Millennium Development Goals
Ukraine: 2000–2015
MILLENNIUM DEVELOPMENT GOALS
Ukraine: 2000–2015

Kyiv 2015
This report uses a wide range of informational, statistical and analytical materials to highlight the progress made to achieve the Millennium Development Goals (MDGs) in Ukraine. It analyses obstacles to the country's development, identifies major challenges and offers recommendations to address them. The Ministry of Economic Development and Trade of Ukraine analysed successes and challenges to achieving the MDG targets by 2015. This work was undertaken with support from the 'Acceleration of Millennium Development Goals Progress in Ukraine' project implemented by UNDP in partnership with the National Institute for Strategic Studies and the M.V. Ptukha Institute for Demography and Social Studies of the National Academy of Sciences of Ukraine. To ensure the objectivity of assessment, more than 200 leading experts from various MDG-related fields were involved in the process of discussing the MDGs, identifying problems and developing recommendations. The publication uses key indicators to measure the progress made to achieve the MDG targets by 2015. The benchmarking indicators were established in 2000 and updated in 2010, taking into account the results of the long-term forecast of national development in Ukraine and analysis of the activities implemented to achieve the MDG targets, including changes in national statistics.

Note: The report contains data from the State Statistics Service of Ukraine. Data for 2014 and 2015 exclude the temporarily occupied territories of the Autonomous Republic of Crimea, the city of Sevastopol and part of the anti-terrorist operation zone. They are, therefore, not directly comparable to data for other years.

The report uses photos from The Day newspaper’s annual photography contest.

This publication will be useful to government officials, staff of ministries and agencies, heads of and experts at central and local executive authorities, scientists, representatives of civil society organizations, and all those who deal with sustainable human development issues in Ukraine.

After Ukraine declared independence, the United Nations (UN) was one of the first international organizations to provide support for democratic transformation by opening its office in Kyiv in 1992. In June 1999 the UN Kyiv office was granted UN House status. The UN operations in Ukraine include support for the country’s humanitarian, social, political and economic development, on the road to achieving world standards of democracy. The following UN agencies are active in Ukraine: the United Nations Development Programme (UNDP), the United Nations Children’s Fund (UNICEF), the United Nations Population Fund (UNFPA), the United Nations High Commissioner For Refugees (UNHCR), the Joint United Nations Programme on HIV/AIDS (UNAIDS), the World Health Organization (WHO), the United Nations Office on Drugs and Crime (UNODC), the International Atomic Energy Agency (IAEA), the International Labour Organization (ILO), the International Organization for Migration (IOM), the International Finance Corporation (IFC), the International Monetary Fund (IMF), the World Bank, the United Nations Office of the High Commissioner for Human Rights and the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). These organizations work in different areas and with their own strategies but are united by an overriding strategic goal: to assist the people of Ukraine in their efforts to build a better future for their country.

For more information on UN activities in Ukraine, visit: www.un.org.ua.

This publication was prepared within the framework of the ‘Acceleration of Millennium Development Goals Progress in Ukraine’ project, implemented by UNDP in Ukraine, in close cooperation with national and international experts. The opinions, findings and recommendations are those of the authors and compilers and do not necessarily represent the views of the UN.

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**ABBREVIATIONS AND ACRONYMS**

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<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>ACSM</td>
<td>Advocacy, communication and social mobilization</td>
</tr>
<tr>
<td>AFE</td>
<td>Amniotic fluid embolism</td>
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<td>AHF</td>
<td>AIDS Healthcare Foundation</td>
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<tr>
<td>AIDS</td>
<td>Acquired immune deficiency syndrome</td>
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<td>AR</td>
<td>Autonomous republic</td>
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<tr>
<td>ART</td>
<td>Antiretroviral therapy</td>
</tr>
<tr>
<td>ATO</td>
<td>Anti-terrorist operation</td>
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<tr>
<td>BAT</td>
<td>Best Available Techniques</td>
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<tr>
<td>BCG</td>
<td>Bacille Calmette-Guerin (vaccine against tuberculosis)</td>
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<tr>
<td>BFHI</td>
<td>Baby-Friendly Hospital Initiative</td>
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<tr>
<td>CEMD</td>
<td>Confidential Enquiry into Maternal Deaths</td>
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<td>CNID</td>
<td>Chronic non-infectious disease</td>
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<tr>
<td>CSW</td>
<td>Commercial sex worker</td>
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<tr>
<td>CVD</td>
<td>Cardiovascular disease</td>
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<tr>
<td>DOTS</td>
<td>Directly Observed Treatment Short Course</td>
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<tr>
<td>DR-TB</td>
<td>Drug-resistant tuberculosis</td>
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<tr>
<td>DTaP</td>
<td>Diphtheria, tetanus and pertussis</td>
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<tr>
<td>ECDCC</td>
<td>European Centre for Disease Prevention and Control</td>
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<td>EGP</td>
<td>Extragenital pathology</td>
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<td>EIT</td>
<td>Engineer in Training</td>
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<td>EIT</td>
<td>External Independent Testing</td>
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<td>EU</td>
<td>European Union</td>
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<td>EUR</td>
<td>Euro</td>
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<td>FSC</td>
<td>Forest Stewardship Council</td>
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<td>GDF</td>
<td>Global Drug Facility</td>
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<td>GDP</td>
<td>Gross domestic product</td>
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<td>GEI</td>
<td>General educational institution</td>
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<td>GHG</td>
<td>Greenhouse gas</td>
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<td>HEI</td>
<td>Higher educational institution</td>
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<tr>
<td>HIV</td>
<td>Human immunodeficiency virus</td>
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<tr>
<td>IC</td>
<td>Infection control</td>
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<tr>
<td>ICT</td>
<td>Information and communication technologies</td>
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<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
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<td>ILO</td>
<td>International Labour Organization</td>
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<tr>
<td>IMCI</td>
<td>Integrated Management of Childhood Illness</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
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<tr>
<td>IOM</td>
<td>International Organization for Migration</td>
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<tr>
<td>IPPC</td>
<td>Integrated Pollution Prevention and Control</td>
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<tr>
<td>ITA</td>
<td>International technical assistance</td>
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<tr>
<td>MARA</td>
<td>Most-at-risk adolescents</td>
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<td>MDG</td>
<td>Millennium Development Goal</td>
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<tr>
<td>MDR-TB</td>
<td>Multidrug-resistant tuberculosis</td>
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<tr>
<td>MES</td>
<td>Ministry of Education and Science of Ukraine</td>
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<tr>
<td>MICS</td>
<td>Multi-Indicator Cluster Household Survey</td>
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<td>MoH</td>
<td>Ministry of Health of Ukraine</td>
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<tr>
<td>MSM</td>
<td>Men who have sex with men</td>
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<tr>
<td>MTCT</td>
<td>Mother-to-child HIV transmission</td>
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<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>NAMS</td>
<td>National Academy of Medical Sciences</td>
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<tr>
<td>NAS</td>
<td>National Academy of Sciences</td>
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<tr>
<td>NGO</td>
<td>Non-governmental organization</td>
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<td>NRF</td>
<td>Nature Reserve Fund of Ukraine</td>
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<td>NTP</td>
<td>National Tuberculosis Programme</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<tr>
<td>OST</td>
<td>Opioid substitution therapy</td>
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<tr>
<td>PATE</td>
<td>Pulmonary artery thromboembolism</td>
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<tr>
<td>PEI</td>
<td>Primary educational institution</td>
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<tr>
<td>PEPFAR</td>
<td>President’s Emergency Plan for AIDS Relief</td>
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<tr>
<td>PHC</td>
<td>Primary health care</td>
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<tr>
<td>PLWH</td>
<td>People living with HIV/AIDS</td>
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<tr>
<td>PMTCT</td>
<td>Prevention of Mother-to-child HIV Transmission</td>
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<tr>
<td>PPP</td>
<td>Purchasing power parity</td>
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<tr>
<td>PWID</td>
<td>Persons who inject drugs</td>
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<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorization and Restriction of Chemicals</td>
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<tr>
<td>SDC</td>
<td>Swiss Agency for Development and Cooperation</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
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<tr>
<td>SMT</td>
<td>Substitution maintenance therapy</td>
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<tr>
<td>TB</td>
<td>Tuberculosis</td>
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<tr>
<td>UAH</td>
<td>Ukrainian hryvnia</td>
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<tr>
<td>UDHS</td>
<td>Ukraine Demographic and Health Survey</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNAIDS</td>
<td>United Nations Joint Programme on HIV/AIDS</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
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<tr>
<td>UNFPA</td>
<td>United Nations Population Fund</td>
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<tr>
<td>UNHCR</td>
<td>United Nations High Commissioner for Refugees</td>
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<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>UNODC</td>
<td>United Nations Office on Drugs and Crime</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>VED</td>
<td>Vocational educational institution</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>XDR-TB</td>
<td>Extensively drug-resistant tuberculosis</td>
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The ‘UN Millennium Declaration’, adopted in 2000 by 189 nations at the UN Millennium Summit, provided a comprehensive framework of core values, principles and key drivers in the three overarching mandates of the United Nations: peace and security, development and human rights. The subsequent ‘Road Map towards the Implementation of the Millennium Declaration’ brought forward a set of eight universal objectives with time-bound targets and quantitative indicators, aimed at eliminating all the major obstacles to a decent life for any human being in any society: eradicating hunger and extreme poverty; ensuring access to education; promoting gender equality; reducing maternal and child mortality; decreasing the scales of HIV/AIDS and other diseases; achieving environmental sustainability; and harmonizing external aid for developing countries. The 2000–2015 period was agreed as the timeline for the implementation of the eight Millennium Development Goals (MDGs) and their respective targets.

Soon after the design of the universal MDG framework, many countries worldwide refined the targets according to their respective national situation. Since then, the MDGs have been regularly monitored at the national, regional and global levels. The final review is currently taking place at the global level, on the basis of the Secretary-General’s report ‘A life of dignity for all: Accelerating progress towards the Millennium Development Goals and advancing the United Nations development agenda beyond 2015’. The report provides an assessment of the progress to date, showing the positive dynamics generated by the MDGs but also underlining the ‘unfinished business’ in a number of countries for specific goals and targets.

The world community is now actively engaged in finalizing the new development agenda for 2015–2030. The UN Summit convened in 2010 for a major review of progress against the MDGs initiated a first intergovernmental dialogue on the substantive preparations for the post-2015 global development agenda. It underlined that the new agenda should be governed by three overarching themes: promoting sustainable development; protecting human rights; and securing peace and harmony. On this basis, 11 thematic areas were identified for further thinking and discussion.1 Soon after, a large process of consultations on the post-2015 agenda was launched throughout the world. National consultations were held in 88 countries and involved over 200,000 people.

In 2012 the Rio+20 Conference on Sustainable Development took up this important matter and in its outcome document, ‘The Future We Want’, requested the UN General Assembly to set up an intergovernmental working group whose assignment would be to make proposals for a new set of goals, to be named the ‘Sustainable Development Goals’ (SDGs). It was specified that the formulation of the new SDGs should take full account of the current MDGs and be an integral part of the shaping process of the post-2015 development agenda. At the 2014 UN General Assembly the UN Secretary-General presented his report ‘The road to dignity by 2030: ending poverty, transforming all lives and protecting the planet’, in which he synthesized the widespread deliberations conducted so far on the future agenda. He stated “in one year’s time the international community will have an historic opportunity and duty to act, boldly, vigorously and expeditiously, to turn reality into a life of dignity for all, leaving no one behind.”

The recently issued final report by the Open Working Group of the UN General Assembly on Sustainable Development Goals proposes the establishment of 17 goals.

The UN Summit for Sustainable Development, held in September 2015 within the framework of the 70th session of the UN General Assembly, adopted the post-2015 global development agenda. This event was the apex of a long and intensive process of consultations, starting in 2012 and involving national governments, a wide range of UN agencies and civil society at large.

‘Transforming Our World: the 2030 Agenda for Sustainable Development’ was adopted at the opening of the UN Summit for Sustainable Development, the UN summit for

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1 These are: Growth and Employment; Energy; Water; Environmental Sustainability; Governance; Food Security and Nutrition; Addressing Inequalities; Health; Education; Population Dynamics; and Conflict, Violence and Disaster.
the adoption of the post-2015 development agenda, on 25 September 2015. It comprises a preamble, a declaration, 17 SDGs and 169 supporting targets, means of implementation and the Global Partnership, and a framework for follow-up and review of implementation. The SDGs demonstrate the scale and ambition of the new universal agenda. They seek to build on the MDGs and complete what these did not achieve. They are integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental.

At the Millennium Summit, Ukraine joined the consensus on the Millennium Declaration and soon after committed to achieving the MDGs by 2015. Since 2004, Ukraine has developed three national reports and a series of annual monitoring reports, each of them presenting the major trends and analysing the reasons for success or setbacks in meeting the targets.

The present report entitled ‘Millennium Development Goals. Ukraine. 2000–2015’ closes this series of reviews by making an objective analysis of the progress made and the positive experience gained, but also the absence of progress – and even the risk of regression on some targets. On this basis, areas of ‘unfinished business’ and new challenges emerging on the Ukrainian path to development have been identified.

Through a number of events, a process of open discussion has been organized for preparing the report. For each of the seven MDGs under review, an expert discussion – at meetings and by electronic means – was launched and a round table held, all of them involving, inter alia, national civil servants. In addition, a final round table was convened to present a draft of the report. In all, the process of discussing and finalizing the report involved more than 150 experts in the areas covered by the MDG targets, such as government officials, experts of UN agencies, diplomats, scientists, economists, demographers, physicians, epidemiologists, ecologists, educators, journalists, businesspersons, leaders of nongovernmental organizations, and civil society representatives.

For the first time ever in Ukraine, 33 key national development indicators have been regularly monitored over a period of 15 years. The MDG monitoring process is thus the only example in Ukraine’s history of a systematic review of governmental commitments on key development issues, with a long-term outlook. Furthermore, it has influenced the shaping of state goals, strategic documents, programmes and legislation. The MDG monitoring can, therefore, be considered as offering significant support to national strategic planning, programming and evaluation. In general, the MDG monitoring performed an important role in building the capacity of a number of civil servants with accountability in these fields.

The review of the achievement of the MDGs provides a sound basis for considering the future of Ukraine, the immediate needs of its population and the longer-term priorities for the country’s sustainable human development. A new era begins with the forthcoming SDG framework for 2015–2030. No doubt, lessons can be drawn from this unique MDG experience to help us take the next step in this promising and challenging process: to adapt the UN post-2015 development agenda to the realities and aspirations of the Ukrainian people, and thus to secure societal support for the full achievement of the SDGs by 2030.
## Box 1.2 The MDG process in Ukraine: overview of the main activities

<table>
<thead>
<tr>
<th>Year</th>
<th>Activity</th>
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<tbody>
<tr>
<td>2000</td>
<td>Ukraine joined the UN Millennium Declaration at the UN Millennium Summit</td>
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<tr>
<td>2001</td>
<td>Adaptation of the MDGs for Ukraine</td>
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<td>2002</td>
<td>Development of a national system of MDG targets and indicators</td>
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<td>2004</td>
<td>Preparation of the annual MDG monitoring process</td>
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<td>2005</td>
<td>Monitoring progress of achievement of the MDGs (report ‘Millennium Development Goals. Ukraine. 2000+5’ presented at the 60th session of the UN General Assembly)</td>
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<td>2006</td>
<td>MDG localization in three pilot oblasts</td>
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<td>2007</td>
<td>Monitoring progress of achievement of the MDGs (report ‘Millennium Development Goals. Ukraine. 2000+7’); Public information campaign on the MDGs</td>
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<td>2008</td>
<td>Linking the MDGs, human development and Ukraine’s European choice, (national human development report ‘Human Development and Ukraine’s European Choice’)</td>
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<td>2009</td>
<td>Institutional capacity-building for national development monitoring</td>
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<tr>
<td>2010</td>
<td>Review of the MDG targets and indicators (national report ‘Millennium Development Goals. Ukraine. 2010’)</td>
</tr>
<tr>
<td>2011</td>
<td>Linking the MDGs and the concept of social inclusion (national human development report ‘Ukraine: Towards Social Inclusion’)</td>
</tr>
<tr>
<td>2012</td>
<td>Localization of the MDGs; National voluntary presentation by Ukraine ‘Promoting production capacity, employment and decent work to eradicate poverty in the context of comprehensive, sustainable and equitable economic growth at all levels to achieve the Millennium Development Goals’ at the session of the UN Economic and Social Council</td>
</tr>
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SECTION I


The 15 years that have passed since the adoption of the UN Millennium Declaration have witnessed dramatic changes in Ukraine's political system and socio-economic situation.

After a decade-long economic slowdown during the 1990s, the country experienced sustained economic growth. However, the world financial crisis generated a collapse in 2009. The post-crisis recovery in 2010–2011 was then followed by stagnation in 2012–2013 before the emergence of a second recession which started in 2014 and is expected to worsen in 2015.

This very inconsistent pattern of growth shows the fragility of the Ukrainian economy, in particular the rigidity of its production structure and its vulnerability to external shocks. Measures aimed at increasing competitiveness and better balancing export capacity with increasing domestic demand have remained weak. Similarly, because of their lack of consistency, the various measures taken to reform the social protection system have not produced the expected results in terms of reducing inequalities and creating decent employment opportunities, despite the efforts made so far in this direction.

GDP DYNAMICS

At the beginning of the millennium, Ukraine's economy demonstrated high growth rates (among the highest of the post-Soviet countries). The country’s gross domestic product (GDP) grew by 71.8 percent between 2001 and 2008 (in 2007 constant prices) – that is, average annual growth exceeded 8 percent (see Figure 1.1).

The economic model remained based on raw materials, hence export-oriented and highly dependent on the external environment. Competitive advantages were mainly provided by cheap energy resources and manpower. Strong demand for metals and chemical products gave an illusion of competitiveness of the national economic model, which by no means encouraged its reform, particularly structural reorganization.

The world crisis of 2008–2009 represented a major setback for Ukraine's economy (the 2009 decline proved particularly acute in Eastern Europe): an unfavourable foreign economic environment, combined with rising prices of gas imported from Russia, led to lower production output in the metallurgy, chemicals and petrochemicals and export-oriented machine-building sectors. Ukraine's aspirations and claims for regional leadership were called into question.

During the economic resurgence of 2010–2011, Ukraine hardly managed to reach its 2006 level of GDP, with a decisive part played by the post-crisis recovery in the world economy. Ukraine's economic model still remained reliant on old industries and was mainly export-oriented. Thus, the volumes and dynamics of not only industrial production but also of foreign trade reflected global economic trends. Agriculture was almost the only sector with high growth rates.

Figure 1.1 GDP 2001–2015, percentage of 2000 level

Source: State Statistics Service of Ukraine.

* See note on page 2.
In 2012 and 2013, a slowdown in world economic growth rates caused a contraction of demand in global markets and adversely affected Ukraine’s export-oriented industries. However, to a certain extent, an expansion of domestic demand maintained production in domestically oriented economic activities. The combination of these two opposite trends explains the economic stagnation during this period.

In 2014 Ukraine was faced with the biggest challenges, including the economic crisis, military conflict in the east of the country and the annexation of AR Crimea. The fall in domestic demand and weak external demand led to a fall in real GDP of 6.8 percent. There was also a rapid devaluation of the hryvnia.

As of the end of the first half of 2015 the situation is as follows: GDP down 14.6 percent; industrial production down 19.5 percent; agricultural production down 9.3 percent; consumer price inflation – 40.7 percent (June to December); exports of goods down 35.0 percent (including exports to Russia down over 50 percent); and real wages down 23.9 percent.

In 2015 the Ukrainian economy has suffered from the geopolitical conflict in the country. Barriers for development have been as follows:

- destruction of infrastructure and production facilities located in the areas affected by armed conflict;
- disruptions to intersectoral cooperation, the logistical network on a subnational level and foreign economic relations;
- complicated international relations with the country’s main trading partner (Russian Federation);
- a lack of energy resources (coal); and
- significantly increased investment risks and negative expectations of the population.

Cumulative systemic imbalances, resulting in devaluation and inflation shocks, also had a significant negative impact on the economy of Ukraine in 2015.

However, in recent months the economic situation has stabilized, and the positive trend is expected to revive economic activity in the second half of 2015. As a result, the annual decline in GDP will slow down to 8.9 percent,
and inflation is expected to reach 45.8 percent (December to December).

**EMployment AND PRODUCTIVITY**

Unemployment fell continuously during the first half of the 2000–2015 period. The unemployment rate among the population of active age (20–64 years, both sexes), as per the International Labour Organization (ILO) methodology, was 10.6 percent in 2001 and only 6.2 percent in 2008 (the lowest value over the 15-year period). The economic crisis increased this rate significantly, to 8.8 percent in 2009, and it declined slightly subsequently but has remained around 8–9 percent in recent years.

The figures on vulnerable employment (the proportion of wage and salaried workers (also known as employees); self-employed workers that include self-employed workers with employees (employers), self-employed workers without employees (own-account workers) and members of producers’ cooperatives; contributing family workers, also known as unpaid family workers) demonstrate no progress in achieving employment stability (see Table 1.1). Vulnerable employment increased from 9.2 percent to 17.3 percent between 2000 and 2005, and then stayed at 17–18 percent up to 2013. About three quarters of persons in vulnerable employment work in the informal economic sector (mainly on personal smallholder farms, selling their products), without any occupational or social protection.

Labour productivity (GDP per person employed) in Ukraine demonstrated an upward but very inconsistent trend between 2000 and 2014 (see Table 1.2). Critical declines in 2009 and 2013–2014 cancelled out the success of earlier years when annual growth rates had reached 7 percent, 9 percent, and even 11 percent. Over the 15-year period, labour productivity increased by 65 percent, which is not sufficient to overcome the consequences of the crisis of the 1990s and to achieve the productivity standards seen in developed countries.

Overall, an unstable macroeconomic environment, low labour productivity and the prevalence of vulnerable and/or informal employ-
WAGE DYNAMICS

Wages failed to grow sufficiently to overcome a pay gap between Ukraine and its neighbours, let alone to approach those of economically developed countries. Labour remuneration policy caused a differentiation in working people’s earnings. At the same time, the minimum wage decreased continuously as a share of the average wage, to 27 percent in 2008 (see Figure 1.3).

To assess people’s real income, wages need to be correlated with the inflation rate. Prices have been growing in Ukraine at rather high rates: overall by 2.2 times between 2001 and 2008 – that is, by 12 percent annually (see Figure 1.4). This undoubtedly affected people’s income but generally encouraged domestic consumer demand. With the economic crisis, prices fell, followed by a new surge of inflation starting in 2014 and continuing in 2015.

The glaring discrepancy between incomes in Ukraine and living standards in Europe became one of the main reasons, if not the central one, for large-scale labour migration: according to estimates, 2.5–3 million Ukrainians work outside the country. Most of them aspire to stay in the destination country, often bringing their children and spouse with them. Given that it is usually the most active and enterprising people who resort to emigration, such a large-scale outflow leads to a deterioration in the quality of the country’s human and labour potential.

The low level of income of working people also entails the need for large-scale state social support in the form of privileges, subsidies and benefits of various kinds. Combined with widespread populist attitudes both in society and among the authorities, it has resulted in a...
continuous and rather rapid increase in social protection expenditures as a share of the total state budget.

THE DEMOGRAPHIC SITUATION

The demographic situation in Ukraine between 2000 and 2015 (see Figures 1.5 and 1.6) is characterized by the following features: low birth rates; high mortality (especially among men of working age); low average life expectancy at birth, with a significant gender differentiation; considerable external and internal labour migration; and population ageing.

Overall, between 2000 and 2013, Ukraine’s population decreased by more than 4 million people, including due to migration. Population ageing is currently the most significant demographic process in the country: it will be shaping the face of Ukrainian society over the coming decades. Elderly persons (aged 60 and older) accounted for 21.6 percent of the Ukrainian population in 2014, which places Ukraine among the world’s 30 oldest countries in terms of this indicator.

The most recent all-Ukrainian population census was taken in 2001. Ukraine did not manage to take a population census for the 2010 round (2005–2014), which considerably diminishes the relevance, completeness, availability and quality of demographic data, thereby greatly reducing the efficiency of analysis and the capacity to plan the country’s socio-economic development and environmental sustainability.

Ukrainian society expects reforms to be carried out proactively, with effective implementation and results that are visible to society. The medium-term strategic priority for development is seen as ensuring the sustainable development of the country – i.e. a balance between the economic, environmental and social pillars of development against a backdrop of peace and social harmony. This requires strengthening the institutional capacity of the public administration system and further development of democracy. The reforms needed would aim to reduce inequality, inclusive growth, ensure real social justice and the rule of law and eradicate corruption.
Section II.
PROGRESS TOWARDS ACHIEVING THE NATIONAL MILLENNIUM DEVELOPMENT GOALS

GOAL 1
REDUCE POVERTY
Section II.
PROGRESS TOWARDS ACHIEVING THE NATIONAL MILLENNIUM DEVELOPMENT GOALS

ABOUT ONE QUARTER OF UKRAINIANS LIVE AT OR BELOW THE NATIONAL POVERTY LINE

EVERY THIRD FAMILY WITH CHILDREN IS POOR
EVERY FIFTH WORKING PERSON IS POOR

SINCE 2000, POVERTY BY ACTUAL SUBSISTENCE MINIMUM HAS BEEN REDUCED FROM 71.2% TO 28.6%
## TARGETS AND INDICATORS

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<th>INDICATORS</th>
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<td><strong>Target 1.A:</strong> Eradicate poverty according to the criterion of US$5.05 (PPP) per day by 2015</td>
<td>1.1. Share of population whose daily consumption is below US$5.05 (PPP), %</td>
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| **Target 1.B:** Decrease the share of the poor population (according to the national criterion of poverty) to 25 percent by reducing the number of poor people among children and employed people | 1.2. Share of poor population according to the national criterion, %  
1.3. Share of poor children, %  
1.4. Share of poor employed people, % |
| **Target 1.C:** Decrease by 10 times by 2015 the number of people whose daily consumption is below the actual subsistence minimum | 1.5. Share of population with consumption below the actual subsistence minimum, % |

## PROGRESS IN UKRAINE

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* The table presents actual data of the State Statistics Service of Ukraine till 2013 and target values for 2015 (established in 2010).
** US$4.30 per day (PPP) was used prior to 2005; therefore, Indicator 1.1 is presented by two dynamic series.
PROGRESS TO DATE

Since 2000 Ukraine has made some progress in reducing absolute poverty, but it remains a problem. According to the current subsistence minimum criterion, the poverty rate decreased from 71.2 percent of the population in 2000 to 22.1 percent in 2013. However, in 2015 it is expected to grow to 32 percent. A similar picture can be seen for another absolute poverty indicator used for international comparisons (Indicator 1.1): the proportion of the population living in poverty has been declining gradually for a long time, but it is now expected to revert to the values observed in previous years, namely to 3.5 percent at the end of 2015.

KEY TRENDS

The reduction in the level of absolute poverty between 2000 and 2013 was caused by an overall improvement in people’s living standards due to economic growth. The relative poverty rate was 27 percent and started decreasing in 2009 (Indicator 1.2). According to preliminary estimates, the relative poverty rate will be 30.6 percent, 29.0 percent among children (Indicator 1.3) and 18.5 percent among employed persons (Indicator 1.4).

A family’s poverty depends on its socio-demographic composition as well as on other factors (place of residence etc). Families with children are a main poverty group and are the most vulnerable to the socio-economic situation in the country. For example, every third household with children lives below the poverty line. Having one child raises the risk of relative poverty by 17 percent, whereas having three or more children increases it by as much as 42 percent. Indicators of poverty based on the structural criterion (share of household food expenditures above 60 percent of total expenditures) are 3 percent for families with one child and 21 percent for families with three or more children.

Hence, the overall reduction in relative poverty did not occur due to a redistribution of resources in favour of children and employed people but solely as a result of a shift in the distribution vectors since the economic crisis.

The structure of poverty by sex and age suggests that the highest levels of poverty are among children aged 0–15 and adults older than 75 years. Another group with a poverty level above average is adults aged 35–45, which corresponds to the peak of labour activity and career growth. This is occurring because most parents in this age group face growing expenditures on educating and raising their children.

In general, the lowest poverty rates are observed in the group aged 45–65, when employment income reaches its highest value and children start their independent lives. A relatively successful period, with poverty indicators equal to or below average, is observed at 20–35 years of age, when employment income appears before the peak of childbearing activity and related expenses on children emerge. However, within this group, women aged 25–30 are at high risk of poverty because a significant number of them are on child-care leave, and the rate of the monthly subsidy for a mother and her child is no higher than the minimum wage.

Poverty indicators increase dramatically above 75 years of age, especially among women. This is due to two factors: lower pension rates for older age groups than for the so-called ‘young’ pensioners, and a loss of residual working capacity, which decreases the opportunity to earn additional income to complement pensions. Also, the health-related expenditures of these older pensioners are typically higher than those of the younger ones.

Poverty by gender. Gender has a minor impact on poverty indicators – i.e. no substantial gender-based differences in poverty rates can be observed. For most age groups, poverty indicator values among men are somewhat higher than among women. However, there are notable exceptions concerning single mothers, women in rural areas and ageing women (due to their lower pensions).

Child poverty. The slow decrease in the proportion of poor children among the total
child population points to a persistent typical feature of Ukrainian poverty: extremely high poverty rates for families with children, especially after the birth of the second and subsequent children, families with children under 3 years of age.

Large families are in the worst situation: the risk of monetary poverty for them is traditionally 2.4–2.6 times higher than Ukraine's average (depending on the poverty threshold chosen). The problem for such families may be aggravated by the reform of the child benefits system. Under the old system, a mother received the minimum wage for six years following the birth of her third and subsequent children, but now the period has been reduced to three years.

A considerable proportion of large families, especially in rural areas, used the child benefits as a sort of survival strategy to help them maintain the entire family. The reduction in the duration of benefit payments means that these families face a serious problem, because the transition to various forms of targeted assistance is occurring quite slowly in the country, due to a series of both administrative and legislative obstacles, as well as psychological factors.

**At risk of poverty.** Large families are at the highest risk of poverty as defined according to non-monetary criteria: their deprivation-based poverty rate is 34.4 percent, versus 21.3 percent for the entire set of households with children. Furthermore, based on self-evaluation (subjective poverty), 73.4 percent of large families consider themselves poor, versus 66.5 percent of all families with children.

Poverty in small families (with one or two children) is due to low wages and to the parents’ inability, especially those of younger working age.

Even among young families with one child and where both parents work, the risk of poverty is extremely high. If the young parents receive a wage equal to about 1.2–1.3 minimum wages, the family perceives itself as being poor.

**Poverty by type of settlement.** Since 2000 Ukrainian poverty has been characterized by considerable variation by type of settlement. Poverty incidence increases as the size of the settlement decreases. The size of differences periodically narrows or widens depending on the settlement type, but the general trend remains stable (see Figure 2.1.1). When non-monetary criteria are used, the settlement component comes to the fore among other poverty-shaping drivers.

**Rural poverty.** A family’s residence in a rural area makes their risk of non-monetary poverty 2.5 times higher than average in Ukraine. Households with only one child have lower indicators of non-monetary poverty indicators than those without children – 21.3 percent versus 22.5 percent – but the risk of non-monetary poverty grows as soon as the second and subsequent babies are born. The risk is even higher in families with non-working-age adults.

Excessively high rates of non-monetary poverty in rural areas are explained by the extremely limited access of rural residents to infrastructural facilities and social services. For example, more than 40 percent of rural residents face deprivation because of the absence of timely ambulance services and lack of communal services. Rural schools are not adequately provided with special equipment for classrooms for Physics, Chemistry and Biology, nor with internet connections – that is, with all that is required to provide high-quality general education which allows children to be competitive when they eventually enter the labour market. The availability of such facilities in schools has even become somewhat worse over the last five years.

Furthermore, because of the substandard road infrastructure, journeys to and from school often take a very long time (even if a school bus is available), which adversely affects children’s health. Sometimes, rural children have to study at boarding schools because there is no other school within reasonable reach. All this contributes to entrenching rural children’s poverty. One in four households suffers from a lack of health care facilities in its community and/or of regular transport links with another community more developed in terms of infrastructure.

**Poverty of living conditions.** Unlike the traditional approaches to poverty assessment based on monetary criteria, poverty of living conditions (deprivation) defines people as lacking certain basic goods. The problem of poverty of living conditions covers a wide range of attributes – from food, non-food-stuffs and services to opportunities to engage
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PROBLEMS AND NEW CHALLENGES

Ukraine’s failure to meet its poverty reduction targets is linked to a number of negative internal and external factors. The main challenges are the following:

- the global crisis that significantly affected Ukraine, leading to a decrease in foreign investment and immediate repercussions for economic development, people’s living standards and poverty, without the usual time lag on the social situation;
- the insufficient economic and social reforms undertaken during the post-crisis period (2010–2012) that led to the stagnation of the economy and standards of living, a situation which gained particular strength in 2013; and
- the exacerbation of the economic crisis due to armed conflict and other negative events occurring in 2014–2015, which immediately resulted in reducing the purchasing power of the population’s income and entailed a growing incidence of absolute poverty.

The last two years have seen not only a rising poverty rate according to absolute criteria but also a growing level of vulnerability to various forms of poverty. In this respect, health has become a major source of vulnerability. A reduction in state financial support for health care, compounded by a decrease in people’s real income, has resulted in a growing level of vulnerability to morbidity-related poverty. For example, in the event of a serious disease requiring considerable expense, almost all Ukrainian families now risk falling into the poverty trap.

The housing problem has been addressed by a large group of families by renting accommodation, but the crisis in the labour market deprives many people of such an opportunity and, therefore, reinforces their vulnerability to poverty of living conditions. The substantial rise in the costs of housing and utility services during 2014 and 2015 will inevitably result in considerably increasing vulnerability to this cause of poverty, even among people who own apartments and houses who do not need to make rental payments.

The risk of debt-related poverty has increased for a large number of families, with growing
debts to both banking institutions and providers of housing and utility services.

**Sudden poverty** due to the loss of property and livelihoods as a result of the armed conflict in Donbas constitutes a new source of vulnerability in Ukraine. The risk of poverty for the affected population is particularly high, since they have to pay for housing and to replace lost household property, children’s school equipment, clothes, footwear etc.

All forms of poverty and vulnerability present new challenges for policy, as they cannot be overcome by conventional methods only. It has become obvious that the system of state social support is not adapted to the country’s current situation and is unable to respond to the new challenges. Furthermore, the current system of economic measures has failed to perform its core functions and should be restructured to be effective in preventing or mitigating any adverse developments. The development of socio-economic and environmental policies requires a clear idea about the scale and structural characteristics of poverty, the risks of its expansion and ways to forecast the impact of policies.

**Box 2.1.2 Internally displaced persons defined as suddenly poor or vulnerable**

Out of 6 million people in the anti-terrorist operation zone and nearby areas, more than 5 million became poor or considered vulnerable to poverty due to the armed conflict, regardless of whether they moved to another part of the country or remained in their places of permanent residence.

**RECOMMENDATIONS TO ADDRESS CHALLENGES**

**Economic growth** is a key prerequisite for the elimination of absolute poverty. However, periods of favourable economic development entail considerable risks of higher relative poverty, since they usually lead to increasing inequalities. It is, therefore, necessary to ensure inclusive growth, maintain a balance between economic growth and regulated income distribution, especially in the case of unjustified inequalities.

According to macroeconomic forecasts, economic growth should be expected in 2016. Therefore, measures should be designed to avert an unfair distribution of the benefits resulting from increased economic activity. A change in the principles and mechanisms of income distribution is required.

It is necessary to gradually foster the legalization of informal incomes, using traditional mechanisms which have proved their effectiveness in international practice but also by searching for genuine national ‘de-shadowing’ tools. Without visible results towards income legalization, any fiscal reforms will not produce the expected results.

**Reducing the scale of child poverty** is a top priority for poverty reduction. The focus should be on labour remuneration. Structural changes in income generation are required to ensure that growth in the minimum wage outstrips other state guarantees. Furthermore, to create opportunities for parents to earn the necessary income to ensure their family welfare, flexible work schedules, especially for mothers with young children, should be implemented. In addition, mothers should be given an opportunity to return to work after maternity leave, including by improving the availability of preschool child-care facilities.

Thus, a good policy to support families with children consists in developing infrastructure which makes it easier for women to reconcile child-rearing and work. This requires the recognition that responsibility for children’s life and health is borne by their parents, and expanding the state standards for kindergartens, which would allow various forms of high quality childcare to develop — not only municipal, state or private kindergartens but also child daycare groups at enterprises or mini-kindergartens on private premises etc.

Experience shows that **education** has a much stronger impact on poverty reduction than providing social benefits. Therefore, ensuring quality education both for children and adults (lifelong learning) should become a central component of any poverty reduction programme. The reduction of non-monetary aspects of child poverty will be promoted by the enhancement of free access to public services for every stage of a child’s development.

**Addressing the problem of inequality** and very high poverty rates among the rural pop-
Population is possible by enhancing their access to social services. This requires shifting the emphasis from financing the facilities and wages of staff in the social sphere to ensuring the availability of basic services for all population groups, regardless of their income levels and place of residence.

Maintaining a balance between economic feasibility and social efficiency is a key requirement for reform of the social assistance system. This relates to the system’s financial capacity and efficient use of funds, on the one hand, and consolidation of the principle of social justice in the distribution of social assistance programme funds, on the other hand. The core approach of the new system should be to significantly broaden the coverage of support for those who are most in need by actively improving the work of social protection bodies in identifying targets. This approach is particularly important in a context of substantial increases in housing and utility costs, since a large number of families might become unable to pay the bills and should, therefore, receive state assistance.

Addressing new challenges caused by internally displaced persons. A unified support system should be established for those affected by the armed conflict. The system should be based on an electronic registration of displaced persons, regardless of the region where they settle and covering all types of social benefits. This would simplify the benefits procedure when displaced persons move to another place of residence, and it would also improve the calculation of budget expenditure according to needs.

On a temporary basis, it would be appropriate to combine the functions of various services to address the range of problems faced by displaced persons: job placement, assignment of benefits, provision of social services and temporary solutions for housing problems. Emergency response teams would be set up to approach every family with acute needs and to find the best way of solving any problem comprehensively.

This requires the establishment of databases related to vacant jobs, residential premises, volunteer organizations providing social services etc. In this way, the reform would make the social support system better adapted to external changes. It means end-to-end reform – from the practical activities of local social protection bodies to major structural changes in social programmes. The staff of these bodies should be more versatile in terms of types and profiles of the work to be done; they should also be ready for temporary territorial rotations within a region. Such an approach requires new standards in personnel selection as well as in the way to financially manage this specific support system.

Developing a new approach in the social support system for assistance in case of emergencies. Such assistance requires an active social policy and would be mainly designed for able-bodied groups. State support would be provided temporarily to enable a family which could potentially be financially self-sufficient to get out of a difficult situation. The availability of this type of assistance would jointly promote the achievement of two important objectives: ensuring the readiness to respond to external challenges due to socio-political or economic events (on a local or even national scale), and minimizing the risks of sudden poverty among the able-bodied population.

Pursuing an active information policy. Families in crisis situations quite often do not know whom to approach for help and, therefore, run away from the problems, which in fact worsen the situation. It is, therefore, necessary to actively inform the population on the types of assistance offered by social services and public authorities – from announcements in the public space and mass media to thematic lessons for senior pupils. In addition, relevant knowledge should be provided to school teachers, personnel at children’s facilities and physicians at children’s polyclinics and maternity hospitals – that is, those directly working with children and their families. They are the ones who are able to identify crisis-affected families and to advise them on the way to approach social services or other public authorities for help.

Improving the efficiency of the state social support system and increasing its impact on poverty. The key task is to shift the social support system from attempting to provide assistance to all vulnerable or uncompetitive population groups towards assistance to the poorest groups. To do this, it is necessary to ensure better targeting of social assistance to poor households by improving legislative, methodological and technical aspects of the state social support system. This approach would improve the efficiency of the distribution of budget funds.
for social goals and, accordingly, provide an opportunity to increase social transfers to the poorest population groups within the limits of the funding available.

**Sharing responsibilities in addressing acute social problems.** Since complicated social problems are emerging in the current context marked by a lack of financial capacity to address them effectively, a new approach to sharing responsibility is needed. The focus should be on sharing responsibility, including financial responsibility, between the State and all civil society entities (business, NGOs, communities and individuals) to ensure equal access to high-quality social services, comply with the principles of social justice in the allocation of funds for social support, and provide specific assistance for socially vulnerable population groups.
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GOAL 2
ENSURE QUALITY LIFELONG EDUCATION
Section II.
PROGRESS TOWARDS ACHIEVING THE NATIONAL MILLENNIUM DEVELOPMENT GOALS

99.4% of children of secondary-school age are enrolled in full-time education.

The internet is available in more than 83% of schools.

Half of young people are enrolled in higher education.

Children enrolled in pre-school education:

- Urban: 91.4%
- Rural: 57.1%
<table>
<thead>
<tr>
<th>TARGETS</th>
<th>INDICATORS</th>
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| **Target 2.A: Increase enrolment rates in education** | 2.1. Net enrolment rate in pre-school educational institutions for children aged 3–5 in urban areas, %  
2.2. Net enrolment rate in pre-school educational institutions for children aged 3–5 in rural areas, %  
2.3. Net enrolment rate for children in secondary education, %  
2.4. Net enrolment rate in post-secondary institutions for those aged 17–22, %  
2.5. Cumulative gross number of persons undergoing retraining or professional development, thousands of people |
| **Target 2.B: Raise the quality of education** | 2.6. Number of general educational institutions with internet access |

### PROGRESS IN UKRAINE

<table>
<thead>
<tr>
<th>Year</th>
<th>Indicator 2.1. Net enrolment rate in pre-school educational institutions for children aged 3–5 in urban areas, %</th>
<th>Indicator 2.2. Net enrolment rate in pre-school educational institutions for children aged 3–5 in rural areas, %</th>
<th>Indicator 2.3. Net enrolment rate for children in secondary education, %</th>
<th>Indicator 2.4. Net enrolment rate in post-secondary institutions for those aged 17–22, %</th>
<th>Indicator 2.5. Cumulative gross number of persons undergoing retraining or professional development, thousands of people</th>
<th>Indicator 2.6. Number of general educational institutions with internet access, %**</th>
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<td>...</td>
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</tbody>
</table>

The table presents actual data from the State Statistics Service of Ukraine up to 2013 and target values for 2015 (established in 2010).

* See note on page 2.

** Data on internet access in schools were not monitored before 2008.
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PROGRESS TO DATE

Ukraine has achieved considerable progress in the field of education, which can be seen from the improvements in target indicators achieved since 2000 (see Figure 2.2.1). Access to pre-school education in urban and rural areas has been enhanced, and the enrolment rate of children in secondary education remains high. Qualitative shifts have occurred in the educational activities of academic institutions, including through the dissemination of information and communication technologies (ICT) and the access to the internet of a considerable number of schools. The enrolment rate in post-secondary institutions for young people has increased. However, Ukraine has not managed to significantly expand the scope of vocational training and professional development, which reveals the lack of a systemic approach to the implementation of the concept of lifelong education.

KEY TRENDS

Pre-school and primary education. One of Ukraine’s significant achievements is the enhancement of access to pre-school education to a situation which is very close to the planned MDG indicator in this area. Between 2000 and 2014, the enrolment rate in primary educational institutions (PEIs) for children aged 3–5 in urban areas increased 1.3 times (from 65.1 to 82.5 percent, against a target of 95.0 percent in 2015), and in rural areas 2.4 times (from 24.0 to 57.5 percent, against a target of 60.0 percent).

However, differences in access to education between regions and types of settlements complicate the situation. For example, if there is no PEI in a settlement, future first-graders have less chance of receiving the same quality of education as other children, and the problem of temporary abandonment of young children becomes more acute for working parents (with extremely dangerous consequences for the children’s health and even life). A shortage of PEI places entails high occupancy of the existing institutions, thereby reducing the quality of services in overcrowded kindergartens.

As of early 2014, 17,800 rural settlements with children of up to 6 years of age had no PEI at all. The nearest kindergartens were 3–5 km away for 39 percent of these settlements, 5–10 km for 36 percent and more than 10 km for 25 percent.3

In terms of regional breakdown, the highest PEI enrolment rates for children aged 3–5 in urban areas (reaching 100 percent in eight regions) are 20 percent higher than the lowest, while rural areas have a variance of 2.4 times (the highest value being 78 percent, and the lowest 33 percent).4

There is also a large variance in the occupancy rates of PEIs according to the types of settlements – which raises the issue of the efficient use of local budget funds. In 2000 the average number of children per institution was six times higher in urban areas than rural areas (111 children in urban kindergartens and 18 in rural ones); in 2014 the variance was five times (173 and 33, respectively).

Every year the problem of shortages of places in PEIs becomes more and more acute. Between 2000 and 2014, the number of children in PEIs with a capacity of 100 places increased from 99 to 132 in urban areas5 and from 56 to 94 in rural areas6 (see Table 2.2.1). Consequently, the number of over-occupied institutions is continually growing (50 percent of urban PEIs and 21 percent of rural ones

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5 In all regions of Ukraine, particularly in large cities (a PEI occupancy rate of 183 children per 100 places in Ternopil, 180 in Lviv and 172 in Poltava).
6 The rural PEI occupancy rate exceeds 100 per 100 places in as many as seven regions of Ukraine.
ENSURE QUALITY LIFELONG EDUCATION

Figure 2.2.1 Breakdown of basic school graduates (with a certificate of basic general secondary education) by type of further education (percentage), 2000 and 2014

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2014*</th>
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<tr>
<td></td>
<td>10.9%</td>
<td>20.3%</td>
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<tr>
<td></td>
<td>66.5%</td>
<td>61.3%</td>
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<td></td>
<td>16.2%</td>
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<tr>
<td></td>
<td>4.1%</td>
<td>15.7%</td>
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</table>

Source: State Statistics Service of Ukraine.
* See note on page 2.

Table 2.2.1 Educational enrolment of young persons aged 17–22 (percentage of resident population of respective age), 2010–2014

<table>
<thead>
<tr>
<th></th>
<th>17 years</th>
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<td>5.7</td>
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<td>55.4</td>
<td>51.1</td>
<td>46.7</td>
<td>39.4</td>
<td>24.4</td>
</tr>
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</table>

Source: State Statistics Service of Ukraine.
* Excluding pupils of special schools (boarding schools) and pupils in special classes.
** See note on page 2.

in 2000; 79 and 44 percent, respectively, in 2014). This trend clearly shows that the problem is not being addressed with a systemic approach in urban areas and is also starting to become pressing in rural areas.

Secondary education. Enrolment rates for children in complete general secondary education are traditionally high in Ukraine (98.5 percent in 2014, against a target of 99.9 percent). This level of education is compulsory and guaranteed by the State on a free-of-charge basis. On graduating from basic education, they receive a certificate of complete general secondary education.

7 This level of education is confirmed by a certificate of complete general secondary education.
secondary school and receiving a certificate of basic general secondary education, children can continue their studies in senior forms of day schools, in evening schools or in vocational or higher educational institutions (HEIs). The combination of compulsory, free complete general secondary education delivered in a diverse range of settings has proven to be a fairly efficient policy mechanism. Applying such an approach allows both the promotion of equal educational opportunities for young people (in terms of access to the relevant learning infrastructure) and consideration of their need for a subsequent educational trajectory (orientation towards a simultaneous acquisition of education and a profession or qualification).

Between 2000 and 2014, certain shifts occurred in the educational priorities of basic school graduates (Figure 2.2.1). The share of those who continued their studies in schools decreased: from 66.5 to 61.3 percent in day schools and from 4.1 to 2.1 percent in evening schools. At the same time, the share of pupils who entered HEIs almost doubled (from 10.9 to 20.3 percent). The share of those who enrolled in vocational educational institutions (VEIs) remained fairly stable (15.7 percent), whereas the share of basic school graduates who did not continue their studies at all decreased from 2.3 to 0.6 percent. Thus, an overall positive trend can be observed – namely, a growing interest among adolescents in acquiring a higher level of education.

Despite the adoption of an inclusive educational model in Ukraine, there are currently some categories of children (in particular, those with complex developmental disorders) for whom appropriate training is not being provided. During the 2014/15 academic year, 9,000 children, aged 6–18 were not attending complete general secondary education for health reasons, of which 7,800 had special physical and/or mental developmental needs. Standard schools are also not completely accessible for children with special needs. More than 4,000 day schools (23.8 percent) still provide no unhindered access for pupils with disabilities even to the first floor. Only 69 schools (0.4 percent) have arranged access for such pupils to the second floor, and 22 schools (0.1 percent) to the third and higher floors.

Higher education. After the upward trend observed in 2000–2010, a minor decline in the net enrolment rate in post-secondary institutions for those aged 17–22 has been recorded in Ukraine since 2011 (47.0 percent in 2010, 45.9 percent in 2011, 45.7 percent in 2012, 46.1 percent in 2013 and 43.0 percent in 2014 against a target of 56 percent).

This absence of progress in meeting the planned MDG indicator for post-secondary education is mainly due to a structural shift in the respective share of the pupil and student populations (see Table 2.2.1). An increase in the share of school pupils aged 17–18 (due to the transition since 2011 to an 11-year study system in general educational institutions, GEIs) and VEI pupils led to a reduction in the student population aged 17–18. Meanwhile, the enrolment rate in post-secondary education for those aged 19–22 remained relatively stable.

The fairly large share of pupils who become HEI students immediately after graduating from school (19.5 percent of basic school graduates and 44.9 percent of high school graduates in 2014) indicates a continuous transition from institutions of secondary to higher education in Ukraine.

One of the educational inequalities in Ukraine is the financial accessibility of vocational education for various population groups. Overall 6.2 percent of households do not have the

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8 The choice of a further place to study is often determined by settlement-specific or regional features of the location of the educational institutions. For example, the rural GEI network is physically unable to ensure that all adolescents can enrol in complete secondary education, which forces some of them to enter VEIs or HEIs.


10 Among those children who did not attend complete general secondary education for various reasons, 20.5 percent did not study for health reasons (16.7 percent in urban areas and 29.0 percent in rural areas).

11 Among those children with special physical and/or mental developmental needs who did not attend complete general secondary education for various reasons, 32.9 percent did not study for health reasons (30.6 percent in urban areas and 35.8 percent in rural areas).


13 See note on page 2.

financial capacity to allow a family member to acquire any vocational education. This type of deprivation affects rural residents (8.4 percent) worse than urban residents (5.3 percent), households with children (12.0 percent) worse than those without children (2.7 percent), the poorest households (15.3 percent) and even the richest households (2.4 percent). The worst affected are households with a total income per capita below the subsistence minimum (17.4 percent).

Therefore, maintaining the public financing of higher education and, thus, preserving its affordability for socially vulnerable population groups remains a pressing issue in Ukraine. The share of students with an opportunity of studying at the expense of state and local budgets has been growing every year (from 37.8 percent in the 2005/06 academic year to 49.4 percent in 2014/2015). The share of students acquiring education at the expense of individuals and families remains substantial (61.5 and 50.0 percent, respectively, for these two academic years), which shows that parents are interested in improving their children's educational attainment, even given the family's limited financial capacity. Meanwhile, the involvement of private firms, corporations and public authorities in training specialists is miserable (0.7 and 0.6 percent, respectively).

From 2000 to 2014, some positive trends have been recorded in the number of students from socially vulnerable population groups who are completely maintained by the government: from 4,700 to 16,600 for persons with disabilities, and from 4,000 to 15,900 for orphaned children and children deprived of parental care.

Higher education remains accessible to rural youth. The share of those enrolled in the initial cycle of training at HEIs from rural areas was 31.1 percent (the share of rural inhabitants in the structure of Ukraine's resident population is also almost one third).

Female students' participation in higher education is traditionally high in Ukraine (the gender parity index among students of HEIs of various accreditation levels even indicates a gender gap in women's favour). Women's growing interest in earning candidate and doctoral degrees can be regarded as a relatively positive trend (see Figure 2.2.2).

Ukraine is strengthening its position in the international market for educational services: the number of students who are foreign nationals has increased from 12,900 (0.67 percent of the total number of Ukrainian students) in the 2000/01 academic year to 56,900 (3.40 percent) in the 2014/15 academic year.

Professional development and retraining. Ukraine undertook to double the number

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15 The share of households that belong to the first (poorest) and tenth (richest) deciles in terms of per capita total monthly income.


17 31.02 percent as of 1 January 2014.

18 Second stage of tertiary education (ISCED 6).
of workers undergoing retraining or professional development between 2001 and 2015.\footnote{The target for Indicator 2.5 (cumulative gross number of people undergoing retraining or professional development) was set at 320,000 people in 2015 (compared to 158,000 in 2001). It is currently impossible to trace information under this indicator because the methodology of its calculation is not in line with the existing state reporting on labour statistics. Therefore, analysis of the situation as regards professional education and staff development will rely on official data from the State Statistics Service of Ukraine.} This target is extremely relevant in view of the need to address a shortage of workers and raise the skill level of professional staff. However, official statistics indicate that the scale of on-the-job staff training remains limited.\footnote{State Statistics Service of Ukraine, ‘Labour in Ukraine in 2013’, statistical digest under the supervision of I.V. Senyk, State Statistics Service of Ukraine, Consultant Publishing House, Kyiv, 2014, 336 p.}

The total number of people undergoing vocational training\footnote{Initial training or retraining.} and professional development was 1.151 million in 2000 and 1.218 million in 2013 (see Figure 2.2.3). However, this trend is not sustainable.\footnote{Due to the 2009 economic crisis, amount of staff training and retraining was the lowest in that year.} The number of workers who undertook professional development is considerably higher than the number of those trained in new occupations, and this gap is widening every year (2.9 times in 2000; 5.2 times in 2013).

The share of people undertaking vocational training and professional development (as a percentage of the total number of registered employees) has grown from 8.7 to 11.8 percent. However, the increase in the relative value of this indicator is mainly explained by an overall negative trend in the labour market – an annual reduction in the number of employees (by 370,400 in 2014 and by 2.8 million since 2000).

Other groups undergoing professional development in Ukraine include civil servants (2013: 19.9 percent, or 66,800 people) and local self-governance officials (15.1 percent, or 14,800 people). There is also a state system for training and retraining unemployed people (217,000 people – or 14.1 percent of the total number of unemployed people registered with the State Employment Service – underwent training at educational institutions in 2013).\footnote{The Law of Ukraine on Employment of the Population, 2012 (since March 2015, the voucher programme has been expanded to cover certain categories of participants from the ATO and internally displaced persons).}

In the opinion of many experts,\footnote{UNDP, ‘Proceedings of the round table “Voucher system for adult training: situation analysis, international experience, and prospects”’, UNDP Ukraine, project ‘Support to the Social Sector Reform in Ukraine’; Kyiv, 2 April 2015, http://www.ua.undp.org/content/ukraine/uk/home/presscenter/articles/2015/04/07/-/.} the development of the voucher-based adult training programme established in 2013 has considerable potential.\footnote{The right to a voucher (for free retraining financed by the Fund for State Social Insurance against Unemployment) is provided to people older than 45 years of age with vocational or higher education. In 2013, 8,600 working people received vouch-}
ers, but in 2014, only 5,700. A main reason for not using the vouchers issued is the difficulty in finding an educational institution which offers convenient educational programmes for this category of the adult population. However, at the same time, many HEIs and VEIs are interested in participating in the voucher programme.

**Access to ICT in educational institutions.**

The computerization of education is of great importance for children, youth and adults to acquire these types of skills and to improve the accessibility of ICT. Therefore, in recent years, special attention has been paid to the introduction of ICT into teaching processes in Ukraine. The share of GEIs with internet access increased from 44.0 percent in 2008 to 83.7 percent in 2014 (against a target of 90.0 percent). For urban areas, this indicator has been exceeding the expected value since 2010, by reaching nearly 100 percent. In rural areas, the process of connecting schools to the global network is progressing more slowly (see Figure 2.2.4).

Analysis of the provision of computer equipment in schools also highlights some differences between settlements for all quantitative and qualitative parameters (see Table 2.2.2). The only advantage of rural schools is that their pupils can spend more time in the classroom on Information and Computer Science lessons because the number of computer-equipped places per 1,000 rural pupils is on average twice as high as in urban schools.

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26 In this area, the Ministry of Education and Science, local authorities and educational institutions of all levels (GEIs, VEIs and HEIs) are cooperating actively with well-known world corporations and international companies.
PROBLEMS AND NEW CHALLENGES

Considerable changes of a legal, institutional, financial, organizational and substantive nature have occurred in the national education system between 2000 and 2015. Most of them have already positively influenced the enhancement of access to high-quality educational services. Additional reforms will just establish the preconditions for further integration of Ukraine’s educational system into the European educational space.

However, this surge of reforms has not yet changed the most conservative elements of the educational system – its financing and management. The rather large sums of money devoted to education (including from household income) have not been used during this period as a tool to ensure the efficient functioning of the sector, particularly for substantially improving the quality of all tiers of educational services.

Extremely low rates of application of the concept of lifelong education are observed in Ukraine. The lack of efficient intersectoral coordination creates delays in setting up training programmes designed for adults who start encountering, or have already encountered, social risks. For example, the University of the Third Age is just at a formative stage. The system of vocational training and professional development can still hardly locate all the points of interaction with the existing or potential sectors of activities. The issues related to full-scale integration of out-of-school education remain unresolved, whereas the recognition of informal education was not launched at the legislative level until 2012.

Implementation of the Law of Ukraine on Higher Education (2014) may become a new challenge. In the opinion of Ministry of Education and Science (MES) experts, several dozens of regulatory legal documents should currently be prepared for an in-depth renovation of the academic structure of the educational sector. HEIs need to draft scientific programmes (within the limits of licensed specialities) that should be mastered by the student, who would thus acquire a higher education degree in a given speciality (Junior Specialist, Bachelor, Master, PhD, Doctor of Sciences). In addition, a new procedure for the accreditation of curricula is being introduced through this law.

Steps aimed at streamlining the higher education network and changing the mechanism of the governmental ordinance for specialist training are radical but necessary in view of the demographic and socio-economic realities. Meanwhile, Ukraine is already facing a problem of yearly increases in the number of young people opting to attend HEIs in other countries.

According to Article 8 of the Law on Higher Education, a Unified State Electronic Database for Education should be adopted and implemented in higher education. It would include three registers: of HEIs, higher education documents (diploma) and EIT certificates.

Shortage of resources for upgrading the educational system under a new model of financial support. In 2015 two types of transfers to local budgets came into force in Ukraine: an educational subvention (to finance GEIs) and a subvention for the training of workers (to finance VEIs). In addition, a redistribution of expenditures between different budget levels is expected during 2015–2017, aimed at expediting the process of optimizing the educational network (in particular, by changing the form of ownership of some educational institutions).

Such reforms not only empower local self-governance bodies but also present them with new challenges, including: guaranteeing the accessibility and quality of PEI and GEI services to the population; having the real capability to determine the relevant amounts of subventions; mobilizing additional funding for upgrading educational...
ENSURE QUALITY LIFELONG EDUCATION

Box 2.2.1 Maintaining the availability of education for forcibly displaced persons and ATO zone residents

According to MES data from November 2014, 67,500 displaced children studied in GEIs and PEIs in various regions of Ukraine, including 2,700 from the AR of Crimea, 42,000 from Donetsk oblast and 22,800 from Luhansk oblast (http://society.lb.ua/education/).

According to the Representative of the President of Ukraine for the Rights of the Child, 500,000 children remained in the occupied areas of Donbas as of the end of January 2014, including almost 5,000 orphans and children deprived of parental care (http://zn.ua/UKRAINE/).

According to the coordinator of the Studenskyi Zakhyst (‘Student Protection’) civil society initiative, about 150,000 students faced the problem of continuing their studies at HEIs in Donbas as of October 2014; only 3,000 of them became non-matriculated students or transferred to other domestic HEIs (http://vesti-ukr.com/).

According to MES data, no less than 60 percent of students left the uncontrolled Donbas areas as of April 2015 (http://novosti.dn.ua/details/248422/).

According to MES data, almost 8,000 HEI students transferred from Crimea to mainland Ukraine as of April 2015, including 4,300 for full-time education (http://ru.krymr.com/content/news/26974156.html).

According to data provided by the Donetsk Oblast Civil-Military Administration, 10,800 high school pupils and recent graduates registered for participation in the EIT in Ukrainian language and literature as of April 2015, including 845 pupils from the occupied area of Donetsk oblast. Fifty-three offices in 20 administrative units were established to conduct the EIT, and more than 2,500 teachers supported the testing process (http://interfax.com.ua/news/general/261696.html).

According to the Department of Education and Science of Luhansk Oblast State Administration, 4,100 high school pupils and recent graduates registered for participation in the EIT as of April 2015. Twenty-three offices were established for the EIT, employing 915 teachers (http://oblosvita.lg.ua/).

institutions, including the provision of appropriate conditions for teaching children with special educational needs; and retaining the human resources capacity of educational institutions. Thus, the local self-governance bodies (territorial communities) are actually being invited, without any assistance, to address the whole set of problems accumulated over many years.

According to MES data, there are almost 5,000 schools with fewer than 40 pupils on average in Ukraine. Despite the fairly high costs to maintain them, it is hard to ensure the quality of education in these schools (for example, for older pupils intending to subsequently attend HEIs). In addition, further expansion of the network of educational institutions and the process of school optimization are hindered by the end of governmental financing for the School Bus Programme in 2015. As a result, 25,000 pupils in cities and urban settlements, and 8,000 pupils living in villages and rural settlements remain uncovered by this service.36

A serious challenge is posed by the objective difficulties in ensuring a systemic approach to the availability of educational services for internally displaced persons and those living in the anti-terrorist operation zone. The unprecedented and tragic events in Ukraine have overwhelmed the country’s capacity to coordinate the educational system sustainably. The infrastructure has contracted due to the annexation of the

36 Pupils living at a distance of more than 3 km from a school and needing transportation (calculated from State Statistics Service data as of the beginning of the 2014/15 academic year).
AR of Crimea and has suffered major damage or has been completely ruined due to hostili-
ties in Donbas. For the first time ever Ukraine
is confronted with the problem of repeated
and large-scale waves of forced internal
migrants and, in particular, ensuring their
constitutional right to education.

This situation has been aggravated by numer-
ous problems of an organizational, financial,
staffing and regulatory nature – namely, the
emergency evacuation of educational institu-
tions; arrangement of normal teaching pro-
cesses for certain categories of children and
youth; and maintenance of the availability of
higher and vocational education in Ukrainian
educational institutions through participa-
tion in main and additional EIT sessions (see
Box 2.2.1). Accommodating a large number
of forcibly displaced persons is complicated,
not only by the necessity to eliminate gaps in
their educational attendance but also by the
need for timely psychological assistance and
rehabilitation.

RECOMMENDATIONS TO ADDRESS CHALLENGES

Adhering to the concept of an inclusive
society should not become a formal issue
for Ukraine, limited to the recognition of
inclusion through legislation and measures
adopted to address certain aspects of edu-
cational inclusion for children and adoles-
cents. The integration of all vulnerable pop-
ulations, including people with disabilities,
internally displaced persons and migrants,
into working and social life cannot be disre-
garded.

One of the fundamental principles of inclu-
sion is interaction. Therefore, implementa-
tion of even minimal standards of inclu-
sion and social involvement is impossible
without adopting the ‘culture’ of interac-
tion and cooperation between central and
local authorities, social partners and non-
governmental organizations. This means
not only raising the level of administrative
responsibility of those directly in charge of
implementing inclusion-related activities
and programmes but also raising their moral
responsibility (in particular for inactivity).

As international experience shows, the edu-
cational system remains the most effective
mechanism for realizing inclusion, prevent-
ing social isolation and, hence, promot-
ing the formation of an inclusive society. A
coordinated educational policy on inclusion
should, therefore, envisage: appropriate
financial, educational, methodological and
staffing support for relevant programmes
and services; simultaneous development of
procedures for their qualitative evaluation

31 Transferring them to educational institutions in different re-
regions; simplifying enrolment conditions; restoring education-
al documents; allocating additional budget-funded places in
HEIs and VEIs; eliminating academic differences for students;
arranging distance learning and external studies for students
and pupils; organizing advisory hotlines etc.

and public monitoring; establishment of
an efficient system of continuous, inclusive
vocational education for youth with spe-
cial needs; development of additional edu-
cational initiatives to implement full-scale
inclusion into all aspects of social, cultural
and economic life; and promotion of the
consolidation of ‘inclusive communities’ at
the societal level and of the development of
local initiatives to create a full-scale ‘inclu-
sive landscape’ in Ukraine.

Practical realization of the concept of life-
long education implies that the national
educational system should expand opportu-
nities in the field of education for all age
cohorts and all social strata. Along with local
authorities and economic sectors, the edu-
cational system is responsible for the suc-
cessful socialization and occupational inte-
gration of every member of society, leading
to the improvement of his/her level of social
and economic activity. If some population
groups are not involved in the educational
space for some reason, it means that the
educational system is not succeeding in
totally fulfilling its social function and over-
coming its own institutional inertia.

The education of adults (who usually have
strong motivation to learn and are more
solvent) is nowadays considered a profit-
able investment for both the public and
private sectors. The use of the considerable
economic potential attached to continuous
education implies: a possible revision of the
existing educational models; the creation of
new educational services/centres; the devel-
opment of wide-scale diversification pro-
cesses between different tiers of the educa-
tional system; the expansion of relationships
between institutional and non-institutional
structures (particularly by legitimizing
informal education); and the adaptation of teaching methods and learning time according to occupational and age-related needs. Furthermore, it is necessary to continue the practice of adopting modern tools to improve people's competitiveness, 'open study resources' and social innovations in education.

Ensuring openness and transparency in education is a multidimensional task, but, first and foremost, it means increasing the educational system's accountability to society for the end results of its activities. Although Ukraine has recently paid considerable attention to the quality of education (including at the legislative level), quality control mechanisms need a major upgrade. It is advisable to implement, step by step, a model whereby educational institutions will be interested in the public demonstration of the quality of their work, including to the governmental and non-governmental institutions which finance them, as well as to educational service users, employers and social partners.

A priority area in the short term should be to adopt a new system of higher education quality assurance which would include three components (according to Article 16 of the Law of Ukraine on Higher Education): 1) an internal quality assurance system; 2) an external quality assurance system; and 3) a quality assurance system for the National Agency of Higher Education Quality Assurance, and for independent institutions evaluating and assuring the quality of higher education.

Reform of the educational sector should include updating educational standards. In this respect, top-priority objectives in higher education include bringing educational standards closer to European standards (through a new list of branches and specialities), integrating academic and occupational standards (through the development of requirements attached to a specific workplace and their inclusion in curricula) and ensuring the recognition of Ukrainian diplomas abroad. Additional requirements to ensure the competitiveness of HEIs could be the following: the cooperation of HEIs in examining requests from the labour market; promotion of the research competency of students; participation of HEIs in addressing the economic, social and environmental problems of the country and its regions; using new knowledge available in various sectors; professional development of the teaching staff; and integration into the world educational and scientific space.

The adoption of a new legislative package of documents (the Law on Education, the Law on Vocational Education etc.) would allow a new type of educational institution to be created – a multidisciplinary regional centre of vocational education oriented towards the region's demand for workers. Other relevant objectives include: adopting competency-based professional standards; combining the existing qualifications in vocational education with the National Qualifications Framework; designing evaluation criteria to assess the quality of work done as part of vocational education; and delegating managerial and financial powers from the MES to the regional level.

When implementing a new model of secondary education, attention should be focused on: guaranteeing the acquisition of complete secondary education, to be assumed by the State; ensuring qualitative updating and timely dissemination of the learning content; approving standards of logistical, methodological, staffing and information support for the educational process in GEIs, taking into account the need for fully functioning inclusive classes and groups; minimizing school drop-out rates; offering continuous learning skills right from the primary education stage; and improving the efficiency of subject-oriented training for basic school graduates, to provide them with greater opportunities for choosing a desirable academic or occupational career.

Since pre-school education services should be provided at a child's place of residence, the following areas remain relevant: expanding the network of PEIs (of all types and forms of ownership) and educational complexes; and adopting modern preschool educational models, including the provision of educational services by teachers who are entrepreneurs in the field of education.

The adoption of a variety of tools for openness and transparency in educational activities is made imperative by the need to offer education that is as close as possible to the highest international standards and best practices. Since the reform process has already begun, the timely elimination
of its unexpected adverse effects requires more active cooperation between the MES and local self-governance authorities and civil society. Amid the decentralization and administrative reform, mechanisms to ensure state standards of educational activities require thorough deliberation.

Fundamental and rapid changes to the traditional lifestyle entail new functions and tasks for educational institutions (in particular, to eliminate restrictions of choice and barriers to participation, to plan and realize individual educational trajectories and to intensify integration and social inclusion processes). It is important that the young generation realizes the interrelation between three crucial and mutually reinforcing concepts: quality of education, quality of employment and quality of life.
Section II.
PROGRESS TOWARDS ACHIEVING THE NATIONAL MILLENNIUM DEVELOPMENT GOALS

GOAL 3
PROMOTE GENDER EQUALITY
Section II.
PROGRESS TOWARDS ACHIEVING THE NATIONAL MILLENNIUM DEVELOPMENT GOALS

In 2015, 51% of women were members of the Ukrainian Parliament (12%).

The average wage gap between men and women is 23%.

Women on councils: 12% in Oblast Council, 23% in Rayon Council, 28% in City Council, 51% in Village Council, 46% in Settlement Council.
### TARGETS AND INDICATORS

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<th>TARGETS</th>
<th>INDICATORS</th>
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| **Target 3.A:** Ensure gender representativeness at the level of no less than 30–70 percent in representative bodies and high-level executive authorities | 3.1. Gender ratio among the Members of the Parliament of Ukraine, number of women/number of men  
3.2. Gender ratio among the members of local authorities, number of women/number of men  
3.3. Gender ratio among the higher-level civil servants (categories 1–2), number of women/number of men |
| **Target 3.B:** Halve the gap in incomes between women and men | 3.4. Ratio of average wages between women and men, % |

### PROGRESS IN UKRAINE

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<td>Indicator 3.2. Gender ratio among the members of local authorities, number of women/number of men</td>
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<td>Indicator 3.3. Gender ratio among the higher-level civil servants (categories 1–2), number of women/number of men</td>
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<tr>
<td>Indicator 3.4. Ratio of average wages between women and men, %</td>
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<td>68.6</td>
<td>70.9</td>
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<td>77.2</td>
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The table presents actual data from the State Statistics Service of Ukraine up to 2013 and target values for 2015 (established in 2010).  
* See note on page 2.
Ensuring gender equality in society is one of Ukraine’s greatest challenges. Most of the ambitious objectives the country set for achievement by 2015 have not been met in full. Key indicators of gender equality are still a long way off target, despite increased support for relevant institutional settings and programmes. Neither the allocation of financial support to measures aimed at ensuring gender equality, a strong expert environment shaped with the active support of non-governmental and international organizations, a series of scientific studies nor the realization of gender initiatives, including an awareness-raising campaign, had the expected effect.

Attaining gender parity in elected authorities turned out to be the most difficult task to accomplish, although this dimension of equality acts as a cornerstone for success in furthering gender equality and determines the availability of real opportunities for women to promote their own empowerment in all areas of social life.

**KEY TRENDS**

Women’s representation in elected bodies and public authorities. Between 2000 and 2015 there was a gradual upward trend in the number of women among the members of the Verkhovna Rada of Ukraine; however, the rate of this growth was largely insufficient to get close to the target set for 2015. The most women were elected to the Verkhovna Rada during the 2014 parliamentary elections (47 of 422 Members of Parliament – 11 percent of the total Verkhovna Rada membership), which should have been held for the first time according to the principle of balanced representation of women and men. Indeed, a long-lasting campaign to promote the idea of gender quota-setting in the election process eventually led to the approval in 2013 of amendments to national legislation, whereby each sex must constitute no less than 30 percent of each national party’s list of candidates.

However, most political parties demonstrated a lack of awareness of or an unwillingness to adhere to these provisions when drawing up their electoral lists: of the 29 parties taking part in the elections, only nine placed women in positions that guaranteed election success on their lists. An analysis of candidates for single-member constituencies showed that there were still constituencies in the country where no female candidates were nominated at all.

At the same time, according to non-governmental organizations, the 2014 election demonstrated a more active and conscious stance taken by female candidates as representatives of women’s interests, as well as an aspiration to increase women’s representation in parliament and, more generally, a broader presence of women politicians in the information space.¹

Successive nominations by the government and the subsequent upgrading of Members of Parliament from the lists resulted in a slight increase in women’s representation in the Verkhovna Rada to 12.1 percent in May 2015 (51 women among 422 Members of Parliament).² Nevertheless, for this indicator, Ukraine still lags far behind developed countries – but also many others – as it is ranked 107th in the world in terms of the gender balance of national parliaments.³ As of 1 January 2015, on average, women accounted for 22.1 percent of Members of Parliaments across the globe, with 41.5 percent in Nordic countries, 26.8 percent in the Americas, 23.7 percent in European countries (excluding Nordic countries), 22.5 percent in sub-Saharan Africa, 19.0 percent in Asia, 18.1 percent in the Arab States and 13.1 percent in the Pacific region.⁴

In terms of women’s participation in top-level elected authorities, Ukraine also lies behind most post-Soviet countries, except Georgia and Armenia. Since the promotion of gender equality is proclaimed as a priority in the Inter-

¹ **http://wcu-network.org.ua/ua/possessing-equal-rights/publications/Gendernii_monitoring_parlamentskix_vibor_2014_roku_Analitichniy.**

² **Verkhovna Rada of Ukraine, official web portal: http://w1.c1.rada.gov.ua/pls/site2/p_deputat_list.**

³ **Inter-Parliamentary Union, Women in National Parliaments: World Classification as of 1 February 2015, http://www.ipu.org/wmn-e/classif.htm.**

⁴ **Inter-Parliamentary Union, Women in National Parliaments: Regional Averages as of 1 February 2015, http://www.ipu.org/wmn-e/world.htm.**
GOAL 3.
PROMOTE GENDER EQUALITY

Parliamentary Union’s Strategy for 2012–2017, further expansion of women’s political representation at the global level can be expected, and Ukraine could then fall further behind if strong corrective measures are not taken.

The situation concerning women’s representation on local-level councils seems somewhat more favourable. Unfortunately, no regular monitoring of this indicator has been conducted in recent years, due to a partial freezing of activities related to an inter-agency transfer of powers within the framework of administrative reform. Political destabilization that began in the country in 2014 also makes it impossible to perform a systematic analysis of this indicator in all regions of Ukraine and to aggregate all the relevant data. However, estimates of women’s representation on local councils of certain regions suggest that Ukraine has managed to come close to the 2015 target for gender parity in this area. At the same time, substantial regional variations in this indicator were observed across the country – from 15.7 percent of local council members in Zakarpattia to 54.9 percent in Chernihiv oblast (see Figure 2.3.1).

Greater openness to equal representation can be observed at lower administrative levels: while women constitute only 10 percent of members of oblast councils, the figure rises to 14 percent for city councils, 23 percent for district councils, 43 percent for settlement councils and as much as 51 percent for village councils. Key factors leading to a greater availability of elected positions for women include closeness to local communities (allowing electors to be better aware of the candidates’ work experience, previous activities and programme slogans) and the lower financial costs of electoral campaigns at local level. In 2015 a new law on local elections was passed, containing a provision on gender quotas (with each sex representing no less than 30 percent of a political party’s electoral list), and this new legislation can be expected to further increase women’s representation on local councils.

Women at top levels of public administration. Although the general gender composition of the civil service in Ukraine still has the attributes of a ‘pyramidal’ structure, where the number of women decreases in proportion to the seniority of the management level (see Figure 2.3.2), substantial progress has been made in securing gender parity in top managerial positions. The target value for this indicator has been reached to a great extent, due to a positive trend between 2000 and 2014. In particular, as of early 2015, women constituted as many as 30.9 percent of all executive civil servants of categories 1 and 2 – i.e. almost one third of top executives involved in decision-making at the highest state level.

Figure 2.3.1 Representation of women on local councils by regions of Ukraine (percentage of council members), early 2015

<table>
<thead>
<tr>
<th>Oblast</th>
<th>Women Representation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zakarpatska oblast</td>
<td>15.7</td>
</tr>
<tr>
<td>Lvivska oblast</td>
<td>29.0</td>
</tr>
<tr>
<td>Ternopilska oblast</td>
<td>35.9</td>
</tr>
<tr>
<td>Ivano-Frankivska oblast</td>
<td>36.1</td>
</tr>
<tr>
<td>Kyivska oblast</td>
<td>46.2</td>
</tr>
<tr>
<td>Rivnenska oblast</td>
<td>46.8</td>
</tr>
<tr>
<td>Dnipropetrovska oblast</td>
<td>48.3</td>
</tr>
<tr>
<td>Odeska oblast</td>
<td>48.5</td>
</tr>
<tr>
<td>Kirovohradska oblast</td>
<td>51.2</td>
</tr>
<tr>
<td>Sumski oblast</td>
<td>51.6</td>
</tr>
<tr>
<td>Zaporizka oblast</td>
<td>51.8</td>
</tr>
<tr>
<td>Zhytomyr ska oblast</td>
<td>52.0</td>
</tr>
<tr>
<td>Chernihivska oblast</td>
<td>54.9</td>
</tr>
</tbody>
</table>

Source: State Statistics Service of Ukraine.

* See note on page 2.


An additional cause for optimism is provided by a gradual increase in the share of women among the highest category of executives, which reached its highest ever level (16.1 percent) during the period in question.

As of May 2015, two ministerial positions in the Government of Ukraine were held by women – the Minister of Finance and the Minister of the Cabinet of Ministers. Five women worked as First Deputy Ministers, and 11 as Deputy Ministers. As regards women’s representation in ministerial positions (10.5 percent as of early 2015), Ukraine is ranked 68th internationally, sharing this position with such countries as Congo, Tunisia and Uzbekistan. Ukraine also lies behind most post-Soviet countries, ahead of only the Russian Federation (6.5 percent), Turkmenistan (5.7 percent) and Azerbaijan (2.5 percent). The potential for further expansion of women’s representation at top management levels is determined by a high rate of general ‘feminization’ of civil service management, which would create a reserve of women personnel with the necessary skills and experience. Furthermore, the ongoing changes in the age and sex composition of civil servants (38.3 percent of women in executive positions in the top category belong to younger age groups – up to 35 years) will enable further growth in the number of professional women and their promotion to decision-making positions.

No marked progress is observed in the promotion of gender parity in executive positions of local government: it is the area where women’s access to top management levels is the most limited, with 5 percent of managers in the highest category at the beginning of 2015, while the proportion of women rises to 80 percent at lower managerial levels (categories 5 and 6). As of May 2015, there were no women Heads of oblast state administrations; however, there were 11 women Deputy Heads in regions of Ukraine (Dnipropetrovsk, Kharkiv, Kherson, Khmelnytskyi, Kirovohrad, Luhansk, Lviv, Mykolaiv, Sumy, Ternopil and Volyn oblasts).

Gender wage gap. Income inequalities also persist in the economic field. In particular, the gender pay gap has not narrowed enough to get near the target value. Despite a positive trend, men’s average earnings in Ukraine are still more than a quarter higher than women’s average income: in 2014, women’s average wage was only 76.3 percent of men’s wage (UAH3,037 vs. UAH3,979 per month). Moreover, the various fluctuations in this indicator over the last decade suggest an absence of any real impact of gender policy on reducing the pay gap. In comparison, the average pay gap was 16.4 percent in the 27 countries of the European Union (EU-27) in 2013. Hence, achieving the gender standards of European developed democracies will require considerable further effort.

However, the weightiest contribution to earnings inequality between women and...
men is caused by a gender-based division of labour that means the partition of working women and men among different professions, occupational groups and economic sectors, and at different managerial levels and positions. Along with the impact of the above-mentioned factors, there remain 'unexplained' drivers of a gender pay gap that are caused by the prevalence of direct discriminatory practices in the labour market – i.e. situations where women receive lower earnings than men despite having equal characteristics in terms of skills and labour productivity.

**Occupational gender discrimination.** A lack of measures to eliminate gender disparities in the labour market in Ukraine explains this persistent pay gap. Some studies underline a growing level of gender-based occupational segregation resulting in an increased concentration of women in traditionally 'female' areas of activity and, subsequently, lower remuneration levels. These occupational areas include activities that require a relatively high level of skills, including mental and creative work, but do not receive high wages – for example, education, health care and social security, public administration, and administrative and support services. However, income differences between women and men are gradually decreasing in these areas of activities: the gender gap was no higher than 15 percent in 2014, while the average wages of women employed in libraries, archives, museums and other cultural establishments even exceeded men's average wages by 8 percentage points.

Historically, the greatest gender labour pay gaps are observed in various industrial sectors, where women's average wage was only 71 percent of men's in 2014 (UAH3,164 vs. UAH4,564). Other groups of activities with a considerable gender pay gap include arts, sports, entertainment and recreation (the ratio was 50.8 percent, or UAH2,721 vs. UAH5,360 per month), and finance and insurance (64.4 percent, or UAH5,940 vs. UAH4,456). Other groups of activities include activities that require a relatively higher level of skills, including mental and creative work, but do not receive high wages – for example, education, health care and social security, public administration, and administrative and support services. However, income differences between women and men are gradually decreasing in these areas of activities: the gender gap was no higher than 15 percent in 2014, while the average wages of women employed in libraries, archives, museums and other cultural establishments even exceeded men's average wages by 8 percentage points.

According to the International Labour Organization, women's average earnings worldwide constitute 77 percent of men's, with the figure having increased by only 3 percentage points over the two last decades. According to international experts, the gender pay gap will also persist for subsequent generations without adequate political response. Therefore, the existence of a certain pay gap between women and men is a global phenomenon driven by the influence of a whole number of determinants: differences between women and men in the level and character of education; the specifics of their employment in terms of working schedule and hours; a prevailing form of employment and workload; career aspirations; and different priorities in the combination of work with family responsibilities.

In addition to the persistent gender discrimination by sector, the impact of a 'vertical' form of gender-based segregation in employment should not be ignored. It manifests through women's limited access to executive positions that offer not only greater powers and opportunities but also much higher pay levels. Although gender analysis of the working population by level of position suggests that women in Ukraine have access to the managerial level, they mainly occupy positions of lower and middle management: men prevail among the top managers, in both the public and private sectors of the economy.

The occurrence of gender discrimination in the labour market is indicated by data from special sociological surveys, reports by the Representative of the Verkhovna Rada of Ukraine for Human Rights, results of inspections conducted by the State Labour Inspectorate of Ukraine, and special monitoring studies. Furthermore, according to the International Labour Organization, up to 10 percent of the advertisements in printed media...

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Footnotes:
are discriminatory, and this figure rises to 15 percent on specialist job-search websites.

**Vulnerable groups of women.** Importantly, the existence of a gender pay gap not only affects women’s current living standards but also results in lower pensions. The adverse impact of lower earnings in the calculation of pensions is compounded by a shorter service record due to a lower pensionable age and, usually, periodic absences from the labour market during a woman’s working life. As a result, the gender gap in average pension rates is significantly higher than the wage gap (women’s average pension was only 72.4 percent of men’s in early 2015, whereas women’s average wage was 77.2 percent of men’s). This substantially affects quality of life in later life, especially given women’s longer life expectancy than men’s. Consequently, ageing women are one of the most vulnerable population groups. High risks of poverty and social exclusion are particularly pronounced for lonely older women whose only incomes are their pension benefits, and whose general well-being is often determined solely by the amount of governmental support they receive.

Another vulnerable group consists of women with young children because, while of working age, they mostly give up employment in the labour market to raise their children, their income depending then on social transfers. Clearly, the risk of poverty for this group of women is higher in single-parent families that do not receive proper male support to ensure their welfare.

As a result, there are considerably more women than men among the low-income population relying on state social assistance. In particular, the household survey of 2013 showed that there were 1.3 times as many women as men receiving child benefit, 1.4 times as many social benefit users and 2.3 times as many receiving subsidies.

Another vulnerable population group consists of rural women, who face problems of low pay in the agricultural sector and limited employment opportunities in other economic activities. A higher risk of poverty for this population group has to be assessed not only in terms of income opportunities but also in the context of access to basic social services. In particular, about 48 percent of female respondents to a survey on the situation of rural women in Ukraine\(^\text{10}\) pointed out that they were unable to buy the medicines and pay for medical services they needed; another 29 percent could not afford the necessary medical care for conditions requiring surgery or long-term treatment. Deprivations in other domains of life include substandard living conditions (nearly 10 percent of rural women describe their living conditions as bad or very bad), insufficient transport infrastructure, lack of access to means of information and communication, and limited opportunities to acquire high-quality education or improve their skills over the course of their life.

Finally, the problem of women’s greater vulnerability is even more acute in the context of the high rate of gender-based violence in Ukraine. According to a survey on the prevalence of violence against girls and women in 2014, 19 percent of women aged 15–49 had experienced physical violence, whereas 8 percent had experienced sexual violence.\(^\text{11}\)

The most widespread form of gender-based violence is still that perpetrated by men within marriage or in cohabitation; at the same time, it is precisely these cases that usually face particular stigma in society. More

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than two thirds of the victims did not ask for help at all, which indicates both insufficient confidence in law enforcement bodies and state institutions at large, and a certain tolerance of gender-based domestic violence.

The gender indicators monitored between 2000 and 2015 fail to fully represent all manifestations of gender inequality in Ukrainian society. Gender disparities cut across almost all development targets, including key areas such as women’s high risks of poverty and social vulnerability, and the gender aspects of socially determined causes of the population’s morbidity and mortality. For example, higher incidence of socially determined diseases (tuberculosis, HIV/AIDS) and malignant tumours, closely related to men’s lifestyles, high mortality from external causes (injuries, poisoning etc.) and suicides constitute an important manifestation of gender inequality in society, connected not only with people’s health status but also with the specific social environment. At the same time, the traditional gender stereotypes assigning the family breadwinner role to men result in excessive psycho-emotional pressure and stress that, amid the insufficient dissemination of guidelines on healthy lifestyles and a lack of public safety, result in excessively high mortality among men of working age.

It is, therefore, advisable to carry out an end-to-end gender analysis of the above-mentioned problems, adopting relevant cross-sectoral approaches to the monitoring and evaluation of progress. Manifestations of gender-based discrimination in the labour market, sexism and biased treatment in the information space and mass media are yet to be covered by a systematic statistical observation. The collection of data concerning the proliferation of gender-based violence remains problematic, due to institutional limitations and shortcomings and also the effect of social and cultural barriers, especially concerning domestic violence. Finally, a lack of sociological monitoring of the prevalence of gender stereotypes and norms in society makes it impossible to research their real influence on the choice of life strategies by women and men, and on the realization of their opportunities in the labour market, in social life etc.

**PROBLEMS AND NEW CHALLENGES**

**Lack of sustainability of gender transformations.** The lack of consistency in developing a national mechanism to ensure gender equality is a significant factor in hindering progress in the achievement of the gender equality goals. The failure to complete administrative reforms at the regional level resulted in weaker coordination between central and local government authorities and in lower institutional capacity, including by the suppression of gender advisers in the field. Unstable powers and a low level of inter-agency collaboration in the implementation of gender equality activities impair the efficiency of reforms, whereas the continuous reshuffling of officials and high staff turnover in the civil service lead to a shortage of skilled specialists in this area. The effectiveness of the gender policy being implemented in Ukraine is also hindered by various problems related to the public sector such as the lack of transparency, low performance, extreme over-regulation of procedures, and weak inter-agency coordination.

At the same time, since the financing provided by the State for its gender policy is residual, implementation of the necessary measures depends heavily on support from international donors, whereas practical implementation of gender initiatives greatly relies on nongovernmental organizations and civil society activists. Although a strong expert pool of scientists, educators, human rights advocates and volunteers, whose activities relate to attitudes to gender equality, has been created in Ukraine, the level of involvement of civil society representatives in the development of gender policy remains rather low.

**Statistical challenges.** The statistical support for monitoring and evaluating progress to ensure gender equality requires further improvement, and the set of relevant indicators should be revised regularly to cover all the manifestations of gender inequality in society and to remain relevant as new social challenges emerge.

**Insufficient level of a gender culture in society.** The absence of a gender culture in the country leads to a failure to recognize, both by state authorities and the public at large, the urgency to address gender problems. This mindset leads to the following gaps: lack of a tradition to consider the principles of gender equality in the formulation of state policies and programmes; failure to comply with gender standards in public authorities; insufficient attention paid to gender problems
in the activities of political parties; and little interest in gender equalization issues among the population. In many respects, the absence of an all-embracing idea of gender equality in society is related to the dominant influence of traditional stereotypes concerning the division of social roles and activities between women and men, their respective life priorities and attitudes. One of the consequences of the persistence of these stereotypes is a strong gender-based occupational segregation that restricts labour choices for both women and men, and adversely affects the labour market at large, impairing its efficiency and flexibility and limiting staff mobility.

Box 2.3.3  The role of gender stereotypes in Ukrainian society

Compared with the populations of other European countries, the opinion is more widespread in Ukrainian society that women should give up their occupational and career interests for the sake of their children and family, and yield to men when the labour market situation is tense and there are not enough jobs. For example, almost a quarter of the Ukrainian respondents taking part in certain rounds of the European Social Survey pointed out that they ‘do not completely approve of women with children under 3 years of age working full time’, and almost 40 percent of the female respondents said they ‘completely agree with the statement that a woman must be ready to work less in a paid job to pay more attention to her family’. These data are in sharp contrast to the opinions of women in western European countries, where the share of such responses was no higher than 15 percent, while in Nordic States this position was shared by less than 5 percent of respondents.

Source: European Social Survey, http://www.europeansocialsurvey.org

Insufficient institutional support for workers with family responsibilities. Weak institutional support in this area restricts the potential for women and men to find a balance in their professional and social lives. It is reproductive activity – which broadly covers not only giving birth to and raising children but also caring for incapacitated family members (those who are ill, persons with disabilities, and elderly people), doing housekeeping etc. – that acts as a key limiting factor concerning opportunities for decent employment, income generation and career development. On the other hand, the additional social protection measures related to maternity and designed to improve women’s working conditions often turn, in practice, into barriers for employment, due to biased treatment on the part of employers who are not willing to bear extra costs and face any inconvenience related to hiring women.

Insufficient attention paid to the problem of reconciling work and paternal responsibilities remains another significant issue in this context. Currently, the question of considering a father’s interests in the scheduling of his working hours at an enterprise is not even raised, which considerably hinders the likelihood of overcoming the predominant stereotype of men solely as the family breadwinner. The idea of granting a father leave to care for a child under 3 years of age remains almost unacceptable both to employers and workers, despite this norm being declared in national legislation. Many men actually remain unaware of their own rights enshrined in legislation. However, as experience from the Nordic States shows, policies that support men’s greater involvement in parenting are the most promising not only for promoting gender equality in the division of family responsibilities but also for raising the total fertility rate in the context of demographic policy.

Decline of the social welfare infrastructure. This decline restricts people’s access to basic social services and lays the ground for women’s excessive engagement in household chores, which is described in modern scientific research as women’s ‘double workload’ or ‘second shift’. The problems of ensuring an appropriate quality of social services, overloaded state-owned facilities and a shortage of financial resources and skilled staff remain significant. A most important concern for working women with family responsibilities is the availability of pre-school child-care facilities, which, according to sociological survey data, are viewed by women themselves as the best way of raising pre-school children. The collapse of regional transport infrastructure reinforces the social exclusion of rural women due to their limited mobility and restricted access not only to domestic service centres but also to health care and educational institutions, employment opportunities and social services.

The current challenges caused by the large-scale flows of internally displaced persons and the anti-terrorist operations being undertaken in the eastern regions of the country lead to new, specific problems in the field of gender development. Pressing issues that
require a rapid response include a number of situations – from the increased vulnerability of women to violence in areas of armed conflict to limited opportunities for citizens to exercise their voting rights due to forced displacement within the country.

**RECOMMENDATIONS TO ADDRESS CHALLENGES**

Although most problems outlined above are interlinked and mutually dependent, it is clear that no general-purpose tool to solve them exists, because the ground for gender inequality is laid at the level of social stereotypes, whose transformation is a difficult and lengthy process calling for systemic and consistent efforts.

In the context of **enhancing women’s political representation**, the most relevant policy directions to foster are: ensuring the compliance of political parties with gender quotas, including legislation specifying these norms so as to ensure an effective proportional inclusion of both sexes on party lists, and building women candidates’ own capacity by shaping their leadership skills, raising their professional level etc.

In general, the involvement of Ukrainian women in political activities still remains low, although the right to stand in elections and be elected to positions of all levels is guaranteed to women by law. Therefore, popularizing the stories of successful women politicians could become an efficient tool to further involve women in political life and cultivate their aspirations to influence the processes taking place in the country and its communities.

Concrete steps in this direction could include special information campaigns, support for special publications such as the Successful Women or the Nation’s Most Influential Women ratings, the creation of programme cycles with publication in the media or the organization of competitions for the title of the best women managers or the best companies adhering to the principles of gender equality in their human resources policy.

At this stage a leading role belongs to mass media, but the need for financial, technical and organizational support for relevant activities requires the involvement of governmental institutions, commercial structures and non-governmental organizations.

Achievement of parity in the representation of women and men at the top levels of public administration is key, as it would trigger a push for a further ‘chain reaction’ in enhancing women’s access to executive positions in the private sector, where the instruments able to influence the empowerment of women in decision-making are not that developed.

Although some countries have laws that contain provisions for jobs to be given to women if candidates of both sexes with equal occupational and skills profiles apply for the vacancy, this instrument appears rather debatable. An alternative approach is to resort to the use of so-called ‘soft’ quotas in the promotion to executive positions, which are based on the principle of gender rotation – i.e. alternating representatives of both sexes in appointments to a given position or at least enforcing the mandatory participation of both men and women in competitions to fill vacant executive positions.

Other influential measures could include the introduction of mandatory reservation of vacancies for positions where women are underrepresented, compliance with requirements that ensure transparency in the staff selection procedure by means of dissemination of internal job ads, the use of a grounded and understandable system of ranking and criteria for the assessment and selection of candidates, and disclosure of these approaches to staff and job seekers.

The policy of ensuring gender equality at the workplace should rely on an integrated approach that would combine different well-targeted actions – namely: bringing the institutional environment within which the gender policy is implemented into conformity with international standards and norms; ensuring the transparency, effectiveness and accessibility of existing anti-discrimination mechanisms; raising staff awareness on the forms and manifestations of gender-based discrimination; activating social partners to ensure non-discriminatory treatment of workers and strengthening advocacy with employers; adopting gender approaches to proactive employment policy and the development of social programmes aimed at targeting vulnerable categories of the population, such as unemployed women, single women raising young children, lonely elderly women etc.; regulating the labour
remuneration policy and gradually raising the remuneration level in the public sector; developing institutional support to workers with family responsibilities etc.

As regards gender policy in the labour market, special attention should be paid to the objective of reducing various forms of gender-based occupational segregation. A certain gender division in employment will obviously persist under any conditions because women and men have different attitudes in their occupational choices and different preferences for activities in the labour market.

The policy objectives consist in eliminating the impact of external drivers of segregation, first and foremost of statutory restrictions on possible employment of women in certain occupations and activities, the list of which does not always correspond to objective criteria and requires regular review. With the current dynamic development of the labour market and society at large, these requirements appear not only outdated but sometimes discriminatory because they restrict women’s opportunities to make an informed choice among different types and forms of employment, according to their own inclinations or physical capabilities. In some cases, titles of occupations, approved by the National Classifier of Occupations of Ukraine (ДК 003:2010), have a gender-specific focus (for example, ‘nurses and midwives’, ‘seamstresses and embroideresses’, ‘typists’ etc.).

As international and domestic experience shows, women represent a large majority of internally displaced persons yet are responsible for children, elderly family members and persons with disabilities. In such situations, manifestations of gender discrimination can be aggravated by the effects of multidimensional discrimination — in finding work, applying for social assistance, locating temporary housing, accessing medical or educational services etc. The specific gender dimensions of these situations should be considered not only in the formulation of a general strategy of social policy in the country but also in the design of concrete, targeted programmes at the national, regional and local levels.

The policy of transforming gender stereotypes in society is the most important but also the most difficult task to perform. Along with the above-mentioned need for educational campaigns, such policy should expand the practice of mainstreaming gender studies into the curricula of educational institutions and overcome sexism in mass media and advertising. Finally, essential conditions for achieving gender transformations in Ukraine include: activating the attitudes of women themselves; fostering a responsible civic stance; overcoming a general paternalistic mindset in society; realizing women’s own rights and opportunities; bolstering their self-esteem; building their confidence in the labour market; and widening the choice of life strategies in society.
Section II.
PROGRESS TOWARDS ACHIEVING THE NATIONAL MILLENNIUM DEVELOPMENT GOALS

4 REDUCE CHILD MORTALITY
BETWEEN 2000 AND 2014
THE CHILD MORTALITY RATE (UP TO 1 YEAR OF AGE) DROPPED FROM 11.9 TO 7.8 DEATHS PER 1,000 LIVE BIRTHS

THE MORTALITY RATE AMONG CHILDREN OF UP TO 5 YEARS OF AGE DECREASED FROM 15.6 IN 2000 TO 9.3 IN 2014
## TARGETS AND INDICATORS

<table>
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<tr>
<th>ЗАВДАННЯ</th>
<th>INDICATORS</th>
</tr>
</thead>
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<tr>
<td><strong>Targets 4.A:</strong> Decrease the mortality rate among children up to 5 years of age by one quarter</td>
<td>4.1. Mortality rate among children of up to 5 years of age, number of children of corresponding age who died per 1,000 live births</td>
</tr>
<tr>
<td></td>
<td>4.2. Infant mortality rate, number of infants up to 1 year of age who died per 1,000 live births</td>
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## PROGRESS IN UKRAINE

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<tbody>
<tr>
<td>Indicator 4.1. Mortality rate among children of up to 5 years of age, number of children of corresponding age who died per 1,000 live births</td>
<td>15.6</td>
<td>14.9</td>
<td>13.5</td>
<td>12.9</td>
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<td>12.4</td>
<td>12.4**</td>
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<tr>
<td>Indicator 4.2. Infant mortality rate, number of infants up to 1 year of age who died per 1,000 live births</td>
<td>11.9</td>
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<td>9.8</td>
<td>11.0**</td>
<td>10.0</td>
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<td>9.1</td>
<td>8.4</td>
<td>8.0</td>
<td>7.8</td>
</tr>
</tbody>
</table>

The table presents actual data from the State Statistics Service of Ukraine up to 2013 and target values for 2015 (established in 2010).
* See note on page 2.
** On 1 January 2007, Ukraine switched to new standards for assessing the criteria for the perinatal period and live and stillbirths.
PROGRESS TO DATE

Maternal and child mortality rates are universally recognized as the most sensitive indicators of a country’s socio-economic well-being. This is why national governments should focus their efforts on improving the efficiency and quality of medical care provided to pregnant women, women in and after childbirth, newborns and infants. Ukraine has been very successful in this area since 2000: the target set for 2015 was met as early as 2010.

However, that all the changes occurred amid a rather difficult situation in the country. As mentioned in Section 1 of this report, in recent years Ukraine has faced a rather deep socio-economic crisis that has caused major changes in the country’s demographic conditions – namely, population ageing and a low birth rate: the number of newborns decreased by 9,200 from 2013 to 2014. This trend was persisting in early 2015 as well: 67,473 babies were born in January and February 2015, compared to 77,380 for the corresponding period in 2014. According to the UN demographic forecast, Ukraine’s population will decrease to 40 million by the late 2020s and to 30 million in the early 2060s. In the context of this difficult period, special attention should be paid to such matters as improving medical care for children of all ages, reforming the social sphere, reducing poverty, stabilizing economic and social processes, strengthening the status of the family and interacting with international partner organizations in health care.

KEY TRENDS

Since the country’s independence, the maternal and child health care sector has focused on further development and improvement of the structure of obstetric and children’s health care facilities.

In 2004, intense implementation of advanced, universally recognized and evidence-based medical technologies started in Ukraine (with the support, through international technical assistance projects, of the international donor community, such as USAID/JSI, SDC, UNICEF and WHO). These efforts led to increased availability of high-quality medical care and a strengthening of preventive care for children and mothers. Moreover, the basic and advanced approaches to pregnancy, childbirth and management of sick children were quickly and successfully revised. This resulted in lower child morbidity and mortality rates (see Figure 2.4.1) and undoubtedly contributed to the country achieving its target indicators ahead of schedule.

On 1 January 2007 Ukraine switched to European criteria for determining the perina-
tual period, live births and stillbirths, which appeared to be the major reason for an increase in the rates of perinatal, neonatal, infant and child mortality in 2007. However, these increases were not significant, and the indicators improved the following year (2008). This points to the assumption of incomplete registration of live births in Ukraine, actually documented by independent evaluations. Since 2009 Ukraine has continually reduced perinatal and neonatal mortality, infant mortality and mortality rates among children of up to 5 years of age, although the stillbirth rate has actually not changed in recent years.

Morbidity rates (see Figure 2.4.2) reflect the general state of children’s health. They are influenced, for children of up to 5 years of age, by socio-economic, antenatal and intranatal factors as well as by specific conditions in the course of the early neonatal period.

**Major causes of mortality among infants and children of up to 5 years of age.** According to official data (MoH of Ukraine), over 60 percent of infant deaths occur in the first 28 days of life (the neonatal period). The most vulnerable group are premature newborns, which in recent years have represented 4.0–4.5 percent of the total number of newborns in Ukraine. Around 30–40 percent of perinatal morbidity and mortality cases are related to premature delivery in one way or another. The most notable drivers of perinatal morbidity and mortality include social factors (such as lack of social support, no housing, no husband, young age of the mother, use of alcohol/drugs, smoking), socio-economic factors (unemployment, low income/poverty) and health disorders (relating to either general or reproductive health).

The leading causes of infant mortality have remained constant over recent years; they include conditions related to the perinatal period and congenital abnormalities, followed by deaths from external causes (Figure 2.4.3).

In 2014 the leading causes of infant mortality outside inpatient settings were injuries and poisoning (33.1 percent), inaccurately determined symptoms, signs and conditions (24.1 percent) and respiratory diseases (13.8 percent). Such causes point to the prevalence of social problems and a low level of parent awareness of how to ensure safe childcare at home.

Hence, antenatal and perinatal care and the socio-economic protection of pregnant women and families are of key importance for maintaining the downward trend in the infant mortality rate in Ukraine. It is, therefore, necessary to further improve the quality and efficiency of medical care for pregnant women and newborns, as well as to ensure equal access to high-quality medical care regardless of people’s place of residence or social status. Reaching these objectives requires a change in the State’s approach to the revision of the legislative framework and the financing of the health care sector.

A stable situation has been observed in the breakdown of the leading causes of mortality among children of up to 5 years of age in recent years. Infant mortality is known to be a key determinant in shaping the mortality
rate of this age group; therefore, the leading causes of mortality within this age group are perinatal conditions, congenital abnormalities and external causes (injuries and poisoning) (see Figure 2.4.4). Decisive actions for reducing the mortality of children of up to 5 years of age will thus be the further implementation of efficient antenatal screening, counselling of parents on childcare, changing organizational and clinical approaches to the provision of medical care to pregnant women, women in and after childbirth, newborns and infants, and the adoption of technologies with proven efficiency for child health care.

Development of the perinatal care system. Ukraine has been transferring to a three-level system of perinatal care within a regional framework. Launched in 2009, the national project ‘New Life – New Quality of Maternity and Childhood Protection’ envisaged the establishment of 27 oblast perinatal centres all over Ukraine that would merge obstetric, neonatal and paediatric services. However, in view of the complicated political and economic situation in the country during the past year, only 12 oblast perinatal centres offering level III medical care were established, covering 16.7 percent of births in 2014. These centres are provided with highly skilled specialists and modern equipment for diagnosis and treatment, which ensures high-quality care for pregnant women with high and medium risks and for sick newborns. Other oblasts in Ukraine do not have such modern level III perinatal centres; therefore, effective, affordable and high-quality medical care for children and mothers cannot be guaranteed in these oblasts.

Figure 2.4.3 Causes of mortality among children of up to 5 years of age (percentage), 2010–2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Perinatal conditions</th>
<th>Congenital abnormalities</th>
<th>External causes</th>
<th>Infectious diseases</th>
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Source: State Statistics Service of Ukraine.

* See note on page 2.

Figure 2.4.4 Proportion of children born in health care institutions certified as ‘Baby-friendly hospitals’ (percentage), 2004–2014

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Source: analysis of development of the Baby-Friendly Hospital Expanded Initiative in Ukraine for 2014.

* See note on page 2.
The Baby-Friendly Hospital Initiative (BFHI). Another undoubtedly significant factor in the reduction in child mortality and morbidity rates is Ukraine’s adoption and implementation of the WHO/UNICEF-recommended Child-Friendly Hospital Initiative. In 2014 nearly three quarters of children (72.2 percent) were born in institutions certified as ‘baby-friendly hospitals’ (in 2008 it was only every second baby). The WHO/UNICEF initiative has been actively implemented in Ukraine since 2005, and 383 health care institutions providing care to mothers and children (33 percent of the total number) had achieved this status as of early 2015. At present, all regions in the country have at least one institution certified as ‘baby-friendly’.

Breastfeeding support. Breastfeeding is universally recognized as a significant driver for reducing child morbidity and mortality. In Ukraine strong support to breastfeeding started being implemented in the early 2000s through an appropriate reorganization of the work of health care facilities, implementation of the BFHI and substantial awareness-raising with the aid of social networks and the Internet. According to official statistics, 54 percent of newborns in 2013 and 54.9 percent in 2014 were on exclusive breastfeeding at the age of 6 months; the figures for the institutions certified as child-friendly hospitals were 62.9 percent in 2013 and 65.9 percent in 2014. According to the official statistics provided by the MoH of Ukraine, breastfeeding rates for children of up to 3 months of age are showing a positive trend: the share of children who completed breastfeeding at 3 months decreased from 37.3 percent in 2010 to 27.3 percent in 2014 (see Figure 2.4.5).

However, the independent Multi-Indicator Cluster Survey (MICS) conducted in Ukraine in 2012 shows that only 19.7 percent of newborns were exclusively breastfed until 6 months of age, and 38 percent of children aged 12–15 months continued breastfeeding, receiving also supplemental food. Only 22 percent of children of up to 2 years of age continued breastfeeding. These figures reveal discrepancies between official and independent statistical data, which can be explained by an imperfect departmental system of collecting and analysing the necessary information as well as by a rather ‘punishing’ approach adopted by the State to address problems involving health workers.

Immunological prophylaxis. Recent years have been marked by changes in the attitude of the Ukrainian population towards child vaccination, which is largely due to sensitization activities by WHO/UNICEF. According to a UNICEF survey, only about 28 percent of respondent mothers in 2008 had a positive attitude to child vaccination, whereas that figure reached 72 percent in 2014.

It has been proved that vaccination has a significant epidemiological effect when no less than 95 percent of the population is covered;
another significant factor for achieving the expected effect is the timeliness of vaccination according to the terms set by a prophylactic immunization schedule. Thus the Law of Ukraine on the Approval of the State Programme on the Immunological Prophylaxis and Protection of the Population against Infectious Diseases for 2009–2015 declared that no less than 95 percent of children of up to 1 year of age must be covered by prophylactic vaccinations against tuberculosis (TB), diphtheria, tetanus, pertussis, Hib infection, poliomyelitis, hepatitis B, measles, mumps and rubella. A new schedule of compulsory prophylactic vaccinations to ensure protection of the population against 10 controlled infections is regulated by the MoH of Ukraine Order ‘On improving the procedure of prophylactic vaccinations in Ukraine’.

Between 1990 and 2008 the rate of full vaccination coverage for children who reached 1 year of age was invariably high (98–99 percent), ensuring protection of the whole society. However, the trend has been gradually regressing since 2008, and in 2014 the coverage of children of up to 1 year of age with bacille Calmette–Guerin (BCG) vaccination against TB decreased to 56.5 percent, against diphtheria, tetanus and pertussis (DTaP) to 38.4 percent, against poliomyelitis to 44.7 percent and against hepatitis B to 48.5 percent (see Figure 2.4.6).

Another worrying situation is observed for vaccination against measles: coverage with the first vaccination decreased from 99 percent in 2002 to 57 percent in 2014. The trend in coverage with the second compulsory anti-measles vaccination is even worse: from 98 percent in 2002 to 41 percent in 2010, with a minor improvement in 2012 (54 percent), even though the considerable economic benefit of this specific immunological prophylaxis has largely been proved. Studies conducted in 11 western European countries showed that the treatment cost for each case of measles is between EUR209 and EUR800, while the per capita cost of vaccination against measles varies between EUR0.17 and EUR0.97. A decrease in the incidence of measles has been recorded in Ukraine since 2012 (27.95 cases per 100,000 in 2012, and 5.4 cases per 100,000 in 2014).

The situation regarding vaccination against poliomyelitis has started improving gradually since early 2015 through UNICEF/WHO assistance and donor support for the vaccine doses needed.

Provision of outpatient medical care to children of up to 5 years of age. Through their own experience and related results, a sufficient number of countries have now demonstrated the validity of a very important pattern: the lower the developmental level of primary health care, the less efficient and the more expensive the health care system.

Reform of the primary level of medical care has been taking place in Ukraine for the last five years. The reform resulted in a considerable increase in the number of family medical facilities: from 4,729 in 2012 to 5,656 in 2014, with 65 percent of them located in rural areas. The number of family doctors working in these facilities increased from

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1 See note on page 2.
8,367 in 2009 to 11,326 in 2014, but only 69 percent of them provide medical care to patients from birth throughout their life. On the other hand, the number of divisional paediatricians in local districts decreased from 10,200 in 2010 to 4,900 in 2014. Given that most sick children have a few signs and symptoms of various diseases simultaneously, the provision of medical care to this patient category at the primary level by family doctors is somewhat complicated, especially amid a shortage of diagnostic equipment in outpatient clinics. That is why the process of adopting the WHO/UNICEF Integrated Management of Childhood Illness (IMCI) strategy began in Ukraine in 2008. This strategy, adopted by over 100 countries, is unique in terms of improving the quality of medical care for children at the primary level and reducing child morbidity and mortality. Figure 2.4.7 shows the results of the implementation of the IMCI strategy in one pilot district – namely, the reduction in mortality rates among various age groups of children. Two other pilot districts achieved similar results.

**Provision of inpatient medical care to children of up to 5 years of age.** The next step in the chain of medical care for children is inpatient care. Development of the national system of inpatient medical care followed a Soviet model and featured a continuous increase in the number of inpatient beds and doctors for many years. Subsequent development of health care using this approach in Ukraine proved its lack of an economic basis and its unsustainability. The greatest challenges for inpatient care occur in district hospitals, mainly because of staff shortages and weak logistics.

This situation prompted a restructure of the hospital capacity devoted to children, in parallel with structural and quantitative changes to the network of primary health care facilities, and 9,840 children’s hospital beds were cut between 2010 and 2014. As a result, in 2014 there were 43,668 beds in 1,145 child health care facilities. Due to managerial reorganization, 40 low-capacity children’s hospitals were closed between 2010 and 2014 without any deterioration in the quality and affordability of medical care for children. The funds saved from these measures are expected to be retargeted to improve the material and technical infrastructure of other hospitals.

**Provision of medical care to orphaned children.** The medico-social support for orphans and children deprived of parental care is an important issue for all countries and can be considered an indicator of a country’s development. These children require special attention in their everyday lives, including medical provision because of their greater health vulnerability compared to the child population at large.

Since 2000 Ukraine has taken many steps which have resulted in a number of positive outcomes: social assistance on the part of the State and the establishment of a network of social maternity and childhood centres; and new models of raising children, such as foster families or family-type children’s homes. These steps have led to a reduction in the number of orphanages and

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**Figure 2.4.7** Results of implementation of the IMCI strategy in one pilot district, %

Source: Report on the early implementation phase of the IMCI strategy in Ukraine.

* See note on page 2.
Section II.
PROGRESS TOWARDS ACHIEVING THE NATIONAL MILLENNIUM DEVELOPMENT GOALS

The State continues to pursue a policy aimed at improving the health of orphaned children, by providing optimal conditions in children’s homes, a nurturing environment, appropriate nutrition, timely and comprehensive medical treatment and rehabilitation. This type of approach is crucial for ensuring the successful physical and mental development of orphaned children.

PROBLEMS AND NEW CHALLENGES

Deterioration of the situation regarding child immunological prophylaxis. Overall, between 2010 and 2014, the State Programme on the Immunological Prophylaxis and Protection of the Population against Infectious Diseases for 2009–2015 was underfunded by more than 40 percent; for example, funding for vaccine procurement in 2014 was only 37 percent of the actual needs. The key factors that caused the drastic reduction in child vaccination coverage are as follows: underfunding within the state immunological programme; devaluation of the national currency; lack of financial decentralization that would secure the transfer of powers to regions for the procurement of medicines and equipment; the impossibility of continuing the procurement of some vaccines (for example, BCG) from long-standing partners; a small number of vaccines registered in Ukraine; and a rather complicated procedure for the registration of immunobiological preparations in Ukraine.

Another problem has recently emerged in Ukraine, related both to the number of unvaccinated children and to certain legislative provisions: this is the rule by which the state immunological prophylaxis schedule does not include any additional compulsory vaccination against other infections that risk raising the child mortality rate (for example, meningitis, pneumonias) if less than 80–85 percent of the population are vaccinated. Such a restriction on vaccination contributes to a rising incidence of serious child infections with a high risk of mortality, and represents a threat to national security.

Problems related to district-level inpatient medical care. In 2013, WHO, with the support of the MoH of Ukraine, conducted an independent assessment of seven health care facilities (district hospitals) providing inpatient medical care to children of up to 5 years of age. According to the experts’ conclusions, along with positive aspects (mothers staying near their sick children, sufficient staff numbers, availability of laboratories, adequate maintenance of sanitary and epidemiological control, provision of meals to children and mothers), there were also some problems which to a certain extent affected the quality of medical care and, consequently, children’s health. The most significant problems identified by the survey are presented in Figure 2.4.8.

In the opinion of the international experts, the revision of the current guidelines and clinical protocols, Ukraine’s adoption of the WHO/UNICEF paediatric hospital clinical guidelines, and the revision of approaches to staffing hospitals in rural areas would considerably improve the quality of inpatient medical care for children of up to 5 years of age.

Insufficient staffing in the paediatric field. In Ukraine, medical care to children at the primary level is provided by a paediatrician or a family doctor according to the territorial principle. In this context, the accessibility and quality of care can only be ensured if there are sufficient numbers of skilled paediatricians and family doctors. However, the trend is the opposite: the number of paediatricians and other specialist doctors has gradually decreased since 2007, except for a very few specializations such as children’s neurosurgeons, anaesthesiologists and infectious diseases specialists. Paediatric specialists are currently one of the groups suffering severe staff shortages in Ukraine, because of both the low salary and social advantages of all health care providers and of the reform of the primary level of health care promoting a refocus on family medicine.

Box 2.4.1 Ukraine has achieved significant results concerning orphans

- The number of children abandoned by their parents in maternity departments decreased from 1.05 per 1,000 live births in 2010 to 0.08 per 1,000 live births in 2014;
- the number of children’s homes decreased from 47 in 2010 to 39 in 2014; and
- the actual number of orphaned children dropped from 2,100 in 2010 to 1,111 in 2014.

Source: MoH Ukrainian Institute for Strategic Studies.

Their charges in 2014 as well as to a decrease in child mortality in those facilities from 0.78 per 1,000 live births in 2010 to 0.60 per 1,000 live births in 2014.
However, a revision of the human resources policy concerning paediatric professions in Ukraine started in 2014: as of 2020, there should be one paediatrician for every two family doctors, and the network of children’s health care facilities (children’s hospitals, maternity hospitals, perinatal centres and primary health care centres) should be fully staffed with paediatricians.

Insufficient awareness and skills of parents concerning childcare, nutrition and development. An active process of education in responsible parenting is only just starting in Ukraine. The first link with parents is provided by antenatal clinics, where health and social workers actively attempt to change the couple’s attitude to childbirth and raising their children, covering the following aspects: healthy lifestyle; correct attitude to a child’s needs; compliance with necessary sanitary and hygiene rules in the family; breastfeeding and the child’s subsequent nutritional needs; and preventive measures to reduce parental and child morbidity. Parental training takes place in the maternity department and after the baby’s discharge from it.

WHO and UNICEF play a major role in developing this area by implementing technical assistance, in cooperation with other international organizations. The aim is to introduce the key areas of counselling and training for responsible parenting into clinical practice. Unfortunately, there is currently very little involvement of state services, hence the general educational level of parents in terms of child health and raising children remains low, particularly among socially vulnerable population groups.

Imperfect system of data collection, assessment and utilization. Changing the approaches to collection, analysis and use of reliable indicators of health care activities is an urgent matter to be addressed. There are currently no unified computer-based information system and no rationally selected samples of indicators reflecting the quality of medical care. Hence, it is not possible to use statistical data on a timely basis in the field for making the appropriate managerial and clinical decisions to improve the quality of the organization and provision of care.

Another specific feature of state statistical reporting is its approach to age-specific analysis of child health. Such reporting covers children from birth up to 6 years of age in Ukraine, whereas the rest of the world has long since shifted to calculating key indicators for children aged 0–5 years. This difference complicates the comparative analysis of statistical indicators with other countries.

**RECOMMENDATIONS TO ADDRESS CHALLENGES**

Continuous political support is absolutely crucial for regular improvements in the area of child health. Up to now, there has been no comprehensive programme on child health in Ukraine, yet this is needed to develop and prioritize strategic areas of work. Such a comprehensive programme is also necessary for budgeting within the framework of the national/regional budget and for raising complementary funds from potential donors.
Further developing, improving and implementing state programmes and optimal medical care models is a difficult task for the health care system of any country. In advanced countries, the complete regionalization of perinatal care is considered the most relevant organizational model for streamlining medical care for mothers and children, as well as for reducing mortality, morbidity and disability rates. In this respect Ukraine has set up a legal and regulatory basis for the regionalization of perinatal care, and a national system of perinatal care monitoring and evaluation has been developed. However, 12 oblasts in the country still have no modern level-III perinatal care facilities, which makes it impossible to provide high-level care in those oblasts. It is, therefore, necessary to consider state- and regional-level financing for the construction and equipment of modern level-III perinatal centres in those oblasts of Ukraine currently without them.

To overcome the problems regarding immunological prophylaxis, it is necessary to restore a full cycle of national vaccine production as well as to revise the current legislation regulating the procedure for registration and procurement of immunobiological preparations. Initial steps in that direction were made in late 2014: the Law of Ukraine on Amending the Law of Ukraine on Medicinal Agents was passed, and the MoH of Ukraine Order No. 566 of 11 August 2014 simplified the procedure for registering in Ukraine vaccines which are prequalified by WHO and registered in countries with high quality standards. This Order allows UNICEF/WHO, in partnership with donor organizations, to provide Ukraine with polio vaccines as humanitarian aid. However, the country’s most important objective for the coming years is to minimize the number of unvaccinated children and create national and regional regulatory mechanisms able to quickly and efficiently change the country’s immunization situation. Given that the entire world will gradually shift to using bivalent polio vaccine in 2016, steps to find ways of using that vaccine in Ukraine should be taken right now.

Further development of paediatric care requires a revision of approaches to managing the system of information collection, assessment and utilization. Measures to improve clinical practice, the organization of medical care provision and patient satisfaction must be based on objective results from independent audits using confidential and anonymous methods. Furthermore, the state list of statistical indicators which have to be reported quarterly by health care facilities should be revised, and the age range for reporting should be changed from 0–6 years to 0–5 years.

Improving the level of efficiency and quality of medical care provision at the primary level and in child inpatient clinics also requires a series of changes. To provide modern, evidence-based technologies at the primary level of medical care for children of up to 5 years of age, the IMCI strategy should be considered and implemented as the basic standard in the country. It should also be included in the compulsory training curricula for graduate and post-graduate levels of both paediatricians and family doctors. Widespread adoption of IMCI would also help to reduce the number of unnecessary hospitalizations of children and polypragmasy in the assignment of treatment. Finally, it would promote a greater involvement of mid-level medical personnel in the diagnosis and provision of medical care to children at the primary level.

To improve inpatient care for children requires the quickest possible adoption of the WHO guidelines on hospital care for children and its practical implementation as a standard of initial care for children hospitalized in an inpatient clinic. In addition, one of the ways to ensure children’s equal access to high-quality medical care, regardless of their place of birth or residence, is to develop telemedicine, which is proving particularly useful for hard-to-reach areas.

In general, improving the quality of medical care provision at every level requires regular revision of existing national guidelines and clinical protocols, and development of new ones, with the wider involvement of professional associations in this process. It is very important to simplify the procedure for approving and adopting guidelines and clinical protocols at the state level. No less important is the need to ensure timely distribution of the guidelines to medical staff, as well as to provide some discretionary power at the regional level to adapt the guidelines to regional needs.

Raising the efficiency and quality of medical care is impossible without the adoption of modern methods of diagnosis and treatment. This requires not only the development of guidelines and clinical protocols but also the provision of all hospitals offering care to women in childbirth and children with a mini-
mum list of necessary working equipment to which all sick children will have access regardless of where they live. Despite the existence of regulatory documents, this objective is currently hard to achieve due to the mainly centralized procurement of equipment and drugs. Only a redistribution of funds to the regional level and a thorough, independent audit of the provision of health care facilities with equipment and medicines will help remedy the situation.

To eliminate staff shortages (both qualitative and quantitative), it is necessary to refocus state policy on aiming at changing the training system for family doctors and at raising the qualification requirements, especially in the domain of children’s medical and preventive care. In addition, the shortage of paediatric staff should be eliminated as soon as possible, especially in district-level hospitals.

Advocacy for healthy lifestyles and training of parents in child development requires broader intervention both at the central and regional levels. In particular, mass media and specialist institutions should be more involved in the dissemination of best practice. Major steps in this respect would be to: distribute free newspapers describing care, development, nutrition and prevention of children’s diseases and injuries; expand an Internet-based network of free counselling; and develop and distribute leaflets containing important child-care information. It is also highly important to train parents to be able to provide emergency first aid to a child in case of a life-threatening situation.
Section II.
PROGRESS TOWARDS ACHIEVING THE NATIONAL MILLENNIUM DEVELOPMENT GOALS

GOAL 5
IMPROVE MATERNAL HEALTH
Section II.
PROGRESS TOWARDS ACHIEVING THE NATIONAL MILLENNIUM DEVELOPMENT GOALS

BETWEEN 2000 AND 2014

THE MATERNAL MORTALITY RATE IN UKRAINE DECREASED FROM 24.7 TO 15.2 DEATHS PER 100,000 LIVE BIRTHS

OF UKRAINE’S ADULT POPULATION (INCLUDING WOMEN OF REPRODUCTIVE AGE) HAS AT LEAST ONE CHRONIC DISEASE

90% OF WOMEN UNDERGO REGULAR MEDICAL EXAMINATIONS IN EARLY STAGES OF PREGNANCY
TARGETS AND INDICATORS

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PROGRESS IN UKRAINE

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</tr>
<tr>
<td>32.1</td>
<td>29.4</td>
<td>25.8</td>
<td>25.3</td>
<td>23.2</td>
<td>21.3</td>
<td>18.7</td>
<td>18.5</td>
<td>18.1</td>
<td>17.9</td>
<td>15.1</td>
<td>14.7</td>
<td>13.5</td>
<td>13.1</td>
<td>10.4</td>
<td>15.1</td>
</tr>
</tbody>
</table>

The table presents actual data from the State Statistics Service of Ukraine and the Ministry of Health of Ukraine up to 2013 and target values for 2015 (established in 2010).

* See note on page 2.

** Ukraine transferred to mortality coding according to the list of codes in the 10th Revision of the International Statistical Classification of Diseases and Related Health Problems in 2005. The indicators calculated before and after this transfer are not comparable; therefore, Indicator 5.1 is presented in two different series.
PROGRESS TO DATE

Maternal health is one of the main indicators of the quality of obstetric institutions and of the efficient implementation of scientific advances in the practice of health care. Furthermore, maternal mortality is an indicator of the health of women of reproductive age, which reflects the result of interactions between economic, environmental, cultural, socio-hygienic and medico-organizational factors.

Over the last 15 years, the maternal mortality rate in Ukraine has decreased from 24.7 deaths per 100,000 live births in 2000 to 15.2 in 2014. In 2012 and 2013, Ukraine nearly reached its MDGs target; however, in 2014, maternal mortality increased again.

At the same time, a steady trend towards a decreasing number of abortions can be seen in Ukraine. Between 2000 and 2014, the number of abortions per 1,000 women aged 15–49 declined by almost 70 percent (from 32.1 to 10.37 per 1,000 women of reproductive age). Of this number, 58 percent were cases of pregnancy terminated at a woman’s request, while the remaining cases occurred for medical reasons such as spontaneous abortion, miscarriage etc.

KEY TRENDS

According to the International Statistical Classification of Diseases and Related Health Problems, 10th revision (ICD-10), a maternal death is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, and occurring from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.

As mentioned above, the maternal mortality rate declined from 24.7 deaths per 100,000 live births in 2000 to 15.2 in 2014. Despite this overall downward trend, maternal mortality remains much higher than the average figure for EU countries, which was 5.69 deaths per 100,000 live births in 2014.

In contrast to the general trend, a notable rise in the indicator occurred in 2009–2010, which was linked to indirect causes, particularly an influenza epidemic. A substantial decline was then observed between 2011 and 2013, but in 2014 the maternal mortality rate increased again. The reasons for this increase would require a more detailed analysis. The new procedure for analysing cases of maternal mortality (Confidential Enquiry into Maternal Deaths – CEMD – based on WHO methodology) was approved at the beginning of 2014. According to this approach, confidential questionnaires will be completed by health care providers who are directly involved in case management. The MoH commission will then review the questionnaires to analyse them, draw conclusions and develop recommenda-

![Figure 2.5.1](image-url)
According to the State Statistics Service of Ukraine, 71 maternal deaths were recorded in 2014. The causes of death are important for the analysis of maternal mortality. According to data provided by the MoH of Ukraine, extragenital pathology – female diseases in which pregnancy threatens life – remained the main cause in 2014, as in previous years.

Extragenital pathology was the cause of death of 15 women in 2014, representing 22.7 percent of all cases of maternal mortality. These figures are lower than in 2013 both in absolute numbers (20) and percentage (34.5 percent). Figure 2.5.2 presents a breakdown of extragenital pathology that caused maternal death. Cardiovascular diseases, which are fairly often categorized as unpreventable, remain the most widespread cause of death.

According to MoH data, the main causes of maternal mortality changed between 2008 and 2014. A summary is presented in Table 2.5.3.

In 2012, haemorrhage was one of the main causes of maternal mortality that can be prevented in most cases. Importantly, the number of cases of obstetric haemorrhage that resulted in a woman’s death decreased. Similarly, the number of cases of abortion-related maternal mortality declined. No cases of death caused by an abortion in a health care facility have been recorded in the last five years in Ukraine. The rate of maternal mortality caused by an abortion commenced or performed outside a health care facility has also dropped, from six cases in 2010 to three cases in 2014.

### Table 2.5.1 Maternal mortality from causes related to pregnancy, delivery and postnatal complications in Ukraine, 2009–2014

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute number</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal deaths, total</td>
<td>132</td>
<td>117</td>
<td>85</td>
<td>65</td>
<td>68</td>
<td>71</td>
</tr>
<tr>
<td>Direct obstetric causes</td>
<td>48</td>
<td>48</td>
<td>50</td>
<td>34</td>
<td>37</td>
<td>44</td>
</tr>
<tr>
<td>Indirect obstetric causes</td>
<td>84</td>
<td>69</td>
<td>35</td>
<td>31</td>
<td>31</td>
<td>27</td>
</tr>
<tr>
<td>External causes</td>
<td>12</td>
<td>20</td>
<td>21</td>
<td>16</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>Per 100,000 live births</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal deaths, total</td>
<td>25.8</td>
<td>23.5</td>
<td>16.9</td>
<td>12.5</td>
<td>13.5</td>
<td>15.2</td>
</tr>
<tr>
<td>Direct obstetric causes</td>
<td>9.4</td>
<td>9.6</td>
<td>9.9</td>
<td>6.5</td>
<td>7.3</td>
<td>9.5</td>
</tr>
<tr>
<td>Indirect obstetric causes</td>
<td>16.4</td>
<td>13.9</td>
<td>7.0</td>
<td>6.0</td>
<td>6.2</td>
<td>5.7</td>
</tr>
<tr>
<td>External causes</td>
<td>2.3</td>
<td>4.0</td>
<td>4.2</td>
<td>3.1</td>
<td>1.8</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Source: State Statistics Service of Ukraine.
* See note on page 2.

Maternal deaths are subdivided into two groups:

I. Maternal death directly connected with obstetric causes (direct obstetric causes) is a mother’s death resulting from obstetric complications of the pregnancy (i.e. pregnancy, delivery and postnatal period), as well as a result of interventions, omissions, incorrect treatment or a series of events related to any of the above-mentioned causes.1

II. Maternal death indirectly connected with obstetric causes (indirect obstetric causes) is a death resulting from a disease that existed before or emerged during pregnancy, not related to a direct obstetric cause but aggravated by the physiological effects of the pregnancy.2

1 According to ICD-10, they have codes O00–O95, Chapter XV, and code A34 (obstetrical tetanus), Chapter I.
2 According to ICD-10, they have codes O98–O99, Chapter XV. Indirect obstetric causes also include maternal deaths caused by HIV (B20–B24), Chapter I.
Section II.
PROGRESS TOWARDS ACHIEVING THE NATIONAL MILLENNIUM DEVELOPMENT GOALS

The decrease in maternal mortality in recent years is explained by the adoption of modern, evidence-based medical technologies in everyday practice in maternity departments/hospitals, the upgrading of the skills of medical staff, the renovation of infrastructure in some health care institutions to meet modern standards, and the improvement of the management system. The attainment of these objectives has also been facilitated by the provisions put forward in the State Programme on the Reproductive Health of the Nation until 2015, particularly:

1. covering 98 percent of pregnant women with antenatal care;
2. implementing the regionalization of perinatal care;
3. supplying obstetric departments with medicines for emergency medical care in case of haemorrhage;
4. adopting clinical protocols on modern perinatal technologies according to WHO recommendations;
5. designing and implementing an infection control system in inpatient obstetric clinics;
6. registering pregnant women with serious extragenital diseases which threaten their life during pregnancy or at delivery, and supplying them with contraceptives free of charge;

Table 2.5.2  Main causes of maternal mortality in Ukraine, 2013–2014

<table>
<thead>
<tr>
<th>Nosology</th>
<th>Percentage of cases in 2014</th>
<th>Percentage of cases in 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extragenital pathology (EGP)</td>
<td>22.7</td>
<td>34.5</td>
</tr>
<tr>
<td>Sepsis</td>
<td>19.7</td>
<td>8.6</td>
</tr>
<tr>
<td>Pulmonary thromboembolism (PATE)</td>
<td>16.7</td>
<td>17.2</td>
</tr>
<tr>
<td>Haemorrhage</td>
<td>15.2</td>
<td>20.7</td>
</tr>
<tr>
<td>Gestational toxicosis</td>
<td>12.1</td>
<td>8.6</td>
</tr>
<tr>
<td>Amniotic fluid embolism (AFE)</td>
<td>9.1</td>
<td>10.3</td>
</tr>
</tbody>
</table>

Source: MoH of Ukraine.
*See note on page 2.

Table 2.5.3  Ranking of causes of maternal mortality in Ukraine, 2008–2014

<table>
<thead>
<tr>
<th>Year</th>
<th>1st place</th>
<th>2nd place</th>
<th>3rd place</th>
<th>4th place</th>
<th>5th place</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>EGP</td>
<td>Haemorrhages</td>
<td>AFE</td>
<td>Gestational toxicosis</td>
<td>Other</td>
</tr>
<tr>
<td>2009</td>
<td>EGP</td>
<td>Haemorrhages</td>
<td>Sepsis</td>
<td>AFE</td>
<td>PATE</td>
</tr>
<tr>
<td>2010</td>
<td>EGP</td>
<td>Haemorrhages</td>
<td>Sepsis</td>
<td>PATE</td>
<td>Abortions</td>
</tr>
<tr>
<td>2011</td>
<td>EGP</td>
<td>Haemorrhages</td>
<td>Sepsis</td>
<td>PATE</td>
<td>Gestational toxicosis</td>
</tr>
<tr>
<td>2012</td>
<td>Haemorrhages</td>
<td>EGP</td>
<td>Sepsis</td>
<td>AFE</td>
<td>PATE</td>
</tr>
<tr>
<td>2013</td>
<td>EGP</td>
<td>Haemorrhages</td>
<td>PATE</td>
<td>AFE</td>
<td>Gestational toxicosis and sepsis</td>
</tr>
<tr>
<td>2014</td>
<td>EGP</td>
<td>Sepsis</td>
<td>PATE</td>
<td>Haemorrhages</td>
<td>Gestational toxicosis</td>
</tr>
</tbody>
</table>

Source: MoH of Ukraine.
* See note on page 2.
✓ partially implementing a system of auditing severe maternal morbidity in obstetric institutions, according to the methodology recommended by WHO;

✓ implementing the national project ‘New Life – New Quality of Maternity and Childhood Protection’, under which a network of level III health care facilities has been established in the field of obstetric-gynaecological and neonatal care (perinatal centres) in 12 oblasts of Ukraine and in the AR of Crimea, and providing them with innovative technologies and modern equipment;

✓ implementing a concept of ‘comprehensive care for unwanted pregnancies’ – i.e. safe abortion in the first and second trimesters of pregnancy as per WHO recommendations;\(^6\)

✓ ensuring occupational training and skills development for physicians and mid-level medical staff of obstetric institutions for the application of modern, evidence-based technologies in obstetric practice;

✓ establishing modern training centres based on oblast-level health care facilities;\(^7\) and

✓ implementing the Responsible Parenting School programme for parents-to-be in most relevant health care facilities, and producing awareness-raising materials.

Termination of pregnancy. A steady downward trend in the number of abortions has been observed in Ukraine. The abortion rate per 1,000 women aged 15–49 declined by almost 70 percent between 2000 and 2014 (from 32.1 to 10.37 per 1,000 women of reproductive age). The official statistics are supplemented by information obtained during a survey conducted in 2012: 13.9 percent of pregnancies occurring during the three years preceding the survey ended in abortions,\(^6\) which indicates some progress compared to the 25.3 percent from the previous study undertaken in the framework of the 2007 Ukraine Demographic and Health Survey (UDHS).\(^9\) More than half of the respondents (58.2 percent) had had one abortion, while 37.2 percent had had two or three, and slightly fewer than 5 percent had had four or more.

This positive trend in the number of abortions is common to all age groups, including adolescent girls aged 15–17. The prevalence of teenage pregnancy declined from 17.76 in 2001 (per 1,000 girls aged 15–17) to 11.83 in 2014. The abortion rate decreased from 7.74 per 1,000 adolescent girls in 2001 to 1.83 in 2013, which indicates that pregnant girls more often decide to give birth than to terminate the pregnancy. Despite this notable decrease in the number of abortions, teenage pregnancy remains a pressing problem.

A total of 109,358 abortions were recorded in 2014 (10.4 per 1,000 women of reproductive age; 24.7 per 100 deliveries). Of this number, 63,281 abortions (57.9 percent, or 6.3 per 1,000 women of reproductive age) were performed at the woman’s request, with the remainder accounted for by termination for medical reasons, due to spontaneous abortion, miscarriage etc.

To prevent maternal mortality and post-abortion complications, the regulatory legal framework concerning the provision of comprehensive medical care in cases of unwanted pregnancy was improved between 2009 and 2013.\(^10\) A relevant clinical protocol was adopted, and an organizational order was approved, based on the WHO recommendations regarding safe abortion. The application of safe methods and compulsory pre- and post-abortion counselling, including post-abortion contraception counselling, allow the woman’s reproductive function to be preserved and repeated cases of unscheduled pregnancy to be prevented. Termination of pregnancy in the second trimester poses one of the most critical risks of maternal mortality. All the cases of maternal mortality related to abortion in 2013 were caused by the termination of pregnancy in the second trimester. Safe abortion in this trimester should, therefore, become a subject

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\(^7\) Ukrainian-Swiss Mother and Child Health Programme, www.mch.org.ua.


\(^9\) MoH of Ukraine, Order No. 423 of 24 May 2013 ‘On approval of the procedure for provision of comprehensive health care to a pregnant woman during unwanted pregnancy, of primary accounting record forms, and of instructions on their completion’; MoH of Ukraine, Kyiv, 2013.
of additional studies, with registration and thorough analysis of these cases of termination, and should lead to an identification of the measures needed to improve the quality of medical services in such situations.

The decline in the abortion rate was promoted by family planning services, educational and preventive work with the population, including youth, as well as by awareness-raising on means of contraception and the establishment of a system for the provision of medical services based on a youth-friendly approach. As of 2014, more than 150 ‘youth-friendly clinics’ were operating in Ukraine. According to the results of the Health Behaviour of School-aged Children survey conducted in 2014 by the O. Yaremchenko Ukrainian Institute for Social Studies with support from UNICEF, the share of teenagers having had a sexual experience had declined (24 percent of the 13–17 age group in 2014, against 39 percent in 2010). The use of condoms as a means of contraception and protection at last sexual contact was reported by the majority of adolescents who had had sex (51.6 percent of those aged 13 years, and 78.7 percent of those aged 15 years). At the same time, the share of teenagers experiencing sexual debut under 15 years of age has grown. One of the reasons for this trend could be the insufficient coverage of children under 15 and their parents with awareness-raising activities.

The decline in the abortion rate is occurring amid growing use of modern contraceptive methods and a decrease in the unmet contraceptive needs of Ukrainian women. According to MoH data, 34.3 percent of women of reproductive age were using intrauterine or hormonal contraceptives in 2013. The rate of contraceptive use is illustrated by findings from a survey of reproductive-age women within the 2012 Multiple Indicator Cluster Survey (MICS), according to which half of the women surveyed reported having ever used a pregnancy prevention method, with 48.9 percent of them using modern methods, and 31.9 percent preferring traditional methods.11

Data from the MoH of Ukraine for 2014 demonstrate a decline in the rate of using hormonal and intrauterine contraception – the first decline since 2000. This raises concerns and requires additional analysis to find out whether the use of this type of contraception has effectively decreased (with a possible increase in the use of other methods such as spermicides, plasters, condoms etc.) or whether there is a general decline in the rate of using all types of contraception. Most contraceptives available in Ukraine are imported; hence their price has grown proportionately with the depreciation of the hryvnia against the US dollar and the euro. Thus, a considerable increase in the price of contraceptives may make them significantly less affordable for a large segment of consumers and may be one of the possible reasons for the decline in their use. At the same time, making contraceptives available to women with serious extragenital pathologies is a key factor in preventing maternal mortality.

The general state of health of girls and women of reproductive age affects their likelihood of encountering complications during pregnancy and delivery. Unfortunately, recent years have seen a general deterioration in health and an increase in the incidence of non-infectious diseases. The highest prevalence of disease among women in 2013 was recorded among girls aged 15–17 (2,286.15 per 1,000). The health of pregnant women cannot be considered satisfactory either: 25 percent of women attending MoH antenatal clinics during pregnancy were diagnosed with anaemia, 14 percent with urogenital system disorders, 6 percent with blood circulatory system diseases, and 9 percent with thyroid dysfunction.  

Maternal health is also affected by behavioural factors, particularly tobacco smoking, use of alcohol and drugs, risky sexual behaviour, a negligent attitude to the course of the pregnancy etc. As sociological studies show, a considerable number of women in Ukraine smoke (permanently or episodically); however, the prevalence of tobacco smoking among the youngest age group of women is decreasing. According to a representative national survey conducted in 2013 by the Kyiv International Institute of Sociology among Ukrainian adults, 12.8 percent of women reported smoking; among them 22.6 percent were younger than 30 (38.7 percent in 2000). This trend is confirmed by data from the MICS 2012: prevalence of tobacco smoking among girls aged 15–19 is considerably less than reported in the UDHS 2007. Of concern, however, is the fact that among women who smoke the proportion of them smoking 5–10 cigarettes per day is gradually growing: from 40 percent in the early 2000s to 60–70 percent in 2010–2013.  

Negative lifestyle factors such as depression, violence from a sexual partner and stress are also risk factors for the development of complications during pregnancy, premature delivery and maternal mortality (especially among pregnant women from socially disadvantaged population categories or risk groups). Due to the armed conflict, a new category, internally displaced persons, emerged in Ukraine in 2014, and women and children account for the largest share among them. Women from this group can be confronted with limited access to high-quality antenatal and prenatal care services, which also aggravates the risk of complications during pregnancy and delivery. Thus, despite the considerable progress made in reaching the targets set for 2015, the sustainability of these results cannot be guaranteed, given the complication of the economic and social situation in the country and the range of general problems in the health care system, particularly the weakness of the sector’s financing system.  

Not all the innovations that improved the quality of prenatal care at the level of individual pilot regions were supported in orga-
nizational and methodological guidelines for nationwide dissemination. Much of the groundwork which has been done and piloted thanks to international technical assistance risks, therefore, being lost unless it is integrated into the general system of medical service provision.

A regulatory legal framework for the regionalization of perinatal care provision has been created, though its implementation is taking place unevenly. To improve the quality and availability of perinatal care, the regionalization process should be expedited in all regions of Ukraine.

**RECOMMENDATIONS TO ADDRESS CHALLENGES**

Achieving sustainability in the area of maternal and reproductive health requires consistent political support based on the state strategy and relevant state programmes.

An efficient family planning service and respect for women's rights, along with improvements in the quality of care provided prior to, during and between pregnancies, can decrease the rates of abortion, premature delivery, delivery complications and maternal mortality.

Reform of the health care system requires the integration of services for family planning, antenatal care and the prevention and treatment of chronic non-infectious diseases (CNIDs) into the activities of primary health care facilities.

The growing prevalence of CNIDs, such as diseases of the cardiovascular and endocrine systems and respiratory diseases, as well as a related increased risk of maternal death, requires improvements in their antenatal diagnosis and treatment. Along with counselling on the use of efficient contraceptive methods for women with extragenital pathology, an important component of the work of the family planning service consists in preparing these women for pregnancy, improving observation during pregnancy and raising the women's awareness of the signs of complications that call for urgent medical assistance.

Appropriate measures to ensure the availability of family planning and perinatal care services for women with disabilities are needed. Given the nosological specificities, there is a need to ensure the infrastructural and architectural accessibility of such services, with the appropriate equipment and health care activities.

Due to the aggravation of the economic situation, contraception has become less easily available for most population groups. This risks an increase in the number of abortions and maternal deaths among women with extragenital pathology. It is, therefore, necessary to fully guarantee the availability of modern contraceptives for this group of women.

Continuing armed conflict in the country and the destruction of infrastructure, including health care facilities, in densely populated regions calls for the establishment of a set of measures to ensure the provision of perinatal care services in emergencies, and guarantee the availability and quality of services for internally displaced persons and those affected by the hostilities.

It is also necessary to integrate educational activities into the antenatal care system, to reduce the rate of premature deliveries and improve maternal and child health. This kind of integrated approach includes programmes aimed at sensitizing pregnant women to a responsible attitude to their health, supervising pregnant women's working conditions, preventing domestic violence etc.

Along the same lines, and more generally, there is a need to implement preventive programmes that encourage a responsible attitude to people's own health (both general and reproductive) and parenthood and promote the abandonment of risky sexual behaviour and bad habits, especially among low-income population groups, rural residents, migrants and members of ethnic minorities. Furthermore, comprehensive prevention programmes for adolescents and youth should be introduced at all stages of general education (primary, secondary and vocational).
Section II.
PROGRESS TOWARDS ACHIEVING THE NATIONAL MILLENNIUM DEVELOPMENT GOALS

GOAL 6
REDUCE AND SLOW DOWN THE SPREAD OF HIV/AIDS AND TUBERCULOSIS AND INITIATE A TREND TO DECREASE THEIR SCALES
Section II. PROGRESS TOWARDS ACHIEVING THE NATIONAL MILLENNIUM DEVELOPMENT GOALS

The access to antiretroviral therapy scaled up from 3,056 patients in 2005 to 66,409 patients in 2014 by estimates there are 223,000 people living with HIV in Ukraine.

The incidence of tuberculosis has decreased by 28% compared to 2005 (from 84 to 60 cases per 100,000 population).

The mother-to-child HIV transmission rate dropped down from 27.8% in 2001 to 4.3%.
TARGETS AND INDICATORS

<table>
<thead>
<tr>
<th>TARGETS</th>
<th>INDICATORS</th>
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<tr>
<td><strong>Target 6.A:</strong> Decrease the growth rate of HIV infection by 13 percent</td>
<td>6.1. Number of people newly diagnosed with HIV per 100,000 population</td>
</tr>
<tr>
<td></td>
<td>6.2. Growth rates of HIV infection, %</td>
</tr>
<tr>
<td></td>
<td>6.3. Number of people dying of AIDS per 100,000 population</td>
</tr>
<tr>
<td></td>
<td>6.4. Mother-to-child HIV transmission rate, %</td>
</tr>
<tr>
<td><strong>Target 6.B:</strong> Decrease tuberculosis morbidity by 20 percent (compared with 2005)</td>
<td>6.5. Number of people diagnosed with tuberculosis for the first time (including tuberculosis of respiratory organs) per 100,000 population</td>
</tr>
<tr>
<td></td>
<td>6.6. Number of tuberculosis deaths per 100,000 population</td>
</tr>
</tbody>
</table>

PROGRESS IN UKRAINE

<table>
<thead>
<tr>
<th>Indicator 6.1. Number of people newly diagnosed with HIV per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.9 14.4 18.2 21.0 25.7 29.3 34.5 38.1 41.2 43.2 44.7 46.2 45.5 47.2 49.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator 6.2. Growth rates of HIV infection, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>... +11.6 +26.4 +15.4 +22.4 +14.0 +17.7 +10.4 +8.1 +4.9 +3.3 +3.6 -1.6 +4.6** ... +4.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator 6.3. Number of people dying of AIDS per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 1.5 2.3 3.8 5.5 7.7 8.8 9.8 11.2 12.3 12.6 12.5 11.5 10.2 8.0</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Indicator 6.4. Mother-to-child HIV transmission rate, %**</th>
</tr>
</thead>
<tbody>
<tr>
<td>... 27.80 10.00 10.00 8.20 7.70 7.10 6.20 6.30 4.70 4.90 3.73 4.31 ... ... 2.00</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Indicator 6.5. Number of people diagnosed with tuberculosis for the first time (including tuberculosis of respiratory organs) per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>60.4 69.5 76.0 77.8 81.2 84.4 83.4 80.1 78.0 72.7 68.4 67.2 68.1 67.9 59.5 67.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator 6.6. Number of tuberculosis deaths per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.3 22.7 20.5 21.8 22.7 23.5 22.3 22.6 22.4 18.2 16.6 15.2 15.2 14.1 11.2 15.0</td>
</tr>
</tbody>
</table>

The table presents actual data from the State Statistics Service and the MoH Ukrainian Centre for the Control of Socially Dangerous Diseases through 2013 and target values for 2015 (established in 2010).

* See note on page 2.
** For indicator 6.4 actual data through 2012 are provided (since determination of HIV infection – namely confirmation or exclusion of a diagnosis – lasts for 18 months after birth, the national indicator is defined only after two years after birth). Indicator 6.4 data are provided based on preliminary estimates.
TARGET 6.A: DECREASE THE GROWTH RATE OF HIV INFECTION BY 13 PERCENT

PROGRESS TO DATE

The scale of the HIV epidemic in Ukraine kept growing between 2000 and 2014. The growth rate of HIV infection decreased from 11.6 percent higher than the 2000 baseline in 2001 to 4.6 percent higher in 2013. According to the 2014 Spectrum estimates (all ages), 223,000 people living with HIV reside in Ukraine. Since the beginning of the epidemic, more than 75,500 people have been diagnosed with the end stage of AIDS, and over 35,000 have died of HIV-related diseases. During recent years the epidemic has continued to expand among the general population, to a large extent due to the growing role of sexual transmission.

Following implementation of the package of measures envisaged by the National AIDS Programme 2009–2013, supported by the Global Fund to Fight AIDS, Tuberculosis and Malaria and other international organizations, some first signs of a stabilization in the HIV epidemic have been seen. The most significant achievements so far include: decreasing the number of cases of HIV among people who inject drugs; increasing access to antiretroviral therapy (ART); reducing the mortality rate of HIV-related diseases; increasing the involvement of non-governmental organizations (NGOs) in the provision of care; and improving the support for people living with HIV.

Although Ukraine has the second largest epidemic in the Eastern Europe and Central Asia region and accounts for 25 percent of regional AIDS-related deaths, the country has been a regional champion in introducing crucial HIV programmes: the mother-to-child HIV transmission rate has been reduced by 85 percent; HIV treatment coverage has increased twentyfold and reaches 66,000 people living with HIV; and opioid substitution treatment has been scaled up from 160 to more than 8,500 people who use drugs.

Just when Ukraine is entering a difficult stage of combating the HIV epidemic, it is faced with the development of a deep socio-economic crisis, and hostilities in the eastern part of the country. These concurrent events will predictably have an adverse impact on the HIV situation, affecting the whole territory and notably the areas temporarily outside the government’s control.

The National AIDS Programme 2014–2018 envisages the implementation of a broad package of interventions with the key objective of stabilizing the epidemic by ensuring the population’s access to large-scale preventive activities and improving the quality of HIV/AIDS treatment, care and support services.

KEY TRENDS

Overall HIV incidence. Between 1999 and 2011 the number of newly registered HIV cases increased every year (see Figure 2.6.1), although it has stabilized at an average of 20,000 for the last five years. Incidence – i.e. the number of persons diagnosed with HIV for the first time in their life – declined year-on-year from 46.5 to 45.5 per 100,000 population in 2012 (against a target value of 49.1 for 2015). This reduction was considered evidence of the decreasing intensity of the HIV epidemic.

In 2013 the number of newly registered HIV cases increased again to 47.6 per 100,000 population, but in 2014 it decreased to 44.8 per 100,000, or by 5 percent compared to 2013, primarily because no relevant data were obtained from health care facilities in the AR of Crimea or Sevastopol city. The forecast figure for 2015, calculated from the 2012–2014 data (still without data for the AR of Crimea and Sevastopol city) is estimated at 45.5 per 100,000, equivalent to a growth rate of 1.6 percent. Growth is expected due to the continuation of hostilities in the east of Ukraine and because of a growing number of forcibly displaced persons from Donetsk and Luhansk oblasts, the regions most affected by the HIV epidemic. Furthermore, a shortage of HIV test kits emerged in 2014. This could lead to an increase in the number of HIV-positive people diagnosed in the coming years, provided that sufficient quantities of the test kits are supplied in future.

GOAL 6. REDUCE AND SLOW DOWN THE SPREAD OF HIV/AIDS AND TUBERCULOSIS AND INITIATE A TREND TO DECREASE THEIR SCALES

It is difficult to estimate the number of new HIV cases on the basis of official statistics, because Ukraine has not yet adopted reliable advanced laboratory diagnostic methods that allow detection of so-called ‘early’ infections. Therefore, according to the UNAIDS and WHO recommendations, the number of new cases is estimated using an indirect approach based on analysing HIV infection incidence trends among younger age groups (15–19 and 20–24 years).

A steady downward trend is observed in the proportion of young persons aged 15–24 in the total number of newly registered HIV cases (from 12.0 percent in 2009 to 6.7 percent in 2014) and, accordingly, in HIV incidence in this age group (from 35.5 per 100,000 population aged 15–24 in 2009 to 25.5 in 2014).

HIV case profiles. Between 2005 and 2014 a constant upward trend in the proportion of HIV-positive persons older than 30 years in the total number of registered HIV cases (from 71.9 percent in 2009 to 82.5 percent among men, and from 51.4 percent to 65.2 percent among women) was observed in Ukraine. This means that the disease is still affecting the country’s most economically and reproductively active population, which gradually results in aggravating the existing negative demographic and socio-economic trends. Men still account for the majority of people living with HIV in Ukraine, but women’s share is growing all the time, reaching almost 44.2 percent in 2014. Data on the place of residence of newly registered HIV cases indicate that the epidemic is slowly spreading among the country’s rural population. The proportion of persons living in rural areas in the total number of the patients newly diagnosed with HIV grew from 21.0 percent to 24.4 percent between 2009 and 2014.

Since 2008 a shift between the two leading modes of HIV transmission has occurred in Ukraine – from transmission by injecting drugs to sexual transmission, mainly through heterosexual contact (see Figure 2.6.2).

Key populations at higher risk. As in previous years, key populations at higher risk play a leading role in the spread of HIV in Ukraine – in particular, people who inject drugs (PWID), men who have sex with men (MSM), commercial sex workers (CSWs) and their partners.

The implementation of large-scale preventive interventions among PWID initiated about 12 years ago has substantially influenced the spread of HIV in Ukraine. According to routine data of the HIV epidemiological surveillance system, there has been a gradual decrease in the number of newly registered HIV cases among PWID in Ukraine. This trend started in 2006 and still continues. Over the last eight years the number of registered HIV cases among PWID decreased by 34.5 percent (from 7,127 in 2006 to 4,670 in 2014), whereas the proportion of HIV-positive PWID in all annually registered cases dropped from 44.3 percent to 24.2 percent. This shows that the intensity of the HIV epidemic in this high-risk group has actually weakened.

According to findings of the regular integrated bio-behavioural survey (IBBS) conducted in 2013 in 29 cities of Ukraine, HIV prevalence among PWID was 19.7 percent. This is somewhat lower than in 2011 and 2009 (21.6 percent). HIV prevalence varies depending on sex, age and the duration of injecting drug use. In particular, among PWID, 22.4 percent of women tested positive, whereas the figure for men was 18.8 percent. HIV prevalence grows proportionately with age: from 2.3 per-
cent among adolescent PWID (18–19 years) to 7.2 percent among those aged 20–24, 16.1 percent among those aged 25–34, and 27.6 percent among PWID aged 35 and older. This trend also reflects differences in HIV prevalence by duration of drug use: from 3.5 percent among PWID using drugs for up to two years to 26.6 percent for those using drugs for 11 years or more.

The group at highest risk of HIV infection by sexual transmission – namely, MSM – is becoming increasingly more significant in the epidemic. The number of officially registered new HIV cases among MSM in Ukraine is increasing every year: from 20 people in 2005 to 277 in 2014 (excluding data for the AR of Crimea and Sevastopol city). At the same time, the official data do not reflect the actual HIV prevalence in this population group, as it still faces stigma and hides its sexual orientation. According to the results of the same IBBS (2013) among MSM in 28 cities of Ukraine, 5.9 percent of the MSM respondents tested HIV-positive, which is somewhat lower than in previous years: 11 percent, 9 percent and 6.4 percent in 2007, 2009 and 2011, respectively. Data from behavioural surveys on bisexual contact and condom use by MSM show that they still play a hidden but substantial role in transmitting HIV to the general population.

HIV prevalence among prisoners, according to the IBBS, is 11 percent. Prisoners are a high-risk group that can easily be covered with comprehensive prevention programmes. Although prevention services reached almost 50,000 inmates in 2014 (the total prison population decreased from 120,000 to about 80,000), they mostly focused on information, education and communication work (IEC) and HIV testing and counselling. The authorities that manage the penitentiary system do not provide sufficient support to the implementation of needle and syringe programmes (NSPs) and opioid substitution therapy (OST), even though about 37 percent of prisoners have experience of injecting drug use and these programmes are promoted by public policy and are available in the community.

Prevention of Mother-to-child HIV Transmission (PMTCT). Activities implemented as part of Ukraine's programme to prevent mother-to-child HIV transmission (MTCT) have been a major success. Since 2003 the coverage of voluntary HIV testing for pregnant women has invariably exceeded 95 percent. The coverage of preventive antiretroviral therapy (ART) for women diagnosed with HIV during their pregnancy has increased from 9 percent in 1999 to 94 percent in 2010. This activity has
resulted in a significant decrease in the rate of PMTCT: from 27.8 percent in 2001 to 3.7 percent in 2011 (see Figure 2.6.3).

However, some increase in the indicator (to 4.31 percent) was recorded in 2012, which is explained by several factors. In that year some delays were observed in the supply to the regions of the HIV test kits used to test pregnant women at the expense of the state budget. The test kits were procured with local budget funds, and whenever they were not available, blood samples were accumulated until the required quantity of test kits and consumables was provided. As a result, more than 20 percent of women who tested HIV-positive were detected late – after 26 weeks of pregnancy, during or after delivery. In 2012 the rate of coverage of medical supervision for HIV-positive pregnant women was 85.7 percent only – i.e. 387 pregnant women were diagnosed HIV-positive for the first time and not registered in a timely manner. Therefore, activities to prevent vertical MTCT for women and their children were implemented late, which adversely affected their efficiency.

According to the most recent data, 149 children were finally diagnosed with HIV and underwent a full cycle of diagnostic procedures according to the current MoH protocol in 2012. This represents 4.3 percent of the 3,457 children born to HIV-positive women (excluding those whose status remained unconfirmed after 18 months of supervision, who died with unknown HIV status or were stillborn). To reduce the vertical HIV transmission rate and achieve a comparable level to European countries (2 percent), it is vital to target activities at pregnant women who inject drugs. For example, according to the findings of epidemiological surveys, the rate of PMTCT among female injecting drug users is as high as 11 percent. This makes it necessary to introduce an integrated approach to the implementation of prevention programmes for pregnant women in this risk group, which includes better social support and harm reduction services, combining OST programmes with special medical interventions.

Overall, the rate of PMTCT depends considerably on the extent to which various combinations of comprehensive activities envisaged by the MTCT prevention programme are applied. If a full course of ART had been provided to HIV-positive pregnant women and their children, together with the exclusion of breastfeeding, the rate of MTCT in Ukraine could have decreased to 1.2 percent in 2012.

HIV-related mortality and ART provision to patients. In 2014, 5,893 HIV-positive people died in Ukraine, of whom 64.6 percent were men, and 35.4 percent were women. The overwhelming majority of deaths were among people aged 25–49 (83.2 percent) and 50 and older (14.5 percent). Of the total number of deaths, 3,742 people (or 63.5 percent) died of HIV-related diseases, while 2,127 died from other diseases and from causes not directly related to HIV, and 24 died of unknown reasons.

Excluding data for the AR of Crimea and Sevastopol city, the following picture has been

\[\text{Figure 2.6.3} \quad \text{Dynamics of the rate of mother-to-child HIV transmission based on serologic examinations (percentage), 2001–2012}\]

\[\text{Source: State Statistics Service of Ukraine/MoH Ukrainian Centre for Socially Dangerous Disease Control.}\]
established for the period between 2012 and 2014: in 2012 the mortality rate was 12.5 per 100,000 population (a decrease of 0.8 percent); in 2013 a further decrease was recorded, to 11.5 per 100,000 (a decrease of 8.0 percent); and in 2014 the mortality rate was 10.2 per 100,000 (11.3 percent less than in 2013). The projected figure for 2015 can be estimated at 9.4 percent, which means that the target of 8.0 deaths per 100,000 population will most likely not be reached, although the mortality rate is steadily approaching this target.

Tuberculosis (TB) is still the main cause of death among people living with HIV. In 2014 HIV/TB co-infection accounted for 63.7 percent (2013: 62.7 percent) of the total number of deaths among people living with HIV. The rate of mortality caused by HIV-related diseases remains an important integral indicator of people's access to early diagnosis, timely initiation of ART and treatment of associated diseases, availability of therapy for certain population groups, and the provision of efficient care and support for people living with HIV by NGOs. It is a basic measure for making projections and determining the socio-economic consequences of the HIV epidemic for the society at large.

It has been reported that 75.0 percent of people living with HIV were tested for hepatitis B markers and 75.4 percent for hepatitis C markers during registration for medical supervision in 2014. Based on the results of these examinations, hepatitis B markers were found in 8.9 percent of the group, and hepatitis C markers in 38.4 percent. Furthermore, 78.8 percent of people living with HIV were tested for sexually transmitted infections; 18.4 percent of them proved positive, and 129 persons were found to have syphilis agent markers.

In 2014 the percentage of people with newly diagnosed TB among new cases of AIDS remained high, showing an upward trend – 74.4 percent versus 71.1 percent in 2013. Some 50.5 percent of people with HIV/TB co-infection are receiving ART.

Again, 2014 saw a tendency of late disease detection in people diagnosed with HIV for the first time. In particular, in 53.5 percent of HIV-positive people aged 15 and older, a disease was detected in clinical stages III and IV (AIDS), and those patients required urgent prescription of ART according to international standards. A comparison of the share of persons with clinical stages III and IV of HIV infection with that of persons with a CD4 level below 350 kl/mcl (49.7 percent) shows that these indicators are quite similar to each other.

These tendencies of late detection and late provision of medical supervision and the necessary related treatment, care and support services for people living with HIV lead to a growth in the number of patients needing ART. As of 1 January 2015 there were 66,409 people receiving ART in Ukraine: 64,405 people received it at facilities of the MoH and the National Academy of Medical Science of Ukraine, including 51,754 funded by the state budget, 12,569 by the Global Fund, and 82 by the AIDS Healthcare Foundation (AHF). A further 2,004 persons received ART at facilities of the State Penitentiary Service of Ukraine, financed by the Global Fund.

Despite a considerable increase in the number of patients receiving ART (from 3,056 in 2005 to 66,409 in 2014), the pace of the ART programme's expansion is still lagging behind the rate of increase in the number of people needing this treatment – the National AIDS Programme 2014–2018 has a target of 85,698 patients for 2015. Subsequently, limited access to ART adversely affects both AIDS morbidity and mortality rates, and HIV prevalence among the population at large. Based on the Global AIDS Response Progress Reporting (GARPR) Indicator 4.1, Ukraine is not reaching the target of 80 percent for treatment coverage, achieving only 30.5 percent in 2014.

Some positive changes are being observed in the provision of medical services to PWID. In 2014, PWID represented 45.7 percent of all deaths among HIV-positive people, compared to 49.5 percent in 2013. The proportion of PWID receiving ART among those who needed it amounted to 47.9 percent, compared to 40.0 percent in 2013.

Although positive, this trend in the improvement of access to treatment for HIV-positive patients (including PWID) and in the expansion of the scope of medical services for these patients has not yet reached an adequate level to make a substantial impact on the rate of mortality from HIV-related causes, especially for PWID. The mortality rate for people living...
with HIV who do not receive ART is higher than the rate for those who do receive it. Thus, the current trends in the HIV-related mortality rate can be attributed, first and foremost, to the late detection and delayed treatment of people living with HIV.

**PROBLEMS AND NEW CHALLENGES**

**Insufficient funding for the National AIDS Programme.** There has been a steady increase in the total funding available for HIV programmes in Ukraine. A significant portion, about 31 percent of the total budget of the National AIDS Programme for 2009–2013, has been allocated to ART, and 78 percent of people living with HIV receiving ART were funded by the state budget as of January 2015. External development partners have been the primary supporters of the HIV prevention programme in the country (the Global Fund and PEPFAR). In 2014 the National AIDS Programme for 2014–2018 was adopted by the Verkhovna Rada of Ukraine and signed by President Poroshenko. A delay in the adoption of this new programme resulted in limited funding for programme activities during 2014 and in an extremely small budget for 2015: UAH7 million for programme management and over UAH280 million for the procurement of medicines for treatment.

Because of its budget deficit, Ukraine is still heavily dependent on external sources of funding to provide an adequate response to the HIV epidemic. The National AIDS Programme budget for 2014–2018 envisaged that almost 32.0 percent of the total planned costs should have been provided by the Global Fund. In 2015 this proportion should have been 32.6 percent, but in reality it is almost 46 percent greater than the state budget for 2015.

In view of the current situation, it is difficult to accurately forecast trends for the incidence of HIV nationally, HIV-related mortality and prevention of MTCT in the short term, and this is further complicated by the critical socio-economic situation and the ongoing conflict in the east of Ukraine.

**Weak planning and substandard organization and management mechanisms.** When planning the budget for the National AIDS Programme 2014–2018, its authors tried to take into account people’s real needs for medical services. However, annual planning and resource allocation is guided by the level of available resources, which is limited and does not consider the real volume of medical services required. Since service providers are budget-funded institutions, this imposes on them restrictions in terms of making independent managerial and financial decisions. The activity of the facilities providing medical services is regulated by a number of binding procedures which are linked to these restrictions and do not take into account the variations of HIV prevalence in the different regions of Ukraine. Funds should be allocated based on the staffing, infrastructure and equipment requirements of medical institutions, but this is often impossible due to limited finances available in local budgets.

Implementation of the National AIDS Programme in 2015 was complicated by the government’s decision to liquidate the State Service of Ukraine on HIV/AIDS and Other Socially Dangerous Diseases, which had the status of a central executive authority. The time-frame for addressing issues related to transferring the Service’s functions to the MoH and establishing a new structure authorized to perform its functions remains unclear.

**Improper management of public procurement** in 2014 led to systematic disruptions in the supply of antiretroviral drugs, medicines for the treatment of opportunistic infections, diagnostic equipment and laboratory monitoring of treatment efficiency. This creates major risks for patients in need of a consistent therapy. The procurement procedures do not take into account this need for a continuous and stable supply of antiretroviral drugs and other items to which key populations at higher risk have limited access (e.g. condoms, test kits etc.).

**The problem of HIV/AIDS in Ukraine, the hostilities in the east of the country and the related humanitarian crisis.** The risk of a potential aggravation of the HIV/AIDS situation in Ukraine has become quite acute because of the hostilities in the east of the country and the subsequent difficult humanitarian situation. This is manifested by a growing number of forcibly displaced persons from Donetsk and Luhansk oblasts, which are among the areas with the largest epidemics in Ukraine: 24 percent of all registered people
living with HIV, 20 percent of those receiving ART and the largest population of PWID were living in the conflict zone in Donetsk and Luhansk. Furthermore, 40 percent of people living with HIV receiving dispensary-based treatment remain in the non-controlled/occupied territory.

New risks have emerged because patients staying in the temporarily occupied areas of these oblasts cannot access full-scale life-saving medicines or diagnostic and preventive interventions. The risk of reverting to the use of narcotic substances is growing among the displaced population due to their severe psychological stress and difficult living conditions.

According to the Ukrainian Centre for the Control of Socially Dangerous Diseases, the number of people diagnosed with HIV for the first time in 2014 decreased by 17 percent from 2013 (from 3,640 to 3,043) in Donetsk oblast and by 43 percent (from 910 to 518) in Luhansk oblast. This is due to the difficulty, and sometimes the impossibility, for the residents of these areas to access HIV counselling and testing services or reach health care facilities because of the hostilities. For example, the number of HIV tests performed in 2014 decreased year on year by 24 percent in Donetsk oblast and by 33 percent in Luhansk oblast.

The number of people living with HIV who de-registered from AIDS service institutions because of a change of residence increased by 149 percent (from 194 to 486) in Donetsk oblast and by 54 percent in Luhansk oblast (from 232 to 358), as might be expected due to the hostilities in the east of the country. Under these circumstances, the relationships between the AIDS service institutions situated in the east of Ukraine, especially in the areas not controlled by the government, and those in other regions are interrupted. In addition, some people living with HIV from Donetsk and Luhansk oblasts are moving to other regions without notifying their local health care providers. Consequently, they remain registered in their previous region, which puts them at risk of treatment interruption and all its resulting adverse effects.

ART provision has dramatically reduced in Donetsk and Luhansk oblasts. For example, out of 46 ART sites in Donetsk oblast, only 21 sites located in the government-controlled areas were functioning as of 5 January 2015. Five institutions of the State Penitentiary Service of Ukraine continue to work in the oblast, providing treatment to 57 HIV-positive inmates. The situation in the other 14 institutions has not yet been determined. Nine ART sites were functioning in Luhansk oblast, four of them in the government-controlled territory. All the institutions of the State Penitentiary Service are working in the oblast, providing ART to 91 HIV-positive inmates.

Problems with regard to HIV/AIDS treatment. Due to the provision of ART, a similar number of HIV-related deaths has been recorded in Ukraine in the last three years – namely, 8.6 per 100,000 population in 2012, 7.8 in 2013 and 8.0 in 2014. At the same time, despite a considerable rise in the number of patients receiving ART (a total of 66,409 patients in 2014), the programme is not expanding fast enough to match the rate of increase in the number of persons needing treatment. The capacity to provide ART is not sufficient to reduce the incidence of AIDS; hence the mortality rate is not decreasing.

This is confirmed by the fact that the mortality rate for people living with HIV who are not receiving ART is much higher than for those who are. Thus, the current absence of a steady downward trend in the rate of mortality caused by HIV-related diseases amid growing access to ART can be explained primarily by the late detection and delayed treatment of people living with HIV.

Insufficient coverage of young people with awareness-raising and prevention activities. Young people are vulnerable to HIV because of their high level of risky practices, including alcohol consumption. A significant number of young people at risk have limited access to prevention and treatment services provided by governmental institutions and NGOs, as they are mainly targeted at adults.

According to sociological surveys, Ukrainian youth in general demonstrate low awareness of HIV/AIDS and knowledge of the modes of HIV transmission: the proportion of the population aged 15–24 years that was fully aware of HIV/AIDS in 2011 reached 39.9 percent. According to the Declaration of Commitment on HIV/AIDS, the target for this indicator in 2010 was 95 percent.

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4 Data provided by the MoH Ukrainian Centre for the Control of Socially Dangerous Diseases, 2015; they include only those who died of AIDS-related diseases.
Insufficient coverage of most-at-risk adolescents (MARAs). Service provision for young people does not take into account the needs of some specific groups of young people, including orphans or homeless children, those living or working on the streets and children who are addicted to alcohol and drugs, including those who begin to inject drugs. These young people, therefore, cannot access adequate services. Organizations that provide special services to MARAs are unable to meet the needs of the youngest representatives of this group, as experts from the institutions are unaware of legal restrictions imposed on working with adolescents and do not have the skills to provide such services. Furthermore, MARAs are often held criminally liable, and unlawful criminal procedural measures are applied to a number of them, which makes it even harder to reach them with medical, social and harm reduction services. The network of youth-friendly clinics is currently not able to provide medical and social services to MARAs, since they lack the capacity to attract the most marginalized young people.

Insufficient coverage of prevention services for key populations at higher risk. Most HIV prevention interventions among key populations at higher risk are supported by external donors and implemented by NGOs. Despite the large number of governmental and non-governmental institutions in the field of HIV, the scope, scale, quality and intensity of activities undertaken by them are currently insufficient to stop the HIV epidemic. Although PWID remain the main driver of the epidemic, their universal access to substitution maintenance therapy (SMT) is still not ensured, which does not allow the coverage of prevention and treatment services to increase. For example, 77 syringes were distributed for every PWID within NSPs in 2013, yet programmes are only considered effective if they provide more than 200 syringes per individual per year. This means that this key population has limited access not only to SMT and ART but also to prevention and medical services in general. Moreover, the coverage of HIV testing among key populations at higher risk remains low and inconsistent. According to the IBBS conducted in 2013, the proportion of PWID who were tested within the previous 12 months and knew their HIV status was 33.7 percent. It was 58.5 percent among CSWs, and 37.8 percent among MSM. As of the end of 2013, prevention programmes reached 63.4 percent of PWID, 46.7 percent of CSWs and only 12.5 percent of MSM.

Violation of fundamental human rights. Ukraine has developed appropriate principles to protect the rights of people living with HIV; it has introduced amendments to legislation and adopted new regulations, particularly the Law of Ukraine on Overcoming the Spread of Diseases Caused by HIV and Legal and Social Protection of People Living with HIV. However, even with these positive legislative changes, there is still a high level of stigma and discrimination against people living with HIV and key populations at higher risk among the general population, medical service providers and law enforcement staff. This creates significant barriers for these groups to access HIV prevention and treatment services. Double and triple discrimination (HIV/AIDS, drug addiction, TB, homosexuality etc.) imposes restrictions on vulnerable groups, especially in villages and small towns. Furthermore, society is dominated by strong stereotypes about gender roles and intolerance towards those who do not conform to traditional gender norms. This is an additional barrier to the provision of HIV prevention, treatment, care and support services.

**RECOMMENDATIONS TO ADDRESS CHALLENGES**

**Strengthening political will to counter HIV/AIDS** concerns national and local authorities equally. Government institutions and the Verkhovna Rada of Ukraine should pay greater attention to the HIV epidemic and provide appropriate levels of financing for programmes and good governance at the national level. Local authorities should allocate sufficient financing and better organize the provision of the necessary services in the field by integrating them into the general system of health care, organization, financial support and social services for people living with HIV, as well as by promoting coordination between social and medical institutions.

**Improving organization and management.** It is necessary to establish links between resources, activities and results; identify the amounts of financing and budget items required for each activity, indicating the source of financing; define the highest-
priority activities that are most likely to help achieve the expected results; optimize the number of institutions responsible for combating HIV/AIDS; and strengthen coordination mechanisms at the national level and between national and regional levels. Of utmost importance is the introduction of amendments to the legislation aimed at enhancing the procedures of procurement and supply of medicinal products and improving the diagnostics in this field. The rules regulating the provision of specialized services should promote flexibility and innovation, thus allowing the services to adapt to local epidemiological, socio-cultural, budgetary and other contexts.

Improving the system of medical care to people living with HIV. Any further expansion of ART for people living with HIV is impossible without decentralization of medical care and integration of all necessary services at health care facilities. A strategy of decentralization is, therefore, essential and should be tailored to the overall public health reform process in Ukraine. This can potentially reinforce the positive impact of the reform on the HIV epidemic and, no less important, cut the support costs of the health care system and optimize material, personnel and managerial resources.

The main goal of decentralization is to ensure universal access to services for treatment of HIV and opportunistic infections, and to provide care and support by using the available resources of the health care system to ensure programme sustainability. Decentralization thus makes a continuum of care available at any health care facility close to patients. It should also promote the active involvement of local communities and the network of people living with HIV in the process of managerial decision-making, minimizing stigma and discrimination, increasing patients’ adherence to ART and using the available resources sustainably.

Enhancing prevention, treatment, care and support. It is necessary to continue preventive activities among key populations at higher risk and ensure a transition from external financing of prevention programmes to financing from state and local budgets. A national strategy needs to be devised to promote healthy lifestyles within the framework of policies on the primary prevention of HIV among young people. It is also reasonable to introduce a socio-medical model which envisages social workers at all institutions that provide specialized services. It is important to develop, adapt and implement models of service coverage for marginalized young people, improve the services for MARAs and enhance their access to youth-friendly clinics, as well as to build the capacity of relevant experts to work with the youngest service users.

It is also important to increase the coverage of HIV testing, early initiation of treatment and care for key populations at higher risk, including prisoners, patients with hepatitis B or C or active TB. There is an urgent need to secure sustainable and sufficient funding from the state budget to procure necessary supplies such as antiretrovirals, test kits, means of prevention etc. Procedures for allocating funds from the local budgets and transferring these funds to NGOs engaged in providing services to MARAs and people living with HIV also need to be simplified.

Reducing MTCT. Given the negative trend in the MTCT rate observed in 2014 and the risks of vertical HIV transmission, an important role can be played in this area by implementation of the international MTCT prevention strategy which focuses on providing lifelong ART to HIV-positive women after delivery. Another key task is to improve HIV diagnostics for children with uncertain HIV status by applying the dried blood spot method, and to study the potential resources and implement the activities required for the effective decentralization of early diagnosis of HIV infection in children.

Ensuring protection and observing human rights. Stigma, discrimination and gender inequality need to be reduced in society in general and, more specifically, among service providers – including medical staff, law enforcement officers, social workers etc. It is also necessary to develop and enforce human rights legislation and introduce amendments to service provision procedures to make them friendlier to key populations at higher risk and people living with HIV. Mechanisms for monitoring violations of human rights and assessing the level of stigma, both in society and among service providers, should be developed and implemented. Finally, to reduce discriminatory behaviour, it is necessary to conduct national information and awareness-raising campaigns and to incorporate these issues into the relevant systems of training and skills development.
GOAL 6. REDUCE AND SLOW DOWN THE SPREAD OF HIV/AIDS AND TUBERCULOSIS AND INITIATE A TREND TO DECREASE THEIR SCALES


PROGRESS TO DATE

Ukraine has made considerable progress in combating TB. After a peak in 2005, the number of new cases has steadily declined and is close to the target set for 2015.

A slow reduction and stabilization of TB morbidity and mortality rates has been observed since 2007 (see Figure 2.6.4). In 2014, actual TB morbidity and mortality rates were lower than the target set for 2015. Between 2004 and 2014, the morbidity rate dropped by a quarter, whereas the mortality rate halved.

The substantial decline in TB morbidity and mortality rates observed between 2013 and 2014 (by 12.4 and 20.6 percent, respectively) is because the statistics did not include data from the uncontrolled territories of the AR of Crimea and Luhansk oblast. However, the decrease in the incidence of TB in Ukraine is real: 19 of the 25 regions in the country demonstrate a decrease, while only 6 show a minor increase (from 1.4 to 8.3 percent). The trend for the mortality rate is the same: a decrease in 18 regions and a slight increase in 7 regions.

KEY TRENDS

TB incidence. Since 2014, WHO has recommended that countries’ reports on TB morbidity should include TB recurrences. The incidence of TB, including recurrences, was 71.2 per 100,000 population in 2014, which is only 5 percent higher than the target for 2015. The indicator has thus decreased in the last five years from 84.6 to 71.2 per 100,000 population, or by 16 percent. Hence, a steady downward trend can be seen, demonstrating an improvement in the TB situation in Ukraine, both in terms of incidence and recurrence.

TB/HIV co-infection. The incidence of TB/HIV co-infection increased by 4.3 times between 2005 and 2014, whereas the co-infection mortality rate increased by 1.5 times. However, a sustainable stabilization of TB/HIV co-infection morbidity (see Figure 2.6.5) and a reduction in TB/HIV co-infection mortality (see Figure 2.6.6) have been observed over the last three years. Overall, 4,441 persons were diagnosed with TB/HIV co-infection in the country in 2014 (against 4,783 in 2013), and mortality declined by 17.9 percent in the last year.

These results indicate an enhancement of TB diagnosis in people living with HIV, large-scale HIV counselling and testing of TB patients (up to 85 percent of new TB cases are covered by HIV testing), the introduction of ART (65 percent of patients with TB/HIV co-infection...
receive ART) and the establishment of cooperation between the TB service and HIV/AIDS prevention and control centres (in 17 regions of the country, the staff list of TB facilities includes an infectious disease physician).

**All forms of active TB.** The prevalence of all forms of active TB is declining. In 2014 it decreased by 14 percent compared with 2013 (from 135.9 per 100,000 population in 2012 to 104.9 in 2013 and 90.2 in 2014). All statistical data are compiled in e-TB Manager, an electronic register of TB patients.

According to international experts, the implementation of the electronic register of TB patients is an example of one of the most successful implementations of integrated information systems in the WHO European region. The register ensured 98% correspondence between paper and electronic reporting data on the total number of TB cases in 2014.

The progress in achieving Goal 6.B. has been ensured through compliance with the commitments made to counteract TB, including consistent financing of the state-wide TB programmes, revision and approval of important regulatory legal acts, and continuous monitoring of their implementation.

The Ukrainian Centre for the Control of Socially Dangerous Diseases at the MoH of Ukraine, which was established to implement state policy on TB, ensures that regular monitoring of the performance of anti-TB activities at the central and regional levels is carried out, and problematic issues concerning TB control are considered by the National Council on HIV/AIDS and TB and the respective regional councils.

**Multidrug-resistant TB (MDR-TB).** In 2011 Ukraine received a grant from the Global Fund to Fight AIDS, Tuberculosis and Malaria to build its capacity to counteract MDR-TB. In the framework of implementing the state-wide response to TB, the grant allowed the country not only to conduct a comprehensive evaluation of its medical care provision but also to obtain additional resources to develop an effective TB control system. Also with the support of the Global Fund grant and as part of the implementation of the State-wide Social Target Programme of Counteraction to Tuberculosis, advanced methods of TB diagnostics have been established in Ukraine.

In October 2012, 4,250 MDR-TB patients started undergoing treatment financed by the Global Fund grant. As of 1 March 2015, there were a total of 12,675 MDR-TB patients receiving treatment in Ukraine. The amount spent on procurement of anti-TB drugs from state budget funds was UAH152.9 million in 2014, representing 90 percent of the total expenditure for procurement of anti-TB drugs in the year.

Despite these achievements, a shift in the epidemiological profile of TB morbidity towards a growing number of MDR-TB patients is being observed. As a result, the number of cases of infectious and incurable disease is growing. This trend may lead to an increase in TB incidence and mortality in the near future and, subsequently, prevent Ukraine from achieving the related MDGs. The number of MDR-TB

![Figure 2.6.5 Incidence of TB/HIV co-infection (per 100,000 population), 1999–2014](image-url)

* Official statistical data on incidence of TB/HIV co-infection were introduced in Ukraine in 1999 according to form No. 08.
** See note on page 2.
cases grew from 3,329 in 2009 to 9,035 in 2013 (see Figure 2.6.7). This surge in MDR-TB prevalence results in the loss of working capacity, deterioration in the health of the Ukrainian people and a rise in disability and mortality; this poses a threat to the country’s national security and requires continuous increases in state budget expenditures.

The substantial increase in the number of MDR-TB cases occurred due to the timely detection of such cases using modern diagnostic methods (Box 2.6.1). Before 2013 an overwhelming majority of such patients were not detected, which resulted in efficient treatment of new and recurring TB cases. According to epidemiological surveillance data for drug-resistant TB (DR-TB), 24 percent of patients with newly diagnosed TB and 60 percent of recurring cases in Ukraine have the multidrug-resistant form of the disease. In 2014 the number of newly diagnosed MDR-TB cases decreased by 1,180 (13 percent).

To ensure efficient TB diagnosis, modern methods of TB diagnostics were introduced in Ukraine as part of implementation of the State-wide Social Target Programme of Counteraction to Tuberculosis and the Global Fund grant: the BD BACTEC™ MGIT™ 960 automated systems for detecting TB mycobacteria and establishing their sensitivity to anti-TB drugs; molecular genetic methods for rapid TB diagnosis using Gene Expert tests in all regions of Ukraine; and hybridization test systems with type-specific Hain probes in Mykolaiv and Kharkiv oblasts. This has considerably reduced the time needed to detect rifampicin-resistant forms of TB in patients, from 45–60 days to 3–5 days. Rapid diagnosis of MDR-TB will help reduce its incidence, as already observed in 2014.

The development and transmission of MDR-TB occurs due to low adherence to treatment, an increase in the size of the multidrug-resistant infection strain brought about by a large number of incurable patients transferred to palliative care, the spread of nosocomial infection due to substandard material and technical conditions in the majority of TB facilities, and the failure of their premises and equipment to meet quality guidelines (including insufficient infection control supplies).

### PROBLEMS AND NEW CHALLENGES

**Treatment of patients with TB.** Due to the spread of MDR-TB and TB/HIV co-infection, the proportion of newly diagnosed patients with bacterioexcretion being treated effectively in Ukraine is 15 percent below the target defined by WHO (85 percent). Treatment efficiency for patients with newly diagnosed smear-positive pulmonary TB in 2014 was 67.6 percent (63 percent in 2013). This indicator was calculated using WHO guidelines, excluding category 4 patients from the total number of patients. The treatment efficiency rate is influenced by the high mortality rate in the cohort (12.1 percent), the proportion of cases with smear-based treatment failure (11.3 percent) and interrupted treatment (6.0 percent).
Section II.
PROGRESS TOWARDS ACHIEVING THE NATIONAL MILLENNIUM DEVELOPMENT GOALS

Section II.

PROGRESS TOWARDS ACHIEVING THE NATIONAL MILLENNIUM DEVELOPMENT GOALS

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Figure 2.6.7
Incidence of multidrug-resistant TB (absolute number), 2009–2014

![Graph showing incidence of multidrug-resistant TB (absolute number) from 2009 to 2014](image)

Source: State Statistics Service of Ukraine and MoH Ukrainian Centre for Socially Dangerous Disease Control.

* Data used from the reporting form ‘Report on the number of patients registered in category 4 (TB 07 – MDR-TB)’. No official data on the number of multidrug-resistant TB patients were available before 2009. ** See note on page 2.

percent). To strengthen adherence to treatment regimens through intense support (distribution of food packages financed from Global Fund resources), Red Cross specialists provided social follow-up to 17,117 TB patients at high risk of treatment interruption between 2012 and 2014. According to the findings of a cohort analysis, the treatment efficiency for these patients was 90 percent, which is 27 percent higher than for the total number of patients in Ukraine. Patients whose treatment fails or is interrupted spread the infection; in the short term this may lead to a renewed increase in the incidence of TB.

**Access to medical services.** The current approach to providing health care focused on inpatient treatment prevents many patients from seeking treatment for fear of losing their social and professional connections. The barriers for patients to access health care include financial issues related to the cost of travel and payments for additional medical examinations and medicines to treat opportunistic diseases and eliminate adverse reactions to anti-TB chemotherapy. Among the newly diagnosed TB cases in 2014, 12.1 percent were alcohol-abusing patients, and 7.0 percent were injecting drug users. This indicates a pressing need for further development of patient social support programmes in the country, which requires the active involvement of civil society institutions.

**Procurement of anti-TB drugs.** Inconsistent financing of activities under the State-wide Programme of Counteraction to Tuberculosis and the specifics of tender procedures (the duration and irregularity of procurement) pose a risk of disruption to the procurement or supply of anti-TB drugs, which can lead to interruptions of treatment and the assignment of inadequate chemotherapy regimens. Since 2014 the e-TB Manager register of TB patients has been used for pharmacological management of the anti-TB drugs procured with Global Fund resources, while those purchased with state budget funds are expected to be included in the register from 2015.

**Health care system.** Reforming the TB service and optimizing the network of TB facilities are among the urgent tasks facing the TB service. An outpatient system of medical care provision to TB patients is currently being started, to avoid nosocomial transmission of infection and to adhere to the principles of TB infection control. It assumes a redistribution of resources for carrying out TB infection control activities, and strengthening social support for patients in the outpatient treatment phases.

The cost of treatment per TB patient in the outpatient model is five times less than in the combined inpatient-outpatient model. The provision of medical care for TB patients in the TB service’s Directly Observed Treatment (DOT) offices and primary health care facilities is on average 16 times less expensive than in one of the TB service’s inpatient facilities. Medical care for TB patients in a day patient facility is three times more expensive than in DOT offices. These are proven and relatively cost-effective alternative forms of outpatient treatment, since TB patients’ adherence to DOT is higher in the outpatient model (based on a retrospective study of cost-effectiveness of TB care models in Kryvyi Rih, Ukraine, for the USAID ‘Strengthening Tuberculosis Control in Ukraine’ project).
Poverty and vulnerable groups. The majority (over 70 percent) of TB patients are from socially disadvantaged population groups. Analysis of the social structure of patients newly diagnosed with TB in 2013 showed that 56 percent were unemployed people of working age, 12.9 percent pensioners, 3 percent homeless, and 1 percent ex-prisoners. Among those newly diagnosed with TB in accounting categories I and III, 15.1 percent were alcohol abusers, and 4.5 percent injecting drug users. Given the current conditions, caution is advised in approaching the reform of the TB service in terms of reducing the bed count in Ukrainian TB facilities.

Moreover, Ukraine is going through difficult times regarding the instability of the political and socio-economic situation: the number of people falling within the definition of ‘socially disadvantaged population groups’ characterized by their living standards is growing, and migration processes are becoming more active, including from the anti-terrorist operation zone. All these phenomena could aggravate the already unsatisfactory TB situation in the country.

Infection control of TB in health care facilities. The unsatisfactory logistical situation in many TB facilities as well as outdated premises in need of an overhaul prevent the necessary standards of infection control from being followed, which contributes to the spread of nosocomial infections. TB facilities are lacking the necessary equipment for infection control (ultraviolet radiation lamps, mechanical ventilation etc.).

RECOMMENDATIONS TO ADDRESS CHALLENGES

TB is caused to a great extent by socio-economic factors and poverty; hence the efforts of the government and state entities should aim to continuously improve people’s well-being, overcome unemployment and poverty and improve the population’s hygiene standards.

A system of medical care for TB patients that focuses on outpatient treatment needs to be introduced, to ensure the sustainable use of funds. A redistribution of resources for carrying out TB infection control activities and strengthening social support for patients in the outpatient treatment phases is required.

Pharmacological management of anti-TB drugs should be improved.

A capacity-building strategy for TB service staff needs to be devised and implemented, accompanied by the development of a unified national concept of continuous training for medical professionals.

Box 2.6.1  A recent review of the national TB programme (April 2015) came up with the following key recommendations for different domains of TB care:

**Health system:** Develop a patient-centred care model oriented to ambulatory care; include TB hospitals in the general health care reform aiming to institute new performance-based funding mechanisms; Merge the currently separate specialisms of pulmonology and TB, specialist into one (respiratory disease specialist), including for pre- and postgraduate education and specialization; Review the human resources plan and task profiles of staff in line with projected changes; Increase the salaries (incentives) for TB staff; Reduce the number of and/or close TB sanatoria, and consider using the resources made available to reform the TB care system.

**Case finding:** Revise the MOH Order No. 327 of 15 May 2014 in relation to extensive obligatory fluorography screening among professions with little impact on the spread of airborne infection, and focus more on well-defined risk groups in line with WHO recommendations. The potential cost savings resulting from the reduced workload and unified diagnostic procedures should be re-invested in TB control measures based on patient-centred care models.

**Laboratory network:** Rationalize further the laboratory network; in particular, the number and effectiveness of level 1 and 2 laboratories needs to be revised; The geographical distribution of laboratories of levels 2 and 3 should be improved, taking into account the population density and number of people at risk of TB and MDR-TB; Improve access to TB diagnostic in remote areas by improving spu- tum transportation logistics as well as the accessibility and availability of rapid molecular tests in these areas; Revise and adequately define normative documents regarding the role, tasks and responsibilities of all laboratory levels, including workload, area of service, qualification and number of staff; Further strengthen the country’s continuous quality assurance programme and support it financially.

**Drug supply and management:** Adopt the Global Drug Facility (GDF) drug quantification method for state budget procurement, to ensure drug procurement and supply at all levels; Ensure the availability and distribution of drugs for complete treatment regimens for all patients, particularly pre-extensively drug-resistant (XDR) and XDR-TB; Pharmaceutical management, especially the drug supply system, should be strengthened at all levels to ensure consistent access to first- and second-line TB drugs of assured quality; Integrate drug management in the civil and prison sectors; Develop a protocol on side-effect management to strengthen the
management of side-effects at all levels and the reporting of serious adverse reactions; Record side-effects on treatment cards and report pharmacovigilance forms to the MoH Expert Centre.

**Infection control:** Implement rapid TB laboratory diagnostics and early isolation of infectious TB patients, and apply administrative control measures; Expand ambulatory treatment for TB and DR-TB patients, in particular non-infectious TB cases; Strengthen the role of the National TB Control Programme in monitoring infection control measures at the level of TB facilities, and conduct risk assessments regularly.

**TB treatment and case management:** Hospital-based models of care should be gradually replaced with specific ambulatory care for all cases of TB and DR-TB, including children; Savings generated through this reform should be re-invested accordingly; All patients on ambulatory care should be effectively supported to ensure treatment adherence, thus minimizing the risk of treatment interruptions, failures and ongoing transmission of TB and DR-TB; Incentives and enablers should be sustainably provided to all patients.

**Childhood TB:** Update childhood TB control measures, including increasing coverage of BCG at birth from the current 65 percent to 95 percent and abolishing BCG re-vaccination at 7 years of age, transforming the annual mass screening with tuberculin skin testing in every child to focused active case finding in risk groups, and applying the WHO-recommended schema of preventive treatment for children with latent TB infection; The current, outdated strategy of hospitalization of children without illness (TB contacts etc.) and children with non-severe forms of TB should be abandoned, as it is a huge financial burden on the country and increases the risk of intra-hospital TB transmission (especially for those without TB); it is also unethical, increasing stigma and psycho-emotional trauma for children and their families; TB diagnosis, treatment and prevention protocols should be urgently updated and introduced in accordance with the latest international standards to ensure access to the relevant diagnostic tools and the use of adequate treatment regimens (including adequate dosage) and isoniazid preventive treatment using evidence-based dosage and duration.

**TB/HIV:** Implement WHO recommendations to start ART for HIV patients (without TB) if CD4 count is less than 500; Ensure uninterrupted anti-TB drug supply to all TB/HIV patients irrespective of their registration (including isoniazid preventive treatment); Allocate earmarked resources from local and/or national budgets to support TB control activities (TB detection, support for contact tracing and treatment adherence) in key affected populations through social contracting mechanisms.

**DR-TB and MDR-TB:** Ensure access to adequate treatment (including fifth group of anti-TB drugs and compassionate use of new anti-TB drugs) for all XDR-TB patients to stop further development of resistance and limit transmission of XDR-TB; Introduce new, shortened treatment regimens and new anti-TB drugs under operational research conditions in line with WHO recommendations, thus improving treatment outcomes, ensuring patient-oriented care and decreasing treatment costs; Ensure palliative care for DR-TB treatment failures through the introduction and development of national guidelines for palliative care and the establishment of treatment facilities with adequate case management and appropriate infection control.

**Human resources:** Review the human resources plan and task profiles of staff in line with projected changes (childhood TB, strengthening of ambulatory model of care, introduction of new staff to ensure patients’ adherence to treatment such as social workers, psychologists, visiting nurses).

**TB control in prisons:** Improve the coordination of TB control activities between the penitentiary and civil health care systems at all levels to ensure an equal quality of health care provision; Define collaboration mechanisms between prison medical and non-medical services to ensure optimal implementation of TB control activities in the penitentiary sector; Facilitate the provision of standardized TB control measures in all prison facilities, and ensure full integration into the National TB Control Programme for 2017–2021.

**Advocacy, communication and social mobilization:** Develop an advocacy, communication and social mobilization strategy in line with the changing approaches of the National TB Control Programme that will include community participation and social mobilization.

**Other vulnerable populations and social determinants:** Expand access to rapid TB laboratory diagnosis and patient-oriented care in populations from vulnerable groups; Ensure the sustainability of activities among key affected population groups that are currently implemented by NGOs through social contracting with funding from the local (regional and/or district) budgets; Support service provision to vulnerable groups close to their areas of residence, expand harm reduction programmes and deploy mobile multi-disciplinary teams with the necessary equipment and consumables.

**Ethics and human rights:** Ensure universal access to TB diagnosis and quality TB and DR-TB treatment for all patients with TB, irrespective of their social status, co-morbidities or low treatment adherence in the past; Provide social support (living place, incentives and enablers) to all TB and DR-TB patients in need during the ambulatory phase of treatment, irrespective of the form of TB or funding source, by using funding from local budgets; Revise the existing legislation on coercive treatment (isolation), and develop the necessary legal support to use all possible ways before considering coercive measures; Revise the notion of palliative care; align it with international standards in this area and add it as an amendment to the current national TB protocol for immediate implementation; Socially disadvantaged patients, especially homeless people, should be systematically included in TB registers, even if they do not have residential registration; The current, outdated strategy of hospitalization of children without illness (TB contacts etc.) and children with non-severe TB forms should be abandoned, as it is a huge financial burden on the country and increases the risk of intra-hospital TB transmission (especially for those without TB); it is unethical and increases stigma and psycho-emotional trauma for children and their families.

**Operational research:** Set up a platform for national and regional operational research in the field of care for TB, DR-TB and DR-TB/HIV co-infection, on the basis of the existing public health agencies, to provide documented evidence of cost-effectiveness for policy decision-making to further improve the financing mechanisms and budgetary allocations at the national and regional (oblast) levels.
Section II.
PROGRESS TOWARDS ACHIEVING THE NATIONAL MILLENNIUM DEVELOPMENT GOALS

GOAL 7
ENSURE ENVIRONMENTAL SUSTAINABILITY
DUE TO HUMAN ACTIVITY, ABOUT 70% OF SURFACE WATER AND A LARGE SHARE OF THE GROUNDWATER RESOURCES ARE NO LONGER A SOURCE OF SAFE DRINKING WATER

4.0 MILLION TONNES OF POLLUTANTS ANNUALLY WERE RELEASED INTO THE AIR IN UKRAINE

2.0 MILLION TONNES OF EMISSIONS ARE FROM TRANSPORTATION AND PRODUCTION
## TARGETS AND INDICATORS

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| **Target 7.A:** Increase by 2015 the share of the population with access to a centralized water supply, *inter alia*, to 90 percent of the urban population and 30 percent of the rural population | 7.1. Share of the urban population with access to a centralized water supply, % of overall urban population  
7.2. Share of the rural population with access to a centralized water supply, % of overall rural population |
| **Target 7.B:** Stabilize by 2020 greenhouse gas emissions at 20 percent below 1990 levels | 7.3. Volume of emissions of pollutants into atmosphere from stationary sources, million tonnes per year  
7.4. Volume of emissions of pollutants into atmosphere from mobile sources, million tonnes per year |
| **Target 7.C:** Stabilize pollution of water reservoirs by 2015. Stabilize at the level of 8.500 million cubic metres per year the volume of sewage disposal into surface water reservoirs | 7.5. Volume of reused water disposals into surface water reservoirs, million cubic metres per year |
| **Target 7.D:** Increase forest cover of the territory of Ukraine to 16.1 percent and the area of nature reserves by 2015. Enhance the network of nature reserves, biosphere reserves and natural national parks to 3.5 percent of the overall territory of Ukraine and to 9.0 percent of the overall area of territories and objects of the Nature Reserve Fund | 7.6. Forest cover and share of lands covered with forests, % of overall area of the territory of Ukraine  
7.7. Share of area of nature reserves, biosphere reserves and natural national parks, % of overall area of the territory of Ukraine  
7.8. Share of area of territories and objects of the Nature Reserve Fund, % of overall area of the territory of Ukraine |
Section II.
PROGRESS TOWARDS ACHIEVING THE NATIONAL MILLENNIUM DEVELOPMENT GOALS

PROGRESS IN UKRAINE

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The table presents actual data from the State Statistics Service of Ukraine up to 2013 and target values for 2015 (established in 2010).
* See note on page 2.
** Volume of emissions of pollutants into atmosphere from stationary sources (only from the enterprises registered at the state level), million tonnes per year.

PROGRESS TO DATE

Ukraine has managed to make certain positive changes towards meeting the targets for environmental sustainability. The emission of greenhouse gases (GHGs) and disposal of pollutants into the environment has decreased significantly, although this is linked to a slowdown in economic growth. Positive trends are also observed in the increase in forest cover and the expansion of nature reserves and natural national parks. Stagnation or little progress is observed in energy savings, energy efficiency and the use of renewable energy. Serious problems also remain with the generation and management of waste from both stationary and mobile sources as well as with the provision of a centralized water supply to the population in rural areas.

KEY TRENDS

**Drinking water and water reservoirs.** The share of the urban population of Ukraine with access to a centralized water supply has been increasing gradually since 2001. For example, it was 88 percent in 2001, 93.2 percent in 2009 and 93.4 percent in 2011, with the two last fig-
ures being higher than the target set for 2015 (90 percent).

However, a very large disparity still persists in Ukraine between urban and rural populations: for example, while 93.4 percent of the urban population had access to a centralized water supply in 2011, the figure for the rural population was only 22.2 percent. The rest of the population uses local drinking water sources such as pit and tubular wells, self-made catchments, levees and imported water.

In terms of water intake, Ukraine is ranked as the worst in Europe. Despite having insufficient water resources, the country has the highest water use per capita (on average 250–320 litres/day/person). This is at least twice as high as the average level of water supply in the advanced countries of Europe. However, this high intensity of water use, both for individual consumption and production activities, is mitigated by a decreasing population, a slowdown in the national economy and progress towards a more efficient use of water – these three factors leading to an overall decline in water intake.

The main industrial consumers of fresh water are the following sectors: electricity production, metallurgy, chemicals and petrochemicals, housing and utilities, and agriculture (see Figure 2.7.1).

As in previous years, considerable water loss in transportation was observed in 2014 – 1.350 billion m³ or 12 percent of the water intake (in 2013 it was 2.213 billion m³ or 16 percent). This considerable amount of water loss is mainly caused by a largely insufficient number of water-metering devices, which are an essential tool for saving water. For example, the level of provision of the water supply and sewage sector with water-metering devices was only 72.4 percent countrywide as of 1 January 2015.

Water pollution. In many regions of Ukraine, underground water sources fail to meet regulatory quality requirements. This is caused, primarily, by anthropogenic contamination. The main factors for such groundwater pollution in most parts of Ukraine include: municipal and livestock wastewaters; mineral fertilizers; agricultural chemical products; unregulated storage of industrial waste, mineral fertilizers and toxic chemicals; oil refineries; and other local facilities affecting the groundwater conditions.

The quality of surface water is also considerably affected by the discharge of mine and quarry wastewater that enters surface water reservoirs without any treatment. In 2014, 11.505 billion m³ of water was taken from natural water reservoirs, including underground ones, representing 84.4 percent of the 2013 water intake. Around 1.503 billion m³ was taken from underground water reservoirs in 2014, whereas the 2013 figure was 1.911 billion m³. The decrease in water intake in 2014 was caused, first of all, by a reduction in the

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1 No recent comprehensive information is available for the centralized water supply in Ukraine, due to the hostilities in the east of the country.

2 The decrease in water loss between 2013 and 2014 was related to some contraction in the work of the North Crimean Canal that had supplied more than 1.2 billion m³ of Dnipro water to the Crimean Peninsula every year (prior to 2014) to meet the needs of drinking water provision and irrigation.
water supply to the AR of Crimea, as well as by a general decline in industrial production in the country. In 2014, 4.871 billion m$^3$ was taken for production needs, and 1.500 billion m$^3$ was taken for household and drinking needs. A rapid decrease in water intake has been occurring since the 1990s; in recent years, water intake has been fairly stable.

**GHG emissions.** As a party to the United Nations Framework Convention on Climate Change (UNFCCC), Ukraine maintains and makes available annual national inventories of anthropogenic emissions by sources and removals by sinks of all GHGs. The results of these inventories provide an objective indicator of the rates and trends in quantitative and qualitative changes in GHGs. According to the draft national inventory for 1990–2013, a steady downward trend has been observed in GHG emissions in Ukraine (see Figure 2.7.2). Total GHG emissions in 2013 were 349.4 million tonnes of carbon dioxide equivalent (СО$_2$). The largest contributor to these emissions in Ukraine is the energy sector, which in 2013 amounted to 272.3 million t CO$_2$e – or 77.9 percent of total GHG emissions.$^4$ This represents a decrease of 60.9 percent from 1990, the baseline year. The processing industrial sector ranks second, with GHG emissions in 2013 of 71.7 million t CO$_2$e (or 20.5 percent of total emissions), which is 39.2 percent less than in 1990 and 4.7 percent less than in 2012.

This decrease is due to a contraction in production output in recent years while energy intensity (energy consumption per $1$ of GDP) remains high. According to energy experts, there is a large potential for energy savings, particularly in the most energy-intensive economic sectors. For example, this capacity for energy saving is estimated at 62–64 percent in the metallurgical, machine-building, chemical and petrochemical industries and 35–38 percent in housing and utility services.$^4$ A large energy-saving capacity also exists in transport and in the food industry.

**Air pollution.** In 2014, 3.2 million tonnes of pollutants were emitted into the atmosphere from stationary sources, which is 74.8 percent of 2013 emissions.$^5$ This decrease is

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$^4$ More than 40 percent of all gas as of late 2012 (about 30 billion m$^3$) was consumed in the public utility sector, mainly for heating, and housing and utility enterprises alone consumed about 11–14 billion m$^3$ of gas every year for that purpose.

$^5$ Information is provided for the enterprises registered at the state level in terms of potential emissions of pollutants and GHGs into the atmosphere. Information for 2013 excludes the temporarily occupied territory of the AR of Crimea and Sevastopol city, and for 2014 also excludes some parts of the anti-terrorist operation zone.
due to a contraction in production output by industrial enterprises and to a partial shift in energy sources, with an expansion in the use of gas and a reduction in coal. In addition, statistical data for 2014 do not fully include information from enterprises situated in the anti-terrorist operation zone.

Among stationary sources, industry is the main air polluter in the country. In 2014, enterprises producing electricity, gas, steam and conditioned air emitted 43.8 percent of the total volume of emissions; processing industry enterprises 30.4 percent; metallurgy 25.1 percent; and extractive industry and quarry development 17.5 percent (see Figure 2.7.3).

The pollutants emitted by stationary sources in 2014 included 579,300 t of methane and 10,600 t of nitrous oxide, which are GHGs. In addition, 153.1 million t of carbon dioxide, also adversely affecting climate change, was emitted into the atmosphere in 2014 by stationary sources, and 28.0 million t by mobile sources.

The significant contribution to air pollution made by mobile sources comes mainly from automobiles, rail, aviation, water transport and production machinery. The volume of pollutant emissions into the atmosphere from these sources increased between 2001 and 2008, from 1.99 million to 2.68 million t per year, and then decreased to 2.0 million t in 2014. The two principal reasons for the large volume of emissions into the atmosphere are ageing vehicles and the use of low-quality fuel. At the same time, air pollution indicators for 2001–2014 demonstrate that the volumes of emissions still depend essentially on the level of industrial output in Ukraine and that conditions for breaking this relationship have not been created.

Pollution of water reservoirs. The target of stabilizing the volume of sewage disposal into surface water reservoirs at the level of 8.500 billion m$^3$ per year by 2015 has been met. The volume was 8.342 billion m$^3$ in 2008 and has not exceeded 8 billion m$^3$ annually since then. The largest contributors to the disposal of waste water into surface water reservoirs include: electricity generation (41 percent of the total volume of disposal), housing and utilities (26 percent), metallurgy (15 percent) and agriculture (14 percent).

In 2014 the total volume of waste, mining-pit and collector and drainage water disposal was 6.587 billion m$^3$. Around 6.354 billion m$^3$ was disposed of in surface water reservoirs, including 4.015 billion m$^3$ (63 percent of the total) untreated standard-quality water, 1.416 billion m$^3$ (22 percent) of water treated to standard quality and 923 million m$^3$ of contaminated reused water (15 percent). The volume of contaminated reused water included 175 million m$^3$ without treatment. The largest volume of contaminated waste water within major river basins in 2014 was recorded in the basin of the Dnipro river – 473.6 million m$^3$ – which is 119.5 million m$^3$ less than in 2013.

Some waste water is disposed of in surface water reservoirs without treatment, which is especially dangerous to the environment. This type of waste water accounted for 15 percent of the total volume of water disposal in 2014.
The main causes of disposal of contaminated waste water into surface water reservoirs include the shortage of centralized sewage systems in most settlements of the country, the low quality of reused water treatment and the unsatisfactory operating conditions of treatment plants.

According to the Concept of the State-wide Programme for Development and Reconstruction of Centralized Water Disposal Systems in Settlements for 2012–2020, the centralized water disposal system in Ukraine is a sophisticated engineering network. It consists of 50,800 km of pipes, 3,200 pumping stations with about 7,600 pumps, and 1,300 sewage treatment facilities. A great number of structures within this network have already reached the end of their standard service life and require renovation. Meanwhile, 12 cities and 345 urban settlements as well as 95 percent of rural communities are not equipped with centralized sewage systems, whereas sewage treatment facilities in 187 urban areas do not work efficiently: more than 12,000 m³ of untreated or insufficiently treated waste water is disposed on water bodies every day. One third (35 percent) of sewage pipes are in a dilapidated or very poor condition, while 49 percent of pumping stations are in need of reconstruction, improved operating processes and equipment or urgent replacement. In recent years, the construction and commissioning of new sewage treatment capacity and the reconstruction of operating facilities and pipes has almost stopped due to the economic crisis.

Forest cover of Ukraine. The share of the total territory of Ukraine covered by forests reached 16 percent as far back as 2013, and, considering a steady upward trend seen in this indicator from 15.6 percent in 2001, there are grounds to believe that the target of 16.1 percent has been met. However, according to European recommendations, forest cover of 20 percent is optimal, which corresponds to the creation of more than 2 million hectares of afforestation in Ukraine.

Not only do forests occupy a relatively small area in Ukraine, they are also very unevenly located within the country – mainly concentrated in Polissia and the Carpathians. Even so, they are the major stabilizing component of natural landscapes, regulating the hydrological regime of territories and the quality of water, preventing the erosion of soil by wind and water, and maintaining the important biochemical cycles of ecosystems.
ENSURE ENVIRONMENTAL SUSTAINABILITY

Table 2.7.1  Total number and area of the Nature Reserve Fund territories and objects by category, as of 1 January 2015

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of objects</th>
<th>% of total area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserves:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nature</td>
<td>19</td>
<td>5.2</td>
</tr>
<tr>
<td>biosphere</td>
<td>4</td>
<td>6.3</td>
</tr>
<tr>
<td>natural national parks</td>
<td>48</td>
<td>30.8</td>
</tr>
<tr>
<td>Wildlife preserves</td>
<td>3,121</td>
<td>34.5</td>
</tr>
<tr>
<td>Regional landscape parks</td>
<td>80</td>
<td>19.5</td>
</tr>
<tr>
<td>Reserve stows</td>
<td>811</td>
<td>2.5</td>
</tr>
<tr>
<td>Other (natural monuments, botanical gardens, zoological parks, arboretums and memorial parks of garden and park art)</td>
<td>4,071</td>
<td>1.2</td>
</tr>
<tr>
<td>Total</td>
<td>8,154</td>
<td>100.0</td>
</tr>
<tr>
<td>Including:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>national</td>
<td>645</td>
<td>53.9</td>
</tr>
<tr>
<td>local</td>
<td>7,509</td>
<td>46.1</td>
</tr>
<tr>
<td>National wildlife preserve (Black Sea)</td>
<td>1</td>
<td>x</td>
</tr>
</tbody>
</table>

Source: State Statistics Service of Ukraine.

According to the State Statistics Committee, **58,000 ha of forests** were recreated in 2014, by planting and seeding forests on 38,000 ha and by natural reforestation on 20,000 ha. In the forests managed by the State Forest Resources Agency, the total volume of reforestation and new forest creation was 25 percent greater than the volume of mass forest felling in 2013.

In 2014 the total area of newly dead forest stands was 17,600 ha, which was 8.3 percent more than in 2013. The main reasons included forest diseases (6,600 ha, or 38 percent of the total), the impact of adverse weather conditions (6,000 ha, or 34 percent) and forest fires (2,300 ha, or 13 percent).

**Forest certification.** Forest certification is an important area in the development of Ukrainian forestry and has now been conducted for more than 10 years. It follows the international pattern of the Forest Stewardship Council (FSC), an international non-commercial non-governmental organization. As of 1 January 2015, the area of certified forests reached 2.787 million ha, which is 26.8 percent of the country’s forest resources. The certified forests are located unevenly, mainly concentrated in the west and north of Ukraine.

Forest certification is an important tool for promoting environmentally balanced and responsible forestry management based on harvesting timber and other forest products subject to the preservation of biodiversity and productivity of forests and the maintenance of natural environmental processes.

**Expansion of the network of nature reserves, biosphere reserves and natural national parks.** A trend of steady growth took place between 2001 and 2015 in the share of the area of nature reserves, biosphere reserves, natural national parks, territories and objects of the Nature Reserve Fund (NRF) of Ukraine in the overall territory of Ukraine.

The Convention on Biological Diversity, to which 193 countries, including Ukraine, are parties, sets the target of creating a system of nature reserves in at least 17 percent of land areas and 10 percent of marine areas by 2020. As of 1 January 2015 the NRF of Ukraine comprised 8,154 territories and areas, covering a total area of 4 million ha of land, and 402,500 ha within the Black Sea area (see Table 2.7.1). The NRF’s area accounts for 6.15 percent of the country’s total area (‘nature reserve rate’) – thus significantly below the 17 percent target set by the Convention on Biological Diversity.

The Ukrainian NRF structure includes 11 categories of territories and objects of national and local importance. As shown in Table 2.7.1, the largest shares belong to wildlife preserves (35 percent), natural national parks (31 percent) and regional landscape parks (20 percent). Work is currently under
way to create new NRF territories and objects and expand the existing ones, with about 600,000 ha of total additional area. Materials for projects to create six NRF territories of national importance totalling 280,000 ha have been drafted and are in the process of being endorsed by the local authorities and self-governance bodies concerned, and the landowners. Materials are also being developed for projects to create or expand a number of NRF territories and objects in various oblasts of Ukraine, with a total surface area of about 300,000 ha.

Waste generation. Some 343.5 million tons of waste was generated in Ukraine in 2014, including 337.4 million tons generated from the economic activities of enterprises and organizations. Waste of hazard classes III, II and I amounted to 641,500 tonnes, 24,200 tonnes, and 2,100 tonnes, respectively. Thus, nearly all the waste generated – around 99.8 percent – is hazard class IV waste – the least dangerous. The share of waste of hazard class I–III is no greater than 0.5 percent of the total waste generated in the country each year, but this is the waste that poses dangers for human health and the environment.

An analysis of waste generation by economic activity for 2010–2013 shows that the largest share of waste is generated by the extraction of black and brown coal, metal ores and other mineral resources, as well as by quarry development.

PROBLEMS AND NEW CHALLENGES

Insufficient access to quality drinking water. The goal of providing the population of Ukraine with quality drinking water, safe for human health, is one of the most socially significant tasks. Water pollution with nitrates results in a variety of diseases, a reduction in the human body’s general resistance and, consequently, growing overall incidence of disease, particularly infectious and oncological diseases.

The main problem that impedes equal access to drinking water is the lack of funding for the construction and reconstruction of centralized water supply systems and plants which would increase the amount of purified drinking water. Other issues include: the poor ecological state of ground and underground sources of drinking water; a lack of adherence to sanitation regulations at many drinking water sources and facilities; the poor technical condition and the deterioration of water supply and sewerage systems; and an insufficient level of implementation of resource- and energy-saving technologies and equipment at drinking water supply and sewerage enterprises.

Air pollution. Air pollution in Ukraine also adversely affects the health of the population. It is caused by the failure of enterprises to implement timely measures to reduce emissions of pollutants below the maximum allowable level, as well as by the use of technically obsolete motor vehicles. The air in major cities suffers the most from pollution by automobile transport emissions, with the concentration of hazardous substances posing a direct threat to human health.

Low energy efficiency. Ukraine’s economy features a low level of energy efficiency. Despite a sharp rise in energy carrier prices, measures aimed at saving energy, higher energy efficiency and power generation from renewable alternative sources are being implemented slowly in the country. Comparison with other European countries illustrates the situation in this regard. For example, according to the NGO ‘Reanimation Package of Reforms,’ Ukraine’s energy intensity (energy consumption per $1 of GDP) is 4.8 times higher than that of the UK, 3.8 times higher than Turkey and 3.0 times higher than Poland. Ukraine consumes more gas than Sweden, Belgium, Poland, the Czech Republic, Norway, Estonia and Latvia combined. Poland consumed 14–15 billion m$^3$ of gas in 2013, and Ukraine 50.4 billion m$^3$, even though Poland’s GDP is three times higher than Ukraine’s. Heating buildings uses 260 kWh/m$^2$ in Ukraine, while the average EU figure is 90–120 kWh/m$^2$. According to the UA-Energy.org web portal, the Ukrainian economy’s energy-saving potential was EUR13.8 billion, or about 39 billion m$^3$ of natural gas, in 2012.

Pollution of surface water reservoirs. Ensuring the appropriate ecological condition of

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* Excluding the temporarily occupied territory of the AR of Crimea and Sevastopol city, and for 2014, some parts of the anti-terrorist operation zone.
water reservoirs remains crucial for all regions of Ukraine. Almost all the surface water and underground water sources are polluted. The main agents causing pollution include nitrogen and phosphorus compounds that are easily oxidizable, toxic chemicals, petroleum products, heavy metals and phenols. Pollution of surface water occurs due to: disposal of municipal, domestic and industrial waste water which is insufficiently treated or not treated at all and flows directly into water reservoirs and via the municipal sewage system; inflow of pollutants into water reservoirs with the run-off from built-up areas; and wash-off from agricultural land due to soil erosion in the water-intake area.

The main challenges to stabilizing the volume of waste water disposal into surface water reservoirs and gradually reducing this type of pollution include, in particular: the significant water losses caused by economic activity; high water intensity of production; depreciation of water, housing and utility facilities; duplication and insufficient coordination among the relevant central executive authorities to effectively perform their management functions in the field of water protection, utilization and reproduction, resulting in ambiguous interpretation of nature conservation laws and in inefficient spending of budget funds; slow implementation of economic mechanisms encouraging enterprises to implement resource-saving and environment-friendly technologies; insufficient funding for the construction and modernization of sewage treatment facilities; and a lack of effective monitoring of drinking water sources outside the centralized water supply systems.

**Weak capacity of waste management.** In view of the large quantity of various kinds of waste in Ukraine, increasing the recycling capacity of such waste appears to be a significant environmental challenge for the country. Industrial and solid municipal waste can be used as secondary raw materials. Almost 90 percent of the recovered and recycled waste consists of non-organic non-metal waste, in particular including waste from thermal processes (sinter, ash, sand etc.), from construction and demolition, as well as from mining works and quarry development. The amounts of the waste generated that can be used as secondary resources are so large that they not only match but often exceed primary resources in terms of their value. However, organizational and legal foundations for using waste as secondary raw materials have not been developed in Ukraine.

As regards consumer goods, the quantities of waste from electrical and electronic equipment have been continually growing in recent years both worldwide and in Ukraine, caused by widespread use of television sets, computers and telephones. EU Member States and other developed countries collect and process up to 80 percent of electronic waste, while Ukraine has no regulatory document that could aim to address this problem.

This is also the case for worn-out motor tyres, which amass at landfill, occupying large areas of land, and are scattered in forests and bodies of water, contaminating the environment. Ukraine has no capacity for innovative technologies to recover worn-out tyres. The collection and recovery of used technical oils and chemical current sources (batteries and accumulators) causes the same problems. Around 400,000 tonnes of used technical oils belonging to hazardous waste is generated in Ukraine annually.

Finally, a great danger to the environment and human health is caused by medical waste containing pathogenic and potentially pathogenic micro-organisms. About 350,000 tonnes of medical waste is generated in Ukraine annually, posing a potential risk of spreading infection.

**Slow increase in the forest cover in Ukraine.** In terms of forested areas and timber reserves, Ukraine is a forest-deficient country. The current rate of forest cover of 16 percent is not sufficient: according to European recommendations, 20 percent is optimal, and to reach this figure, Ukraine would need to create more than 2 million ha of new forests. At the current afforestation rates, this would take 15–20 years.

**Insufficient expansion of the network of nature reserves, biosphere reserves and natural national parks.** The slow pace of expanding the existing NRF territories and creating new ones raises concerns, as do losses of biotic and landscape diversity. The main issues include: a lack of funding for existing and newly established NRF objects; poor funding of activities aimed at establishing an ecological network at the local level; departmental fragmentation of management of the NRF objects (Ministry of Ecology and Natural Resources, State Forest Resources Agency, NAS of Ukraine); and low level of effectiveness...
Section II.
PROGRESS TOWARDS ACHIEVING THE NATIONAL MILLENNIUM DEVELOPMENT GOALS

of monitoring compliance with the requirements of the environmental legislation and the regimes of the NRF territories and objects, particularly those of local importance.

Ineffective legislation in terms of state supervision in the field of environmental protection. Most metallurgical enterprises work without any radical reconstruction, renovation of equipment or adoption of advanced technologies. Outdated technologies entail excessive consumption of raw materials, fuel and energy carriers as well as waste generation, which increases the man-made burden on the environment. Ineffective legislation allows these enterprises to ignore the legal requirements and damage the environment. Although the State Environmental Inspectorate calculated the damage caused by violations of environmental protection legislation in 2014 as costing UAH1.073 billion, the sum collected by the State from relevant claims and lawsuits was only UAH63 million.

Insufficient allocation of funds for capital investments in environmental protection. Enterprises, organizations and institutions spent UAH 21.9 billion (net of VAT) for environmental protection in 2014, but 65 percent of these expenses accounts for operating costs, and only 35 percent for capital investments.

The negative impact of the situation in the east of the country. Environmental degradation in Ukraine is also caused by the hostilities in Donetsk and Luhansk oblasts, which host thousands of economic entities posing a high risk to the environment and the health of the population. Another threat is due to the fact that there are trunk gas, oil and ammonia pipelines and underground gas storage facilities in these territories.

The mines that have already been closed or are in the process of being closed are especially dangerous. The danger is aggravated by interruptions to the electricity supply which stop water pumps and lead to the flooding of mine workings, surface flash flooding, flooding of adjacent areas and the contamination of surface and underground water resources.

Man-made burden on the environment. Despite the overall decline in industrial production in recent years, the man-made burden on the environment is not diminishing. Major contributors to environmental pollution still include metallurgy, the chemical industry, fuel and energy, housing and utilities, and agriculture. In the long run, this leads to unfavourable living conditions, morbidity and high mortality rates. These adverse effects are aggravated by obsolete production equipment, the use of outdated technologies, the low level of provision with waste water treatment facilities, the violation of environmental legislation and the insufficient adoption of low-waste and resource- and energy-saving technologies.

In particular, outdated technologies entail excessive consumption of raw materials, fuel and energy, which increases production costs and increases the environmental impact because the volumes of waste, pollutant emissions and waste water from the enterprises are growing. Due to state and local budget deficits, very little funding is allocated to environmental protection. However, the key reason for the heavy environmental burden of enterprises is that they are not interested in the adoption of resource-saving and environmentally safe technologies.

At the macroeconomic level, there are also no incentives for a structural reorganization of the economy from a resource-intensive ‘dirty’ model towards a ‘greener’, environmentally safe economy.

RECOMMENDATIONS TO ADDRESS CHALLENGES

Addressing the institutional weaknesses of environmental governance. Strategic documents on environmental protection have been developed in Ukraine, in particular, the Law of Ukraine on the Basic Principles (Strategy) of the State Environmental Policy of Ukraine for the Period until 2020 and the National Action Plan on Environmental Protection for 2011–2015. However, as the analysis shows, most of their components are not being implemented. It is, therefore, necessary, first and foremost, to analyse the reasons for the failure to comply with these documents, amend them as required, and make appropriate decisions to ensure their unconditional implementation. In addition, measures aimed at fulfilling the provisions of the EU–Ukraine Association Agreement should be included in the above-mentioned documents, and other countries’ best practice in ensuring sustain-
able environmental protection should be taken into consideration.
A number of state, regional and local programmes have been set up in various environmental areas, but they are weakly interconnected, do not receive enough financial support and, subsequently, are only partially implemented, which significantly limits their efficiency. It is, therefore, suggested to develop, based on and instead of these programmes, a single state-wide environmental protection programme which would include measures at national, regional and local levels. A legal foundation for the development of such a programme is provided by the Ukraine 2020 Sustainable Development Strategy, approved by the President of Ukraine in January 2015, which envisages the development and implementation of the Environment Preservation Programme.

Towards a green economy. An important way of ensuring sustainable development in Ukraine is to replace the resource-intensive economic model with an environmentally safe and socially-oriented ‘green’ economy. This calls for a structural reorganization of the economy through the shaping of a consistent set of interrelated policies and measures, all of them pointing to a transition to a ‘green’ economy including inter alia generation of “green” jobs.

In particular, a consistent mix of economic and regulatory instruments needs to be developed. Currently, the relatively low prices of natural resources and environmental pollution – which are components of a product’s final price – do not encourage enterprises to save energy, minimize waste or decrease pollution. To address this problem, a profound reform of the taxation system should be initiated, aimed at fostering innovation and redirecting investment and consumption towards a resource-efficient economic and environmental model. Such fiscal policy, accompanied by a set of relevant regulations, would stimulate changes in the behaviour of both enterprises and households, and thus accelerate the move towards more sustainable production and consumption patterns.

The key components of a ‘green’ economic model for Ukraine must be clearly identified. In the field of industry and technology the existing activities requiring modernization and the new activities to be promoted should be highlighted, including waste recycling as secondary resources for production, science-intensive technologies (space, aviation, ICT, nanotechnologies) and alternative renewable energy sources. In the field of environmental protection, the activities to be promoted should include areas such as organic agriculture, large-scale reforestation, leisure and tourism activities, development of health spas and treatment resorts in the Carpathians, near the Azov Sea and in other regions of the country, ‘green’ tourism etc.

Adopting and implementing cleaner production methods to reduce air pollution. All production sectors should apply cleaner production methods to reduce air pollution and decrease the consumption of natural resources for every unit of production across the whole economy. This requires introducing new systems for the regulation of industrial emissions and improving the technical control of pollutant emissions into the atmosphere, using the best available technologies. Environmental norms such as Euro-4 levels of fuel for motor vehicles should also be established.

Combating climate change by saving energy, improving energy efficiency and developing renewable energy. Saving energy and improving the economy’s energy efficiency play a key role in combating climate change and, more broadly, ensuring sustainable development. In 2010 the government adopted the State Target Programme of Energy Efficiency and the Development of Energy Generation from Renewable Sources and Alternative Fuels for 2010–2015, which set two major targets: (1) to reduce the energy intensity of GDP over the course of the programme by 20 percent from 2008 (i.e. 3.3 percent annually); and (2) to change the country’s energy profile, with the share of renewable energy sources and alternative fuels representing no less than 10 percent of total energy consumption in 2015. Since neither target has been reached at this stage, the existing measures need to be consolidated and new ones developed where necessary.

Currently there are few financial incentives in the country that promote measures aimed at saving energy, improving energy efficiency or generating power from renewable sources. A key policy direction in this respect is to build up a comprehensive, consistent and flexible system of financial incentives in the country. This system should cover both enterprises and ordinary citizens implementing energy-saving and energy-efficient measures. Important components of this package would include significant tax exemptions for entrepreneurs investing in energy-efficient equipment, as
well as subsidies for installing domestic insulation and utilizing solar energy.

Reducing the consumption of fossil fuels by saving energy is not enough, however. It needs to be complemented by a **dynamic shift towards renewable and alternative sources of energy** such as solar, wind, hydro-power, biomass, gas from organic waste and from sewage treatment plants and landfill biogases.

These sources currently account for only 4 percent of all the energy consumed in the country. In late 2011 Ukraine was included for the first time in the international ranking of attractiveness of countries for the development of renewable energy. Ukraine ranked 32nd out of 40 countries, with 37 out of a possible 100 points. The three leaders were China (70 points), USA (66) and Germany (65). This shows that there are good prospects for the development of alternative energy sources in Ukraine. The economic and regulatory tools mentioned above should also be used for this purpose.

**Increasing and streamlining the financial mechanisms for environmental protection.**

The only budget-based and consistent source of financing for environmental protection activities is the State Fund for Environmental Protection and its related local funds, established more than 20 years ago. These funds (about 12,000 of them) are fragmented, however, and the quality of management of their resources is extremely low, unprofessional and inefficient. More than 80 percent of the local funds are rural funds, with revenues often below UAH1,000. Thus, the fund management system needs to be reformed on a free market basis and with an expansion of revenue sources, in particular by consolidating the funds and granting them the status of legal entities; undertaking expenditures mainly in the form of preferential loans and lease payments; and designating the funds as eligible to receive and spend investment resources from international technical assistance (ITA).

Moreover, ITA is an untapped and potentially substantial source of funding for environmental protection activities. However, it has a minor investment component, generally in the form of various kinds of research. Re-targeting the ITA from ‘research’ to ‘investment’ is a task of extreme importance because Ukraine, having signed the Association Agreement with the EU, must implement the European *acquis* provisions, which requires financing.

Within the ITA framework, it is worth considering the debt-for-environment swap for some part of Ukraine's foreign debt. The debt-for-environment swap makes it possible to transform some external state debt liabilities into the country’s commitment to finance environmental protection activities in its own territory for a preset amount in its national currency. Such a process has taken place in Poland, Bulgaria and other countries.

**Reforming the licensing mechanism.** This system should evolve by asking companies to use the best available technologies, which would then become a key requirement for the issuance of permits for emissions, pollutant disposals and waste disposal. It would thus bring about a shift to combating the causes of pollution, rather than just their consequences. The EU has adopted this approach and has a Best Available Techniques (BAT) database, formed by the European Integrated Pollution Prevention and Control (IPPC) Bureau.

Through this reform, the use of environmentally safe substitutes for harmful raw materials would be promoted in industry. As a complementary measure, the production or utilization of high-risk hazardous substances should be restricted or prohibited. To control the safety of raw and other materials in Ukraine, it is also necessary to implement a system of chemicals registration and evaluation like the registration system active in the EU (Technical Regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals – REACH).

**Strengthening information and control mechanisms.** The ineffective mechanism of exercising state supervision/control over environmental protection and the use of natural resources should also be reformed. Despite the considerable losses (billions of hryvnias) caused to the State by violations of environmental protection laws, the State receives only tens of millions of hryvnias in fines. One of the ways to make the state control mechanism for environmental protection more effective is to design and implement a procedure for monitoring the environmental performance of enterprises involved in activities which might affect the environment, as well as a system for environmental certification of such enterprises.

**Ensuring the population's access to safe drinking water through a centralized water supply.** The state water management system needs to...
be reformed, and the payments collected for the use of water resources and the environmental tax on pollutant disposal would be used to finance activities required to properly maintain these resources. An adequate level of funding should be secured for the State-wide Programme ‘Drinking Water of Ukraine’ for 2011–2020. It is also necessary to develop centralized water supply systems in the communities using imported or substandard drinking water, and to equip centralized drinking water supply systems and drinking water distribution points with advanced treatment systems. Installation of water-metering devices for all users is a pressing problem. It is reasonable to shift to combating the reasons for surface and underground water pollution, rather than their consequences, which may lead to a prohibition of the disposal of untreated waste water into natural water reservoirs and to the identification of all possible sources of surface and underground water pollution.

Increasing the area of forest. This requires the reform of forestry to make it sustainable, notably by gradual reducing state funding and replacing it by increasing funding from resources secured by forestry management. It is also necessary to develop plans to create new forests based on detailed and comprehensive examination of soils, and to integrate such plans into the local development strategies.

Fostering a qualitative and quantitative growth of the NRF. To do this, it is necessary to: eliminate the departmental fragmentation of the management of NRF objects and establish a governmental body to manage nature reserves; introduce European indicators of the performance and efficiency of species and habitat preservation into NRF territory organization projects; resume exemptions on paying land tax for NRF institutions; and adopt laws that simplify the procedure for allocating land for nature and biosphere reserves, natural national parks and other NRF territories and objects.

Reducing waste and managing its disposal. The growing quantities of waste generated by industry are partly a result of inefficient legislation. The current regulatory framework in this area only deals with certain aspects of waste generation and management, thereby allowing polluters to avoid any responsibility for the waste they generate. It is, therefore, necessary to strengthen the regulations in this important field and ensure their enforcement by combining strict control of their application with a mix of incentives for compliance and possible sanctions for non-compliance.
The Post-2015 Development Agenda adopted at the UN Summit in September 2015 begins a new era of economic progress, social justice and environmental sustainability in the world. It calls for a new vision of development, profound changes in the way to produce and to consume. It also requires new, faster and more efficient response mechanisms to challenges and threats.

As highlighted by the UN Secretary-General, “sustainable development is, in short, the pathway to the future”. All UN documents issued for the Summit state that the Post-2015 Development Agenda has to be founded on the following key pillars:

- **dignity**, by ending poverty, fighting inequalities and protecting the human rights of every human being, including all those who are still on the margins today;
- **people**, by ensuring healthy lives, knowledge and the inclusion of women and children;
- **planet**, by protecting our ecosystems for all societies and future generations;
- **partnerships**, by catalysing solidarity for sustainable development;
- **justice**, by promoting safe and peaceful societies, and strong institutions; and
- **prosperity**, by shaping a strong, inclusive and transformative economy.

IDENTIFYING THE SUSTAINABLE DEVELOPMENT GOALS: A WORLDWIDE PARTICIPATORY PROCESS

The process of developing a set of Sustainable Development Goals (SDGs) building on the MDGs was launched in June 2012 at the Rio+20 Conference on Sustainable Development. The international community decided to establish an “inclusive and transparent intergovernmental process open to all stakeholders, with a view to developing global sustainable development goals to be agreed by the General Assembly”.

Three years later, the outcome document of the Summit, endorsed by world leaders, is indeed the outcome of a vast process of consultations involving not only governmental officials and experts but a wide range of representatives of civil society: NGOs, peasant movements, trade unions, environmentalists, women activists, youth movements and individual citizens who expressed their views through numerous meetings, web-based discussion platforms and other means of communication. This process, facilitated by the United Nations, was conducted both across borders and through national consultations and successfully ensured that people’s opinions and aspirations were heard and taken into account. In particular, most national consultations involved young people, who will assume responsibility for the planet, and socially excluded groups and communities who usually have no voice in the development debate. In all, over 200,000 people have contributed to the global discussion, and national consultations took place in 88 countries on all continents.

Following the Rio+20 Conference, the UN General Assembly established the Open Working Group on Sustainable Development Goals, which was mandated to make proposals on a set of SDGs integrated into the UN Post-2015 Development Agenda. After intensive negotiations among the Member States which participated in the Open Working Group, the final report proposes a set of SDGs consisting of 17 (see Box 3.1).

17 new Goals continue the MDGs’ journey towards progress for everyone that aims to go even farther to focus the world on ending poverty, hunger and major health problems, as well as break new ground by setting goals and targets on inequalities, economic growth, decent jobs, energy, climate change, and peace and justice, among others. Being more complex and comprehensive, the SDGs agenda appears to be much more challenging and should build on MDG legacy and take into consideration the lessons learned from MDGs’ implementation. The new Sustainable Development Goals (SDGs) were adopted in September 2015 by the world leaders.
Box 3.1. Sustainable Development Goals

Goal 1. End poverty in all its forms everywhere

Goal 2. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

Goal 3. Ensure healthy lives and promote well-being for all at all ages

Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 5. Achieve gender equality and empower all women and girls

Goal 6. Ensure availability and sustainable management of water and sanitation for all

Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all

Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Goal 10. Reduce inequality within and among countries

Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable

Goal 12. Ensure sustainable consumption and production patterns

Goal 13. Take urgent action to combat climate change and its impacts

Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss

Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development
Section III.

The report specifies that the SDGs should:
- be action-oriented, global in nature and universally applicable;
- take account of different national realities, capacities and levels of development;
- be considered in the process of drafting of national strategies and priorities;
- seek to complete the unfinished business of the MDGs and respond to new challenges; and
- constitute an integrated, indivisible set of global priorities for sustainable development.

Concerning the targets, it specifies that:
- they are defined as aspirational global targets, with each government setting its own national targets guided by the global level of ambition, but taking into account national circumstances;
- they will be further elaborated through indicators focused on measurable outcomes; and
- the indicators related to the targets must form a foundation for national monitoring of development.

The SDGs will take the MDG approach in combining goals, targets and indicators – undoubtedly the best way to ensure proper monitoring and concrete outcomes. However, there are three notable differences in the approach:
- the SDGs are universally applicable, while the MDGs focused on lower-income countries and, therefore, excluded economically advanced countries;
- the SDGs adopt a horizontal approach, while the MDGs were based on a vertical approach; and
- the SDGs adopt an integrated view of development, while the MDGs were dealt with in siloes.

The final report of the Open Group highlights that “the goals and targets integrate economic, social and environmental aspects and recognize their interlinkages in achieving sustainable development in all its dimensions.”

THE GOVERNMENT’S APPROACH TO SUSTAINABLE DEVELOPMENT

Ukraine has taken steps to define sustainable development benchmarks. In particular, in January 2015, the President of Ukraine signed the Decree ‘On the Ukraine 2020 Strategy of Sustainable Development’. The strategy includes 62 reforms, with eight of them regarded as priorities. It states that achieving European living standards and improving Ukraine’s standing in the world is a principal goal of these reforms. The document specifies strategic directions for the government on the country’s development for the next five years, as well as indicators of their achievement (see Box 3.2).

A major component of the strategy is governance reform, with the following priority tasks:
of energy. The transition to this new energy model should be based on the adoption of innovative technologies. Key goals of the state policy in this field include: (i) reducing the energy intensity of GDP by 20 percent by the end of 2020 through the implementation of 100 percent mandatory commercial metering of energy consumption and the use of energy-efficient technologies and equipment both in production activities and public utilities; and (ii) increasing the share of renewables in the country’s total energy consumption to 20 percent by 2020 through projects that make the best choice of alternative sources of energy and using the best available technologies in this field.

The strategy also includes reforms of national security and defence, health care and taxation and deregulation in the economic sphere. Finally, a social compact between government, business and civil society, with each party having its own area of responsibility, is considered a key prerequisite for the implementation of the strategy.

The Ukraine Strategy of Sustainable Development identifies strategic directions for reforms and development policies in the medium term (up to 2020). While a number of reforms do need to be implemented in the short and medium term, there is also a need to determine a strategy and new goals for a longer term. This would give a visibility to more ambitious objectives, with a possibility for the Ukrainian population to follow the progress made and the problems met in moving ahead on this development path. A longer-term strategy for sustainable development would also have the merit of providing a genuine vision of the future of Ukrainian society, with a consistent and comprehensive framework for transforming this vision into reality. In other words, it would allow the country to both avoid a piecemeal approach to the transformative changes needed, and to consistently maintain a fundamental strategic line, independent of short-term political developments.

**RESPONDING TO THE EXPECTATIONS OF THE CIVIL SOCIETY**

The dignity revolution has created a strong aspiration for a genuine democracy and has increased tremendously the political consciousness of the population. This is why the shaping of the Post-2015 Development...
Agenda and the SDGs in Ukraine has to take into account the fundamental aspirations of the population: a new form of governance, a new form of societal relations and a new economic model. These demands from civil society call for a strategic vision based on a consensus view.

Thus key components of the new long-term strategy should include: securing peace and social cohesion; building the foundations for a new quality of economic growth; eradicating acute forms of poverty and inequality; and ensuring a substantial increase in life expectancy. Moreover, any Ukrainian citizen, regardless of his or her origins, education, gender, age, ethnic background or place of residence, should never be restricted in terms of human rights and basic economic and social opportunities, which are prerequisites for fully fledged development. Poverty reduction should be ensured first and foremost by creating the proper conditions and incentives for any able-bodied person to play an active role in the labour market, while social assistance should only target the most vulnerable persons who remain isolated from social and economic life.

By integrating the economic, social and environmental concerns in a wide range of initiatives and activities, it becomes possible to build a self-confident society, caring for any individuals and groups as well as the future generations and the planet. It is with this vision in mind that Ukrainian society is ready to take part in devising a long-term strategy that will specify and articulate the SDGs and targets to be reached by 2030.

**DRAWING ON THE LESSONS OF THE MDGs: SUCCESSES AND UNFINISHED BUSINESS**

The shaping of the SDGs in Ukraine should take full account of the MDGs experience in the country. The lessons to be learned at the methodological level are as follows:
- ✔ The integration of the MDGs into the sectoral objectives of line ministries (e.g. the MoH for the health-related MDGs) has been fairly satisfactory, but they have been considered less in the overall national development strategy.
- ✔ The adaptation of the MDG targets to the situation of the country has been successful; for example, the indicators on both absolute and relative poverty have been adjusted according to the levels of income and the poverty profiles in the country.
- ✔ The monitoring process has also been successful, with the publication of regular reports, some of them going beyond the presentation of trends by analysing the underlying causes of the positive or negative developments.
- ✔ The indicators have been well chosen; however, some important ones were not selected (for example, to follow the trends on energy intensity and the respective share of energy sources in total energy consumption).
- ✔ A number of problems have emerged regarding the data related to a number of indicators: unreliable methodology, partial and/or irregular collection, unsatisfactory use and dissemination etc.

As regards achievement of the MDGs, success in reaching the targets can be summarized as follows:
- ✔ Absolute poverty has drastically declined without meeting the target values.
- ✔ Access to pre-school and higher education has significantly increased.
- ✔ The improvement of maternal health has been considerable, and success in child mortality has been achieved.
- ✔ There has been a slowdown in the number of new cases of HIV, with some sign of stabilization.
- ✔ The number of cases of TB has constantly declined.
- ✔ The increases in forest cover and in the area of natural reserves and parks have reached the target values.

The unfinished business can be outlined as follows:
- • There is a renewed increase in relative poverty among the two high-risk groups monitored with a specific indicator – namely, children and employed people;
- • The quality of education and lifelong education (professional development and vocational training) remains a major problem in the educational system.
- • There has been no significant progress in gender equality, particularly concerning gender parity in representative authorities.
- • The provision of a centralized water supply in rural areas is still largely below the target value.
- • There has been no significant progress in energy efficiency and the use of renewable energy.
Finally three other important considerations deserve to be highlighted:

- Some positive trends in the environmental sphere are only due to a slowdown in economic growth; this is the case for the decrease in GHG emissions, the relative stabilization of air pollution and the decrease in water use.
- On the other hand, the global economic crisis and its impact on economic growth have resulted in reducing the purchasing power of the population and a resurgence of both absolute and relative poverty while increasing the share of the population at high risk of poverty.
- The armed conflict in the east of the country has further aggravated this difficult economic and social situation. This is particularly noticeable for a number of indicators for 2014 and the prospects for 2015: in addition to the poverty rates, the maternal mortality rate and the incidence of HIV are now on a negative trend. These events directly affect the large numbers of internally displaced persons and the country as a whole, notably through disturbances to public services and the need for additional finances to remedy these difficulties.

**TOWARDS A NEW SUSTAINABLE DEVELOPMENT MODEL IN UKRAINE**

In a traditional development model the challenge is to manage trade-offs between three goals: fostering economic growth and competitiveness, reducing social inequalities and preserving the natural resource base. A human and sustainable development model considers these three objectives mutually reinforcing, rather than contradictory.

The SDGs have been designed in this spirit: they require a consistent integration of efforts aimed at jointly inducing a new type of economic growth, responding to the aspiration for social justice and taking care of the environment. Considering the current development process in Ukraine, this approach requires a change in mindset, an in-depth socio-economic transformation and new types of partnerships.

In anticipation of the process of shaping the framework for the SDGs, targets and indicators in Ukraine for the 15 years ahead, some normative features and people’s aspirations can already be outlined regarding the three dimensions of the sustainable development model to promote in the country.

**THE ECONOMIC DIMENSION: CHANGING THE NATURE AND PATTERN OF ECONOMIC GROWTH TOWARDS INCLUSIVE GROWTH**

Amid the economic decline caused by the global crisis and the military conflict, matters of economic growth have become of enormous significance in Ukraine. It is no coincidence, therefore, that they are continuously ranked as a top priority of the country’s development in most sociological studies. However, while realizing that neither overcoming poverty nor ensuring higher living standards for the wider population is possible without economic growth, Ukrainian people always emphasize that a fair distribution of the results of growth among all population groups is important to them, rather than just the improvement of the economic situation per se. The general feeling is that growth, so necessary to Ukraine, should be achieved neither at any price, without substantial social return, nor on a short-term horizon with the constant threat of another crisis coming up; rather, the growth process has to be sustained, inclusive and sustainable.

Translated into normative terms, people’s concern means that the usefulness of growth is unquestionable, provided that: it creates employment (avoiding jobless growth); its outcomes are fairly distributed among residents of the country, thereby preventing greater inequality and social polarization; it is not based on the predatory use of natural resources; and it is resilient to external shocks, thus minimizing risks of recession in case of a global crisis.

Meeting these conditions requires a change in the quality and pattern of growth. For Ukraine, there is an urgent need to move from a development model where the competitive advantages are mainly based on natural resource use to an innovative model with priorities such as technological level of capital, skilled manpower, saving of energy and other natural resources, and an innovative style of management.

With such an economic model, the foundation of growth is human capital and this is the best way to increase labour productivity in all fields of economic activity. For Ukraine, it means the adoption of new technologies, not
only for the maximization of the value added in industry and agriculture but also for the modernization of transport and the development of services. It also calls for large-scale investments in infrastructure, in particular in roads, and support for micro-, small and medium-sized business. Ukraine, by virtue of its size, can hardly be a highly specialized economy; therefore, its best prospects are related to the multifaceted development of the entire economic sphere.

Only such a knowledge-based and green pattern of growth will allow the country to counteract the challenges of unemployment – especially among youth – the shortage of resources – in particular, energy – and political troubles. The creation of opportunities for legal employment and green jobs with decent pay and working conditions will not only reduce poverty and inequality in society but also become an important driver of social integration.

Moreover, stability of the business environment is a necessary prerequisite for this type of economic surge. This implies a simplification of the variety of procedures governing enterprise activities (subject, however, to social and environmental standards), mitigation of the tax burden, and a tangible reduction in corruption.

THE SOCIAL DIMENSION: PROMOTING SOCIAL JUSTICE AND EQUALITY OF OPPORTUNITY

The SDGs and the Post-2015 Development Agenda should aim at eradicating marginalization and exclusion in their economic, political, social and cultural dimensions. Society must ensure the right of every person to equal chances for her/his personal development. This requires access for all members of society to health care services (in particular, medical services but also a safe environment, clean drinking water etc.), education, employment and security (of person and property). Experience shows that those people unable to escape the poverty trap are hostages of disease, unemployment, incomplete education and natural disasters.

Outcomes of economic growth should be distributed fairly among all people, as should the burden of economic transformation. The state income policy should eventually promote a society with a large middle class able to take care of its welfare by itself both during its economically active period and after its completion, distributing its income prudently between current and future consumption. Only those who suffer developmental limitations from birth should be protected unconditionally through targeted assistance.

The importance of full and legal employment appears clear: it generates income for all people of active age, decreases public spending (e.g. for unemployment benefits) and provides social contributions, which, at least in part, finance social services and pension schemes. Employment with decent wages decreases both absolute and relative poverty, thereby reducing inequalities.

THE ENVIRONMENTAL DIMENSION: PRESERVING THE RESOURCE BASE AND MAKING THE ENVIRONMENT HEALTHY

Ukraine, which survived the Chornobyl tragedy, knows from experience the vital significance of a healthy environment – more than most other countries in the world. Economic losses caused by Zakarpattia floods, and chronic neglect of territorial communities’ interests by private companies are other notable consequences of an inefficient system for using and managing nature. The situation is aggravated by the totally unpredictable outcomes of the events in Donbas, which will have a human and social impact but also an environmental impact for a rather long time.

A society and the State, as its agent, must provide conditions to effectively protect natural reserves and parks as well as nature in general – preservation of valuable landscapes, certain species of flora and fauna, and cultural and historical heritage sites. Another important environmental requirement is to address the problems of water quality in Ukraine’s main water arteries, the Dnipro, Pivdenny Buh and Siverskyi Donets rivers (for the latter, the task is further complicated by the uncontrolled disposal of water in the context of the military conflict). Specific attention should also be paid to minor rivers serving as sources of water supply for a considerable part of the rural population. Special regulation is required for uncontrolled use of water from underground sources, considering its unique drinking quality and shortage. In any event, a balance between economic development and activities to protect nature should be ensured.
TRANSFORMING GOVERNANCE FOR MORE FREEDOM, JUSTICE AND TRANSPARENCY

Governance is a problem which runs across the whole public administration. This appears clearly in Section 2 of this report: for each MDG where there is poor performance on a given issue, a major factor in the explanation lies with a malfunction in governance: inconsistencies in the organization of the relevant administrations, excessive diversity of entities in the same field of activities, lack of coordination etc.

From these observations, the following lesson can be drawn: a prerequisite for achieving each and every SDG will be the move towards high-quality governance, which includes staff competence, simplification of the administrative structures, eradication of corruption, and a genuine commitment to social support. Accordingly, the issue of proper governance, fair and transparent authorities, and people’s participation in decision-making and accountability mechanisms should be introduced in the formulation of the various goals. Personal freedom, availability of justice, absence of discrimination, and involvement of civil society in the decision-making process on issues affecting people’s lives are, on the one hand, key signs of human development and, on the other hand, drivers of future progress. Freedom should, therefore, be regarded not just as a component of well-being but as a fundamental value of human development.

There is a need to ensure efficient institutions devoted to supporting and enforcing the legal system in charge of freedom of speech and the media, open and free political choice and access to justice.

The time for radical changes in the transparency of authorities’ actions has come: both the population at large and every citizen have the right to know how the budget funds raised from their taxes are spent, and how corporate profits are distributed – particularly in the extractive industry, which exploits resources belonging to the common good. Without reliable and strong institutions, it is impossible to ensure such transparency and the responsibility of the authorities to overcome corruption. Societies function via their institutions. To influence the decision-making process and monitor the compliance of governmental actions with the decisions taken, people need a legal environment that will enable them to establish civil society organizations, protest peacefully, express their opinions and secure defence in legal proceedings.

Over the last 15 years, the reports on the MDGs have served as a single strategic document enabling civil society to assess the policies and activities of the authorities by monitoring 33 key indicators. The SDG framework for Ukraine should build on this established practice and enlarge it in line with the Post-2015 Development Agenda.
### Annex A. PROGRESS TOWARDS ACHIEVING THE MDGs IN UKRAINE (GLOBAL LEVEL)

<table>
<thead>
<tr>
<th>Goal</th>
<th>Description</th>
<th>2000</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1</td>
<td>Eradicate extreme poverty and hunger</td>
<td></td>
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<td></td>
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<tr>
<td>Goal 2</td>
<td>Achieve universal primary education</td>
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<tr>
<td>Goal 3</td>
<td>Promote gender equality and empower women</td>
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<tr>
<td>Goal 4</td>
<td>Reduce child mortality</td>
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<tr>
<td>Goal 5</td>
<td>Improve maternal health</td>
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<tr>
<td>Goal 6</td>
<td>Combat HIV/AIDS, malaria and other diseases</td>
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<td></td>
<td></td>
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<tr>
<td>Goal 7</td>
<td>Ensure environmental sustainability</td>
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<tr>
<td>Goal 8</td>
<td>Develop a global partnership for development</td>
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</tbody>
</table>

**Legend:**
- **GREEN:** ACHIEVED
- **YELLOW:** LIKELY
- **RED:** UNLIKELY
Annex B. PROGRESS TOWARDS ACHIEVING THE MDGs IN UKRAINE (NATIONAL LEVEL)

<table>
<thead>
<tr>
<th>Goal 1 Reduce Poverty</th>
<th>Indicator 1.1. Share of population whose daily consumption is below US$5.05 ($4.30) (PPP)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Indicator 1.2. Share of poor population according to the national criterion</td>
</tr>
<tr>
<td></td>
<td>Indicator 1.3. Share of poor children</td>
</tr>
<tr>
<td></td>
<td>Indicator 1.4. Share of poor employed people</td>
</tr>
<tr>
<td></td>
<td>Indicator 1.5. Share of population with consumption below the actual subsistence minimum</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal 2 Ensure Quality Lifelong Education</th>
<th>Indicator 2.1. Net enrolment rate in pre-school educational institutions for children aged 3–5 in urban areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Indicator 2.2. Net enrolment rate in pre-school educational institutions for children aged 3–5 in rural areas</td>
</tr>
<tr>
<td></td>
<td>Indicator 2.3. Net enrolment rate for children in secondary education</td>
</tr>
<tr>
<td></td>
<td>Indicator 2.4. Net enrolment rate in post-secondary institutions for those aged 17–22</td>
</tr>
<tr>
<td></td>
<td>Indicator 2.5. Cumulative gross number of persons undergoing retraining or professional development</td>
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<tr>
<td></td>
<td>Indicator 2.6. Number of general educational institutions with internet access</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal 3 Promote Gender Equality</th>
<th>Indicator 3.1. Gender ratio among the Members of the Parliament of Ukraine</th>
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<tbody>
<tr>
<td></td>
<td>Indicator 3.2. Gender ratio among the members of local authorities</td>
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<td></td>
<td>Indicator 3.3. Gender ratio among the higher-level civil servants (categories 1–2)</td>
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<tr>
<td></td>
<td>Indicator 3.4. Ratio of average wages between women and men</td>
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</tbody>
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<thead>
<tr>
<th>Goal 4 Reduce Child Mortality</th>
<th>Indicator 4.1. Mortality rate among children of up to 5 years of age</th>
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<tbody>
<tr>
<td></td>
<td>Indicator 4.2. Infant mortality rate</td>
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</tbody>
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<thead>
<tr>
<th>Goal 5 Improve Maternal Health</th>
<th>Indicator 5.1. Maternal mortality rate</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Indicator 5.2. Abortion level, number of abortions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal 6 Reduce and Slow Down the Spread of HIV/AIDS and Tuberculosis and Initiate a Trend to Decrease their Scales</th>
<th>Indicator 6.1. Number of people newly diagnosed with HIV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Indicator 6.2. Growth rates of HIV infection</td>
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<tr>
<td></td>
<td>Indicator 6.3. Number of people dying of AIDS</td>
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<tr>
<td></td>
<td>Indicator 6.4. Mother-to-child HIV transmission rate</td>
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<tr>
<td></td>
<td>Indicator 6.5. Number of people diagnosed with tuberculosis for the first time (including tuberculosis of respiratory organs)</td>
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<tr>
<td></td>
<td>Indicator 6.6. Number of tuberculosis deaths</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal 7 Ensure Environmental Sustainability</th>
<th>Indicator 7.1. Share of the urban population with access to a centralized water supply</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Indicator 7.2. Share of the rural population with access to a centralized water supply</td>
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<tr>
<td></td>
<td>Indicator 7.3. Volume of emissions of pollutants into atmosphere from stationary sources</td>
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<tr>
<td></td>
<td>Indicator 7.4. Volume of emissions of pollutants into atmosphere from mobile sources</td>
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<tr>
<td></td>
<td>Indicator 7.5. Volume of reused water disposals into surface water reservoirs</td>
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<tr>
<td></td>
<td>Indicator 7.6. Forest cover and share of lands covered with forests</td>
</tr>
<tr>
<td></td>
<td>Indicator 7.7. Share of area of nature reserves, biosphere reserves and natural national parks</td>
</tr>
<tr>
<td></td>
<td>Indicator 7.8. Share of area of territories and objects of the Nature Reserve Fund</td>
</tr>
</tbody>
</table>

ACHIEVED  LIKELY  UNLIKELY