Spatial Planning in Belarus: Towards Achievement of Sustainable Development Goals

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Key words: Spatial planning, national urban development policy, sustainable development goals, 11 SDG

SUMMARY

The paper presents the general concept of sustainable development and 17 Sustainable Development Goals (SDG) endorsed by 2030 Agenda for Sustainable Development adopted in 2015. The paper highlights current trends of urbanization and problems of Belarusian cities. It presents main directions of the national urban development policy of the Republic of Belarus for 2016-2020 and their connections with targets of SDG 11: Make cities, human settlements inclusive, safe, resilient and sustainable, and interconnections with other SDGs.

SUMMARY

В докладе представлены общая концепция устойчивого развития и семнадцать целей устойчивого развития ООН, представленных в Повестке дня 2030, принятой в 2015. В докладе анализируется процесс урбанизации в Республике Беларусь, выявляются проблемы городского развития, обозначены основные направления государственной градостроительной политики на 2016-2020 и их корреляция с 11-ой целью устойчивого развития ООН «Обеспечение открытости, безопасности, жизнестойкости и экологической устойчивости городов и населенных пунктов».

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1. UNITED NATIONS AGENDA FOR SUSTAINABLE DEVELOPMENT 2030

The concept of sustainable development was endorsed by the world's Governments at the 1992 Earth Summit in Rio de Janeiro and confirmed at the United Nations Conference on Sustainable Development in 2012 (Rio+20). Since that time this political vision based on insights on crucial global problems concerning environment, climate change, poverty, and the long term distribution and access to resources has been on the agenda. Despite progress, social, economic and environmental considerations have yet to be fully integrated in policy-making, business practices and lifestyles throughout in countries.

In 2015, the United Nations member states adopted the 2030 Agenda for Sustainable Development (Agenda). It is designed as a universal framework for all countries, regardless of their level of development. The Agenda contains seventeen Goals aimed at liquidation of poverty, preservation of the planet resources and ensuring prosperity for all. Each Goal has a number of targets that should be achieved over the next 15 years. For the Goals to be reached, governments, the private sector and civil society must join their efforts.

The document has an ambitious and transformative framework - a paradigm shift in international development that has the potential to put the world on a more sustainable way and ensure a life of dignity for all groups of population. The new Agenda is underpinned by goals on peaceful and inclusive societies and effective institutions, means of implementation and follow-up mechanisms to make the Agenda work.

17 Sustainable Development Goals have 169 associated targets which are integrated and indivisible. Never before have world leaders pledged common action and endeavor across such a broad and universal policy agenda. Countries are setting out together on the path towards sustainable development, devoting their-selves collectively to the pursuit of global development and of "win-win" cooperation which can bring huge gains to all countries and all parts of the world. The Agenda should be implemented for the full benefit of all, for today's and for future generations.

Sustainable Development Goals (Figure 1):

- •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.

Spatial Planning in Belarus: Towards Achievement of Sustainable Development Goals 2030 (9355) Alena Kasyanenka, Aliaksandr Khizhniak and Uladzimir Tainikau (Belarus)

- •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, and 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.



Figure 1. 17 Sustainable Development Goals

Source: www.un.org/sustainabledevelopment/news/communications-material

Spatial Planning in Belarus: Towards Achievement of Sustainable Development Goals 2030 (9355) Alena Kasyanenka, Aliaksandr Khizhniak and Uladzimir Tainikau (Belarus)

2. GOAL 11: MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

In recent decades, the world has experienced rapid urban growth. Today, more than half the world's population lives in cities. By 2030, it is expected that 6 in 10 people will live in urban settlements. By 2050 more than two-thirds of the world will be urban dwellers.

Cities are hubs for science, education, commerce, culture, productivity, social development and much more. At their best, cities give a chance for people to advance socially and economically. Cities are considered as incubators for innovation and growth and drivers of sustainable development.

However, a lot of challenges exist to manage cities in a way to create jobs and prosperity, to provide adequate shelter and infrastructure while not straining land and resources. Common urban challenges include damage of environment, lack of funds to provide basic services, a shortage of adequate housing and declining of infrastructure. Absence or weakness of urban development policies aggravate these problems.

Sustainable Development Goal 11 "Make cities and human settlements inclusive, safe, resilient and sustainable" (SDG 11) sets the following targets:

- •target 11.1: by 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums;
- •target 11.2: by 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons;
- •target 11.3: by 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries;
- •target 11.4: strengthen efforts to protect and safeguard the world's cultural and natural heritage;
- •target 11.5: by 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations;
- •target 11.6: by 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management;
- •target 11.7: by 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities;

Spatial Planning in Belarus: Towards Achievement of Sustainable Development Goals 2030 (9355) Alena Kasyanenka, Aliaksandr Khizhniak and Uladzimir Tainikau (Belarus)

- •target 11.A: support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning;
- •target 11.B: by 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels;
- •target 11.C: to support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials.

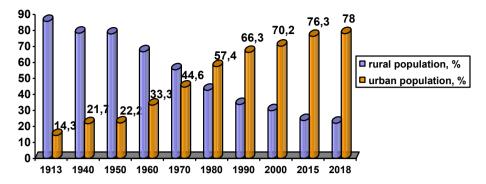
Therefore, it will be under the auspices of cities whether the world will succeed or fail in achieving goals of poverty eradication, equality, climate change reduction, and ensuring healthy lives. It will be the cities that determine if it is possible to achieve inclusive economic growth or yield to greater inequality. It is in cities where people will seek opportunities for higher education and employment. And, it will be cities that determine if the world will continue steadily increasing usage of the world's resources or whether it is real to realize a more sustainable path. This is why sustainable development goal 11 SDG, "Make cities and human settlements inclusive, safe, resilient and sustainable", is so important. Success in achieving the targets under SDG 11 sets the stage for achieving targets in many of the other SDG goals.

Better urban planning and management are needed to make the world's urban spaces more inclusive, safe, resilient and sustainable. As of May 2017, 149 countries were developing national-level urban policies.

3. CHARACTERISTIC OF URBANIZATION PROCESS IN BELARUS

Before World War II, Belarus was an agricultural country with a share of urban population of 21%. The period 1960-1985 was characterized by high urban population growth as a result of active industrialization. It did lead to migration of labour force from rural to urban areas. And this was a centrally planned policy. Since 1996 the rate of urbanization has been slowed down. This is explained by the transition from intensive urban development coupled with the establishment of large industrial enterprises towards a period were state investment on new industries has ceased (Figure 2).





According to governmental forecasts, slight growth of urban population is expected in the future. The main cause is still migration from rural areas, which will compensate the natural decrease of urban population and provide some growth. Today, cities in Belarus are main drivers of economic development, innovations and attractions of investments and high-qualified human capital. More than 20% of total population is concentrated in the capital city of Minsk.

System of spatial and urban planning in Belarus was developed within the planning system of the Soviet Union and existed in its central form until 1991. Integrated budget and centralized system of planning and distribution of financial and human resources were the peculiarities of that period. After USSR breakdown, during the last two decades human settlements in Belarus have seen a major transformation as the country moved from planned to market economy. It has been accompanied by both opportunities and challenges. Territories and human settlements are witnessing changes in patterns of growth, production and consumption, changes in land use, mobility and physical structure.

Spatial and urban planning and development in new economic conditions should aim at providing of market sustainability of the territories and determine different strategies for regions, cities and functional urban areas depending on existing potential and certain conditions for further social and economic development. Taking into account SDGs, is important to consider and protect public interests, to provide safe and sustainable living environment, access to affordable housing and infrastructure, especially for unprotected groups, to preserve and provide efficient use of natural resources, historical and cultural heritage.

The following points reveal certain shifts that have been made in the system of urban planning towards principles of sustainability:

majority of regions, cities and towns have completed plan in place. Thus, their development is based on elaborated planning documentation (comprehensive and detailed plans);

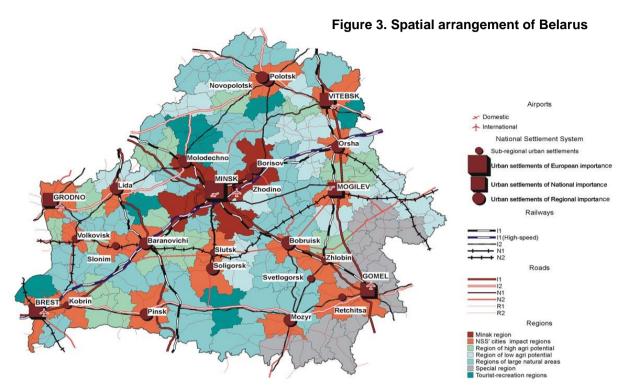
Spatial Planning in Belarus: Towards Achievement of Sustainable Development Goals 2030 (9355) Alena Kasyanenka, Aliaksandr Khizhniak and Uladzimir Tainikau (Belarus)

the multi-story housing stock is provided with centralized engineering infrastructure networks and developed system of public services in large, big and medium-sized cities;

- •formation of urban green-water systems interrelated with suburban areas, e.g. water courses, lakes and rivers, etc.;
- •increasing attention to protection and revival of historical-cultural heritage. It implies policies for the restoration and renovation of historical centres of the cities;
- •development and enactment of national legislation regarding urban planning and the management of cities;
- •increasing concern for integrated approaches in city management linking city planning, housing, economic development and civic participation among planners and policy makers.
- •The common problems of Belarusian cities have their roots in the centralized system of the past and aggravated by the period of transition. They can be defined as follows:
- •inefficient use of land within cities' borders with large tracts of land allocated for non-residential use;
- •aggravation of transport problem (appearance of traffic jams, shortage of parking places, etc.);
- •environmental pollution in cities and towns with developed industry;
- •deterioration of engineering infrastructure networks with inadequate maintenance and repairs, presenting losses and inefficiencies;
- •inefficient usage of existent land within the city's borders. Weak revitalization of brownfields which are usually allocated in central parts of the cities
- •high energy consuming technologies in housig sector, construction, industry and public transport;
- •low level of civil society participation in city planning and management;
- •incompleteness of decentralization process with regard to the share of power and responsibilities of local authorities of different levels.

Urban Development Policy of the Republic of Belarus 2016-2020 (UDP) aims to address above-mentioned challenges.

4. NATIONAL URBAN DEVELOPMENT POLICY OF THE REPUBLIC OF BELARUS 2016-2020



The third edition of the UDP for the period 2016-2020 was worked out by the Institute for Regional and Urban Planning under the auspice of the Ministry of Architecture and Construction and agreed with different stakeholders.

Strategic goal of the policy is development and improvement of living environment through integrated and efficient use of the potential of regions, cities and rural settlements.

UDP is comprehensive document which tackles different thematic areas and promotes conditions for sustainable, innovative and economically powerful regions, cities and rural settlements that offers a good quality of life. Directions of UDP correspond to targets of SDG 11. They are interconnected with other SDGs as Goal 3. "Ensure healthy lives and promote well-being for all at all ages", 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 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 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".

Four main directions of the Urban Development Policy of the Republic of Belarus 2016-2020 determine tasks to be fulfilled within five-year coming period.

Balanced development of regions and human settlements by enhancing the sustainable settlement pattern.

First direction enhances economical sustainability of cities and territories. It corresponds to targets 11.5, 11A and benefits to realization of Goals 8, 9, 12. It is considered that a new impulse for development could get cities and towns which are located on the way of new planned transnational transport corridor from China to Europe - the new "Silk Road"

The tasks are:

- development of territories and satellites-towns of Minsk city agglomeration and suburban areas of regional centers in connection to forecasts of their strategies of socio-economic development. Through agglomeration cities will have the power to innovate, generate wealth, enhance quality of life, and accommodate more people in a sustainable manner;
- development of social infrastructure in small towns, agrotowns and big rural settlements to create comport habitat for population living there and to provide adequate service for surrounding rural areas;
- creation of tourist and recreation clusters and intensification of tourist industry with providing favorable conditions for investments, protection of historical heritage and nature resources.

Comprehensive development and achievement of high standards of living environment, provision of ecological security

Second direction promote green, inclusive, habitable and resilient cities. It is connected with targets 11.6, 11.7 and corresponds to Goals 3, 8, 9,13.

The direction sets the following tasks:

- transition from mono-functional to multifunctional urban structure to have a diversity of services and jobs on the area;
- creation of modern public spaces with taking into account interests of different social and age groups to diversify urban environment;
- urban reconstruction and revitalization of inefficiently used territories to create innovative industry, multifunctional public centers and housing;
- popularization of the "Smart city" conception through using of IT in urban live, urban management, transport and communication;

Spatial Planning in Belarus: Towards Achievement of Sustainable Development Goals 2030 (9355) Alena Kasyanenka, Aliaksandr Khizhniak and Uladzimir Tainikau (Belarus)

- exclusion of urban expansion to landscapes and natural areas;
- accomplishment and maintenance of public spaces, greenery in cities;
- creation of affordable living environment "without borders" to all groups of population including physically handicapped people using principles of "universal design".

Improvement of regional and urban transport communications system and Modernization of engineering infrastructure

Third direction aims to promote effective, productive and better connected regions and cities. It is connected by target 11.1, 11.2, 11.5, 11.6, 11A and benefits to realization of Goals 3, 6, 7, 8, 12.

The direction sets the following tasks:

- construction and re-construction of existing transport "multimodal" nodes with development service facilities on regional and local levels;
- optimization of public transportation system with priority development of network of regional and urban railway, metro and tram in cities to enhance mobility of people;
- incorporation of different types of parking in high density residential areas in Minsk and large and big cities to make yards free of cars;
- creation of network of bicycle path routs to promote bicycle's using;
- priority development of engineering and transport infrastructures for newly planned residential areas to provide housing and social infrastructure construction;
- priority use of electricity in heating system by industry and households;
- economically and ecologically expedient use of renewable energy sources in urban life by industry, recreation, communal service;
- development of separate collection, recycling and re-use of secondary resources and waste by construction of regional waste management factories and stations.

4. *Harmonious development of human settlements' physical structure, protection and rational use of historical-cultural heritage*

Forth direction aims to make cities more attractive and comfortable for living. It is related to targets 11.4, 11.7 and Goal 3, 8.

The direction sets the following tasks:

- improvement cities' image by using of innovative technologies and traditional local materials in construction (wood, concrete, metal, glass);
- increase of functional attractiveness of historical and cultural heritage shift from heritage preservation to its usage for recreation and tourism activity;
- creation (revival) of cultural landscapes.

Spatial Planning in Belarus: Towards Achievement of Sustainable Development Goals 2030 (9355) Alena Kasyanenka, Aliaksandr Khizhniak and Uladzimir Tainikau (Belarus)

Sustainable spatial and urban planning can be triggered through integrated policy implementation which provides planning of compact and connected cities and regions, suggests transformative renewal strategies and improvement of infrastructures (social, engineering and transport), supports environment planning and management, and enhance inclusive and participatory planning.

CONCLUSIONS

Cities are places with intensive economic activities where a large number of centrally based functions and facilities are linked. Cities also function as centres of cultural development and social advancement. Social innovations usually happens within the context of a city and, as a result, it has a powerful impact on the rest of a country or region. Political institutions, social movements, education and research often have their origins in urban districts. In Belarus it is not different.

Cities plays an important role in achieving the SDGs. A vision for cities development has never been more important than it is today. National policies and regional development plans that take into account the specific needs and characteristics of urban areas are essential to sustainable development. Belarus tries to adopt and incorporate its priorities into strategic national urban planning documents and projects. The implementation of national urban development policy plays a crucial role for further territorial development of the country as this activity enables to appreciate natural, economic, social conditions and develop different options for the most efficient territorial development, social and economic progress, preservation and protection of historical and cultural values.

There are many challenges ahead in achieving SDG 11 and other Goals interconnected to each other. On local level Belarusian cities will need solid implementation plans and support in order to realize the targets of SDG. The implementation of these targets and the previously defined priorities requires among other things – the development and strengthening of institutional and human resources capacities of local authorities and those institutions engaged in planning processes and city management. Unfortunately, Belarusian professionals and local authorities are not all acquainted with participatory planning and mechanisms of civil society involvement in city governance. Planning activities in Belarus are still rather sector-oriented and there is a need to develop integrated approaches linking housing, city planning, economic development and citizen participation. Government institutions must learn how to play facilitating roles and overcome the limitations of control and regulatory tasks.

When looking at countries of Western, Central and Eastern Europe and the Baltic Sea regions Belarusian planning practitioners have a series of lessons and inspiration regarding publicprivate partnership and awareness rising of civic society in the process of urban planning and management, and the capacity building of local authorities.

International assistance addressed to knowledge transfer, best practices learning, professional exchange through training and joint projects development can be efficient ways of

Spatial Planning in Belarus: Towards Achievement of Sustainable Development Goals 2030 (9355) Alena Kasyanenka, Aliaksandr Khizhniak and Uladzimir Tainikau (Belarus)

cooperation between these countries and Belarus. It will certainly lead to efficient planning and achievement of Sustainable development Goals in European Region.

REFERENCES

National Urban Development Policy of the Republic of Belarus 2016-2020.

National Report on human settlements development of the Republic of Belarus for UN Conference Habitat III, 2016.

National Plan of Spatial Development of the Republic of Belarus till 2030, 2017

Sustainable Development Knowledge Platform. Report of the Secretary-General, "Progress towards the Sustainable Development Goals", E/2017/66 (https://sustainabledevelopment.un.org/sdgs).

Sustainable Development Knowledge Platform Transforming our world: the 2030 Agenda for Sustainable Development (https://sustainabledevelopment.un.org/post2015/transformingourworld).

BIOGRAPHICAL NOTES

Alena Kasyanenka has a diploma in engineering and in law. Has been working at the Institute for Regional and Urban Planning of Belarus (IRUP) since 1998. Now she is a Head of the Department of Sustainable Urban Development. She participated in international trainings on urban and land planning, housing development in the Netherlands, Sweden, Egypt.

Ms Kasyanenka deals with scientific researches in the sphere of sustainable city planning and development, learning of best practices in the field of urban renovation, land management. She is responsible for international cooperation IRUP with UN Habitat and UN ECE. Alena coordinates training activity within IRUP, organizes seminars for local authorities on the issues of sustainable development and land planning, housing sector performance, civil society participation in urban planning and development. She participated in elaboration of the Main directions of Urban Development Policy of the Republic of Belarus 2016-2020. She draws out the National report on human settlements development of Belarus for Conference Habitat III.

Alena participates in Sweden- Belarusian –project "Improvement of the system of land management and urban development in the Republic of Belarus using modern methods and technologies".

Uladzimir Tainikau has a diploma in psychology. He works at the Department of Sustainable Urban Development. He deals with scientific researches in the sphere of sustainable city planning and management; smart city development, eco-technologies, civil society participation in urban planning and development. He is responsible for organizations studies of public opinion within the framework of master plan development.

She participated in elaboration of the Main directions of Urban Development Policy of the Republic of Belarus 2016-2020 and in the preparation of National report on human settlements development of Belarus for Conference Habitat III

Uladzimir participates in Sweden- Belarusian –project "Improvement of the system of land management and urban development in the Republic of Belarus using modern methods and technologies".

Aliaksandr Khizhniak has a diploma in law and in public management. He is a director of the Institute for Regional and Urban Planning of Belarus since 2013. He guides 160 employees of IRUP. He is involved in development of urban legislation, recommendations on city governance. He delivers lectures on the topics related to urban management, legislation and planning documentation development. Mr Khizhniak participated in the elaboration of Main directions of Urban planning policy of Belarus 2011-2015, 2016-2020, other state programs. Mr Khizhniak participates in Sweden- Belarusian –project "Improvement of the system of land management and urban development in the Republic of Belarus using modern methods and technologies".

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