# ECONOMICS AND NATIONAL MANAGEMENT

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# SOCIAL DEVELOPMENT AND SOCIAL PROTECTION OF AGGLOMERATION IN THE CONTEXT OF PROVIDING THE SUSTAINABLE DEVELOPMENT

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**Timeliness and research the topic.** In Ukraine the development of agglomeration (from Latin "agglomerate" – incorporate, accumulate), the organization of urbanized environment of separate territories, each of which has its own peculiarities have been actively developing recently. The latest are important to consider building plans, programs of social and economic development of these territories. This is indicated in research by E. Alaiev, P. Beyrog, B. Burkinskyi, A. Weber, A. Vyshnevskyi, E. Hoover, V. Davydovych, G. Dobrovin, M. Demin, V. Kristaller, E. Kusminskyi, O. Laiko, E. Lamperd, G. Lappo, V. Osipov, E. Pertsik, Yu. Pivovarov, M. Pistun, Ya. Pitiurenko, O. Topchiiev, I. Fomin, O. Shablii and many others.

Despite a large amount of research on the social and economic development of agglomeration, in Ukraine their development has not yet reached the acceptable results. Social problems, in particular the impact of agglomeration processes occurring in Ukraine with consideration to present state of living standards of the population, require in-depth study, in particular in terms of threats and dangers to the life of the population. There are no reached stable economic development and social sphere in Ukraine. The formation and evolution of agglomeration in our country occur in the absence of efficient tools of state impact on this process. And this reduces the "agglomeration effect", lead to the irrational use of the resource capacity of the territories that are part of agglomeration, to intensification the irregularity social development. This research is focused on solving mentioned issues, the aim of which is to provide on the basis of present state of agglomeration the search of tools of impact on the acceleration of the social development and social security of agglomeration, and ensuring sustainable development.

World experience shows that each urbanized environment has its own features that are important to consider when developing plans, projects relating to the social and cultural development of the territories. It also follows from world experience, that investment appeal of the territories is largely determined by the qualitative indicators, that is a compactly developed set of settlements that are clustered around one or several centers, united by various intensive connections, social-territorial system. The city center is usually the center of agglomeration. It becomes the center of inter-settlement cultural and social services a certain institution with episodic usage and periodic care facilities. In our opinion, sufficiently

complete definition of the term "agglomeration" is presented in Wikipedia, where it is indicated that urban agglomeration is a territorial entity that underlies city or even a collocation of urban settlements, rural areas united in a single whole (complex multicomponent dynamic system) intensive economic, including labor, social, cultural, recreational and other ties, as well as environmental interests.

Thus, agglomeration is a territorial unit that:

- Occurs on the base of a city ( or a range of closely set towns conurbation) and forms an urbanization zone which includes bordering inhabited areas;
- Is distinguished by a high level of a manufacture concentration, first of all industry, infrastructure facility, scientific and educational institutions as well as a considerable part of a population;
- Has a critical transformative influence on the environment that changes the economic structure of the inhabited areas and the social aspect of life;
  - Has a high complex level of business and territory integration of its elements.

Main criteria to distinguish an agglomeration area are:

- The transport accessibility (the way to the agglomeration center should not take more than 60 min);
- The close bordering of the agglomeration center and the inhabited areas;
- The presence of the cities with a fast-growing manufacture and a social cultural infrastructure;
- High level of a manufacture density at the agglomeration center city;
- Urban influence on the environment that causes a change of its economic structure and the social aspect of life;
  - High complex level of a business activity of the territorial unit, agglomeration, etc.

Each agglomeration should be adapted to the market condition, the extension of the highly liquid products spectrum; introduction of the advanced equipment and technologies that provide the competitiveness of the products, made at the agglomeration manufacture and make suitable conditions for the production of new products.

Except the complex level, the main agglomeration features are:

- The presence of the transport corridors;
- Territorial accessibility that allows to extent agglomeration borders;
- Deep economic ties between the inhabited areas that belongs to the agglomeration;
- Deep administrative and political, organizational and business ties between the center and the bordering inhabited areas of agglomeration;
  - High level of a functional connection:
  - Stable labor-market, land market, real estate market;
  - Legal independency of the territory units, united around the city;
  - Dynamics fast adaptation to the changes;
  - Diversification of the economic, social and cultural life, etc.

Thus, intense demographic, social, economic and cultural ties are characteristic of agglomerations, as integral cells of the urbanized environment, formed on the basis of the city – the core and adjacent interrelated settlements.

Experience shows that as part of the agglomeration it is possible to share systems: water supply and disposal; water intakes; water pipes; city sewerage networks and treatment facilities (where technical capabilities exist for this).

World practice shows that the share of material production in agglomerations in gross domestic product has recently been decreasing, while the proportion of the production of various services has been increasing. About 500 agglomerations have already been formed in the world, in which 40% of the urban population and 20% of the inhabitants of rural settlements live. These territorial associations are especially widespread in Canada, the USA, and France, whose experience in the development of agglomerations must be used in Ukraine, considering agglomerations as from the point of outstripping economic development and increasing the competitiveness of a designated area.

Agglomeration is not only a factor of economic, but innovation-driven growth. It is known that specialists have recognized the 21st century as the century of knowledge economy. Nowadays there is a requirement for creative ideas to the economy based on reasonable needs. The current economy needs innovation. The latest technologies are used not only in cities – centers of agglomerations, but also in small settlements. Besides researchers from Poland and Germany point out that lately the medium and small cities located around large cities and regional centers have shown the best dynamics in attracting innovations and developing production using the latest technologies. That is, the settlements of agglomerations become active participants in the socio-economic development of the specified territorial environment, based on new

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technological capabilities and new approaches to the organization of human living space.

The activation of this process in our country, as mentioned above, requires:

- The establishment of territorial communities in accordance with:
- The Law of Ukraine "On Voluntary Association of Communities";
- The Law of Ukraine "On the State Program for Creating the National Environmental Network of Ukraine for the Years 2000-2015";
  - The Decree of the President of Ukraine "On Priority Tasks in the Field of Urban Development";
- The Resolution of the Verkhovna Rada of Ukraine "On the concept sustainable development of the settlements of Ukraine" and others.

The State Strategy for Regional Development for the period until 2020 emphasizes that the above-mentioned resolution requires good governance.

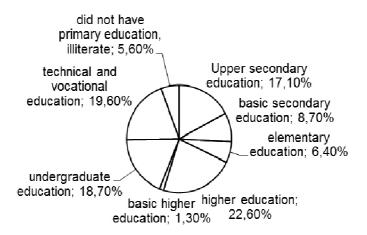
Urban areas are part of the human environment, in which the social environment with which human existence is associated is especially important.

As a rule, regional centers, which are not only important economical, but also educational and cultural centers are the centers (urbanized cores) of agglomerations. The latter are peculiar factors, which set conditions for a marked improvement of socio-cultural rural population service and, combining with other factors, a push-pull migration. Unfortunately, the transport connection in Ukraine, which contributes to the successes migration policy, does not exist between every agglomeration locality. Availability of cultural, education and healthcare units has a positive impact not only on people's capital forming, an important factor of providing sustained development, but to some extent, restrains migration processes.

At present, there is a huge distinction between the central agglomeration city and even districts, which are close to it. And it concerns not only providing population with educational and cultural sphere services, but also water and canalization indicators. The bigger the distance between a central city and a rural settlement, the worse relevant indicators are.

Specialists claim, that agglomeration centers, having a huge concentration of financial, highly qualified human recourse, scientific research infrastructure, become innovative development centers not only of agglomeration, but of regions and the country entirely. For this part, it allows involving significant number of investments, first of all, in developing of high technical economical branch. In fact, it is necessary to reach the conciliation of the communities' interests both in spatial and strategic planning, and in sphere of common investment policy elements forming.

This should be facilitated by intellectual potential of both, the country in general and every territorial association. As demonstrated by the statistics, the educational level of population goes up. In 2017 among Ukrainian population at the age of 6 and higher 22.6% had higher education, 19,0% – technical and vocational education. At the same time a considerable part of population – 5.6% in the indicated age did not have even primary education and were illiterate.



**Population distribution by educational level.** Increasing of educational level of population has a positive impact on the condition of using available resources, on improvement of service delivery and on providing an increase of population wealth. The latter is contributed by a partnership of territorial communities, as experience has shown.

In this aspect, a convincing example is territorial association based in Kakhovka, Nova Kakhovka, Berislav and Kakhovka and Berislav regions. A strategic plan of developing was established and asserted on

corresponding council sessions, as well as a joint subregional development agency, which helps all communities to attract investments and to undertake joint events, particularly, round work tables with public agents, businessmen, representatives of communities.

In this aspect, the experience of our neighbor Poland deserves attention. In this country a big importance is aimed to creating condition for work and living in small agglomeration towns, for developing creative professions, which contributes decreasing of labour migration. With development of such kind of activities, in Grodzisk Mazowiecki agglomeration:

- A space for population is completely changed
- The city turned into an attractive place for living (well-maintained lakes, parks, places for sport and physical activities).

The result of such method is that in agglomeration locality a labour (push-pull )migration practically ended, unemployment is eliminated, criminality is appreciably reduced.

Experience of Poland and also the domestic one ("Tavria" agglomeration, "Dnipro-Buzka golden delta" established at the base of Mykolaiv and Kherson regions etc.) shows that agglomerations' development promotes the educational and professional capacity building and growth as well as transformation of the social capital that is frequently used at the elaboration of strategic planning of the social and economic development of the settlements that formed an agglomeration. Incidentally, a strategic plan requires to elaborate the specific projects fulfilling the function of the organic constituents of operational objectives, relevant creative issues and the main branches of agglomeration economies would be conducive to the economic growth, increase of the territories' competitiveness, realization of common interests taking into account available and potential resources.

The strategic plan of agglomeration's development should include the investment promotion, human and mental potential, economic bloc, transport and communications, all the elements of social and cultural sphere etc. It must be developed systematically on the basis of implementation of European experience of corporate planning.

The development of such a plan includes:

- SWOT-analysis with a detailed assessment of available resources identifying the strengths and weaknesses of the resourcing;
- Identification of the right directions of social and cultural development of territorial community taking into account citizens' views;
- Elaboration and implementation of measures to insure social security, addressing the factors that endanger sustainable social and economic development of agglomerations. Insufficient public funding, lack of donor funding, citizens' unpreparedness to professional activities within the framework of agglomerations [1].

Nowadays, as is known, there is a strong need to provide training for workers of labour occupations. About 20 percent of the population of Ukraine and fewer than 8 percent of Kyiv has vocational education. Meanwhile, practice suggests that the higher the indicator, the better conditions to ensure the stable development. At the same time the increase of level of the population with vocational education has a positive impact on formation of anthropogenic, urban environment. According to the statistics, there are preschool and general educational institutions of I-II or III levels that provide elementary, secondary and senior secondary education as well as vocational and higher educational establishments of I-II or III-IV accreditation levels almost in all agglomerations first of all in the city — a regional center around which this association was formed.

In recent times there is a tendency in the development of education, especially in the higher educational establishments towards extension of international contacts, integration to the European scientific and educational communities that promote:

- More rapid introduction of new educational technologies, upgrading of professional skills of graduates;
  - Improvement of quality of academic research works;
- Capability enhancement of foreign investments attraction in divergent educational and scientific programs and funds [2, 3, 4].

Environmental education has a great impact on the achievement of sustainable development, in particular its economic element. The result of environmental education is to develop motivation, needs, habits of directed environmental education and environmental protection, healthy lifestyle of agglomeration population. The outstanding pedagogue John Amos Comenius believes that in order to achieve these we should keep certain order and sequence of knowledge transfer with strict attention to age-specific

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characteristics of child, their interests, mental state altogether in educational process. He defined three components of the principle of nature conformity:

- -deep knowledge of human nature, its anatomico-physiological and psychological features;
- -to make the content and organization of educational program close to nature;
- -customs and traditions educational orientation [5].

The effectiveness of environmental education in the providing of sustainable development in agglomeration, region and in country as a whole is achieved as if it is conducted in all their educational institution. The creation of the atmosphere of mutual help, trust, humanity in the pupils' and students groups' contributes to the environmental education. Experience has shown that with the help of educators university graduates become many-sided personality with high morality, environmental culture and environmental thinking. There are elements for forming environmental thinking:

- -knowing basic scientific nature notions and environmental problems;
- -realizing responsible attitude towards nature;
- -understanding the nature as the unique value and as the source of material and spiritual power;
- -the ability to absorb practically and protect it;
- -direct participation in solving environmental problems [5].

As world experience shows:

- -firstly, environmental education should be arranged in all educational institutions;
- -secondly, environmental education should be guaranteed throughout the life;
- -thirdly, their aim should be to teach pupils, students to understand the value of the Earth nature, the necessity of unity of its processes, the connection between human and nature.

Any human activity, human behavior towards attitude to nature should be agreed with its laws. Such approach will help to develop sense of belonging to nature.

Effective environmental education of pupils, students provide the necessity:

- -to ensure streamlining the contents of continuity of environmental education for all age groups of children, teenagers, youth;
- -to highlight constantly environmental issues in the process of learning separate subjects , using also the inter- and cross-subject links;
  - -to create in educational institutions proper supply of training equipment;
- -to improve forms and methods of environmental education, active pupils', students engagement to environmental protection;
- -to form reasons for responsible attitude towards nature, desire to deep learning and develop the natural resources.

So this means that all natural sciences and humanitarian subjects should be environmentally oriented. Such approach should lead to vast knowledge of environment, responsible attitude both to nature and personal health, eco-friendly habits of thoughts and environmental literacy. By communicating with nature humankind enriches the unseen. In other words, environmental education is a source of inspiration for human creativity and an important factor in health promotion.

In accordance with our research not only education development, but social sphere in general have an influence on demographic indices and population structure in agglomerations. Recently was mentioned tendency among the villagers to live in the city and, vice versa, town dweller's appetency to nature, caused not only by socioeconomic, but also environmental problems such as noise, contamination, air pollution etc., which are common for cities and agglomeration centers. Above-listed factors in a great measure affect human health.

According to our investigation morbidity rate in Ukrainian cities has increased by 5% and incidence of diseases – by 7%. It approves process of chronicity of diseases in Ukraine. As a result, physical condition of an average citizen is much worse than in neighboring countries. This is confirmed by the following data: if total life duration of Ukrainian resident describe as 100%, then 13% of them may be characterized as ones with ill health condition. By comparison, among the Czechs such index is 9% and among the Poles – 8%. Despite such insights, it should be mentioned that in Ukraine in general and in most agglomerations alike the number of newly diagnosed patients is decreasing. For the last 7 years per 100,000 population, the decrease almost reached 10%.

Nevertheless, the incidences of leading cause of death, such as HIV infection, neoplasms, active tuberculosis are remains quite high. That implies that mortality rate remains extremely high, particularly among the able-bodied and child (up to one year) population.

According to experts' hypothesis, by 2025 80% of the population would live in cities, 55-65% among them – in big cities, where, according to research, not only socio-economic but also environmental problems, which affect the population health and safety and security arrangements, are deteriorating every year. It is worth reminding that there are such strands among complex components of the environment of agglomeration, in particular marginal type of urban and rural, which directly or indirectly affect the achievement of social security:

- topography and geology, subsoil and hydrologic system, climate, flora and fauna of the area;
- man-made ones noise, vibration, electromagnetic rays;
- vehicle-to-population ratio (unfortunately, in Ukraine it influences on the number of road accidents with grave consequences. Our country ranks one of the top places in Europe for the number of injured and dead on the road).

All of them affect the environmental conditions, which, unfortunately, are getting worse in Ukraine and the rest of the world alike. This information is confirmed by UN experts, who conducted 'An assessment of ecosystem at the turn of millennium', which evaluated 24 indicators. As a result, they have come to the conclusion that in the last fifty years, environmental improvements have occurred only in four species; 15 types of environmental indicators have significantly deteriorated; 5 species are in a state of disrepair. Under such circumstances, state implementation of the measures should be urgently done to secure sociological, ecological and economical safety not only in Ukraine in general but in agglomerations of urborural (marginal of urban and rural) type. So it is necessary to create a credible guarantee system of civilized existence, including the availability of essential agglomerations of various workplaces and the provision of agglomeration residents with housing and public utilities. For this purpose it is necessary to do the following:

- to enhance the development of the utility industry in all agglomerations, where the service provider is not a monopolist, and the buyer has the opportunity of protection of the rights and receiving quality services;
- to promote successful enterprise activities in the public and personal services in various type of ownership;
  - to regulate the tariff formation and to maintain the permanent control over it;
  - to ensure the establishment of the clear quality standards of public utilities;
- to facilitate the strengthening technological innovation aimed at reducing losses and saving resources;
- to create the appropriate conditions for the development and implementation of modern forms of self-management of the population to improve the service basically, also through the regional use of life-sustaining engineering infrastructures of both the city and surrounding settlements;
- to ensure the availability of sufficient educational facilities, including pre-school and cultural institutions, to provide both the city and the surrounding area with a wide range of recreation services;
- to guarantee the delivery of quality socio-cultural services to the population with a focus on expanding their range, including the provision of efficient transport links through the reconstruction of the existing road network, the improvement of the urban traffic and connections with the interurban transport, etc.

All these aspects will significantly affect not only the economic performances, but also the social well-being of the population, the establishment of the social security and the assurance of the sustainable socio-economic development.

**Conclusion.** Based on the research, it can be concluded that the implementation of the mechanisms is necessary for the coordination of decision-making in particular areas of agglomerations and the fiscal consolidation or cooperative strategizing of the socio-economic development of the agglomeration in all territories.

At the same time, a very cautious approach should be taken to determine the administrative status of agglomerations and to integrate the surrounding territories. After all, the differentiation of the economic development level of different territories is increasing in Ukraine. Therefore, it is necessary to find mechanisms for establishing cooperation between the residents of the center and the surrounding settlements, as parts of the agglomerations, the social development of which contributes to:

- the regional balanced development which will promote urban and rural territories' development, including through partnerships;

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- the creation of opportunities to support and protect the ecosystems and strengthen economic areas around the center of agglomerations;
- the careful attitude to the natural resources, encouragement the development of less developed, mainly rural territories, that allows to accelerate the establishment of agglomerations; to use effectively the concentration of the productive forces in agglomerations in order to ensure their economic growth and increase their competitive advantage; to accomplish a purpose of the sustainable development to promote the development of the quality, free from social barriers societies for the benefit of the sustainable economic growth and improving the population prosperity.

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Гаращук Олена Василівна, доктор економічних наук, професор, начальник відділу та міжнародного співробітництва Державної служби якості освіти України. Куценко Віра Іванівна, доктор економічних наук, професор, заслужений діяч науки і техніки Державної установи України, головний науковий співробітник «Інститут природокористування та сталого розвитку Національної академії наук України». Соціальний розвиток та соціальна безпека агломерацій у контексті забезпечення сталого розвитку. Досліджено генезу та еволюцію формування в Україні агломерацій та їх вплив на забезпечення сталого розвитку. Розкриті критерії та основні ознаки агломерацій, їх роль у формуванні складових сталого розвитку. Зазначається, що основним завданням формування агломерацій є сприяння підвищенню життєвого рівня жителів населених пунктів, віддалених від міста, - ядра агломерації, вирівнювання територіальних відмінностей у соціально-культурному обслуговуванні населення. Констатовано, що для агломерацій, як цілісних осередків урбанізованого середовища, характерними є наявність інтенсивних демографічних, соціальних, економічних і культурних зв'язків, а також значна концентрація фінансових та висококваліфікованих людських ресурсів, формування науково-дослідної інфраструктури, що у сукупності створює умови перетворення агломерацій у центри інноваційного розвитку регіонів та країни в цілому. Це в свою чергу дозволяє залучати значні обсяги інвестицій перш за все у розвиток високотехнологічних галузей економіки. Акцентовано увагу на тому, що важливо ураховувати інтереси громад як у сфері просторового та стратегічного планування, так і в сфері формування елементів спільної інвестиційної політики. Запропоновано ряд заходів щодо прискорення процесу забезпечення сталого розвитку. В числі останніх перспективною може бути розробка механізмів залучення інвестицій у розвиток соціальної сфери та підвищення ефективності їх використання.

*Ключові слова*: сталий розвиток, довкілля, соціальна сфера, агломерація, стратегічне планування.

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Garashchuk Olena. Doctor in Economics. Professor, Head of Communications and International Cooperation State service of education quality of Ukraine. Kutsenko Vira, Doctor in Economics, Professor, Honored Scientist of Ukraine, Chief Researcher State Institution «Institute Environmental Economics and sustainable development of the National Academy of Sciences of Ukraine». Social development and social protection of agglomeration in the context of providing the sustainable development. The genesis and evolution of the formation of agglomeration and their impact on ensuring sustainable development in Ukraine were investigated. Criteria and the main features of agglomeration in the structure and components of sustainable development were disclosed. It is noticed that the main task of the forming agglomeration is to help to improve the living standards of residents of remote from the city-core agglomeration and equalization of differences in social and cultural services to the population. A number of measures were offered to accelerate the process of providing sustainable development. Among the latest, the development of mechanisms for attracting investments in the development of the social sphere and increasing the efficiency of their usage may provide positive effect.

*Key words*: sustainable development, environment, social sphere, agglomeration, strategic planning.

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Гаращук Елена Васильевна. локтор экономических наук, профессор, начальник отдела коммуникаций и международного сотрудничества Государственной службы качества образования Украины. Куценко Вера Ивановна, доктор экономических наук, профессор, заслуженный деятель науки и техники Украины, Главный научный сотрудник государственного учреждения экономики природопользования устойчивого развития Национальной академии наук Украины». Социальное развитие и социальная безопасность агломераций В контексте обеспечения устойчивого развития. Исследована генеза и эволюция формирования в Украине агломераций и их влияние на обеспечение устойчивого развития. Раскрыты критерии и признаки агломераций, их роль в формировании составляющих устойчивого развития. Отмечается, что основной задачей формирования агломераций является повышение жизненного уровня жителей населенных пунктов, удаленных от города, ядра агломерации, выравнивание территориальных различий в социально-культурном обслуживании населения. Констатировано, что для агломераций, как целостных составляющих урбанизированной среды, характерны наличие интенсивных демографических, социальных, экономических и культурных связей, а также значительная концентрация финансовых высококвалифицированных человеческих ресурсов, формирование научно-исследовательской инфраструктуры, которые в совокупности создают условия преобразования агломераций в центры инновационного развития регионов и страны в целом. Это в свою очередь позволяет привлекать значительные объемы инвестиций прежде всего в высокотехнологичных экономики. Акцентировано внимание на том, что важно учитывать интересы териториальных общин как в сфере пространственного и стратегического планирования, так и в сфере формирования инвестиционной политики. Предложено мероприятий по ускорению процесса обеспечения развития. В устойчивого числе последних перспективной может быть разработка механизмов привлечения инвестиций в развитие социальной сферы И повышение эффективности использования.

**Ключевые слова:** устойчивое развитие, окружающая среда, социальная сфера, агломерация, стратегическое планирование.