ОРГАНИЗАЦІЙНО-ЕКОНОМОЧИНА СТРУКТУРА ФУНКЦИОНАУВАННЯ МІСЬКИХ ПАРКІВ: АСПЕКТИ СТАЛОГО РОЗВИТКУ ТА ЕКОСИСТЕМНОГО ПІДХОДУ

Актуальність. Публікацію присвячено висвітленню особливостей застосування принципів сталого розвитку та екосистемного підходу до організаційно-економічного забезпечення розвитку міських парків. Актуальність статті обумовлена тим, що наявність інституційних пасток в сфері розвитку міських парків не дозволяє втілювати дані принципи в повному обсязі, що заважає ефективному вдосконаленню сфер зеленого господарства та підвищенню значимості зелених просторів.

Мета та завдання. Метою статті є проведення аналізу щодо адаптації принципів сталого розвитку та екосистемного підходу до сфери розвитку міських парків, а також визначення інституційних пасток, які стоять на заваді.

Матеріали і методи. В процесі підготовки статті було використано матеріали власних досліджень, аналіз статистичних даних, публікації вітчизняних науковців. Використано наступні методи дослідження: монографічні (для всебічного вивчення проблеми організаційно-економічного забезпечення розвитку міських парків та виявлення причинно-наслідкових зв'язків), статистичні (при роботі зі статистичними даними та аналітичними розрахунками).

Результати. На основі проведеного аналізу надано інтерпретацію принципів екосистемного підходу щодо організаційно-економічного розвитку парків та обґрунтовано їх важливість для подальшого переходу до сталого розвитку. Аналіз кількісних показників зелених насаджень по містам України вказує на значний потенціал забезпечити жителів міст доступними рекреаційними зонами, і по деяким містам показники навіть відповідають інтересу до такого рівня. Але недоліки інституційного устрою не дозволяють презентувати міста України на міжнародному рівні, а також застосовувати інноваційні та нестандартні підходи до організації зеленого простору, які могли б значно підвищити інтерес до українських міст. Міські парки є важливим природоохоронним об'єктом, але їх організаційно-економічний устрій перешкоджає досягненню найбільш інтересних резултатів.

Висновки. Виявлено, що найбільш доцільне першочергове вдосконалення саме інституційної складової організаційно-економічного устрою міських парків. Це дозволить найбільш ефективно впровадити нові підходи до розвитку міських парків, та втілити принципи сталого розвитку та екосистемного підходу. Саме тому буде необхідно змушувати інституційні пастки, які стоять на заваді подальшому розвитку.

Ключові слова: міські парки, сталий розвиток, екосистемний підхід, інституційні пастки, організаційно-економічне забезпечення.

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Aim and tasks. The purpose of the article is to conduct an analysis of the adaptation of the principles of sustainable development and the ecosystem approach to the development of urban parks, as well as to identify institutional pitfalls that stand in the way.

Materials and methods. In the process of preparing the article, materials of own research, analysis of statistical data, publications of domestic scientists were used. The following research methods were used: monographic (for a comprehensive study of the problem of organizational and economic support for the development of city parks and the identification of cause and effect relationships), statistical (when working with statistical data and analytical calculations).

Research results. On the basis of the analysis, the interpretation of the principles of the ecosystem approach to the organizational and economic development of parks is provided and their importance for the further transition to sustainable development is substantiated. The analysis of quantitative indicators of green spaces in the cities of Ukraine indicates a significant potential to provide city residents with accessible recreational areas, and in some cities the indicators are even comparable to the most green cities in the world. But the shortcomings of the institutional system do not allow to present the cities of Ukraine at the international level, as well as to apply innovative and non-standard approaches to the organization of green space, which could significantly increase interest in Ukrainian cities. City parks are important nature conservation objects, but their organizational and economic structure prevails as compared to objects of communal economy, and does not take into account most of the socio-cultural and natural aspects of their essence.

Conclusion. It was found that the most expedient priority improvement is the institutional component of the organizational and economic structure of city parks. This will make it possible to most effectively implement new approaches to the development of city parks, and implement the principles of sustainable development and the ecosystem approach. That is why the main institutional traps that stand in the way of further development were identified.

Keywords: city parks, sustainable development, ecosystem approach, institutional traps, organizational and economic support.

Problem statement and its connection with important scientific and practical tasks. The current global trend is to expand approaches to the organization of city parks, and the most successful initiatives testify to the possibility of raising the image of cities and promotion at the international level due to the organization of green space. Often, such initiatives are socially oriented and focus attention on the maximum preservation and enrichment of the natural space of cities. The cities of Ukraine have significant potential in the implementation of nature protection and health initiatives through the organization of a network of parks and squares. But this potential is still not used due to the inability of the institutional structure to reach a new level of rethinking the green spaces of cities, their role in social and even economic well-being of cities.

Analysis of recent publications on the problem. The following domestic scientists made a significant contribution to the research of the current state and trends of sustainable development: Nesterenko S., Radzinska Yu., Petrushenko M., Burkynskyi B., Shevchenko H., (Petrushenko et al., 2021), Baranchenko Y., Andreeva N., Bagrov N., and others. The problems of organizing the green infrastructure of cities and multifunctional territories are highlighted in the works of the following scientists: Khumarova N., Chercykh L., Vartanyan H., Bulysheva D. Modern approaches to understanding the ecosystem approach in nature management are highlighted in the works of Veklych O., Bryndzia O., and Bystryakov I. A purely economic approach can be noted regarding the development of industrial parks (Petrushenko et al., 2021).

Allocation of previously unresolved parts of the general problem. However, urban parks and their role in contributing to the achievement of sustainable development goals are hardly given attention in publications dealing with the sustainable development of cities. The organizational and economic structure of the functioning of city parks is considered as a small part of the overall city structure, and thus the possibility of a broad rethinking of the role of parks and their potential is lost. So far, the attention of scientists has not been directed to the improvement of the institutional system for the development of city parks, the institutional possibilities of reaching the international level of cooperation, the promotion of the multifaceted effects of city parks on the socio-cultural, ecological and economic space of the city.

Formulation of research objectives (problem statement). The purpose of the study is to analyze the institutional structure of the development of city parks, and to identify institutional traps that prevent the implementation of the principles of the ecosystem approach and sustainable development.

Materials and methods. The development of a holistic vision of the organizational and economic structure of the sustainable development of city parks using an ecosystem approach was carried out on the basis of a system-structural analysis, which
gave a comprehensive vision of the application of these two principles specifically for the development of city parks. The statistical analysis made it possible to consider the quantitative indicators of provision of green spaces in the cities of Ukraine, and to draw a conclusion about the significant potential of Ukrainian cities. The monographic method made it possible to determine the cause-and-effect relationships of the occurrence of gaps in the institutional system, which require priority determination.

**An outline of the main results and their justification.** For the first time, the concept of "sustainable development" was presented in the report of the International Commission on Environment and Development "Our Common Future", and which denotes development that meets the needs of the present and does not endanger the needs of future generations in natural resources and environmental quality (United Nations, 2023).

When considering the problem of sustainable development of city parks, it is necessary to take into account city-wide trends - whether there is a concept of sustainable development for the city at all, to what extent the interests of the current generation are taken into account in the functioning of the city. In the context of sustainable development of cities, sustainable infrastructure is distinguished, which includes city parks and green areas. The following principles of sustainable development are applied to all types of sustainable infrastructure (housing, central heating, energy supply, waste disposal, public transport, city roads, water supply and drainage, technological support, and urban space) (McCormick et al., 2012; Ecodia, 2023):

- Interconnection of projects and solutions for the city as a whole;
- Inclusiveness and social orientation;
- Planning based on the "bottom-up" approach, which means decision-making taking into account public opinion and openness to public proposals;
- Funding from sources that provide for inclusive and strategic approaches.

According to the report "Our Common Future" of the International Commission on Environment and Development, the principles of sustainable development are generally described as follows (Regional agency of sustainable development, 2023):

1. Sustainable development as the central guiding principle of organizational and management structures;
2. Economical attitude to available global resources and ecological potential;
3. The strategy of early prevention of environmental problems is the most effective and economical means of achieving sustainable development;
4. A comprehensive approach to environmental and economic issues in the decision-making process for the most important policy goals;
5. Fair distribution of costs for environmental protection and economic development.

Therefore, we see that it is impossible to ensure sustainable development for one type of urban infrastructure, or sphere of public interest, in isolation from others. The functioning of the city is ensured by the orderly work of three main structures - planning, functional and social planning, which are established in the master plans of cities (Apatenko, 2017). In our opinion, the key prerequisites for the sustainable development of the city should be laid precisely at the stage of preparation of the master plan, in the work of these three components. To date, the planning structure is often violated due to the influence of various interested groups (developers and owners of land plots) on local self-government bodies, as a result of which environmental protection and the uniform development of urban areas suffer. Purely economic interests of certain interested groups often worsen the functional and social planning components, such as: blocking of passages to the sea coast, privatization of recreational areas with their subsequent destruction and development, privatization of cultural monuments with the aim of their further destruction, uneven development of transport connections due to dominated by the interests of private carriers, etc. If the influence of limited groups on decision-making that harms the interests of ordinary citizens continues in the institutional structure, it will be impossible to ensure the sustainable development of the city and green zones in particular. For the sustainable development of cities, it is important to identify development priorities for individual territories, landscaping and architecture, and create planning solutions for their rational use. When creating proposals, it is necessary to take into account the investment indicators of the lands of specific cities and the factors of their formation (Nesterenko & Radzynska, 2017).

Applying the principles of old development to city parks and green spaces, it is worth paying attention to the principles of the ecosystem approach. According to the officially adopted interpretation at the 5th Conference of the Parties to the Convention on Biological Diversity in 2000, the ecosystem approach is "a strategy for the
integrated management of land, water and living resources that ensures their preservation and sustainable use on an equitable basis" (Nairobi, 2000). According to the interpretation of O. Z. Bryndzya, "the ecosystem approach is a way of achieving sustainable development based on ensuring the sustainable functioning of living ecosystems" (Bryndza, 2008). As we can see, the ecosystem approach in nature management contributes to sustainable development, and therefore the implementation of its principles is of primary importance on the way to sustainable development. As a confirmation of this opinion, we consider the interpretation of O. O. Veklych regarding the "concept of the ecosystem approach in economic science from the point of view of management", namely: "as a complex adaptive management approach to balancing the key characteristics of ecosystems and social use of nature in order to achieve both sustainable management and sustainable potential of ecosystems on the basis of ensuring their reproductive capacity for the functional production of goods and services in order to ensure current and future environmental and humanitarian needs" (Veklych, 2017).

In section "B" of the appendix of the report of the V Conference of the Parties to the Convention on Biological Diversity in 2000, 12 principles of the ecosystem approach and supporting methodological recommendations for their application are listed (Nairobi, 2000). We offer an interpretation of their implementation for the sustainable development of city parks (table 1):

### Table 1

<table>
<thead>
<tr>
<th>Principles of the ecosystem approach</th>
<th>Reference methodical recommendations</th>
<th>Interpretation of the principles regarding the sustainable development of city parks (CP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The tasks of managing land, water and living resources are determined by society</td>
<td>Focus on functional relationships and processes in ecosystems</td>
<td>The development of CP is carried out according to the needs of citizens and the potential of ecosystems. Maximum participation of communities in the planning of green spaces.</td>
</tr>
<tr>
<td>2. Ecosystem management should be as decentralized as possible;</td>
<td></td>
<td>The presence of competent authorities regarding the management of park ecosystems, and an individual approach to each park.</td>
</tr>
<tr>
<td>3. Ecosystem management bodies must take into account the impact of their activities (actual or potential) on adjacent or any other ecosystems</td>
<td>Promotion of fair use of benefits</td>
<td>Contributing to the improvement of organoleptic parameters of urban space and adjacent ecosystems.</td>
</tr>
<tr>
<td>4. Recognizing the possibility of positive management results, it is necessary, however, to understand the functioning of the ecosystem and manage it in an economic context. Any ecosystem management program should: a) eliminate disproportions in the market structure that negatively affect biological diversity; b) provide incentives for biodiversity conservation and sustainable use; c) if possible, concentrate all costs and benefits within the ecosystem itself;</td>
<td>Using strategies of adaptive management of ecosystems</td>
<td>The construction of strategies for the development of CP, which will contribute to the investment attractiveness of the less developed areas of the city, will increase the image of the city. Availability of recreation in parks for residents of various districts.</td>
</tr>
<tr>
<td>5. One of the priority tasks of the ecosystem approach is to preserve the structure and functions of the ecosystem in order to maintain ecosystem services</td>
<td></td>
<td>Improvement of the institutional structure of the management of CPs in accordance with the main functional groups of ecosystem services inherent in them - regulatory, cultural and supporting.</td>
</tr>
<tr>
<td>6. Ecosystems should be managed within their natural functioning</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. The ecosystem approach must be implemented in the appropriate spatial and temporal scales

8. The aims of ecosystem management should be long-term, due to the variability of time parameters and the possibility of delayed consequences, which is characteristic of ecosystem processes

9. When managing ecosystems, it is necessary to take into account the inevitability of changes;

10. An ecosystem approach should ensure a proper balance between conservation and use of biodiversity and their integration

11. The ecosystem approach should take into account any information, including scientific data, knowledge, innovations, practices of indigenous and local communities

12. The implementation of the ecosystem approach should involve interested groups of society and scientific disciplines.

Source: Formed with the use of (Nairobi, 2000).

To achieve a positive effect, all twelve principles should act in a comprehensive manner and contribute to sustainable development. In the context of the application of these principles to the development of city parks, it is necessary to clarify the specifics of the implementation of principle 2 of the ecosystem approach. As the practice of local self-government bodies in Ukraine has shown, city parks are almost not considered in the context of social development and well-being, involvement of citizens in decision-making, or large-scale programs for the economic and ecological well-being of the city. The structure and powers of management institutions do not contribute to the implementation of most of the principles of the ecosystem approach to the development of urban parks, so today the institutional system of park development needs a coordination structure that will take on intermediary functions and promote an individual approach to the development of parks on the ground.

We can offer the following structure of organizational and economic support for the sustainable development of city parks, taking into account the principles of the ecosystem approach and sustainable development (Figure 1):

As we can see from Figure 1, international organizations that contribute to the development of urban green areas in different countries of the world can be included in the subjects of sustainable development of city parks. This experience is absent in Ukraine, due to which the opportunities to borrow the best experience and promote Ukrainian cities at the international level are lost. For example, World Urban Parks holds a competition of green cities every two years, where any city can present its innovative solutions for greening measures. The next such competition will be in 2024 (AIPH World Green City Awards 2024). As of 2022, around 60 applications have been submitted from 40 cities representing 28 countries on all 7 continents, and the applications are evaluated by an international technical committee with advanced green city expertise. This international competition helps promote your city at the international level, shows its solidarity with the global movement for green cities and sustainable development of urban spaces. By participating, cities will have the chance to publish their initiatives on the AIPH website and integrate them.
Figure 1 – Organizational and economic support for the sustainable development of city parks, taking into account the ecosystem approach

Source: author’s own development
Improving the organizational and economic structure of the functioning of city parks in accordance with the principles of sustainable development and the ecosystem approach requires a comprehensive approach. One of the main and driving factors of positive changes should be the improvement of the institutional component, which will become an important lever of influence on the economic, ecological and social aspects of solving this problem. So, let's identify the shortcomings of the modern institutional system of Ukraine regarding the development of city parks.

The author considered the sphere of legal regulation, which contains provisions on the development of settlements, including urban green zones (Vernihorova, 2021). To date, there are a number of laws, norms and by-laws in Ukraine that regulate the management of green spaces and create the basic prerequisites for the development of urban green spaces. Among the documents of national importance, the following can be distinguished (Vernihorova, 2021):

1. DBN B.2.2-12:2018 "Planning and Development of Territories", regulates the level of greening of various green areas, regulates the maximum permissible number of visitors to green areas, as well as non-urban green areas;
2. The Law of Ukraine "On Improvements in Settlements", from 2005 - specializes in a complex of works on engineering protection of settlements, and economic provision of measures for greening the territories of cities and their improvement;
3. Rules for the maintenance of green spaces in cities and other settlements of Ukraine dated 04.10.2006 (In pursuance of the Law of Ukraine "On the Improvement of Settlements") - regulates the legal basis of greening of cities;
4. Rules for the maintenance of residential buildings and outbuildings dated May 17, 2005 - regulate the rules for maintaining green spaces within the boundaries of outbuildings;
5. The Law of Ukraine "On the Nature Reserve Fund of Ukraine" from 1992 - defines such objects among natural territories as: arboretums, botanical gardens, zoological parks and parks-monuments of horticultural art. Regulates legal and organizational principles regarding their functioning;
6. Standard rules for improvement of the territory of the settlement, of the Ministry of Regional Development, Construction and Housing and Communal Economy of Ukraine, dated November 27, 2017 - regulate the procedure for improvement; determine the boundaries of holding territories adjacent to the territory of enterprises, institutions and organizations; requirements for sanitary cleaning of territories, etc.;
7. Decree of the Cabinet of Ministers of Ukraine No. 559 "On fees for calculating the amount of damage caused by green spaces within cities and other settlements" dated April 8, 1999 - regulates the fees for assessing damage to green areas from their damage and improper use.

Also, among the important documents regarding the organization of green spaces, it is worth highlighting the master plans of the cities of Ukraine, which are adopted by the city councils and contain data on the actual areas of plantations in the city and their planned changes, as well as city targeted programs for the improvement of public areas.

As we can see, the formation of green areas of general purpose is regulated from the standpoint of urban planning and communal economy norms. At the same time, as it was said earlier, according to the Rules for the maintenance of green areas in populated areas of Ukraine (Verkhovna Rada of Ukraine, 2006), about 14 types of parks are distinguished by their functional purpose: "cultural and recreation parks, district, sports, children's, dendrological, historical, national, memorial, ethnographic parks-museums, historical, exhibition, zoological, aerofitotherapy, etc." According to Section 3 of the Rules for the Maintenance of Green Spaces in Settlements of Ukraine, "The objects of improvement in the field of green management of settlements include: parks, parks of culture and recreation, parks - monuments of garden and park art, hydroparks, meadow parks, forest parks, buffer parks, district gardens; dendrological parks, national, memorial and others; parks; urban forests; recreation areas; green plantings in security and sanitary protection zones, zones of special land use; coastal green spaces; green areas of the home territory". That is, the diversity of parks and other green areas should also include appropriate programs for social development and improvement. To date, only the rules of maintenance, improvement work, landscaping and protection of green spaces are regulated. But at the state level, there are no programs and regulations regarding the socially oriented development of urban green zones, their inclusiveness and promotion of the well-being of...
the population, and this is the first gap in the institutional system.

The next gap in the current regulatory documents is the lack of legally defined standards for the greening of cities and settlements of Ukraine, which can be considered a prerequisite for the insufficiency of targeted beautification programs at the local level. It is known that in 2015, a draft of the Law of Ukraine "On green spaces in cities and other settlements" was submitted, according to which it is proposed to establish standards: 25 m$^2$ per person for cities, and 20 m$^2$ per person for rural settlements. This standard size is based on Soviet requirements, according to which for large industrial cities this standard was 24 m$^2$. To date, this indicator, according to the authors of the bill, is relevant due to the large number of cars in cities (Ligazakon, 2023). But so far this bill is not in force, so we will focus on international standards.

According to the recommendations of the World Health Organization (WHO) (World Health Organization, 2012), the required standard of green spaces ranges from 9 m$^2$ of green spaces per person to the ideal value of 50 m$^2$ per capita. These indicators are correlated with such standards as: sustainable urban development, basic health indicators, justice, adaptability to climate change, and others (Russo & Cirella, 2018). In order to understand the level of greening of cities in Ukraine, we will calculate the indicators of provision of green spaces per inhabitant and as a percentage of the area, for the cities of regional centers (table 2):

<table>
<thead>
<tr>
<th>City</th>
<th>City area (km$^2$)*</th>
<th>Population*</th>
<th>Area of green spaces (km$^2$)</th>
<th>M$^2$ per inhabitant</th>
<th>Percentage of green spaces from the city area, (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ternopil</td>
<td>86</td>
<td>225004</td>
<td>9,9</td>
<td>44</td>
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<td>Chernihiv</td>
<td>79</td>
<td>282747</td>
<td>6,91</td>
<td>24,4</td>
<td>8,7</td>
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<td>Odesa</td>
<td>186,90</td>
<td>1010537</td>
<td>6,8</td>
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<td>Ivano-Frankivsk</td>
<td>83</td>
<td>238196</td>
<td>12,4</td>
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</tr>
<tr>
<td>Kharkiv</td>
<td>350</td>
<td>1421125</td>
<td>34,94</td>
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<tr>
<td>Rivne</td>
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<td>243873</td>
<td>1,5</td>
<td>6,2</td>
<td>2,3</td>
</tr>
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<td>Dnipro</td>
<td>409,7</td>
<td>968502</td>
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<tr>
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<td>Kropyvnytskyi</td>
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<td>901645</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mykolaiv</td>
<td>259,8</td>
<td>480 080</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Simferopol (ARK)</td>
<td>107</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Kyiv</td>
<td>839,2</td>
<td>2952301</td>
<td>565</td>
<td>191,4</td>
<td>67,3</td>
</tr>
</tbody>
</table>

Notes: 
* data on the areas of Ukrainian cities as of the beginning of 2022
** Green spaces for general use and special purposes.

As can be seen from Table 2, the indicators of provision of green spaces for public use vary greatly by city. The average indicator for the country per capita is 53.4 m$^2$, which, according to WHO requirements, even exceeds the maximum ideal indicator. At the same time, for such large
cities as: Zhytomyr, Dnipro, Odesa and Rivne, the greening indicators are extremely insufficient. The worst greening indicator for the city of Dnipro is only 3.4 m² per person or 0.8% of the city’s area. The highest indicators are in the city of Kyiv - 191.4 m² per person, and in Kropyvnytskyi - 137.3 m² per person. These discrepancies testify to the unsettled nature of the development of green areas for public use, and the complete dependence on strategies at the local level. The high indicators of the provision of green spaces in the cities of Ukraine are facilitated by the country's natural wealth of forests, which, for example, in western Ukraine, leave inclusions in the territory of cities and in suburban areas. Therefore, most cities of Ukraine are favorable for consumption, and have a high potential for socially oriented development of green economy. For comparison, some of the most green cities in the world have the following indicators: Vienna - 51% of the territory and 120 m² per person; Ljubljana (Slovenia) – 560 m² per person; Singapore – 66 m² per person. Cities with extremely insufficient greening: Istanbul - 6.4 m² per person, Tokyo - 3 m² per person, Buenos Aires - 1.9 m² per person (Liveable cities, 2023). One of the gaps is also the insufficiency of statistical data, namely, the difficulty of finding data on green spaces for the cities of regional centers, targeted greening programs, discrepancies in the availability of data by city, as well as the complete lack of information for small cities.

Let's examine the institutional framework for the development of green zones on the example of the city of Odesa. According to the analysis of the Investment Passport of the city of Odesa for 2021, it can be noted that green zones are not among the popular areas of investment. While the calculations in Table 1.9 indicate the need to increase the supply of green spaces. The city's investment policy is aimed at:

- Development of economic cooperation by spreading information about the socio-economic and cultural potential of the city;
- Promoting the introduction of energy-saving technologies in the production of products;
- Creation of conditions for the formation and development of clusters (transport, tourism, sewing, processing of agricultural products, media and IT spheres);
- Formation of entrepreneurship support infrastructure, resource and information provision of entrepreneurship subjects;
- Implementation (co-financing) of international technical assistance projects for the development and support of entrepreneurial activity;
- Promotion of attracting investments to the city's enterprises and strengthening their investment and innovation orientation. Creating an attractive investment climate (Official site of the city of Odesa, 2023a).

Among the current beautification programs that have provisions for the care of green spaces, it is possible to single out the Municipal Targeted Beautification Program of the City of Odesa for 2022-2026, which is financed from the budget of the Odesa City Territorial Community in the amount of UAH 3,870,301.7 thousand, for the entire period of program execution (Official site of the city of Odesa, 2023b). According to the program, "Functions for the development and preservation of green spaces are entrusted to the Municipal Enterprise "Miskzelentrest". The company owns 16 parks (with a total area of 317.02 hectares), 79 public squares (with a total area of 107.47 hectares), 7 boulevards (with a total area of 19.32 hectares) and 122 objects of the green zone: separation lanes, triangles, U-turns rings (with a total area of 135.93 hectares). About 167,000 trees and about 133,000 bushes grow on the serviced territory." The program does not specify the amounts of expenses for the support of green areas, and the objects of improvement, in addition to green spaces, also include: objects of road management; energy supply; external lighting; placement of outdoor advertising; territories of cemeteries; elements of street trade. Funding information can be found in the previous program performance report. According to the report on the implementation of the Municipal Targeted Improvement Program of the city of Odesa for 2018-2021, out of the total funding of the program 2,473,581.0 thousand UAH for the development and preservation of green spaces was provided for: As can be seen from Table 3, the expenses for the maintenance of green spaces are extremely small, only 5% of the total funding of the program. In addition, all the work on the maintenance of green areas was carried out during 2021 - the last year of the target program, which may indicate a residual principle in the financing of green areas and the lack of a step-by-step comprehensive vision of their development. Therefore, we can assert the need to improve the Municipal Target Program for the improvement of the city of Odesa, or to create an alternative program that will include the perspective of the development of urban green spaces.
Table 3

Expenditures for the development and preservation of green areas, carried out according to the Municipal Target Program for the improvement of the city of Odesa for 2018-2021

<table>
<thead>
<tr>
<th>List of program activities</th>
<th>The deadline for the event</th>
<th>Amount of financing (anticipated), thousand UAH.</th>
<th>Budgetary allocations taking into account changes, thousand UAH.</th>
<th>Actually completed, thousand UAH.</th>
<th>Cash expenses (mastered), thousand UAH.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance and restoration of green spaces and objects of city improvement, which are on the balance sheet KP &quot;Miskzelentrest&quot;</td>
<td>2021</td>
<td>90 375,1</td>
<td>90 375,1</td>
<td>90 332,6</td>
<td>90 332,6</td>
</tr>
<tr>
<td>Development of projects and overhaul of city improvement facilities</td>
<td>2021</td>
<td>9 740,0</td>
<td>7 603,0</td>
<td>7 601,4</td>
<td>7 601,4</td>
</tr>
<tr>
<td>Technical re-equipment of KP &quot;Miskzelentrest&quot; through the purchase of items and materials of long-term use, special equipment, mechanisms, means of small mechanization, equipment, etc.</td>
<td>2021</td>
<td>16 975,4</td>
<td>16 838,6</td>
<td>16 725,0</td>
<td>16 725,0</td>
</tr>
<tr>
<td>Renovation of green spaces</td>
<td>2021</td>
<td>7 481,9</td>
<td>7 480,5</td>
<td>7 480,5</td>
<td>7 480,5</td>
</tr>
<tr>
<td><strong>Total by field of activity</strong></td>
<td><strong>2021</strong></td>
<td><strong>124 572,4</strong></td>
<td><strong>122 297,2</strong></td>
<td><strong>122 139,5</strong></td>
<td><strong>122 139,5</strong></td>
</tr>
<tr>
<td><strong>Percentage ratio to the total budget of the program</strong></td>
<td><strong>5%</strong></td>
<td><strong>4,9%</strong></td>
<td><strong>4,9%</strong></td>
<td><strong>4,9%</strong></td>
<td><strong>4,9%</strong></td>
</tr>
</tbody>
</table>

Source: Formed with the use of (Official site of the city of Odesa, 2023c).

For comparison, in the city of Lviv, according to the Comprehensive Environmental Program for 2017-2022, only in 2021, the reconstruction of green facilities was carried out in the amount of UAH 17,430,000. For 2022, work on the development of a local eco-network scheme was planned, which was suspended due to the introduction of martial law (Lviv city council, 2023).

In Ternopil, there are two target programs related to the development of green areas:
- The park development program for 2022-2024, adopted by the decision of the city council dated November 14, 2022, No. 8/p19/12 (Official site of the city of Ternopil, 2023a), is aimed at the development of parks in the context of "increasing interest in the use of entertainment facilities and cultural institutions located on the territory of parks ", the budget of the program is UAH 181,150.0 thousand;
- Environmental Protection Program of the Ternopil City Territorial Community for 2020-2023, which provides measures for the inventory of green spaces. The budget is UAH 285,129.1 thousand. (Official site of the city of Ternopil, 2023b).

As you can see, the budget of these programs is also insignificant, but in the Ternopil urban territorial community there are only 5 parks with a total area of 127 hectares, the activities of which are mostly aimed at recreation of the population. Nature protection functions are performed by the nature reserve fund, which has 12 objects on the territory of the city with a total area of 725.35 hectares, which is 12.39% of Ternopil’s territory.

In the city of Chernihiv, the Program for the Improvement of the Environmental Condition of the City of Chernihiv for 2021-2025 (in the field of housing and communal services) is currently in effect. The budget for landscaping measures is UAH 356.52 thousand (Official site of the city of Chernihiv, 2023a). It is worth emphasizing the economic importance of the development of green infrastructure specifically for Chernigov. It is known that in 2019 there was a project to reconstruct the Central Park of Chernihiv, with the aim of transforming it into a city-forming object, attracting tourists and revitalizing local business. There is no information about its implementation, but the creation of a recreational and cultural
facility is of strategic importance for the economy of Chernihiv. The city will experience economic uplift provided that tourists are attracted and the region's popularity increases (Official site of the city of Chernihiv, 2023b). In August 2021, Chernihiv KP "Zelenbud" presented the Project of the Greening Development Program of the City of Chernihiv for 2021-2025, which provides for the implementation of modern landscaping and care practices, the creation of an electronic registry of trees, and the creation of new boulevards and squares. The program is the best possible option for the field of landscaping of the city. As of 2021, the implementation of the project required more than 2.5 billion hryvnias, which was too high even for that time. It was assumed that the most relevant components of this project would be implemented first (Vernihorova, 2022).

Comparing the data on the targeted improvement programs, it can be noted that there are currently no financial strategies for the development of green spaces in Ukraine at the state level, depending on their local conditions, needs, and natural potential. The effectiveness and capacity of targeted programs depends on a number of local factors: the competence of local self-government bodies; possibilities of the local budget; the level of the corruption component in management structures; the initial level of development of the city's natural potential (since the programs are mainly aimed at supporting existing green spaces).

Taking into account the sufficient level of greening of Ukrainian cities according to table 2, it is worth noting one more gap in the institutional system. To date, the organization of park management does not include strategies for the implementation of directives on nature protection and adaptation to climate change. At the same time, this area has significant potential in the implementation of environmental protection norms for the integration of Ukraine into the EU, according to which Ukraine is significantly behind in fulfilling the requirements of the Association Agreement. World experience shows that urban parks have the potential of a strategy for adapting the urban environment to climate change, as well as preserving biodiversity and ecosystems. We saw the prospects for the development of the eco-network on the territory of the city only in the Comprehensive Environmental Program for 2017-2022 for the city of Lviv.

Having considered the state of financing of a number of city targeted programs, and based on the results of work on the search for accounting information, we can make assumptions about the presence of "institutional traps" in the field of development and beautification of green spaces that do not contribute to the sustainable development of city parks. The concept of "institutional trap" was introduced by V. Polterovych, and means a persistent ineffective norm that is self-sustaining (Grazhevska & Zavazhenko, 2019). Among the main factors of the emergence of "institutional traps", which are characteristic of the field of green economy, the following can be noted: the absence of a long-term strategy for institutional changes, corruption, the inadequacy and narrow focus of state structures in this field.

![Fig. 2. Structural and logical diagram of "institutional traps" in the organizational and economic structure of the green economy of Ukraine](source: author's own development)
Figure 2 shows a diagram of the organizational and economic structure of the green economy of Ukraine and "institutional pitfalls in its structure":

Figure 2 shows the following institutional pitfalls of the green economy of Ukraine:
1 – lack of an innovative view of the potential of urban green areas;
2 – outdated financing schemes; lack of legally defined standards for greening cities; lack of provisions on the promotion of climate change adaptation strategies; lack of provisions on the implementation of environmental directives of the EU; lack of provisions on communication with the public; lack of provisions regarding the socially oriented development of green areas; the absence of a legal framework for the extension and protection of the contracts of improvement companies with the city government when it is changed; lack of possibility of subscription and long-term contracts within budget funding;
3 – insufficient statistical reporting and availability of data on the development and financing of green spaces; lack of a comparative analysis of the development of green spaces in cities; lack of data on the development of green areas in small towns and urban-type settlements; lack of long-term programs and plans for the development of green areas for 10-20 years; the choice by the city government of companies that provide the cheapest services; the absence of an independent expert commission that would provide an assessment of the work of the green improvement company, as well as the officials who are responsible for the project; the lack of dialogue between the authorities and society regarding the work carried out and their quality;
4 - insufficient statistical reporting and data availability; ineffective management
5 - lack of opportunities to influence the decision-making of higher institutions.

In the work of Stryzhak O.O. the reasons for the existence of institutional traps are summarized, among which it is possible to single out those that are most characteristic of the institutional sphere of the development of city parks in Ukraine, namely (Stryzhak, 2019):

- Effect of increasing returns – support of an inefficient institution by a large number of players;
- The effect of coordination – following the established norm, which does not contribute to the effectiveness of the institute;
- Self-reinforcement – increasing the probability of choosing the current norm in the next period as a result of adapting the parameters of the economy to the current norm;
- Cultural inertia - reluctance to change the stereotypes of the past.

Inefficient formal institutions slow down development, and the institutional system is unable to change formal norms, which in aggregate leads to the emergence of an institutional trap (Stryzhak, 2019). There are three ways of borrowing from sustainable development institutes, namely:
- construction of the institute according to the ideal theoretical model;
- reproduction of examples of effective institutions that took place in the history of the country;
- construction of institutes based on the models of other countries.

There are two ways out of the "institutional trap" - evolutionary and revolutionary. Evolutionary is softer and takes longer. Revolutionary involves revision of ineffective norms and institutional reform. In the context of the integration of Ukraine and the EU, it is important to choose a revolutionary path that will involve a new approach to the development and maintenance of green spaces. The improvement of the institutional structure should involve its transformation into a more open and flexible system related to various spheres of social well-being, but in the context of the development of green spaces.

Conclusions and perspectives of further research. As the analysis of the concepts of "sustainable development" and "ecosystem approach" showed, the joint application of their principles complement each other, and therefore is relevant for the development of city parks. The analysis of the institutional environment of Ukraine in the field of organizational and economic support for the functioning of city parks showed significant gaps that hinder the development and implementation of effective changes. Solving the problem of the existence of these "institutional traps" is of primary importance for further reforming the sphere of urban green economy. The fight against outdated views on the field of park management should include joining the world experience of urban parks and innovative solutions of green cities. Therefore, official cooperation with foreign organizations, participation in qualification improvement, certification, and promotion of cities at the international level should be an important component of improving the institutional system.

As the analysis of the quantitative indicators of provision of green zones per capita showed, Ukraine has a significant potential to present a significant number of its cities at the AIPH World Green City Awards international competition. At
the same time, poor international cooperation in this field and the residual principle of support and financing of parks do not allow the implementation of innovative initiatives that should be presented at this competition. This shows that Ukraine is losing chances to improve its image due to the outdated institutional system of park development. In the condition of international competition and high demands on Ukraine from the European Union, solutions to combat institutional traps should be revolutionary, but at the same time easily adapted to the existing system of local self-government bodies.

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