CONCEPTUAL PRINCIPLES OF BLUE GROWTH IN THE DEVELOPMENT OF NATURAL ASSETS IN URBAN PARKS OF UKRAINE

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Introduction. For the coastal regions of Ukraine, the conceptual provisions and principles of the blue economy, which define the main approaches to the functioning of maritime industries in the context of sustainable development, have recently become particularly relevant. Harmonious development of coastal regions is impossible without considering the main components of nature management and their connection with the concept of blue growth. One of the important directions of natural use within the city, particularly on the seaside, is recreation in city parks and related activities of related sectors of the economy. Therefore, this study substantiates conceptual approaches and defines the role and place of city parks in the economy of nature use based on blue growth.

Aim and tasks. The purpose of the study is to substantiate the conceptual provisions of the use of natural resources of city parks as natural assets in order to form effective strategies of sustainable development, in particular, on the principles of blue growth of city parks in accordance with their condition and the degree of influence on the development of urban space and society.

Results. In the context of the study, the differences of such concepts as: "natural capital", "natural resources", "natural assets", "ecosystem functions", and "ecosystem services" are substantiated, which is revealed by taking into account the conceptual and systemic features according to the presence of the consumer and involvement in economic and social processes. Based on this, the essence of the natural resources of urban parks as assets was analysed and substantiated using the GE/McKinsey matrix. It was determined that different city parks are unequal in terms of availability of natural assets and their contribution to urban improvement and economic development. In the matrix analysis process, urban parks were typified according to the degree of involvement of their natural assets in economic and social processes, which allowed for the prediction of differences in risks that arise in the process of decision-making and organizational and economic measures regarding the functioning of parks.

Conclusions. Thus, based on the improvement of conceptual provisions regarding the use of the natural assets of city parks, a conceptual basis for the study was developed in the context of sustainable development, and the peculiarities of the understanding of city parks as natural assets were determined. Based on the matrix analysis results, the types of city parks were determined according to the quality of their resources and their importance (role) to the city, and the risks that arise in their functioning were substantiated. It has been proven that tasks and priorities regarding the development of city parks should be based on natural, economic, and social factors, and that their functional dependence on the effectiveness of decision-making is substantiated.

Keywords: blue economy, city parks, natural assets, economic development, public welfare.

1. Introduction.

In a modern urban environment, there is increasing awareness of the role of urban green spaces, particularly parks, in the harmonious development of large metropolises and small cities based on the principles of sustainable development. At the same time, modern challenges (political, technogenic, climatic, urban, and recreational) have changed the role and functions of city parks, which are recognized by scientists and have become an impetus for developing new approaches to their management and organization. These challenges, on the one hand, increase the vulnerability of city parks and, on the other hand, contribute to the study and justification of their economic content. Determining the essence of the economic component of park space helps to approach the development strategies of green areas in a more reasonable manner, taking into account the specific economic, environmental, and social aspects of the selected city.

Despite its comprehensiveness regarding the growth of coastal areas, the blue economy, as an independent direction of international scientific research, bypasses the issue of the role of green areas and city parks. The green spaces of cities can significantly enhance, for example, the recreational and cultural spheres in the context of blue growth. Therefore, this study is devoted to the development of conceptual foundations for the sustainable development of urban parks based on the determination of the impact and degree of significance of various parks for the development of urban space through an understanding of the essential importance of their natural assets.

There is a lack of data on the economic justification of the functioning of city parks from the point of view of understanding their impact on social and economic development, the importance of relevant levers of regulation, and organizational and economic support. At the same time, the effectiveness of management decisions regarding city park development strategy depends on factors and the degree of their consideration. Therefore, it is necessary to realize that city parks are usually different in terms of their beneficial effects on the social, economic, and ecological components and characteristics of urban space, even under the conditions of the same areas of green spaces.

In this regard, the novelty of this study regarding the ranking of city parks according to the degree of transition of their natural resources to the status of natural assets is theoretically and practically significant, as well as the presented functional dependence of the effectiveness of management decisions regarding the development of city parks on groups of natural, social, and economic factors.

Therefore, the proposed strategic guidelines for the sustainable development of city parks, depending on their type, can enable the formation of an individual approach when developing long-term plans and strategies for urban and regional socioeconomic development. The application of the principles of the blue economy is consistent with the modern trends of sustainable development, which determines the relevance of the concept of sustainable development of urban parks in coastal regions in the context of blue growth.

2. Literature review.

Modern research by domestic scientists includes justification of the city's green infrastructure as an essential component of its ecosystem (Cheng et al., 2021; Cherchyk, 2008; Kim & Son, 2021; Li et al., 2021). This approach is vital for promoting a comprehensive vision for developing green areas, given their relationship with both the ecological situation and the social and economic space of the city.

A separate impetus to the integrated development and management of green areas of cities is developed provisions within the concept of inclusive nature management (Kostetska et al., 2020; Stehnei & Irtyshcheva, 2022), as well as research on the multifunctional nature of urban green spaces (Chamara et al., 2020; Serdiuk et al., 2023; Shevchenko et al., 2020; Vartanian, 2015). The balanced development of green infrastructure in the context of blue growth is impossible without the concept of sustainable development, which has thorough developments (Han & Cao, 2024; Kvach et al., 2020; Petrushenko & Grunwaldt, 2021), which is applied in a comprehensive and narrow sense of economic and social growth.

As for the blue economy and the development of its sectors, studies have primarily focused on developing the concept of particular spheres of the economy, such as aquaculture (Iermakova et al., 2023), maritime transportation challenges (Kanellopoulos & Amditis, 2022), innovative development of coastal ecosystems and territories (Chen et al., 2024; Okumus et al., 2024).

Scientific issues of the development of urban areas and the rational use of recreational, natural resources are often considered without actualizing the issues of the blue economy but contain significant achievements that can be used as a basis for the development of the concept of the development of recreational areas in the context of blue growth (Andryeyeva et al., 2018; Melikh et al., 2019; Pavlikha et al., 2023).

Considering the complexity and multifacetedness of modern approaches to the study of natural resources of seaside cities, the substantiation of the natural assets of city parks should be based on the essential definitions of the economics of nature use (Boyce, 2001; Burkynskyi et al., 2020; Glasmeier & Farrigan, 2005).

Among the main research methods on the development of the economy of nature use, matrix analysis is often used. These approaches have been developed in this research, which allows the correlation of many criteria and analysis of a wide range of positions obtained. Examples of the use of this method and its interpretation concerning the economics of natural resource management were studied by Bai et al. (2024), Gilbert & Shi (2024), and Hu et al. (2024), in which land was ranked according to the degree of their investment attractiveness, in particular, risk factors.

At the same time, despite the significant scientific basis of the economics of nature use, in Ukraine, the issue of justification and methodological aspects of the development of city parks, their natural resources, and economic and social potential still needs to be studied. Modern studies of the economics of nature use to raise questions about the application of the principles of sustainable de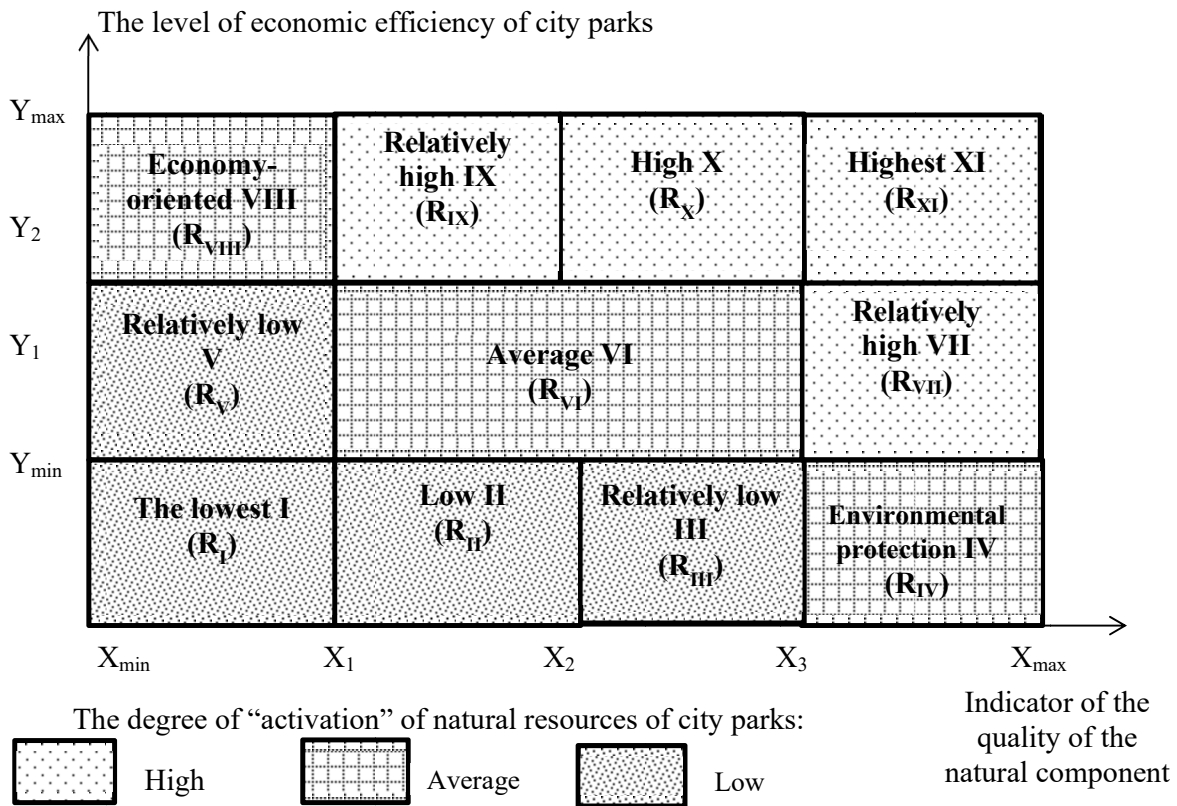velopment to urban parks, and the corresponding optimization of their management policy (Slätmo et al., 2022), as well as about the role of urban green spaces in the context of sustainable urban development (Horbliuk & Dehtiarova, 2021; Štrbac et al., 2023). Considering the importance of urban green space for many aspects of sustainable development, the economic understanding of natural assets concerning city parks and their definition as a component of natural capital remains unfounded.

Currently, the development of city parks in Ukraine is managed as an object of communal property. However, a particular management approach is applied to parks of protected importance or those with protected areas, which are considered in relevant city target programs. Implementing the ecosystem and sustainability principles and understanding the park's natural resources' economic essence, namely as assets, actualizes the issue of conducting further research on improving the park management system, including the empowerment of nature protection agencies and park management employees.

3. Methodology.

In order to substantiate the inequality of different urban parks in terms of urban improvement, as well as the inequality of their natural resources and conditions in the context of the transition to the status of natural assets ("activation"), a matrix analysis is used, namely the GE/McKinsey matrix, which makes it possible to compare economic efficiency and the state of the natural component (natural assets).

For this purpose, it is proposed to rank the various degrees of transition of natural resources of city parks to the status of natural assets in the coordinate system, where the X-axis is the indicator of the quality of the natural component and the Y-axis is the level of inclusion of natural resources in the economic and social space of the city. Based on this ranking, parks with a high degree of "activation" of natural resources and conditions can be distinguished as medium or low, depending on the level of inclusion of the natural resources of the parks in the economic and social space of the city and the qualitative state of the natural component (Figure 1).

The level of economic efficiency of city parks

Economy-oriented VIII (R_{VIII})	Relatively high IX (R_{IX})	High X (R_X)	Highest XI (R_{XI})
Relatively low V (R_V)	Average VI (R_{VI})		Relatively high VII (R_{VII})
The lowest I (R_I)	Low II (R_{II})	Relatively low III (R_{III})	Environmental protection IV (R_{IV})

Y_{max} Y_2 Y_1 Y_{min}

X_{min} X_1 X_2 X_3 X_{max}

The degree of "activation" of natural resources of city parks:

High   Average   Low

Indicator of the quality of the natural component

Fig. 1. Ranking matrix of city parks according to the degree of transition of their natural resources to the status of natural assets.
Source: authors' own development.

Thus, applying the GE/McKinsey matrix made it possible to distinguish eleven types of city parks according to their socio-economic significance and contribution to public well-being. This means that the existing urban target programs for developing and beautifying green areas must consider the characteristics of their natural assets, which can only be equally effective for some types of parks. This can explain why, for example, under the same green zone development program, different indicators of attractiveness and demand for city parks from consumers were observed.

4. Aim and tasks.

The purpose of the study is to substantiate the conceptual provisions of the use of natural resources of city parks as natural assets in order to form effective strategies of sustainable development, in particular, on the principles of blue growth of city parks in accordance with their condition and the degree of influence on the development of urban space and society.

The tasks of the study were as follows:
- determination of the essence and justification of the specificity of the concept of natural assets of city parks;
- definition of risks that are characteristic of different types of parks;
- determination of the strategic development of city parks according to the degree of importance of their natural assets.

To solve the tasks set in this study, the following scientific methods were used:
- Scientific generalization to justify the specificity of the concepts "natural capital", "natural resources", "natural assets", "ecosystem functions", and "ecosystem services", depending on the presence of the consumer;
- Matrix analysis to substantiate the inequality of natural assets of parks according to the degree of their involvement in the social and economic development of the city;
- A mathematical analysis is used to substantiate the variables that impact the effectiveness of management decision-making regarding city park development.

5. Results.

Today, city parks are an important factor in the comfort of urban spaces, as are their attractiveness and competitiveness. At the same time, domestic statistical reports show that parks are not considered separately, but in the context of the development of the green economy of cities as a whole, they also include green objects such as parks, boulevards, buffer zones, landscaped residential areas, and landscaped areas of institutions, facilities, and enterprises.

The development of natural assets of urban parks in the context of "blue growth" is further discussed using the example of providing green space to the seaside city of Odesa in Ukraine. Even in wartime, this city remains a favourite place of rest among the residents of Ukraine. Therefore, developing its recreational potential is a priority task for the post-war recovery of the recreational sphere. Table 1 shows the indicators of the development of 17 officially registered parks in Odesa as of 2020 (Department of Municipal Economy of the City of Odesa, 2020).

Table 1. Availability of city parks in the administrative districts of the city of Odesa (2020).

№	Object	Total area, ha	Lawns, ha	Trees, pcs.	Shrubs, pcs.
	Prymorskyi district				
1	Greek Park	3.94	2.7951	545	79
2	City Garden	1.995	0.74	230	37
3	Victory Park Arboretum	48.9205	41.172	19800	10154
4	Istanbul Park	3.48	2.2393	1315	2886
5	Taras Shevchenko Central Park of Culture and Recreation	44.3597	37.2554	17866	10098
6	Yunist Park (8 st. Big Fontain)	4.043	3.0598	249	255
7	Yunist Park (right side)	1.8114	1.6111	364	137
8	Cosmonaut Park	5.16	3.5549	887	
9	Preobrazhenskyi Park of Culture and Leisure	13.7	8.909	2517	2999
	Peresypskyi district				
10	Forest Park "Shkodova Hora"	26	21.19	4975	850
11	Kotovsky Park	25.77	23.613	9424	2616
12	Youth Park	6.498	4.798	2287	647
	Khadzhybeiskyi district				
13	Airport Forest Park	43.3	27.4	21650	70000
14	Park Savytskyi	19.326	17.55	6213	3500
15	Artpark	15	14.15	7762	663
16	Park Horkoho	17.861			
	Kyivskyi district				
17	411 Battery	49.0165	27.2615	21316	450

Source: based on data of the Department of Municipal Economy of the City of Odesa (2020); Miskzelentrest Odesa (2023).

The most well-off district in terms of the number of parks is Prymorskyi, and the least is Kyivskyi district. The situation is slightly different regarding the ratio of the total area of city parks to the total area of recreational green spaces. Thus, Khadzhybeiskyi district has the most extensive park area at 76.8%, and Prymorskyi district has the smallest at 57.4% of the park area (Table 2).

Table 2. The share of park areas in the total area of recreational plantations by administrative districts of Odesa in 2020.

District	Total area of recreational plantations, ha	Total area of city parks, ha	Percentage ratio of parks to recreational areas, %
Prymorskyi	221.9601	127.4096	57.4
Peresypskyi	100.1659	58.268	58.2
Khadzhybeiskyi	124.3689	95.487	76.8
Kyivskyi	71.1472	49.0165	68.9

Source: based on the Miskzelentrest Odesa (2023) and Department of Municipal Economy of the City of Odesa (2020).

As could be seen, city parks make up more than half of the total area of recreational plantations. Kyivskyi district has the lowest indicators of the area of parks and recreational areas. Parks must have the most significant recreational potential and capacity among all recreational facilities. Therefore, the percentage of park areas compared to the total area of the city's administrative districts and their capacity (m^2) per inhabitant of the district were determined (Table 3).

Table 3. Provision of city parks for residents of Odesa in 2020.

District	District area, ha	Percentage ratio of the area of all parks to the area of the district, %	Number of population of the district, thousands of people	Provision of parks per person, m^2/person
Prymorskyi	2420	5.3	259	4.9
Peresypskyi	2530	2.3	263	2.2
Khadzhybeiskyi	8970	1	242,9	3.9
Kyivskyi	4770	1	256.58	1.9

Source: calculated based on the Miskzelentrest Odesa (2023); Odesa City Council (2023a; 2023b; 2023c; 2023d).

According to the Ministry of Construction, Architecture and Housing and Utilities of Ukraine (2006), green areas for public use are regulated as follows:
- Citywide – 12 m^2/person;
- Residential areas – 7 m^2/person.

It can be seen from Table 3 that the calculated supply of parks per person does not meet the established standards, and in Khadzhybeiskyi district (2.2%) and Kyivskyi district (1.9%) it is generally meager. In general, the city of Odesa is unique in terms of its economic and recreational potential, which should be taken into account when developing a sustainable development strategy and the principles of blue growth in combination with the development of green infrastructure.

In order to develop an economic toolkit for the use of natural assets of city parks within the framework of blue growth, it is necessary to determine the basic principles and provisions of the blue economy, as well as the main economic entities that participate in it. According to the definition of the "blue economy" provided by the World Bank, it "aims to promote economic growth, social integration and preserve or improve livelihoods, while ensuring the ecological sustainability of oceans and coastal areas" (The Ocean Foundation, 2024). The Center for the Blue Economy interprets this concept as "the overall economic contribution of oceans and coasts to the national economy, as well as the need to address the sustainability of these natural assets" (Grimm et al., 2017). That is, the interests of the "blue economy" are based on the marine economic complex and the preservation of marine and coastal ecosystems. In this research, the study focused on improving the conceptual provisions regarding the economic essence of the use of natural assets of urban parks within the framework of blue growth for seaside cities and regions.

As part of the work of the Financial Initiative at the UN, 14 principles (UNEP, 2018) for financing a sustainable blue economy were proposed. There were proposed to be guided by these principles when developing an economic toolkit for the use of natural assets of city parks in coastal regions and identify the main ones (Table 4).

Table 4. Principles of sustainable blue economy financing in the context of the development of city parks.

№	Principle	City parks
1	**Protection**	**It can be applied**, including in the context of the creation and functioning of marine and coastal parks of protected importance
2	**Compliance**	**Promising** with the support of international investments and private initiatives
3	**Risk awareness**	**It requires development** when programming the influence of city parks on the development of coastal regions
4	**Systematic**	**It requires development** within the framework of assessing the direct and indirect effects of city parks on the development of coastal regions
5	**Inclusiveness**	**Can be applied** in the context of accessibility of city parks and their arrangement
6	**Cooperation**	**Can be applied** to the creation of marine and seaside parks of protected importance, and the operation of educational and cultural programs based on them
7	**Transparency**	**Desirable** for improving the accounting system of city parks
8	**Objectives**	**Possible** as part of targeted programs for the development of green spaces
9	**Effectiveness**	**Possible** as part of targeted programs for the development of green spaces
10	**Precautionary measures**	**Desirable and relevant**
11	**Diversifications**	**Desirable**
12	**Solution orientation**	**Promising** when creating a network of marine and seaside parks of various types (nature protection, recreation, research, entertainment, etc.)
13	**Partnerships**	**Desirable and relevant**, in order to solve the problem of low funding from the state
14	**Scientific approach**	**Desirable**

Source: based on The Sustainable Blue Economy Finance Principles (2018).

In the framework of blue growth, the presented principles should be applied to the use of natural assets of city parks. The special connection of the natural assets of the parks with the local economy within the framework of blue growth is due to the impact on the recreational and nature protection components.

Therefore, in order to understand the role of city parks in the development of the blue economy, it is necessary to foresee the implementation of its principles, in particular through the organization of green infrastructure. Figure 2 presents the author's vision of the relationship between city parks and the blue economy:
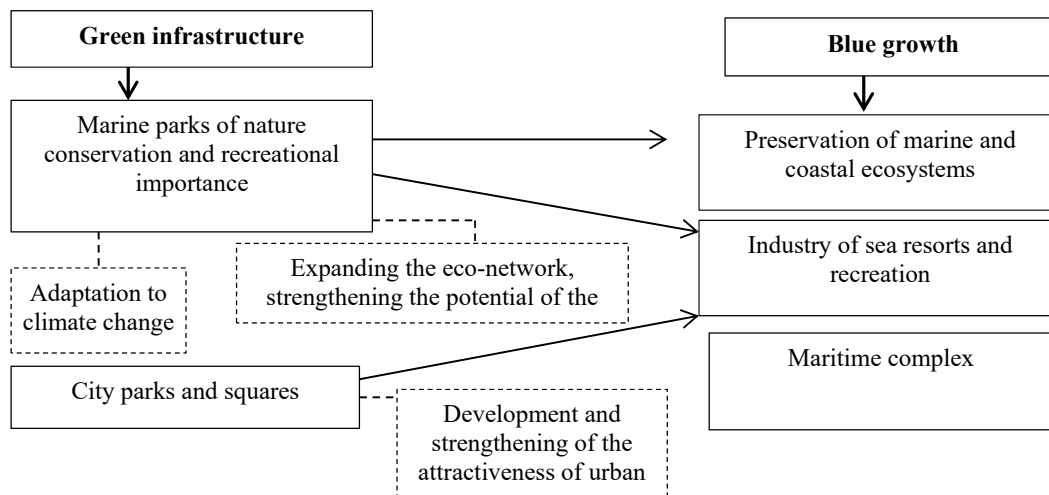

Fig. 2. The connection of city parks with blue growth.

In order to build the most effective strategies for the development of city parks in the context of the blue economy, it is crucial to interpret their natural assets correctly. According to the World Forum on Natural Capital, natural assets include: soil, air, water, flora, fauna and ecosystem services (The Scottish Wildlife Trust, 2017), so natural assets perform the functions of ecosystem services, which are a public good used by people. As Boyce (2001) notes, certain features of natural assets can be identified that distinguish them from financial assets and real estate. Thus, "the availability of natural assets not only brings income but also improves the health and ecology of the environment, which is not related to income". The second feature is that "every person has the right to natural assets". A third feature is the "inaccuracy in the identification of property rights over natural assets" and the "distribution of these rights among different parties" (Boyce, 2001).

According to the above-mentioned, were offered a fourth feature of natural assets which can exert both direct and indirect influence on social and economic spheres.

Boyce (2001) also notes that natural resources become assets when people have rights to them. Therefore, not all urban parks are of equal value regarding natural capital, and not all their natural resources automatically qualify for natural asset status, particularly in a market environment. Therefore, considering the city park as natural capital, it is possible to illustrate the relationship between the following concepts as follows: "natural capital", "natural resources", "natural assets", "ecosystem functions", and "ecosystem services", which are often identified but differ in their essential value, taking into account the nature and possibility of their use by a person, as a consumer of the results of production processes (Figure 3).
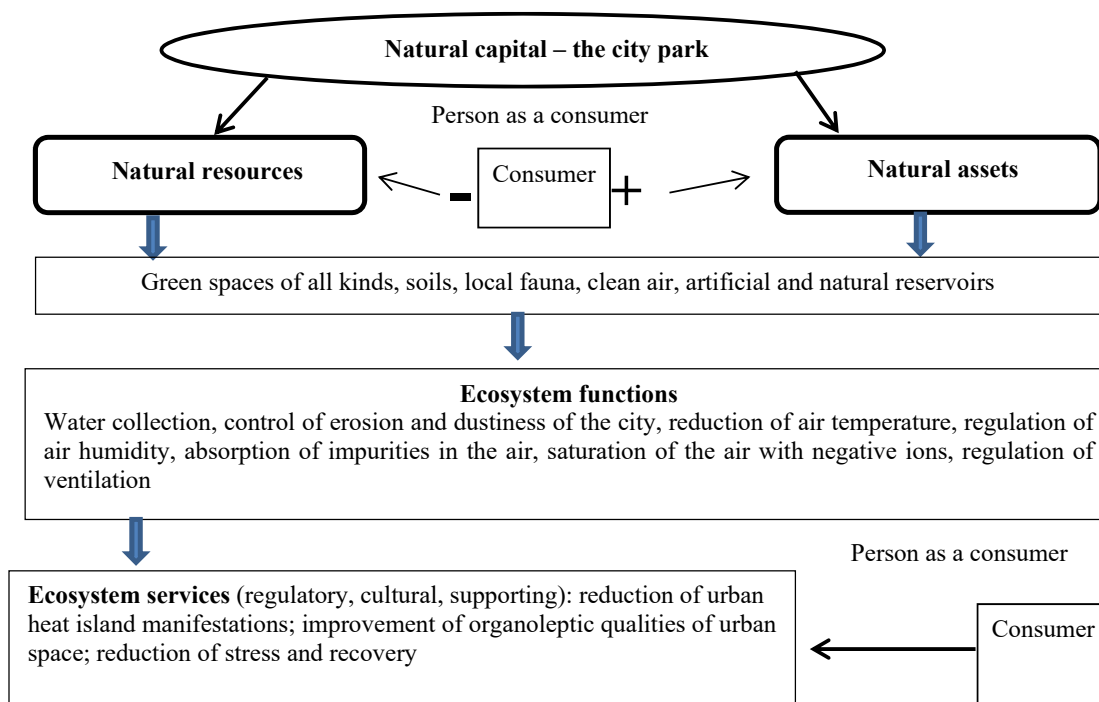
Fig. 3. Justification of the concept of "natural assets" of the city park.

As can be seen from Figure 3, the presence of a person as a consumer concerning the resources of city parks justifies the transition of the concept of "natural resources" to "natural assets" and "ecosystem functions" to "ecosystem services".

It is possible to define the concept of "activation" of natural resources of city parks, which was proposed to understand the process of including the natural resources of the city park in the economic and social space of the city, during which citizens have the right to use them, and satisfy recreational, cultural, and aesthetic needs.

During the economic substantiation of the natural assets of city parks with the aim of their further effective use, the problem of identifying their significance for the social and economic development of cities and the ecological well-being of territories arises. Consequently, through demand and use, natural resources become natural assets and provide ecosystem services. Ranking the natural assets of city parks using a matrix analysis, namely the GE/McKinsey matrix allows determining the degree of "activation", the nature of involvement in the economic sphere, and the difference in the socio-economic importance of different types of parks. Therefore, according to the matrix analysis, could be distinguished the following types of city parks (Figure 1):

1. City parks with a high degree of "activation" of natural resources and conditions:

The highest (XI) – the natural resources of city parks have the highest degree of transition to the status of natural assets, which is expressed in the ability to form a city brand, attract foreign tourists, have a significant impact on the price of real estate in the surrounding areas and its transition to elite status, as well as high quality of the natural environment and significance of park ecosystems. When implementing projects, management and investment decisions regarding the development of city parks, it is possible to obtain the maximum economic effect for investors and the best recreational effect for visitors. Risks for this type of park (R_{XI}) are abuses by investors and opportunistic behaviour of managers, which can negatively affect the state of the environment and deteriorate the natural environment, contributing to a high level of corruption around the adjacent land plots. For these parks, it is essential to ensure strict monitoring of proposed projects, mandatory consideration of social and environmental interests, and public control.

High (X) – the natural resources of urban parks have a significant degree of transition to the status of natural assets, which is expressed in a high priority among investors and the urban population. However, the natural component of the park needs improvement and protection. Risks for this type of park (R_x) are also possible abuses by investors and managers, which can degrade the natural environment.

Therefore, when implementing projects related to the use of natural assets of this type of park, priority should be given to environmental protection measures.

Relatively high (IX, VII) – the natural resources of city parks have a relatively high degree of inclusion in the economic and social space of the city. However, in the case of urban parks of the IX type, in landscaping, priority is given to entertainment infrastructure, and the natural ecosystem will have an increased recreational load and a weakly stable ecological state. The risks for this type of park (R_{IX}) are the neglect of environmental regulations to obtain financial benefits. Therefore, it is important for them to regulate recreational and anthropogenic loads.

In the case of assigning parks to type VII, the priority of improvement is given to measures to preserve the natural environment. To increase economic attractiveness, it is necessary to implement innovative approaches to the organisation of recreational nature use that will not harm the natural component. The risk (R_{VII}) for this type of park is that they may encounter unscrupulous investors. Therefore, it is important for them to increase social significance, which can become a guarantee of protection from the public. For example, it would be relevant for these parks to organise general educational and recreational activities on the territory of the park, with the help of which it is possible to organise the recreation of citizens without harming the park, and at the same time with a high recreational effect and a spectrum of positive impressions.

2. City parks with an average degree of "activation" of natural resources and conditions:

Medium (VI) – natural resources of city parks have an average degree of transition to the status of natural assets. The natural component needs protection and improvement, and the park does not have a significant impact on the value of real estate in the surrounding areas. It does not attract visitors from other areas of the city. Risks (R_{VI}) for this type of park also consist in the possibility of encountering unscrupulous investors who will significantly increase the economic attractiveness but, at the same time, will not reveal the natural potential and even harm it.

For this type, it is crucial to implement comprehensive park development measures. At the same time, priority should be given to nature protection measures and the disclosure of natural potential through improving the quality of all components of the park's ecosystem.

Economically oriented (VIII) – city parks have high economic efficiency and even bring profits. However, the territory is characterised by a low level of natural component provision, and natural ecosystems are disturbed and degraded. This type of park includes specialised amusement parks and cultural and recreational services, based not on the natural component but on the entertainment infrastructure. Risks (R_{VIII}) for this type of park should be considered in two directions: (1) economic risks that may arise mainly due to economic instability, seasonal decrease in visitors, significant selectivity for this type of parks among citizens, orientation mainly on the younger generation; (2) environmental risks, which are expressed in a high rate of ecosystem degradation, and environmental protection measures are not among the priorities due to the park's clearly expressed entertainment specialisation. For parks of this type, it is necessary to implement complex programs of development and beautification.

Nature conservation (IV) – natural ecosystems in excellent condition, most often with protected status, the park has low economic efficiency. This type can include botanical gardens. Risks (R_{IV}) for this type consist of the interest of unscrupulous investors, the corruption component regarding the illegal allocation of parklands, and on the other hand, the low level of funding from the state. Therefore, for these parks, it is crucial to establish the receipt of additional funds by organising citizens' recreation without harming the park based on the zoning of its territory, as well as to strengthen responsibility for non-normative activities on the park's territory.

3. City parks with a low degree of "activation" of natural resources and conditions:

Relatively low (III and V) - the natural resources of city parks have a low degree of transition to the status of natural assets. In the case of type III, the natural component is in a satisfactory condition.

However, the park is characterised by low economic efficiency and the need for significant improvement of infrastructural components, such as the repair of alleys, roads, benches, lighting, decorative architectural elements, etc. Risks (R_{III}) for this type are low attractiveness precisely because of the low level of landscaping. Therefore, such parks need to implement restoration projects that preserve the natural component.

In the case of a medium degree of economic effect from using natural assets of urban parks (type V), the infrastructural component is more developed, and the natural one needs significant improvement and conservation. Risks (R_V) are the probability of further development of the park towards economically attractive infrastructure, while the natural component needs special attention. Complex development emphasising the primacy of the natural component is vital for parks of this type. The low degree of inclusion of natural assets of the parks in the economic and social space of the city (type II) is the park has average indicators of ecological stability of the ecosystem but does not have a significant impact on the tourist attraction of the city and does not provide economic effects. The park requires subsidies from the city budget but does not indirectly affect economic development. These are mainly large parks that require effective management and development of projects to increase their attractiveness to citizens. Risks (R_{II}) consist of the difficulties of implementing park restoration projects due to the low level of state funding. Therefore, for this type, it is important to develop a plan and tasks for the park's development and to attract private partners for their implementation.

The lowest degree of inclusion of the natural assets of the parks in the economic and social space (type I) is the abandoned territory of the city park, which needs both the restoration of the infrastructure and significant improvement of the green spaces. Risks (RI) consist in the negative effect that the park has on the social and economic space of the city - due to its neglect, its territory carries several dangers for citizens - in the form of unsuitable infrastructure facilities, dark, deserted places, and risks of encountering persons with criminal intentions.

Because of this, citizens bypass such a park, and it does not have recreational or economic effects on nearby residential areas. This type of park requires major infrastructure repairs, improvement of all plantings and provision of safety measures for visitors.

Thus, the effectiveness of decisions regarding the development of the city park, as well as the green spaces of the city as a whole, depends on the reasonable consideration of a large number of variables that can be classified by origin:

- natural (N) – climate and topography; susceptibility to the effects of climate change; ecosystem potential; degree of degradation; the role of city parks in the regional eco-network; environmental problems of the city;

- social (S) – recreational load and demand; the needs of the population regarding parks and the degree of their satisfaction; the number of visitors; features of public order and the presence of risks of its violation; psychological characteristics of different categories of the population – men and women, the elderly and youth; the general psycho-emotional climate in society; the presence of people with special needs;

- economic (E) – the financial condition of park farms; competencies of local self-government bodies; the economic situation of an individual city; local and regional programs for the development of green areas; regulatory and legal sphere of regulation; degree of involvement of private partners and investment attractiveness of city districts and the parks themselves.

Thus, the dependence of the effectiveness of decisions regarding the development of city parks on the factors mentioned above can be expressed in the form of a function that allows determining the state of the management system:

$$F = f(N_{1-n}, S_{1-n}, E_{1-n}) \qquad (1)$$

Considering the above-mentioned typification of city parks according to the degree of inclusion of their natural resources in the economic and social space of the city, as well as a wide range of factors for their effective development, it is possible to propose strategies for the development of city parks, taking into account the specific risks for each type.

As mentioned above, three parks were distinguished according to the degree of "activation": high, medium, and low. Each type was suggested to develop development strategies that met the following criteria in the context of overcoming identified risks (Table 5).

Table 5 presents the main criteria for the development strategy of city parks based on the blue economy, depending on the degree of "activation" of their natural resources and the corresponding toolkit. It is also possible to highlight the general priorities of the strategy of sustainable development of city parks in the context of blue growth, which will be relevant for all three types of parks:

- harmonization of the design of park areas in the system of urban green infrastructure;

- promoting the creation of an ecological network on the territory of cities;

- promoting the adaptation of cities to the consequences of climate change;

- adaptation of the development of city parks by the EU nature protection directives;

- promoting the development of the city's tourist and recreational space;

- improvement of the regulatory and legal sphere of development and functioning of city parks according to the degree of "activation" of their natural resources;

- introduction of an ecosystem approach to the development and management of parks;

- coordination of environmental, public and state interests;

- improvement of the system of accounting and monitoring of the natural component of parks and public needs;

- formation of a network of information and communication with citizens regarding the development of city parks based on the principles of the blue economy.

In order to obtain the best effects from the implementation of the strategy of sustainable development of city parks by various types of "activation" of their natural resources, it is necessary to provide for the implementation of such principles that will be consistent with the principles of the blue economy, which were considered at the beginning of this article, namely:

Legitimacy – following the existing legal framework regarding the improvement and functioning of city parks;

Strategizing – predicting possible changes and impacts on the ecological, social and economic space of the city and coastal ecosystems, from various development projects and functioning of city parks;

Balancing – equal development of natural and infrastructural components of parks with preservation and strengthening of all positive impacts of ecosystem services of city parks;

Cooperation and cooperation – involving the private sector in co-financing the development and restoration of city parks in the context of sustainability and the creation of specialized marine parks;

International cooperation – borrowing and implementation of successful international experience, taking into account the provisions of EU environmental directives;

Innovativeness – openness to the application of new approaches to the effective use of the territories of city parks for recreation and health (healing properties of plants, features of planting to achieve the most favourable effect on mental health, taking into account phytoncide properties, features of planning and its psychological effects, and much more);

Integration – the involvement of education and recreation in increasing the social value of city parks, strengthening their positive effects on human development.

Table 5. Criteria for the strategy of city parks sustainable development according to the degree of "activation" of their natural resources, taking into account characteristic risks.

Risks for parks with a high degree of "activation" (R_{XI}; R_X; R_{IX}; R_{VII})	Criteria for the development strategy of city parks on the basis of the blue economy
- abuses by investors and managers; - a high level of corruption around the adjacent land plots; - violation of environmental regulations for the benefit of financial gain; - maintaining competitiveness and attractiveness; - public safety risks due to a significant number of visitors;	- strict monitoring and selection of projects (economic monitoring); - the priority of environmental protection measures (ecological monitoring); - regulation of recreational and anthropogenic loads (ecological regulation); - increasing the involvement of the population in discussions regarding the implementation of projects (expertise as a tool); - research of public needs and public opinion (public surveys); - innovativeness (intersectional cooperation, public-private partnership); - creation of safe conditions for staying in the park (control).
Risks for parks with an average degree of "activation" (R_{VIII}; R_{IV}; R_{VI})	- a comprehensive approach to the development of parks, their infrastructure and the natural component (environmental audit and planning as tools); - the priority of environmental protection measures (ecological monitoring as a tool); - to arrange the receipt of additional funds for the support of the park (intersectional cooperation as a tool - for example, the organization of school classes on natural history without harming the park); - increased responsibility for non-normative activities on the territory of the park (application of fines).
- possible advantage of economic interests - economic risks for amusement parks: seasonal decrease in visitors, significant selectivity among citizens, focus mainly on the younger generation; - ecosystem degradation; - neglect of nature protection measures; - interest from unscrupulous investors; - low level of funding from the state;	
Risks for parks with a low degree of "activation" (R_{III}; R_V; R_{II}; R_I)	- a comprehensive approach to the development of parks, their infrastructure and the natural component (ecological and social monitoring, expertise, planning); - the priority of environmental protection measures (ecological monitoring); - involvement of private partners for the development of parks (partnership agreements); - provision in the reconstruction plans of safety measures for the operation of the renewed park with the help of organization and technical equipment (public control).
- the possibility of reconstruction without taking into account environmental standards; - limited financing for implementation of improvement and reconstruction projects; - lack of visitors due to low level of equipment and hidden dangers for visitors; - the probability of perceiving the park as an undesirable infrastructure object due to dangers.	

6. Conclusions.

Strategies of sustainable development and the principles of blue growth do not bypass the development of city parks as components of urbanized space, which improves the population's quality of life. This study developed the essence of the natural assets of city parks by the degree of integration of the effects of the use of natural resources into the social and economic space of the city. Based on the matrix analysis results, the types of parks were determined according to the quality of their resources, roles, and importance for the city's development. The substantiation of the most likely risks characteristic of each of the specified types of parks provides the author's vision of the problems of the development of the urban economy and its green infrastructure. It reveals weaknesses in their modern organizational and economic structure.

The main factors that must be considered to increase the efficiency of decision-making regarding the development of city parks (natural, economic, and social) and their functional dependence are determined. Based on the identified risks for different types of parks, the principles of the blue economy were determined, and the criteria for effective decision-making regarding the development of city parks were substantiated. The vision is based on an ecosystem approach to solving the problem of the efficient use of city parks in the context of blue growth. For any socio-economic problems and needs related to nature management, the park should be considered an ecosystem that needs modern development principles. The main provisions of the conducted research are designed to expand the range of interests of the blue economy, in particular, the inclusion of the problem of the development of city parks in the seaside regions in the subject of its research.

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