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Revitalization and Development of the Green Real Estate of Riga City

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Abstract. The general purpose of the scientific paper is to reflect the basic research results in the area of the management of the green real estate of Riga City. The interpretation of the term "green real estate" includes parks, gardens, squares, alleys and other green urban open space. Scientific research discussed within the framework of the paper has an observational case study design. The main results of the research are related to the study of the management process of the revitalization and development of parks and open spaces in the City of Riga. Based on the research results, conclusions and elaborations received within the study, recommendations for the improvement of the management of green space of Riga City are developed.

Keywords: development, green space, real estate management, revitalization.

I. INTRODUCTION

This chapter examines topicality and scientific aspects of the research "Revitalization and Development of the Green Real Estate of Riga City".

World Health Organisation with the help of the Report of the Millennium Ecosystem Assessment "Ecosystems and Human Well-Being. Health Synthesis" in 2005 has focused public attention on the fact that diverse and friendly green urban open spaces are desirable. This is reflected in high real estate values adjacent to attractive open spaces. There is a hypothesis that green contributes not only to tangible but also to intangible landscape services such as benefiting human health and wellbeing. Individual studies report on the benefits of green to human health, both physically and mentally, on green open spaces affording ventilation and thermal comfort in urban heat islands, on retention of storm water, on preventing air pollution, and on people using such areas for food and fuel/energy production. Functions that are important for the quality of life, adapting to the climate change and for emergency management related to natural hazards such as floods, fires and earthquakes [1]. According to Diedrich Bruns (Diedrich Bruns – deu.), green open space would contribute to resilient societies. However, there is little proof that substantiates such hypothesis and much research is needed to better understand such complex relationships [2]. A leading author on sustainable development Herbert Girardet considers that public spaces and parks form a crucial feature of liveable cities. Unlike in many 19th-century cities, frequently not enough space is kept aside for them. Too often, attractive, safe and well-maintained spaces are located in privately owned, enclosed shopping centres. Yet public parks are important for people from whose lives the experience of green space and biodiversity has gone missing [3]. Enrique

Penalosa (Enrique Peñalosa – spa.), former mayor of Bogota (Bogotá – spa.), observes that parks and public space are important to a democratic society because they are the only places where people truly meet as equals. Parks are also essential to the physical and emotional health of a city. However, this is not obvious from most budgets, where parks are treated as somewhat of luxury. Roads, the public space for cars, receive infinitely more resources and less budget cuts than parks, the public space for children [4]. In Enrique Penalosa's opinion parks play many non-obvious roles in constructing a society. However, one of the most important is to make cities more egalitarian.

Clark and Jauhiainen (Clark - fin, Jauhianen - est.) found that the "greening" of European cities has been one of the most important widespread and controversial of modern urban development's [5]. Notions of the "green" city go back at least to the seventeenth century, when Thomas Fuller described the English provincial town of Norwich as: "Either a city in an orchard or an orchard in a city. So equally are houses and trees blended it." [6]. But it was in the nineteenth century that references to green space in the urban context multiplied. The need for "zones of open country" around London was mentioned in the 1820s and "green corridors" in the 1880s, and similar phrases were picked up and disseminated in other cities and towns across the continent [5]. Robert Schafer (Robert Schäfer - deu.) in "Parks. Green urban spaces in European cities" emphasizes, that a city without a park is not a city, at least not a modern one. No other open space, be it a square or a boulevard, an arcade or a promenade, is able to do what a park can. It's quite substantial contribution takes in the disciplines of ecology, aesthetics, sociology, and sport. A great many interests and needs are concentrated in a park. The value of a park for a community is undisputed. Controversy arises if a new park is to be created. Everyone wants to have their say even though the financial investments involved are considerably lower than for any run-of-the-mill bridge structure. On the one hand, this is an indication of its status, and on the other, of difficulties surrounding its application [7]. In some cases an economic value of the park as a green real estate comes in front of the institutional and public decisions and activities. The necessity to provide a study on the improvement of the management of green space of Riga City ($R\bar{\imath}ga - latv$.) going well beyond the traditional value of parks determines the topicality of the scientific research. In order to achieve the above mentioned purpose the following assignments are

1. With the help of the monographic method to discuss ideas, attitudes and phases of the development of green space

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in Riga City; using the questionnaire method to focus attention on the management of green space of Riga City nowadays.

- 2. With the help of the benefits approach to evaluate managerial aspects of green real estate.
- 3. Using the case study approach to explore the importance of the revitalization and development of green space in Riga City.

The main research results are related to the development of the recommendations for the improvement of the management of green space of Riga City.

II. RIGA – THE CITY OF GARDENS

This chapter will discuss the ideas, attitudes and phases of the historical development of urban parks and green areas in Riga City in the period from the 13th century until nowadays.

"The garden represents close interaction between civilisation and nature and it is of global importance as confirmation of the original aspects of culture, style, time and creativity," - expresses the Latvian architect Juris Dambis (Juris Dambis – latv.). As the landscape in Latvia developed, the city of Riga, the country's castles and estates, and its small towns - all of these had a wealth of historical gardens. Historical gardens and parks in various parts of cities are important components of Latvia's cultural heritage, and the preservation of these for future generations will satisfy the interests of Latvians and Europeans alike [8]. The famous Latvian poet Imants Ziedonis (Imants Ziedonis - latv.) has named Riga: "The City of Gardens" [9]. Describing the development of gardens in Riga, he notes that during the late 19th century a new movement emerged in the public gardens of European cities – greenery based on the principles of the natural sciences. The landscape gardeners of Riga were ready for this. Analyzing the historical development of the green areas in Riga City it is necessary to note, that the first significant town planning measures were the establishment of the two so-called Imperial Gardens (Государевы сады – rus.)[10]:

- 1. At Gustavsala (Gustavsala latv.) or Petersala (Pētersala latv.).
 - 2. At the Alexander (Aleksandra latv.) bastions.

Initially the parks were conceived as a part of an ensemble of the Imperial's palaces (Государевы дворцы - rus.), which were to be built in these places. Later, however, the citizens of Riga were able to utilize these parks for their rest and recreation. At the beginning of the 19th century, a plot of land given to the town by the widow of the merchant Vermanis (Wöhrmann deu.) was planted with trees and shrubs. In line with the terms of the gift deed, this park was open to the public. In due course the park expanded and became one of the most remarkable open spaces in the city [10]. The gardens created at the beginning of the 19th century were intended for the whole society, but the truly public gardens in the city were designed and installed after the Riga Gardens Directorate (Rīgas dārzu direkcija – latv.) was established in 1879. Riga's gardens became an urban treasure – a place where people could take walks and relax – and these gardens wisely unified and supplemented the urban

space. An overview of the development of Riga's parks and gardens over the course of the centuries is included in Table I.

TABLE I OVERVIEW OF THE DEVELOPMENT OF RIGA'S GREEN SPACE [8]-[9]-[11]

The first phase, from the 13th to the 18th century

Gardens were established in closed territories – the gardens of convents and baronial estates

The second phase, from 1710 to 1860

Riga became part of Imperial Russia, and the gardening arts developed very quickly: the first Imperial Garden on Petersala Island; the second Imperial Garden; gardens at baronial estates (the Hammer, Benkin and Thoren estates, the White baronial estate with a beautiful park and oak plantation and other locations)

The third phase, from 1860 to the eve of World War I

Suburban areas were developed very rapidly. G.Kuphald began work on the Esplanade (Esplanāde – latv.) Vermane Garden (Vērmanes pārks – latv.). The green areas of the city's main cemetery. The green areas along the city's canal. The ring of boulevards around Old Riga. The Riga Castle Square (Rīgas Doma skvērs – latv.). Jekabs Square (Jēkaba skvērs – latv.). Herder Square (Herdera laukums – latv.). The green area around the buildings that now house the Cabinet of Ministers and the Supreme Court. Tornkalna Park (Tornkalna parks – latv.). New principles of cemetery planning were put in place

The fourth phase, from World War I until 1940

A new landscape in Vermane Garden. Ziedondarzs Garden (Ziedondārzs – latv.). Moscow Garden (Maskavas dārzs – latv.). Dzeguzkalna Park (Dzegužkalna parks – latv.)

The fifth phase, after World War II

The square at the Riga Russian Drama Theater. The establishment of the Forest Park (Mežaparks – latv.) as a place for culture and recreation (1949). Esplanade (1951). The left and right banks of the Daugava River (Daugava – latv.). The green area at the Dailes Theater (Dailes teātris – latv.). The green area at the Moscow cinema (kinoteātris Maskava – latv.). Green areas in new residential areas. Victory Park (Uzvaras parks – latv.)

As could be seen from Table I, the development of Riga's parks and gardens has five specific phases. Riga's public greenery has been the work of several highly prominent gardening artists. From 1880 until World War I, Riga's director of gardens was a man named Georg Kuphaldt (Georg Friedrich Ferdinand Kuphaldt – deu.), who with great skill reconstructed and improved all the public gardens of his era. After World War I the public gardens of Riga were very successfully restored by Andrejs Zeidaks (Andrejs Zeidaks – latv.), who installed vast lawns and carefully constructed groups of perennial plants, as well as areas of greenery meant for different groups of visitors [9]. It is necessary to note that Andrejs Zeidaks successfully launched the development of public parks and gardens also outside the city centre - Ziedondarzs, Moscow Garden, and Dzeguzkalns Park. Zeidaks had a seminal influence on the development of green areas throughout Latvia. After World War II the restoration and maintenance of the city's public gardens was largely the work of Karlis Barons (Kārlis Barons – *latv.*), who designed several parks and oversaw the installation of many squares and street green areas. His lifework is Victory Park in Zemgales (Zemgales – latv.) suburb in Riga.

A new specific phase of the development of public green space in Riga City started after Latvia proclaimed independence in 1991. This period could be characterized by new forms of real estate ownership and management as well as by new landscape planning approaches and materials.

III. MANAGEMENT OF GREEN SPACES OF RIGA CITY NOWADAYS

This chapter will focus attention on the management of green space of Riga City nowadays.

Nowadays Riga is widely known in Europe for its parks, gardens, squares and alleys. In accordance to the Riga City Development Programme 2010-2013 (Rīgas attīstības programma – latv.) plantings and natural areas cover almost 25.0% of the territory of Riga. The total area of green urban open space is 7 430 hectares [12]. Green areas are a popular place for recreation and sport among local residents and foreign tourists. Urban open space and parks are an important value of the living environment of the Riga City residents as well as a significant element of the structure of the urban landscape. Urban open space and parks are a significant element of the "green" real estate of the Municipality of Riga City (Rīgas dome – latv.). There are 30 gardens and parks and 66 squares in Riga that are managed by the municipal limited liability company "Riga City Forests" (Rīgas meži - latv.). The organizational structure of the agency is schematically shown in Figure 1.

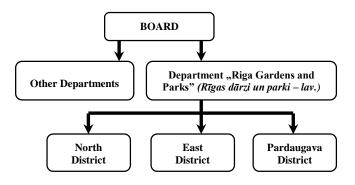


Fig.1. Organizational structure of the municipal limited liability company "Riga City Forests" [13]

As shown in Figure 1, one of the departments of the municipal limited liability company "Riga City Forests" is responsible for maintaining and restoring existing urban gardens, parks and squares as well as for creating new green areas. The department "Riga Gardens and Parks" consists of three sections – North, East and Pardaugava (Pārdaugava – latv.) In the framework of the research the sociological study was implemented for the assessment of the management of green urban areas in Riga. With the help of the questionnaire method the attention of the following audience of the respondents was focused on the management of green space of Riga City:

1. Urban residents – 18-74 years old residents of Riga City.

2. Urban development experts – knowledgeable, senior professionals whose daily work and duties related to various dimensions (incl., urban planning and management) of Riga City.

Experts' assessment of the management of Riga City green urban space during the period from 2005 till 2010 is included in Figure 2.

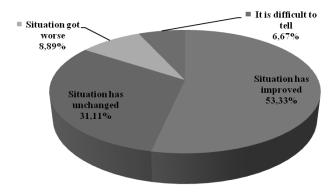


Fig.2. Changes in area of management of Riga City green urban space during the period from 2005 till 2010 [Made by the Authors].

As shown in Figure 2, 53 percent of the surveyed urban development experts positively assess the situation in the area of management of Riga City green urban space. By contrast, 31 percent of respondents admit that the situation has not changed during the reporting period. About 9 percent of the experts stressed that the situation got worse but 7 percent could not answer. It is necessary to note that within the survey Riga City residents among other significant impediments of Riga environmental improvement have mentioned the lack of green open space. In opinion of city urban residents the 8 most topical environmental development challenges for Riga City are the following:

- 1. Low air quality.
- 2. Poor developed waste management system.
- 3. Low drinking water quality.
- 4. Insufficient waste water management.
- 5. Retired vehicles, poor technical condition of vehicles.
- 6. Lack of planting and natural areas (parks, gardens).
- 7. Lack of facilitated public beaches.

It is important to note that in order to evaluate improvement of the urban environment and movement towards healthier and sustainable living areas municipality of Riga in 2009 applied for the European Green Capital Award. The objectives of the European Green Capital Award are the following [14]:

- 1. Reward cities that have a consistent record of achieving high environmental standards.
- 2. Encourage cities to commit to ongoing and ambitious goals for further environmental improvement and sustainable development.
- 3. Provide a role model to inspire other cities and promote best practice and experiences in all other European cities.

In accordance to the results of evaluation of Riga City application for the European Green Capital Award of 2010 & 2011, Riga got 8 points out of 13 points in the indicator area "Availability of green areas open to the public". It means that in relation to other European cities the situation in Riga is characterized by medium accessibility of green and blue space. The existing situation in Riga City is schematically shown in Figure 3.

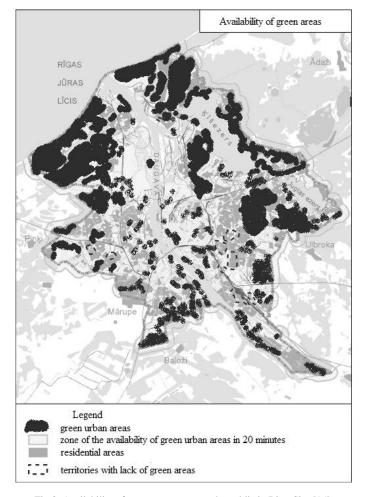


Fig.3. Availability of green areas open to the public in Riga City [15]

As shown in Figure 3, there are still territories with the lack of green open space in Riga City. Therefore the improvement of the availability of green areas open to the local public as well as amelioration of the management of urban green open space is crucially important for Riga City. Directions of future activities are closely related with the potential social, economic and ecological benefits that green open space could provide to urban residents, entrepreneurs and tourists.

IV. BENEFITS OF THE GREEN REAL ESTATE

This chapter will evaluate managerial aspects of green real estate and its social, economic and ecological benefits.

In the publication edited by Michael Sorkin "Variations on a Theme Park: The New American City and the End of Public Space" it is stressed that there are not only significant differences in urban public space between the United States and Europe but also between different European cities [16]. The author focuses attention on the fact that green open space in the city in the late nineteenth century is not the same as green space in the early twenty-first century – even if we talk about a park that is physically located exactly in the same place. In trying to unravel the processes by which urban, public or green space is made, the following key questions have to be asked: for example, who acts as gatekeeper to whom in urban space, how different notions of space are communicated and represented in the media and broader local discourses, and what is the role of urban space in political and power relationships [16]. Answers on the above mentioned questions could help to identify green open space managerial characteristics and aspects. A significant proportion of them are associated with potential social, economic and ecological benefits from green urban areas.

Benedict and McMahon found that green open space provides people with mental and physical health benefits derived from living near nature in the following ways [17]:

- 1. Purify the air in urban areas: they remove nitrogen dioxide, sulphur dioxide, carbon monoxide, and ozone, and store or sequester carbon in wood.
- 2. Provide opportunities for outdoor recreation, from walking to biking. Thus reducing the risk of coronary heart disease, high blood pressure, diabetes, etc.
- 3. Regular physical activity also relieves symptoms of depression and anxiety and generally improves mood.
- 4. Enhance emotional, cognitive and values related development in people.

According to Habermas (*Habermas – deu.*) green space is a vital, dynamic part of urban space. He discusses that it not only has a physical dimension as parks, gardens or wasteland within the built environment, but it also functions as social space. Parks and other green areas are sites of public cultures, social gatherings and informal get-togethers, bringing together various people. In contemporary cities green space offers accessible public space to local communities. Because of its openness, public space of this type is vital for cultural identification and social attachment at the neighbourhood and local level. In this way, with the activity and engagement of urban residents, green space constitutes an important, if neglected part of the public sphere [18]. In this way green open space promotes recurring casual social encounters and the building of social capital.

Analyzing economic benefits of green open space it should be noted that it is often difficult to translate people's love to open space or natural landscapes into a money amount. Benedict and McMahon note that recreational trails, which may be part of a green infrastructure plan, also serve to attract people and commercial enterprises that serve them. The flow of tourists and recreational spending produces additional employment and opportunities for existing residents. Multiplier effects enhance the value of natural amenities. Additional incomes are generated from encouraging the people who service the tourist industry and retires – from hotel workers, to hospital staff, to taxi and bus drivers – to spend their time and

money within the community [17]. "A community that expects to capture and maintain incomes from tourism and people with non-employment income must structure the economy to maintain the amenities that attract these people," conclude Clyde F.Kiker and Alan W.Hodges [19].

The world practice shows that green open space – parks, gardens, squares, natural areas, etc. – also increase the value of real estate. Data of the research on park Proximity Sales Premium implemented by Miller Andrew Ross are summarized in Table II.

TABLE II PARK PROXIMITY SALES PREMIUM [20]

Distance to Park in Meters	Round-Trip Walk in Minutes	Sales Premium
~30,0	1,0	24,0%
~90,0	2,5	15,0%
~180,0	5,0	5,0%
~400,0	10,0	Insignificant

As could be seen from Table II, parks increase the price real estate buyers are willing to pay to live close by. For example, a park located 30 meters from home could raise sales premium up to 24.0%. If the distance to the park is six time longer the rate of sales premium is only 5.0%. It is necessary to note that in this way green open space provides a very good return of investment for either government or private developers. In addition, Benedict and McMahon stress that many businesses report that the access to outdoor recreation and a clean environment are among the most important determining factors when selecting a location. As cell phones, computers, the Internet, and other advances in technology make it easier for businesses to locate away from commercial hubs and transportation links, such quality-of-life factors will be even more critical to location decisions [17]. Finally, green open space also directly benefits people - providing a variety of natural sites for outdoor recreation and nature-based education.

V. REVITALIZATION OF GREEN REAL ESTATE OF RIGA CITY

This chapter will provide an overview of the plans of revitalization and development of green open space in Riga City exploring the importance of future activities.

In accordance to the Riga Development Plan (Rīgas Attīstības plāns – latv.), the general purpose for the capital of Latvia is to facilitate Riga long-term development, providing the possibly highest quality of life for all the people working, living, investing into or simply visiting Riga [21]. In order to achieve the above mentioned purpose Municipality of Riga City started an ambitious project in 2012. It is aiming at arranging and revitalizing green open space areas in Riga and providing local residents with attractive green recreation areas within 20 minutes walking far from their living place.

In general, approximately 2.5 million Latvian Lats (*lats – latv.*) from the budget of the Municipality of Riga as well as 4.7 million Latvian Lats from European Union funds will be invested in the development of green areas [22]. It is important to note that within the project of the development and revitalization of the green real estate of the Municipality of Riga

City a new, broader view of parks, that has recently been emerging, is identified.

An overview of the planned green real estate revitalization and development activities in Riga City is schematically shown in Figure 4.



Fig.4. An overview of the planned green real estate revitalization and development activities in Riga City [22]

As shown in Figure 4, seven significant green real estate revitalization and development projects have been started for implementation in Riga City using new view of urban public parks and gardens. Chris Walker (Chris Walker – eng.), Urban Institute senior researcher, focused attention on the fact that this new view goes well beyond the traditional value of parks as places of recreation and visual assets to communities [23]. It focuses on how policymakers, practitioners, and the public can begin to think about parks as valuable contributors to larger urban policy objectives, such as job opportunities, youth development, public health, and community building.

An overview of planned activities in Riga City green areas within the framework of the revitalization projects are provided below [22]:

Lucavsala (*Lucavsala – latv.*) – it is planned to carry out the development of green area, including the creation of Lucavsala recreation park and a skate park, a lawn installation, the arrangement of a jogging trail, the improvement of the access to the road, the arrangement of a beach volleyball court, etc. It is planned to invest about 600 000 Latvian lats into the arrangement of the park. This year, around 300 000 Latvian lats will be invested in the green open space development. The cost

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of the installation of the equipment for video supervision and lighting installation will be about 77 000 to 98 000 Latvian lats.

AB Jetty (AB dambis – latv.) that was built to strengthen the left bank of the river Daugava – the renovation and extension of the covering of the road and pavement, including replacement of the concrete slabs and concrete paving, the installation of a road curb as well as the arrangement of a playground, etc. It is planned to use such type of coverage for sidewalks that are appropriate for skateboarding. It is planned to invest from 145 000 to 168 000 Latvian lats into the development of the jetty. Lighting installation will cost 217 700 Latvian lats. In addition, the video supervision would cost approximately 26 000 Latvian lats.

The area around Mara's pond ($M\bar{a}ras\ d\bar{\imath}kis-latv.$) – the project involves the creation of a recreational zone, the reconstruction of walks and greenery at the northwest shore of the pond as well as the construction of bicycle paths. It is planned to clean the pond, to reconstruct the shoreline, to strengthen the embankment and to create habitats. In the area near Marupes Street ($M\bar{a}rupes\ iela-latv.$) it is planned to repair walks, to arrange greenery as well as to reconstruct the playground and the sport zone. The improvement of the recreation zone will include the installation of the observation zone, boat docks as well as the placement of art objects.

Grizinakalns (*Grīzinkalns – latv.*) – the cover of the walks will be fully restored as well as special walks for the navigation of the visually impaired people will de labeled with special signs. There will also be cycling paths. The new lighting will be created in the park. It is planned to arrange the stage space at the upper terrace – to install adequate coverage for the necessity to put a mobile bandstand in case of different cultural events. In the framework of the revitalization of the park it is planned to reconstruct the walking pool. The children's playground will be greatly expanded. Thinking about using Grizinkalns for sports activities, it is planned to create a recreation area with outdoor equipment.

Peace Garden (Miera dārzs – latv.) – during the reconstruction the cover of the walks, stairs and retaining walls will be restored as well as guides for the tourists will be installed, the benches will be refurbished. In addition, the revitalization project involves lighting providing and replacement of the public utilities. It is planned to restore the children's recreation area and to undertake the replanting of the area, as well as to construct public toilets.

Ziedondarzs (Ziedondārzs – latv.) – within the project of the revitalization of Ziedondarzs, the cover of the walks will be replaced; the area around the fountain will be expanded and accompanied by a lush planting of roses. New equipment will be installed at the children's playground as well as a large pool for walking will be created. The park will be equipped with new, comfortable benches and lighting system. It is planned to restore the gardener's cottage built in 1928 as well as to install public toilets.

The project on revitalization of the territory of Grizinkalns, Ziedondarzs and Peace Garden began in 2011. It will be completed in 2013. The total cost is 5 268 283 Latvian lats that consists of the following proportions:

- 1. Co-financing of the European Regional Development Fund 4 478 040 Latvian lats (85.0%).
- 2. Co-financing of the Riga City Council 790 243 Latvian lats (15.0%).

Plavnieku Park (Plavnieku parks - latv.) - in accordance to the recommendation of the public Riga City Council there continue green open space development activities in Plavnieki District (Pļavnieku rajons - latv.) in area between Andreja Saharova (Andreja Saharova – latv.), Dravnieku (Dravnieku – latv.) and Plavnieku (Plavnieku - latv.) Streets. Within the development activities it is planned to keep maximally the existing birch grove. It is planned to provide a comfortable pedestrian movement, while creating opportunities for a diverse range of recreation. All active recreation zones shall be provided in areas free from trees. The pedestrian walks will be mainly intended at the existing sites, but they will be made wider and more convenient by placing benches and waste cans. This year it is planned to upgrade 2.8 hectares in the park area. 202 000 Latvian lats are awarded for these activities. The other 40 000 Latvian lats are intended for the lighting installation.

Evaluating activities implemented by Riga City Council, it is necessary to focus attention on the significance of the local municipality actions to improve quality of living environment in urban area. Revitalization of existing green public spaces as well as development a new one create a new recreational opportunities for the local residents and foreign tourists. It means an increase of the public interest to green urban open space in Riga. Growing popularity of such public events annually hold in Riga City parks and gardens, like European Union Garden Festival, Pardaugavas Festival, Christmas Tree Trail, etc., is an obvious example. Workshops, exhibitions and open-air parties hold in Riga City green open space are a good place for doing business for local craftsman, artists, farmers, etc. Successful realization of the planned revitalization and development of parks and gardens will increase ecological, aesthetic and cultural value of green public areas as well as land and property value at the surrounding territories.

VI. CONCLUSIONS

The research results show that green open space is an important component that forms the quality of life in urban areas. Along with the buildings, small architectural forms, infrastructure, parks and gardens are elements of the living material space. Parks, gardens and squares are significant places of urban public life and a specific category of the real estate of Riga City. The revitalization of the existing green open space and development of new one is a great challenge for Riga City and its inhabitants. It is necessary to note that such big investments into revitalization and development of green open space Riga City Council has not done for at least the last ten years but Plavnieki Park has become the first new park in Riga City during the last twenty years. The successful implementation of the revitalization and development of the green real estate of Riga will make the city more attractive and comfortable for residents, entrepreneurs and tourists. That is crucially important for urban marketing and the local socioeconomic development in 2014 when Riga will become European Capital of Culture as well as the host city of 8th World Choir Games. The planned and implemented green real estate revitalization activities in Riga City are oriented to the diversification of the recreation, sport and social life activities in green open space as well as improvement of the environmental quality and safety. Smart and well-arranged green open space will allow urban dwellers and guests to enjoy outdoor recreation activities and cultural events at the different corners of Riga City.

No less important is the fact that with the help of the improvement of the quality of the existing parks, gardens and squares as well as with the development of new ones in Riga City, the availability of green areas open to the public will increase. It will make effort to improve the urban environment in Riga City and move towards healthier and sustainable living areas at the Northern Europe. Thus, Riga City will have more chances to apply for the prestigious European Green Capital Award and to win it. It will spur the Riga City invest in further efforts and boost awareness within the city as well as in other cities. The award will enable Riga City to inspire other Latvian and European cities and share examples of good practices in situ. This will ensure that Latvian's towns and cities become better places to live and reduce their environmental impact on the wider environment.

Based on the above-mentioned conclusions, it is recommended for the Riga City Council within its competence to promote integration of green open space related issues into all municipal development policies. Thus significant step towards development of Riga City green open space spatial structure will be done. It is advised to pay more attention to more active involvement in the process of revitalization and development of green open space local residents and nongovernmental organizations. For example, residential groups – The Senior Alliance, Parents Clubs, Youth Sports Groups, neighbourhood societies - Mezapark Development Society (Mežaparka Attīstības biedrība – latv.), association for Latgales "Asociācija development (biedrība priekšpilsētas attīstībai - lav."), etc. It will empower local residents to participate in planning and development of their living environment as well as to take care about it. It is recommended for the educational institution to support naturebased education and for mass-media to promote public awareness about the importance of the green open space in the urban environment. As examples of good practice could be mentioned nature research competition for pupils "Come to visit Garden!" ("Nāc dārzā ciemoties!" – lav.), organized by Riga School of Natural Sciences, amateur running competition "Let's run Riga City parks!" ("Izskrienam Rīgas parkus!" – lav.), etc.

REFERENCES

- Corvalan, C., Hales, S., McMichael, A. Ecosystems and Human Well-Being. Health Synthesis. In: A Report of the Millennium Ecosystem Assessment. France: World Health Organization, 2005, p.64.
- [2] Bruns, D. Resilient Urban Development in Europe without Green? In: Materials of the ELCA Research Workshop "Green City Europe – for a

- better life in European cities" Bad Honnef, Germany: European Landscape Contractors Association, 2011, p.59.
- [3] Girardet, H. Cities. People. Planet. Urban Development and Climate Change. Second edition. Hoboken, USA: John Wiley \$ Sons, Ltd., 2008, p.169.
- [4] Peñalosa, E. Parks for Liveable Cities: Lessons from a Radical Mayor. Materials of the Great Cities Conference - Urban Parks Institute's Great Parks, Chicago, USA: July 30, 2001, p.30-31.
- [5] Peter, C., Jauhiainen, J.S. The European City and Green Space: London, Stockholm, Helsinki and St. Petersburg, 1850-2000. Ed. Peter C., Aldershot, England: Ashgate Publishing Limited, 2006, p.318.
- [6] Fuller, T. The Worthies of England. Ed. J.Freeman, London, England: Allen & Unwin, 1952, p.716.
- [7] Schäfer, R., Sansot, P., Poblotzki, U., et al. Parks. Green Urban Spaces in European Cities. Berlin, Germany: Callwey Verlag, 2003, p.128.
- [8] Dambis, J., Zilgalvis, J., Muceniece, A. *Vēsturiskie dārzi un parki. Eiropas kultūras mantojuma dienas 2007*. Rīga: Valsts Kultūras pieminekļu aizsardzības inspekcija, 2007., 143 lpp.
- [9] Ziedonis, I. (sēr. red.). Rīga parku pilsēta. Rīga: Jumava, 1999., 8.-15.lpp.
- [10] Municipality of Riga City. Parks. Municipal Portal of Riga. [online] [Accessed July 22, 2012] Available from: https://www.riga.lv/EN/Channels/About_Riga/History_of_Ri ga/Stories /Parki/default.htm.
- [11] Rīgas Meži. Rīgas dārzu un parku vēsturiskais raksturojums. Rīgas Meži portāls. [online] [Accessed August 4, 2012] Available from: http://www.rigasmezi.lv/lv/ Rigas_darzi_un_parki/vesture/Rigas-darzu-un-parku-vesturisks-raksturojums.
- [12] Rīgas domes Pilsētas attīstības departaments. Rīgas attīstības programma 2010.-2013.gadam. Pašreizējās situācijas raksturojums 2010. [online] [Accessed August 11, 2012] Available from: http://rdpad.lv/uploads/rpap/Programma_2.dala_Esosa_situacija_lielais.pdf
- [13] Rīgas Meži. Struktūra. [online] [Accessed August 12, 2012] Available from: http://www.rigasmezi.lv/lv/par_mums/struktura/
- [14] European Commission. European Green Capital. The Expert Panel's Evaluation Work & Final Recommendations for the European Green Capital Award of 2010 and 2011. European Commission, 2009. [online] [Accessed August 22, 2012] Available from: http://ec.europa.eu/environment/europeangreencapital/wp-content/uploads/2011/05/Evaluation-Panel-Report-Award-Cycle -2010-2011.pdf
- [15] Rīgas domes Pilsētas attīstības departaments. Publisko apstādījumu pieejamība. [online] [Accessed August 15, 2012] Available from: http://www.rdpad.lv/rpap/rpap_ar_grozijumiem/paskaidrojuma_raksts/paskaidrojuma_kartoshemas/
- [16] Sorkin, M. (ed.) Variations on a Theme Park: The New American City and the End of Public Space. New York, USA: Hill & Wang,, 1992., p. 252.
- [17] Benedict, M.A., McMahon E.T. Green Infrastructure. Linking Landscapes and Communities. Washington, USA: Island Press, 2006, p.57-58.
- [18] Habermas, J. The Structural Transformation of the Public Sphere: an Inquiry into a Category of Bourgeois Society. Trans. by Burger T., Cambridge: 1992, p.305.
- [19] Kiker, C.F., Hodges, A.W. Economic Benefits of Natural Land Conservation: Case Study of Northern Florida. Washington, USA: Defenders of Wildlife, 2002, p. 24.
- [20] Douglas, F. Sustainable Urbanism: urban design with nature. New Jersey, USA: John Wiley & Sons, Inc., 2008, p. 169-170.
- [21] Rīgas domes Pilsētas attīstības departaments. Rīgas plānošanas dokumenti. Rīgas dome, 2010. [online] [Accessed July 25, 2012] Available from: http://www.rdpad.lv/rigas_planosanas_dokumenti/
- 22] Rīgas domes Pilsētas attīstības departaments. Rīgas dome sāk vērienīgus parku un skvēru atjaunošanas darbus, ierīkos jaunas aktīvās atpūtas vietas. Rīgas dome, 2012. [online] [Accessed July 25, 2012] Available from: http://rdpad.lv/services/Projekti/miera_darzs_/article.php?id=102923
- [23] Walker, C. The Public Value of Urban Parks. Washington, USA: Urban Institute, 2004, p.8.

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