Collective gardening as a form of resident participation in the revitalization of open spaces in high-rise housing estates

Ivana Protićr^a, Milena Branković^b, Jelena Dekić^c, Mihailo Mitković^d

Resumo

Os espaços abertos em conjuntos habitacionais de grande altura são frequentemente espaços negligenciados evidenciando estar em ruptura com os indicadores de qualidade de vida são interrompidos. Algumas das causas chave da tendência de declínio progressivo de sua qualidade têm um caráter contínuo, resultam da negligência e concentração de problemas, assim como, da falta de um sistema eficiente de manutenção e gestão. Na atualidade e em vários países europeus existem diferentes modalidades de revitalização em espaços abertos, sendo recorrente a crescente participação no processo de revitalização. As atividades e modalidades de participação variam, podendo ser implementadas por meio de vários instrumentos. Um dos instrumentos mais populares da participação dos moradores é a jardinagem coletiva, o que pode ser observado em numerosos exemplos de revitalização em países europeus. O objetivo deste artigo é analisar alguns exemplos de implementação de jardinagem coletiva no processo de revitalização de espaços abertos em conjuntos habitacionais de grande altura. O artigo destaca os benefícios do uso deste instrumento na revitalização em espaços abertos no sentido de se alcançar soluções sustentáveis, de acordo com os interesses e objetivos dos residentes. O fortalecimento do sentido de territorialidade e do sentimento de pertença dos residentes é algo particular importância para o ambiente vivencial. Os resultados também evidenciam que a jardinagem coletiva contribui para a recuperação da boa vizinhança e para a construção de comunidades residenciais, bem como, para a exortação dos residentes para que participem de forma coletiva na melhoria de seu ambiente de vida.

Palavras-Chave

Espaços Abertos, Revitalização, Residentes, Participação, Jardinagem Coletiva Abstract

often neglected spaces in which fundamental indicators of the quality of life are disrupted. Some of the key causes of the trend of progressive decline of their quality are continuous neglect and accumulation of problems and the lack of an efficient system of maintenance and management. Under current conditions in European countries, there are different modalities of open-space revitalization. The common fact that can be identified is the increasing participation in the revitalization process. Thus, activities and modalities of participation vary and can be implemented through various instruments. One of the most popular instruments of the participation of residents is collective gardening, which can be observed in numerous examples of revitalization in European countries. The aim of this paper is to analyse the examples of the implementation of collective gardening in the process of open-space revitalization in high-rise housing estates. The paper highlights the benefits of using this instrument in openspace revitalization to achieve sustainable solutions in accordance with the requirements of residents. The strengthening of territoriality and the sense of belonging of residents to the living environment are of particular importance. The paper also points out that collective gardening contributes to good neighbourhood relations, to the building of residential communities, as well as to exhortation to residents to jointly participate in the improvement of their living environment..

Open spaces in high-rise housing estates are

Keywords Open spaces, Revitalization, Residents, Participation, Collective gardening

^a Phd, assistant. University of Nis, Faculty of Civil Engineering and Architecture, Serbia. Email: ivanab76@yahoo.com

^b Phd, assistant professor. University of Nis, Faculty of Civil Engineering and Architecture, Serbia. Email: milena_dinic@yahoo.com

^c Phd Student, assistant. University of Nis, Faculty of Civil Engineering and Architecture, Serbia. Email: jelena_djuric@ymail.com

^d Phd Student, assistant. University of Nis, Faculty of Civil Engineering and Architecture, Serbia. Email: mihailo.mitkovic@gmail.com

Introduction

Striving to improve the quality of life is the central and universal preference policy for the development of cities of all countries, the primary goal of any political subdivision, and a permanent feature of architecture and urbanism. The mechanisms and instruments that help cities achieve the best possible living conditions are different, and one of the most important priorities is to improve the quality of housing and associated open spaces. A variety of current processes and changes in the social, political, environmental, and cultural domain bring along the transformation in the field of business and leisure, together with the daily emergence of new technologies, which reflect a range of negative impacts on the system of social values and the quality of life. All these changes are also manifested in the sphere of high-rise housing complexes, specifically in the state of the physical structure and in the state of the associated open spaces that constitute the relevant spacious and utilitarian items of people's everyday life. Modern urban development and changes in the socio-economic sphere lead to the changing needs of residents. This, along with the aforementioned negative tendencies, emphasizes the need to adjust the open spaces of high-rise housing complexes by introducing new requirements. One of the modalities for the promotion of open spaces, with resident participation, is the implementation of the concept of collective gardening, which is the topic of this paper.

Overview of the problems of open spaces in a high-rise housing complex

Many multidisciplinary studies of the quality of life indicate the poor state of the high-rise housing complexes (Madanipour, 2004; van Kempen et al., 2005; Coorev, 2012), which is characterized by a lack of basic human values and neglect of the immediate surroundings - functional, health, environmental, social, and aesthetic values of open spaces. Despite the multiple significance of open spaces for the quality of life in complexes with high-rise housing, the said author concluded that these areas are unable to meet the requirements of residents towards achieving their basic role - creating a friendly and attractive environment for a wide range of leisure activities. The current status of open spaces in most European countries is manifested through various forms of deprivation and maladjustment of open spaces to the changing social, demographic, economic, and cultural trends and the needs of residents of high-rise housing complexes. Given the wide range of problems of open spaces, it is important to explore the potential and effective mechanisms for revitalization aimed at ensuring the protection of existing values while providing new opportunities in line with the modern trends of open-space design and new lifestyles of residents, and aimed at providing a higher quality of life. Significant problems in high-rise housing complexes include the residents' sense of alienation, lack of a feeling of belonging to the community, and lack of interest in improving the environment, which particularly affect the quality of life. Contemporary examples of open-space revitalization indicate that the implementation of collective gardening can improve the quality of open spaces, provide residents with adequate hygienic, space-functional, and aesthetic requirements for comfortable living, as well as strengthen the feeling of belonging and territoriality.

Conceptual guidelines of collective gardening

Numerous examples of revitalization (Castell, 2009; Tiessens et al., 2007) of open spaces indicate multiple benefits of resident participation, which ensures the effectiveness of the harmonization of different opinions, ideas, and knowledge. It is a democratic process of finding common solutions of various actors in cooperation with the users of the space – residents – in accordance with their needs. Participation contributes to finding better solutions, with the need to meet the following requirements: to motivate residents to actively participate, to inform residents about the importance of planning actions for open-space revitalization, to educate them on the topic, and to involve them in a timely manner (Bogdanović and Mitković, 2006). The effectiveness of resident participation can be seen in all stages of open-space revitalization, and participation is used as a driving force for mobilizing resources in the community and implementing activities through its own resources. This contributes to the sustainability of the planned activities. It also contributes to the achievement of better solutions, greater cooperation between the various stakeholders, strengthening of local democracy, education, and development of new skills, thus improving the culture of living and raising the awareness of residents, which is important for achieving sustainability of residential neighbourhoods, one of the main goals of the Lisbon Strategy (2010).

One of the most effective instruments for open-space revitalization is collective gardening. Collective gardening is a form of resident participation in the promotion of open spaces. It can be understood as a form of joint activity in which residents of high-rise housing voluntarily participate in the planning, promotion, and management of open spaces (Castell, 2009). The following activities of residents are possible in collective gardening: brainstorming, problem solving and working together with others, discussions, sharing of responsibilities, and other forms of interaction, where the individual is a part of a collective process. These activities include information gathering, socializing, discussions, and other formal relationships that connect local groups of residents with external actors which represent society as a whole. However, conflicts also arise, whereby visible or sharp divisions are created between different neighbourhood groups in the process of collective gardening. There are several cases of initiating collective gardening:

• the case where companies engage residents to participate in the tasks of garden and open-space maintenance, the so-called "self-management" – e.g. in the neighbourhood of Augustenborg (see 4.1 below);

• the case where residents can use the garden with plots within the open space – e.g. in the neighbourhood of Poptahof (see 4.2 below);

• the case where the residents' association signs an agreement to take over the responsibility of collective garden maintenance from housing maintenance companies;

• the case where the residents' association can establish a garden in an undeveloped open space in the housing complex as a key mechanism of the process of open-space and residential complex revitalization (Castell, 2009).

In terms of open-space revitalization, multiple contributions of collective gardening can be seen in numerous residents' activities (Aalbers, 2012). These effects are important from the residents' perspective, as well as from the perspective of the housing neighbourhood and the society as a whole. An important step for implementing collective gardening is to establish the residents' association and to identify key individual residents interested in taking charge of creating a collective garden as a special type of open space. The most important effects of collective gardening implementation are the following:

• resolution of existential issues – collective gardening can help younger or socially excluded residents become actively involved in the community as it can provide them with employment;

• security improvements – achieved through informal social contacts, whereby neighbours can familiarize themselves with the process of collective gardening and the development of local norms;

• learning and knowledge enhancement, skill transfer, and exchange of experiences among residents;

• creation of a space to meet the needs of residents, territoriality, and personalization through resident participation;

• effective management and promotion of open spaces by residents;

• strengthening of the residential community.

Examples of collective gardening in European counties

Among the numerous examples of collective gardening in the process of open-space revitalization, two examples from the European practice were chosen for the purposes of this study: residential neighbourhoods of Augustenborg in Malmö (Sweden) and Poptahof in Delft (The Netherlands).

Residential neighbourhood of Augustenborg in Malmö (Sweden)

The residential neighbourhood of Augustenborg in Malmö was built in the 1950s as one of the first within the Swedish social housing policy. Initially, it was considered a successful joining of housing and social facilities, and had the potential recruitment of residents. In recent decades, Augustenborg experienced a period of socio-economic deterioration, so significant revitalization projects were implemented from 1998 to 2002 (Kazmierczak and Carter, 2010). The main triggers for initiating the revitalization



were difficult social and economic conditions in the neighbourhood, problems with the waste management, flooding hazards, and marginalized and devastated open spaces. The initiative for the revitalization began in 1990 and has since developed into a project called Ekostaden Augustenborg. The key objective of this project was to create a residential neighbourhood with a higher degree of social, economic, Sand environmental sustainability. Significant changes in the physical infrastructure included, among other things, the creation of sustainable drainage systems, green roofs, and green areas. In addition to infrastructure changes, a significant goal of the program was to improve open spaces, which resulted in improving the image of the entire neighbourhood. One of the main objectives of the Ekostaden program was to enable residents to actively participate in the planning and implementation of revitalization programs. Accordingly, public discussions through regular meetings, workshops, and informal gatherings at sports and cultural events were organized. Access became more open and consultative. The residents participated in the dialogue at meetings about the project, and some of them became very active in concrete actions on the reorganization of open spaces. Constant communication and participation allowed the needs and wishes of residents to be incorporated into the project.

We should emphasize the importance of this project from the perspective of collective gardening. It was initiated by the residents who started to grow vegetables on small open spaces (Hybrid Parks, 2016). In addition, residents were given larger spaces, where people of all ages and ethnic backgrounds were welcome. After smaller areas, much larger spaces for collective gardening were formed around the neighbourhood (Image 1). The city housing company derived benefit from this project and introduced a program of providing green boxes to residents in order to encourage and support collective gardening. Experiences from these projects showed that collective gardening significantly contributed to connecting people with nature and to their mutual cooperation, strengthening the sense of belonging, territoriality, and good-neighbourly relations. Residents are assisted by gardeners of the district. Days of gardening and internal market are organized in order to promote community spirit and common interests, which further encourages residential involvement in collective gardening.

With the introduction of collective gardening and other types of interventions, the program provided the following benefits: ecological improvement, improvement of the built environment and open spaces, and strengthening of the local housing community and good-neighbourly relations. The remodelling of open spaces between the blocks, the creation of a place for leisure and attractive spaces for children to play, as well as the creation of collective gardens where residents can grow food, have contributed to Augustenborg's becoming an attractive place to live positively, as assessed by the residents.

Residential neighbourhood of Poptahof in Delft (Netherlands)

The residential neighbourhood of Poptahof was built during the 1960s. It is one of the first residential complexes outside the historic centre of Delft and it was envisaged as a form of modern housing for members of the working and middle classes. The main problem in this neighbourhood was a low level of regulation and anonymity of open spaces, which led to a feeling of insecurity among the residents and the absence of a sense of community, belonging, and territoriality. For the purpose of its revitalization, a master plan with the following objectives was created (Tiessens et al, 2007): improving the monotonous residential complex, which is quoted very low in the housing market, improving security and disrupted attractiveness, and reorganizing and constructing new open spaces, as part of an integrated reconstruction of the neighbourhood (Image 2 a, b, c,).



Image 1 – Collective gardening residential neighbourhood of Augustenborg Source: http://www.hybridparks.eu/publications/



Image 2 – left (a): master plan for the revitalization of Poptahof; middle (b): design of Poptapark; right (c): image of Poptapark

Source: Tiessens et al. (2007)



Image 3 – Collective gardening in the neighbourhood of Poptahof Source: Tiessens *et al.* (2007)

The idea was that the revitalization of the park should stimulate the modernization and create a positive perception of the entire residential complex, as well as help attract additional investments by different interest groups in the mixed content in the complex (IMAGE project). Poptapark is centrally located and it was completed in 2008 on the former site of the river with tall trees; it provides the following infrastructure for leisure activities: a play area for children; lawns; a green hill used for sunbathing, sledding, organizing festivals, and other events; trails for walking and cycling that runs through the park and connects it to the main street and the shopping zone; and a space where the residents engage in collective gardening (Image 3), which contributes to strengthening community spirit and territoriality.

It was revealed that collective gardening was one of the key points of successful improvement of open spaces in Poptahof. It was confirmed that the involvement of residents contributed to improving their responsibility for the housing environment, particularly through the activities of collective gardening. The effects of collective gardening have contributed to creating a positive attitude of residents towards other cultures and lifestyles, thus strengthening the good-neighbourly relations and mutual tolerance. The effect of variability in the arrangement of and the cultivation of various types of health food and vegetation is particularly significant. In addition to their medical importance, colourful properties were designed to enhance the aesthetic component of the open spaces (along with other types of interventions in this respect). Finally, collective gardening contributed to the neighbours' cordiality, strengthened their sense of territoriality and of belonging to the living environment, and also helped reduce crime rate and vandalism.

Conclusion

A review of selected examples of open-space revitalization showed that collective gardening provides a favourable framework for overcoming the negative trends of development of open spaces and for directing their improvement. The analyzed cases revealed multiple positive effects of collective gardening, the most important of which are the following: improvement of the general characteristics of open spaces in all aspects of their quality; satisfaction of residents with the housing environment; strengthening of good-neighbourly relations and residents' responsibility for their own environment; and general improvement of the quality of life. It is particularly important to recognize the significance and effectiveness of collective gardening in the process of open-space revitalization by the local authorities. Connecting to the local community or to the residents and local officials is also important, both for initiating collective gardening and for financial support and implementation. A key factor for the implementation of collective gardening is a proper organizational and institutional framework concerning maintenance and management. In conclusion, collective gardening takes on increasing importance in the process of open-space revitalization and it can be considered an effective instrument for improving the quality of life and the sustainability of the high-rise housing complexes.

Bibliography

• Aalbers, C. (2012), "Case II: Contacts through Contracts: Residents managing public green space in Utrecht", in Aalbers, C. et al. (Eds), *Work Package 4: The Utrecht-Houten case study*, EU 5th Framework project Communicating Urban Growth and Green (GREENSCOM), Alterra Green World Research, Wageningen.

• Bogdanović I. and Mitković, P. (2006), "Revitalizacija slobodnih i rekreativnih prostora u kontekstu unapređenja kolektivnog stanovanja", *Proceeding of "Rekonstrukcija i revitalizacija grada", Društvo Urbanista Beograda*, pp. 359-371.

• Castell, P. (2009), "Collective gardening as a coping strategy for residents in deprived urban neighbourhoods: a literature review", *Proceeding* of "Changing Housing Markets: Integration and Segmentation (ENHR09)", European Network for Housing Research (ENHR), Prague.

• Coorey, S. (2012), Design of open spaces in high density zones: case study of public housing

estates in Hong Kong, Phd Thesis, University of Hong Kong.

• Kazmierczak, A. and Carter, J. (2010), *Adaptation to climate change using green and blue infrastructure, A database of case studies*, Augustenborg, Malmö: Retrofitting SUDS in an urban regeneration area.

• Madanipour, A. (2004), "Marginal public spaces in European cities", *Journal of Urban Design*, Vol. 9(3), pp. 267-286.

• Tiessens, W. et al. (2007), *The image project new tools for neighbourhood regeneration, regenerating neighbourhoods by improving their image*, An INTERREG IIIB Project.

• van Kempen, R., Dekker, K., Hall, S., Tosics, I. (Eds.) (2005), *Restructuring large housing estates in Europe*, Chicago: University of Chicago Press.