

## COMMUNITY GARDENS IN THE PROCESS OF REVITALIZATION OF OPEN SPACES IN RESIDENTIAL NEIGHBOURHOODS

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*Summary: Modern approaches in improving urban open spaces in residential neighborhoods, often exposed to a wide range of physical, environmental, social and aesthetic problems, in recent years in developed countries imply the implementation of an integrated approach in the process of their revitalization, often proposing the introduction of community gardens as a significant and effective tool for improvement. The aim of this paper is to examine the concept of community gardens, analyze an example of best practice and explore potentials of their implementation in residential neighborhoods in the city of Nis. The results of this research can serve as a basis for promoting the application of community gardens in our urban theory and practice.*

*Keywords: urban open spaces, community gardens, urban revitalization*

### 1. INTRODUCTION

Devastation and marginalization of urban open spaces in residential neighborhoods, caused by a wide range of problems, is an unusual phenomenon in cities around the world. Numerous studies indicate that these areas in residential neighborhoods are often neglected, useless, that they are in poor hygienic condition and have a negative image. The dispersion of problems impose the need to explore effective mechanisms for the

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revitalization of urban open spaces in order to ensure the protection of their existing values and provide new opportunities in accordance with contemporary trends in the design of urban open spaces and new living styles of tenants in order to ensure a higher level of quality of life. In this context, collective gardening-community gardens, which are the subject of research of this paper, are intensively applied as an effective modality of revitalization of urban open spaces. Urban gardens have a long and successful tradition, being reinvented in recent years as an important urban element, providing educational and financial as well as recreational and social benefits.

Unlike the developed countries with long-standing practice of revitalizing urban open spaces, in Niš, as in many post-socialist cities, devastation, neglect and progressive decline in the quality of urban open spaces is evident, which can be seen through a wide range of physical, environmental, social and aesthetic problems. In urban planning practice in Niš, in addition to partial interventions, the improvement of urban open spaces has been neglected, and the concept of rentals is not present. The aim of this paper is to examine the concept of community gardens and point out the possibilities of their implementation in a residential neighbourhood in Niš. Therefore, the experience of the best practice example is presented. The results of this research can serve as a basis for promoting the use of community gardens in our urban theory and practice, as a legitimate instrument of urban revitalization.

## **2. COMMUNITY GARDENS: CHALLENGES, BENEFITS, INFLUENCE ON QUALITY OF LIFE AND BEST PRACTICE EXAMPLE**

Community gardens are one of the forms of collective gardening. According to Castell [3], collective gardening is a form of joint activities in which tenants of the residential buildings volunteer to participate in the design, improvement and management of urban open spaces. Also community gardens are collectively organized and self-managed gardens where tenants can solve their existential issues, where the potentials for growing and access to healthy food (fruit and vegetable) are emphasized. Furthermore, socially vulnerable and poor tenants, can be employed on community gardens and therefore gain financial benefit (this can partly solve the problem of unemployment). Community gardens have a particularly significant effect on health. They can: increase physical activity through garden maintenance activities, reduce risk of obesity and obesity-related diseases and can improve mental health and promote relaxation [1]. The implementation of gardens allow renaturalisation, approximation of the elements of nature to tenants, revitalization of formerly unhygienic spaces, and, in contrast, improvement of microclimate, reduction of air pollution and creation of recreation space. Collective gardening can encourage inclusion of young people or socially excluded tenants, which improves the community spirit. In particular, the importance of community gardens for the development of good neighborly relations should be emphasized, thanks to the unfolding of informal social contacts, where the alienated neighbors can get to know each other and get closer. Encouraging the participation of tenants in joint activities in community gardens and the interests of preserving the space on which they are positively reflects on strengthening territoriality and tenure of tenants in the housing environment [2]. Abandoned open spaces that were once anonymous, marginalized, unsupported and,

consequently, on which an antisocial and criminal activities was often carried out and criminal activities, after transformation into residential gardens, become attractive urban open spaces and reduce negative behavior. Empty, abandoned, unsupported urban open spaces are due to long-term neglect and inefficient management and maintenance systems. In the case of community gardens, the responsibility for maintenance and management is in the hands of tenants. In this way it is possible to hire tenants, which at the same time saving funds for maintenance. Finally, the introduction of community gardens contributes to the strengthening of the housing community, which is recognized through: mobilizing resources from the housing community, developing cooperation and trust among neighbors, fostering self-determination, developing new skills and contacting various external actors.

## 2.1 Residential neighborhood Poptahof, Delft, Netherland

Residential neighborhood Poptahof was built during the 1960s. It represents one of the first residential complexes outside the historic center of Delft and is conceived as a form of modern housing for members of the working and middle class. The main problem in this neighborhood was the low level of regulation and anonymity of urban open spaces, which affected the sense of insecurity among tenants, the lack of sense of community, affiliation and territoriality. For the purpose of improvement, a Masterplan of revitalization was developed and the objectives were [4]: improvement of the monotonous housing complex (which was very low on the housing market), improvement of security and distorted space attractiveness, reorganization and construction of new urban open spaces, and as part of the integrated reconstruction of the neighborhood (Figure 1).



Figure 1: Master plan of revitalization

● position of community gardens

Source: Tiessens et al. [4]



Figure 2: Community gardens

Source: <https://www.urbangreenbluegrids.com> [6]

The idea was to revitalize the park in order to encourage modernization and creation of a positive perception of the whole residential complex, as well as to contribute to attracting additional investments of various interest groups in order to invest in mixed contents within the complex [5]. Poptapark is centrally located and completed in 2008 in a place where it was previously a high-green river; the following facilities are planned for various activities: children's play area, lawns, green hills (used for sunbathing, sledding, festival

and other events); a bicycle path and walk that passes through the park and connects it to the main street and the shopping area; the place where the occupants deal with collective gardening (Figure 2,3), which contributes to the strengthening of the spirit community and territoriality.



Figure 3: Community gardens

Source:Tiessens et al. [4]

Community gardens in Poptahof are conceived and is run by a group of residents with the support of the Woonbron social housing corporation and the Poptahof Project [6]. It is especially interesting the creation of childrens' garden (Figure 4).



Figure 4: Children's garden

Source:<https://www.urbangreenbluegrids.com> [6]

After the implementation of the revitalization project, it was found that one of the key points of the success of the improvement of formerly abandoned open spaces is the introduction of community gardens. It was confirmed that the introduced activities of collective gardening contributed to encouraging greater responsibility of tenants for the housing environment. Collective gardening has also contributed to the creation of a positive tenant attitude towards other cultures and lifestyles and the strengthening of good neighborly relations and mutual tolerance. There is a particularly significant effect of variability in the arrangement - cultivation of different types of healthy food and vegetation, besides health significance, also created colorful spaces that contribute to the visual-aesthetic component of open spaces (with other types of interventions in this sense). Finally, collective gardening has contributed to the strengthening of the tenant's belonging

to the residential environment (they feel proud of their gardens) and to the reduction of crime and vandalism.

### 3. EXAMINATION OF THE POSSIBILITY OF IMPLEMENTATION OF COMMUNITY GARDENS IN RESIDENTIAL NEIGHBORHOOD DURLAN, NIS, SERBIA

Residential neighborhood Durlan in Nis is a typical example of housing construction in the era of socialism. Residential buildings were built during the 1980s, and at the beginning of the 21st century, most of them were upgraded. This is a typical example of the degradation of open spaces, which began in the era of socialism (Figure 5).



Figure 5: Urban open spaces in Durlan residential neighbourhood, City of Nis (1-16)

Source: Autor

The negative consequences of the treatment of open spaces in the era of socialism, as well as the aforementioned urban changes and housing policies after 1990 in Niš are multiple, both on the living values of open spaces and on the quality of life of tenants. Urban open spaces in Niš in general suffer from the lack of continuous investment in maintenance and management, and long-term replacement contributed to their degradation, disturbing functional and human values, spatial integrity and tenants quality of life. Apart from the aforementioned socio-political and urban changes, the reasons for the devastation lie in the unresolved property-legal relations, the undefined property status of construction land, the vague treatment in the legislation and the absence of standards and norms for regulation. The reason is permanent savings and inadequate allocation of funds from state budgets and directing to state-owned maintenance companies. As part of the current problem, it is also important to mention the absence of the responsibility of tenants to care for the common property to maintain open spaces.

Open spaces in this residential neighborhood are high-level degradation representatives in every respect: utilitarian, ecological, social, aesthetic. They are organized in front of the entrance to the building and between the lamellas, and there are also central meeting areas at the block level. However, obsolescence and devastation, as well as the lack of urban equipment and content for the activity of different categories of tenants, vandalism, low level of hygiene maintenance, lack of green space, contribute to the lost purpose of these areas, monotony and low level of quality of life of tenants. Greenery is present in various forms, but vegetation is neglected. There are also many free unused surfaces that are also in poor condition. In some places on the site there are marked parking spaces. However, due to the large disproportion between the number of parking spaces and the number of cars, as well as the "housing indecency", there are many cases of parking on green surfaces, in playgrounds, assembly areas, paths (Figure 5).

Considering the great diversity of problems and the very high degree of deprivation of open spaces, it is necessary to apply various measures of improvement from the domain of spatial-functional organization and urban design, to the improvement of environmental quality and social components of the quality of space. The basics of improvement are remodeling and reconstruction of the existing spaces. In particular, the importance of preventing further delay of the revitalization of open spaces and the establishment of an adequate system of management and maintenance in order to prevent even more intensive deprivation of these areas and disturbing the quality of life of tenants should be emphasized.

Despite these negative processes, the impression is that using modern approaches-the introduction of community gardens can significantly influence the improvement of the current state of open spaces. The large share of green areas and empty, unused areas in this area represents a huge potential for creating community gardens. The spatial organization of housing blocks is also beneficial both for the use of smaller and larger tenants. Smaller gardens could be located next to residential buildings, users would be tenants of these buildings and primarily intended for horticulture. The larger gardens can be located in the central parts of the block, where more tenants from the entire residential block could be hired. It could also be possible to employ unemployed tenants as managers of larger gardens. In accordance with the purpose of this research, this area has been identified and proposed for potential sites for the implementation of occupancy gardens (Figure 6).

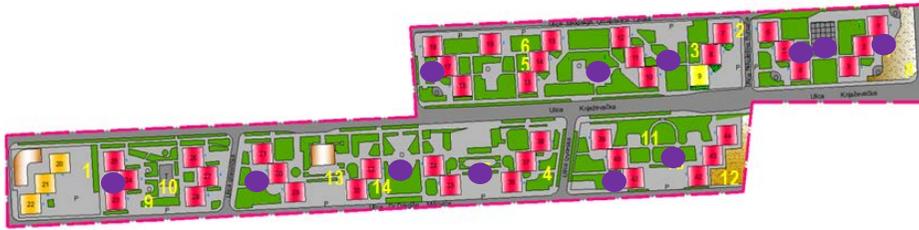


Figure 6: Potential locales for the implementation of community gardens in Durlan residential neighbourhood, City of Nis

Source: Autor

#### 4. PRECONDITIONS FOR IMPLEMENTATION OF COMMUNITY GARDENS IN DURLAN RESIDENTIAL NEIGHBOURHOOD, CITY OF NIS-FINAL CONCLUSION

It can be concluded that community gardens are a very actual instrument for open spaces improvement and residential neighborhoods. The analyzed example of good practice confirms that the implementation of community gardens can significantly improve open spaces, contribute to the creation of visually comfortable spaces, which result in more favourable environmental impacts as well in residents quality of life improvement. The project for the introduction of community gardens in the neighborhood Poptahof demonstrates that open spaces can be arranged in housing estates to enable the direct solution of the existential problems of tenants and can be aesthetically integrated in the neighborhood landscape. Created community gardens do not only promote empty and abandoned spaces, but serve as healthy components in dirty, noisy and hard artificial environments, and their favorable air quality and micro-climate characteristics of the neighborhood are also significant.

The paper points to the possibility of implementation of community gardens as an instrument for improving the abandoned empty spaces in the residential neighborhood of Durlan in Nis. In order to make this concept useful, it is necessary to conduct a studious promotion of the concept of community gardens in planning practice and regulations of the city of Nis. Then, it is important to transfer ownership of open spaces by local authorities to tenant associations and volunteer organizations in the function of creating collective gardens. Furthermore, the transfer of parts of common free areas to tenants is required to use and promote the implementation of collective gardens for growing food, vegetation, as well as establishing a system of "self-management" and "self maintenance" - giving tenants the responsibilities of maintenance and management.

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## STANARSKE BAŠTE U PROCESU REVITALIZACIJE SLOBODNIH PROSTORA STAMBENIH SUSEDSTAVA

**Rezime:** *Savremeni pristupi u unapređenju slobodnih prostora u stambenim susedstvima, često izloženim širokim dijapazonom fizičkih, ekoloških, socijalnih i estetskih problema, poslednjih godina u razvijenim zemljama podrazumijevaju implementaciju integrisanog pristupa u procesu njihove revitalizacije, uz sve intenzivnije uvođenje stanarskih bašti kao značajnog i efikasnog instrumenta. Cilj ovog rada je istraživanje koncepta stanarskih bašti, analiza primera dobre prakse i ispitivanje potencijala za njihovu primenu u stambenom susedstvu u Nišu. Rezultati ovog istraživanja mogu poslužiti kao osnova za promovisanje primene stanarskih bašti u našoj teoriji i praksi.*

**Ključne reči:** *slobodni prostori, stanarske bašte, urbana revitalizacija*