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Social aspect of urban agriculture with examples from Croatia

Društvena uloga gradske poljoprivrede sa primjerima iz Hrvatske

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ABSTRACT

As the world's population increases every day, so does their need for food. Most of the world's population lives in urban centres away from food production sites. To reduce food dependence, the urban population turns to food production within the city, urban agriculture (UA). Attention to urban agriculture has increased rapidly during the last couple of decades. Enthusiasm for UA is growing on an international and domestic level, also with the scholar community. Still, there are policy makers that struggle to implement UA with city planning. Over time, various forms of agriculture production in the city have evolved, divided into three main categories: urban agriculture, peri-urban agriculture, and urban farms. In addition to its multiple impacts (economic and ecological), UA has a significant holistic approach. It appears differently depending on the context. Some of the social effects of urban agriculture can be: fostering activism, gender equality, social cohesion and social inclusion, education, and preservation of cultural heritage. There are many examples of urban agriculture in the world, often with an economic or environmental role as the primary one. However, in this paper, firstly, we analyse various social aspects, and secondly, we present examples from Croatia, where the primary purposes are social benefits.

Keywords: urban agriculture, community gardens, social role, holistic aspect, Croatia

SAŽETAK

Kako se svjetsko stanovništvo svakodnevno povećava, tako se povećava i njihova potreba za hranom. Većina svjetske populacije nalazi se u urbanim središtima daleko od mjesta proizvodnje hrane. Kako bi se smanjila ovisnost o hrani, gradsko se stanovništvo okreće proizvodnji hrane u gradu, odnosno gradskoj poljoprivredi (GP). Naklonost prema gradskoj poljoprivredi povećava se u posljednjih nekoliko desetljeća. Oduševljenje GP raste na međunarodnoj i domaćoj razini, ali i u znanstvenoj zajednici. Nažalost, političari na lokalnoj razini teško se odlučuju za implementaciju GP u urbanističko planiranje. Razvojem poljoprivredne proizvodnje u gradu, pojavili su se različiti tipovi GP, podijeljeni u tri glavne kategorije: gradska poljoprivreda, prigradska poljoprivreda i gradski uzgoj. Osim višestrukih utjecaja (ekonomskih i ekoloških), GP ima značajan holistički pristup. Pojavljuje se na različite načine, te je izrazito lokalnog karaktera. Neki od društvenih učinaka GP mogu biti: poticanje civilnog aktivizma, ravnopravnosti spolova, društvena kohezija i socijalna uključenost, obrazovanje i očuvanje kulturne baštine. U svijetu postoji mnogo primjera gradske poljoprivrede, često s ekonomskom ili ekološkom ulogom kao primarnom. Međutim, u našem radu navodimo primjere iz Hrvatske s primarnom društvenom ulogom, te zaključno iznosimo perspektivu razvoja navedene uloge gradske poljoprivrede.

Ključne riječi: gradska poljoprivreda, gradski vrtovi, društvena uloga, holistički pristup, Hrvatska

INTRODUCTION

Urban agriculture, as a term is very contradictory. On the one hand, we have a city, a metropolitan area, most often associated with high-rise buildings, asphalt and (noise, air, and light) pollution. While on the other hand there is agriculture, associated with the rural area - green, healthy, leisure activities, social interactions. Kisic (2018) defines this as a "bipolarity system", the smell of ploughed soil, the scent of mown hay, the smell of barns, the voice of farm animals and contrary smell of asphalt, alienation, and modern busy life. Gittleman (2009) describes it as a "quiet revolution" because nowadays, most of the population lives in the urban regions and are usually producing for themselves and their family. It is considered to be "quiet" because some decades ago, urban agriculture was ignored by the scientific community and by municipal leaders (Kortright and Wakefield, 2011). Nowadays, the situation is inverted, as science with policymakers acts towards raising awareness and positive outcomes of urban agriculture. United Nations (2018) data shows that the global urban population has increased from 751 million in 1950 to 4.2 billion in 2018, meaning 55% of the world's population lives in urban and peri-urban areas and is expected to increase to 68% by 2050, or 6.7 billion people in urban areas worldwide. Currently, in Croatia, the population is equally divided between rural and urban, but with tendencies of further urbanization (Kisić, 2018). The situation in Europe is projected to be around 80% of the urban population by 2020 (Nilsson et al., 2013). Lack of strategies for rural development is the main reason for emigration from rural areas and is known since the early 1970s (Jolly, 1971). Grgić et al. (2010) highlight additionally low job opportunities, lack of cultural events, recreation possibilities, health, and social services in rural parts.

However, with the rise of the urban population, many are beginning to convert small vacant spaces into urban gardens (community gardens, allotment gardens). Some citizens are driven by producing something themselves and improving living conditions, while others use it for commercial purposes (Kisić, 2018). What connects all of

them is concern about climate change and sustaining food security. Also, Vivero-Pol (2017) encourages viewing of food as a human right and not as commodity provided by the alternative food system. Therefore, urban agriculture is becoming an increasingly important component in circular agricultural production for sustainable cities (Thomaier et al., 2015). In its report, Food and Agriculture Organization (2010) emphasizes that 800 million people are involved in urban agriculture, producing together around 20% of the required food in the world. In addition to its environmental and economic roles, urban agriculture also has a social purpose, which is becoming increasingly relevant as citizens are mostly self-interested above all, living in estranged communities and without faceto-face interaction (Augustina and Beilin, 2012). Also, urban agriculture can contribute to the inclusion of the newly arrived residents in the community (Lovell, 2010). Citizens are encouraged to take up eco-friendly hobbies, actively participate in the neighbourhood and positively influence their future, leading to an increase in overall social benefit (Corrigan, 2011). Therefore, in this paper, we summarised the importance of urban agriculture with emphasis on social role in Croatia. With such examples, we hope to raise awareness of the importance of UA not only among scholars, but also among many interested parties involved in shaping urban policy. To the author's knowledge, there is a lack of such studies, especially in Eastern Europe.

HOLISTIC ASPECT OF URBAN AGRICULTURE

According to Vadnal and Alič (2008), in developed countries (Table 1), urban agriculture is a hobby, additional interest and recreation, sort of a craving to create individually as much as possible (e.g., "grow your own"). It is also considered as quality leisure time, while being in the company of other people who enjoy it. However, in countries where there is high poverty, unemployment, economic insecurity, there is a lack of supplies of quality food to the cities. That is why the role of urban agriculture is first and foremost food security and restraining further malnutrition among the most impoverished families. Nowadays, Tornaghi (2017) argues different roles of UA

Table 1. Function of urban agriculture in developing and developed countries

Developing countries (De Zeeuw, 2003)

Improving the eating habits and diet of citizens, a supplement to local economic development, reducing poverty and social unrest among (socially) vulnerable groups of citizens, an addition to the city's ongoing environmental development.

Developed countries (Sommers and Smit, 1994)

Improving the availability and quality of food, generating additional income for the economy, recreation and leisure activities, culture, education.

in achieving food justice. First, traditional, through shared experiences and practices within the community and second, through three strategies of alternative urbanism (neoliberal urbanism, urban ecology, food commoning).

Urban agriculture activities already have shown beneficial effects on biodiversity and the development of the local food system, but also it provides a new dimension for social development. Some authors note that social dimension could become the primary purpose of urban agriculture (Orsini et al., 2013). Different types of urban agriculture (residential gardens, city gardens and gardens of various institutions) with low economic profitability, have a significant impact on social inclusion, poverty alleviation and community development (Van Veenhuizen and Danso, 2007; Brezinščak et al., 2019). Whatever the economic status of the nation, UA depicts as a social organization focused on creating more reliable and more connected urban communities. Social activities reflect local needs and skills and link them with urban agriculture so that it gives a sense of joint achievement by producing food with added social value (Smith and Bailkey, 2006). So, there is no suprise when UA receives praise for its inclusion of disadvantaged members of society. Furthermore, we explain several aspects of social activities linked with UA.

Political expression and democratic value

The political role of UA is expressed through two measures. The first measure is structuring of the community and establishing of the main body of the community and deciding how to make decisions (democracy, autocracy, or a combination of both). Other is connecting members with government officials or higher levels of government, to have direct links with political parties and interest groups (Smith and Bailkey, 2006), these active residents are known as "urban ecological citizens" (Light, 2003). Through their work, participants in UA learn about the management function and how the leader can help the community thrive. Learning about these functions is one of the essential roles of UA as it helps to create a strong community, but also in empowering individuals in the community (Travaline and Hunold, 2010). Community gardens thus become unique urban public spaces that offer the opportunity to develop a tolerant, creative, and empowered society based on the values of inclusion, collaboration, and the belief that the community brings well-being. In political terms, community gardens can form space and society in which we live, thereby restoring the responsibility and power to the community of active and emancipated citizens (Rubić and Gulin Zrnić, 2015). With greater confidence and knowledge of various functions, individuals have the opportunity to elevate their influence to make a difference (Levkoe, 2006). In democratic systems where citizens have some influence over public policy, the concept of local councils and committees can structure and facilitate the creation of support policies for those active in some form of urban agriculture (Barron, 2016). Horst et al. (2017) report increased voter registration associated with active participation in the community. Research in the UK showed lower rates of severe and petty crime in areas with some form of UA (Cozens et al., 2004). As a form of political expression, UA represents a clear-cut rejection of the capitalist, corporation food production (McClintock and Simpson, 2018).

Gender equality

Generally, both men and women are active participants in UA, while the nature and extent of their assignment vary in different contexts. In Africa, for example, most farmers in UA are women, because they bear the responsibility for household livelihood. Also, lower education is causing difficulties in finding formal jobs (Hovorka, 2005). On the other hand, in Asia, men are in the majority due to the commercial nature of agriculture. UA empowers women to collectively initiate, structure and implement successful projects tailored to the identified nutritional needs of their family members, despite local resource constraints or gender discrimination (Smith and Bailkey, 2006). Small (2007) reports a positive impact of the Siyazama Community Gardens Project on the position and role of women in the community of Cape Town. Women become responsible for their lands, choosing their crops, and farming methods, taking care of surplus sales and promotion, participating in training and workshops, and promoting their practices in other communities. Also, they employ men as an additional workforce. In this way, women move away from the traditional roles of unemployed homemakers who are taking care of the home and children and become financially equal household members. Soon, UA can be an excellent field for accommodating gendered sustainability. Achieving that goal requires a joint effort around these elements: mainstreaming, namely conceptual clarity, identifying practical and strategic needs, political will and commitment, capacity building and resource allocation, and scientific research. It is critical to perceive that UA activities and related approaches can have different effects on people, contingent upon which gender and level of work required, during planning and implementation. Additionally, it is vital to perceive gendered based disparities, which reveal themselves in UA dynamics and strengthen social rejection, especially of women (Hovorka and Lee-Smith, 2006).

Social cohesion and shared participation

Often, urban communities lack social cohesion and joint participation in achieving a shared vision. UA

brings together members of that community, most often outdoors, and creates interaction. Essential characteristics of successful UA are group project planning and implementation of projects, networking with other communities and solving challenges together. A sense of control of their local food system leads to a collective sense of self-worth for individuals and the community, whereby those included think more positively about themselves and their neighbours and are pleased with their shared achievement (Smith and Bailkey, 2006; Teig et al., 2009).

Cohesion among solidarity exchange groups is imminent, as the group follows a shared vision, and it is crucial for people to be open and express clearly and honestly what they want to do, which applies to both, manufacturers, and consumers. Through mutual openness and honesty in the group, trust exists, and doubt and fear disappear, while mutual relationships slowly deepen. If there are any problems within the group or among the members, support or assistance is available, and solidarity takes effect. If everyone knows each other well and established a trusting relationship, a natural consequence will be mutual assistance or solidarity, which is one of the main goals of such groups (Medić and Pešak, 2012).

A feeling of network responsibility for nearby nourishment framework prompts an aggregate feeling of strengthening for people and the network, whereby those included contemplate themselves and their neighbors and are pleased with their mutual accomplishment.

Education

UA activities promote learning about food – where, how, and by whom it is grown. The idea is to understand food production chain better, the value of locally produced food and make an informed decision in regards with food development and policies (Iles, 2005; Okvat and Zautra, 2011). Even those that do not actively participate in farming have more interest in agriculture process when UA is in their community (Deelstra and Girardet, 2001). Research from Toronto noted that participants of community gardens buy less food in stores and eat more vegetables (Wakefield et al., 2007). Throughout the 20th

century, school gardens were an excellent educational tool - not only for their practical knowledge of food but also for their awareness of composting and recycling and introducing discipline, organization, and responsibility.

Furthermore, UA enables an individual to learn specific practical skills in production, processing and marketing that are not available in other branches in the urban area (Smith and Bailkey, 2006; Travaline and Hunold, 2010). In kindergarten and school, children spend up to a quarter of their time playing outdoors. Often undervalued and recognized as "filling the time" or "taking a break from learning," is crucial to a child's learning. Titman (1994) defines it as "informal curriculum" and what children learn during this time through play develops their social and cognitive skills. In their research, Malone and Tranter (2003) point out that the schoolyard space is a "stage" at $which \, children \, spontaneously \, and \, freely \, respond \, to \, events$ that touch their lives. It is a space where they connect with the social, cultural, and environmental domains of childhood. The authors note that by introducing gardens to schools and kindergartens, the game transforms into small research units where children learn about the environment and their surroundings, food and nutrition, animals, and the climate.

Cultural heritage

Certain groups of residents were not born in the city where they live but migrated to the metropolitan area. Each of these migrant groups has its nutrition preference, which is not always available in the local market or, if it is available, the prices of these products are not acceptable. Migrant groups often turn to grow and enjoying familiar foods in their gardens to maintain their traditions and identities, while sharing culturally specific agricultural and culinary knowledge among the community (De Zeeuw and Dubbeling, 2009; Hondagneu-Sotelo, 2014).

Medić and Pešak (2012) note that users of the Solidarity Exchange Group through local and seasonal products are recognising the importance and health value with seasonal supplying and some are even remembering forgotten recipes from their grandparents. The connectivity of

the region with local and seasonally available food is also noted. When buying local and seasonal food, we are respecting local communities and traditions, which somehow faded during urbanisation. Urban agriculture is helping to build a food system that, through communion, empowers its members to discover and enjoy their cuisine as they do their traditions and cultural heritage. Classical (rural) agriculture is a praiseworthy element of the legacy of many cultural groups, and by reactivating in cities (by cultivating and processing traditional crops), it creates a significant link with tradition and connects them with their heritage. Celebrations around food production, such as seeding or harvest holidays, are common and extremely important in connecting young people with traditional rites (Smith and Bailkey, 2006). In the spirit of keeping traditional agriculture inside the city, Esbah et al. (2014) promote inclusion of UA in UNESCO protected Historical Peninsula of Istanbul (Turkey). As a reminder of the important cultural landscape for future generations by utilising derelict parts, raising awareness, and adapting UA concepts within urban plans. Vadnal et al. (2010) argue that the protection of cultural and historical gardens is closely intertwined with economic function and offers a model of multifunctional urban agriculture.

(Social) Inclusion

As a rule, people in cities are very reserved and closed, often confined to their four walls, often spending their time with television, computer, or smartphone, alone, and only sometimes they get together with relatives, neighbours or friends. It is noticeable, especially with older people and pensioners who have much free time, but they often use it poorly. Many of them feel lonely, neglected, and a bit useless in the community in which they live. On the other hand, projects such as city gardens can make a good sense of their leisure time and thus significantly improve the overall quality of life. Urban lands divided into small garden plots function as living communities where, apart from cultivation, people get to know each other, socialize, collaborate by sharing garden tools, exchange seeds, cultivation experiences, recommendations, tips. It can lead to active social life, new friendships, garden parties and barbecues or card tournaments under the gazebos. Such garden communities Larder et al. (2014) refers to as food-based communities. For many, socializing with family and friends serves as a motivation for pursuing farming activities in the city. Besides, the desire to "grow your own food " or recollecting childhood memories in the countryside is a great motivation (Lyle et al., 2015).

UA can play a role in the social inclusion of marginalized groups (the elderly without a pension, the unemployed, the disabled, affected by war or disasters, minorities, low-income households) by providing them with the opportunity to feed their families and raise income while improving self-management and entrepreneurial capacity (De Zeeuw and Dubbeling, 2009). Survey results show that in London, where all residents have the right to use urban gardens, regardless of ethnicity, class, gender, and age, sharing knowledge, skills, culture and values leads to social inclusion and a sense of belonging to the community migrants living in non-migrant communities (Beckie and Bogdan, 2010; Cabannes and Raposo, 2013). On a positive effect of UA of social inclusion is written by Lang (1999); Wakefiled et al. (2007); Kingsley and Townsend (2006); Turner et al. (2011) and Skar et al. (2020). The European Commission (2012) defined social exclusion as a process that pushes individuals to the margins of society and prevents them from fully participating in society because of personal poverty, lack of necessary competencies, lifelong learning opportunities or discrimination. There are many different and interrelated factors, such as regional or gender inequality, unemployment, poor vocational or social skills, low income, poor housing conditions, belonging to a minority group and the like. It encompasses an individual's inability to access public services, to participate in community life, and to act in a society with a sense of personal dignity.

SOCIAL BENEFITS FROM UA: EXAMPLES FROM CROATIA

City gardens in Zagreb

Community gardens in Zagreb have a long history, from the Bulgarians-gardeners in the 1870s to the organisation of illegal city gardens in the 1990s. With the closure of illicit gardens in the Travno block in 2013 (to revitalise "unregulated" urban areas), the Mayor of the City of Zagreb issued a Conclusion on the implementation of the project City Gardens (Official Gazette, 2013), which initiated the regulation and equipping of arable land owned by the City of Zagreb to provide part of arable land to citizens of Zagreb for the production of vegetables, berries, herbs and flowers for self-use (Mrakužić, 2018). The right to use the plots of the City Gardens is granted to any person with a registered residence in the City of Zagreb who does not own, co-own, rent or use other arable lands. The criteria for letting garden plots for use are the applicant's place of residence, social status, Croatian war veteran's status, retirement status and a number of household members. Based on earned points, and matching criteria, a contract for a two-year lease is concluded, with the possibility of extension. Arable land consists of garden parcels up to 50 m² in size with shared components (access roads and paths, wooden and prefabricated tool and organic fertiliser repositories, composters, benches and waste bins, arbour, and canopies). All city gardens are fenced, and the common areas are for socialising and resting, or education and workshops (Kisić, 2018; Mrakužić, 2018). According to Mrakuzic (2018), City Gardens make healthy food accessible and improve citizens home budgets, contribute to the preservation of a healthier environment, preserve biodiversity, raise environmental awareness of citizens, promoting healthy lifestyles, as well as developing the City of Zagreb's partnership with citizens. Since the City Gardens are in an urban environment, a monitoring program has been established. Public Health Institute, "Dr. Andrija Štampar" and the University of Zagreb Faculty of Agriculture, analyse samples of soil, water and plant material and regularly monitor soil condition, contamination intake and food safety of the products. The results are available to all users of garden plots.

In her research, Dobrić (2015) conducted interviews with users of City gardens in three city blocks (Prečko, Savica and Sopot). Focusing on the gardener's motivation to establish or participate in the garden, a model of managing the garden, organisational interventions

for harmonisation and emancipation of the gardening community and openness of the garden towards the neighbourhood. The author states that gardeners in these gardens are of different ages, nationalities, educational levels, worldviews, and political backgrounds, and with a certain level of openness to the exchange of gardening advice, as well as spontaneous gardening solidarity and mutual assistance in physical activities in the garden. The primary motivation for setting up a garden and participating in garden activities is the connection within the community, cultivation of food, the development of gardening skills, the desire for recreation, and escape from everyday life. In conclusion, the author states that community gardens are open to all, gardeners, and residents. They are accessible places for a creative and stimulating neighbourhood gathering, and providing an opportunity for getting to know each other, by applying direct and positive communication, sharing knowledge, experiences and ideas, and reflecting on personal, natural and social values.

Caritas project in Zadar

Urban agriculture often serves as a way of helping the homeless. As an example, Kisić (2018) cites the employment of the homeless population of Zadar - a project of the Ministry of Social Welfare and Caritas of the Archdiocese of Zadar, entitled "New Skills for New Opportunities". The project aims to develop new skills for homeless people in farming, and the beneficiaries of the project are the homeless accommodation of St. Vinko Paulski, Caritas of the Archdiocese of Zadar. The development of a business plan defined the cultures for planting, soil preparation for farming, and the procurement of tools. The main result of the project is to raise awareness of the needs and possible opportunities for the homeless. Also, through the implementation of the project and the harvest, the Public Kitchen in Zadar is supplied. The project's authors consider this as an excellent example of re-socialization and social inclusion of homeless people because through work they begin to feel useful again, and gradually their faith and hope for a better and brighter future are restored. Mirjana Tadic, Deputy Director of Caritas in Zadar, states that during the project, the homeless people raised 5 t of potatoes (*Solanum Tuberosum*) and about 100 kg of chard (*Beta vulgaris* subsp. *Vulgaris*) in 2016, thus saving Caritas resources significantly. In Bokanjac area they cultivate around 4000 m² with potatoes, chard, cabbage, kale, broccoli and parsley, and they present their activities at the Benkovac agricultural fair (Caritas Zadar, 2015; Antena Zadar, 2016).

Rab Psychiatric Hospital

Rab Psychiatric Hospital was founded in 1955 in Kampor, about 5 km from the town-centar of Rab, Island of Rab. The hospital offers 2 ha of green space, and its microclimate conditions provide excellent conditions for the application and development of open-air therapy programs as well as for exploring the effects of the natural environment on human mental and physical health. In front of the main building is a garden that grows vegetables and herbs used for cooking as part of occupational therapy. For users and visitors alike, the garden is a pleasant and attractive location used for therapeutic purposes. It has a positive effect on our senses but also helps to meet the human need for nurturing and caring. Through the implementation of various activities in the garden (planting, transplanting seedlings, watering, plowing, protection against pests, fertilization, maintenance of greenhouses), beneficiaries gain confidence and a sense of self-competence. By working in the garden, users are relieved of excess energy and restore muscle strength and endurance. It also provides users with the opportunity to find new interests and hobbies for healthy leisure time, which will continue after being released from the institution (Šendula Jengić and Hodak, 2012).

Horticultural therapy, according to Kuharić et al. (2010), is a professionally guided form of patient treatment, in which the positive values of human interaction with plants and gardens enhance cognitive, psychological, social, and physical functions of users. The authors also state that persons with physical or mental disabilities involved in horticultural therapy programs gain experience working in therapy gardens, can with certain

adjustments continue these activities at home or work. Although agricultural activities started from the mid-20th century, its social aspect becomes apparent as a part of UA in 2012, when the project for designing and constructing a therapeutic garden started within the hospital park in cooperation with prof. mr. sc. Daniel Winterbottom, an expert in the design of therapeutic and sensory gardens and parks, from the Faculty of Landscape Architecture at Washington State University in the USA (Šendula Jengić and Hodak, 2012). The design solution created around the central circle, is also a stage and theatre, with various program features (wooden promenade, water motif with waterfall, a sensory garden with different scents, colours and textures of plants, canopies, and pergolas as spaces for socializing). By creating these elements, spaces and activities that will improve the health of users with specific needs - physical or cognitive rehabilitation, spaces for the social interaction of users suffering from social phobias or antisocial behaviour, memory loss, PTSD. With all psychological betterment, time spent in the therapeutic garden reduces stress, lowers blood pressure and heart rate, promotes focus, reduces the dose of drugs and has a positive effect on the immune system, which significantly shortens the time spent in the hospital (Šendula Jengić et al., 2011).

Ecological and Educational Garden of "Podmurvice" Pupil Dormitory, Rijeka

The garden, intended for young users, pupils and students, is located in the urban core of the City of Rijeka, was founded in 2010. The garden was built with the support of the Seattle University's "Design and build" educational program, which aims to educate students on the practical tasks of establishing gardens with socially sensitive and environmentally conscious activities, and in collaboration with a range of professionals and artists from Croatia. The environment is arranged according to wishes of the recipients, and guidelines provided by gender-sensitive analysis. The garden sought to create new opportunities through which young people could take care of their immediate environment, thereby assuming responsibilities in their community, raising

their inner values through creative, artistic work, and thus building self-esteem and confidence. The garden hosts eco-educational activities with a variety of topics, such as a series of flower garden design workshops and flowering plants that enhance the garden itself, lectures and seminars on organic food production, bio-waste collection and composting. Organization of such activities is raising awareness about food production and ecology, but also the importance of working together from an early age (Butorac, 2015).

"Wonderful Gardens" in Varaždin

Varaždin's Wonderful Gardens spread over 1.3 ha of city land. They consist of 108 garden plots measuring 50 m² and several hundred citizens cultivating them. Founded on May 1st, 2012, at the initiative of five Varaždin residents who did not know each other before and who did not gather because of creating communal gardens, they were led by the idea about creating a stronger community. As the founders themselves did not have enough expertise in agriculture, which was a prerequisite for obtaining a parcel from the City, they contacted local NGO (Biovrt Association) - which readily and without compensation agreed to hold a workshop on the basics of organic gardening for all concerned. "Wonderful Gardens" provide a location for the cultivation vegetables and herbs, but it also becomes a place for sharing everyday stories, knowledge, ideas, and experiences among users. In the end, the goal was achieved - without significant initial funds, the project of community gardens was managed by the citizens themselves, which can serve as an example that in any environment where there is an interest of citizens a similar project can be launched (Hanžek, 2015).

Green Classroom of the Faculty of Education and Rehabilitation (ERF), University of Zagreb

The main idea behind the Green Classroom project (garden), is to clarify the role of gardens in the quality of human life and the impact that gardens can have on human life and health. Followed by the example gardens at world university campuses such as Harvard University,

Yale, Oxford, University and Campus in Milan, the University Library in Warsaw. In 2013, the ERF Garden - Green Classroom was launched. It is a combination of a multi-sensory park and a vegetable garden, located on a plot close to the Faculty of Education and Rehabilitation at the Borongaj Science and Education Campus in Zagreb. During 2014, there were many gardening workshops, involving ERF students and professors, as well as numerous volunteers, asylum seekers and children. Curiously children who came with their parents spend their free time more constructively and quickly made a connection with adults and peers. Children and young people, enjoy gardening activities and do not experience any of this as arduous, but instead as recreation and play. During the work action, everyone works as much as they can and want, together, in a relaxed atmosphere in which everything takes place spontaneously. It is through the promotion of community social cohesion, volunteering, pro-social engagement, and commitment that the Green Classroom and all activities in the garden stimulate mental health promotion, which is an investment in the quality of life and the development of social and emotional competences of all involved. Since 2015, citizens from the local block near the Borongaj campus have joined in the garden activities as well. Furthermore, participating in gardening activities are suggested to the unemployed and other groups that are at risk of being socially excluded. Such space has great potential and should be accessible and useful to a wide range of people with different needs and ages - from children to senior citizens, regardless of their level of ability or skill. Activities in the Green Classroom can be carefully structured, according to the needs of each user (Novak, 2015).

CONCLUSION

The world's population is growing day by day, and so is the need for food. Given the increase of urbanization, most of the inhabitants are fostering some UA and wanting to learn about food production. It applies not only to the means of production but likewise on the environment, social relations, and circular economy. Urban residents are becoming more aware of how they (negatively) affect the

environment and are increasingly turning to sustainable agricultural production within the city. Given the busy lifestyle and alienation in urban areas, social aspects are not researched enough. Although there are limitations, through various forms of UA, we described a social role of urban agriculture. Many of them focus on creating healthier communities through encouraging activism, educating members, gender equality, social cohesion, and social inclusion, preserving cultural heritage, and socializing newcomers. Through presented examples, we conclude that urban agriculture is a multifunctional activity that develops through the development of cities and its inhabitants. Examples from Croatia are explained in detail in each subchapter, with benefits and possibilities for implementation in other cities or urban regions. Despite many positive impacts and raised awareness in the last decade, the area is still under-researched and requires collaboration between scholars, project owners and municipality. UA as a concept is still in the beginning stages in Croatia, and this paper possibly brings broader debate among decision-makers and other interested factions. Next step should be, creating a framework for the development of UA and including it in urban planning. While solving such challenges, it is vital to maintain a holistic approach.

"If it is shaped the right way, the garden becomes a community that we are involved in, as opposed to a society where we are excluding ourselves." - (Dobrić, 2015)

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