

COST Action TU1201 Urban Allotment Gardens

Short Term scientific Mission – Short Report

# Urban Gardening in European Cities

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## Motives for Urban Community Gardening Using Examples of Birmingham City (UK)

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# 1. Abstract

Urban gardening is local, regional and seasonal food production in cities and has become trendy, modern, fashionable. More and more people harvest and sow plants on their private balcony, terrace, in their private gardens or in urban community gardens. Many different motives force people to grow their own food in community gardens such as *community, experience with nature, individual design, food production, political commitment, tradition, manual work, and time with family*. In times of overpopulation, urbanisation, long transport routes, and over usage of pesticides, urban community gardens, more and more, play an important role in our everyday lives and in the scientific world.

*Urban gardening* is an expression of small-scale and communal usage of urban spaces and has established to provide an opportunity where citizens can increase their personal well-being in urban space. Urban community gardens boom and more and more people become active gardeners. The gardener's motives are as different as the gardeners themselves, but there are some main motives. Urban community gardens are not only "beautifications" of brownfields; they also integrate socially excluded people, help to realize individual ideas, compensate stress and increase the well-being of all gardeners. Through communal activities, such as sowing, harvesting, processing and eating vegetables and fruits, gardeners feel more connected than other inhabitants to nature and their natural environment.

## 2. Introduction

Many studies, like the Global Green Space Report 2013, state that green spaces and spending one's free time on them is more important for a human's well-being than vocation, sexual life, money or religion. (Global Green Space Report, 2013). Further, therapeutic gardens and so called Healing Gardens show that gardens affect human's well-being and health positively (Ulrich et al. 1991, Ulrich 1999, Cooper Marcus, 2001).

This research methodology is based on a quantitative analysis of gathered data through online questionnaire with eight areas of questions with five to six response possibilities in order to understand gardeners' motives. The study shows the locations of the gardens and how important various motives are to practice urban community gardening and which motives are the most relevant ones. The paper starts by defining the terms *community*, *community garden* and *motive* or *motivation* and continues presenting and discussing the findings.

The paper functions as a short report of a STSM (Short/term Scientific Mission) scheme funded by COST Action TU1201 Urban Allotment Gardens in Europe. The mission was conducted at Birmingham City University as the host institute. Further research and more data will be added in the extended version of this report. The findings of Birmingham City will also be compared to those of Salzburg City.

### 2.1. Definitions

**Community** is a major part in urban community gardening. Urban community gardens often function as a link between foreign people, which results in more and better communication between gardeners. According to the Oxford Online Dictionary a community is "a group of people [...] having a particular characteristic in common", "practising common ownership" and "sharing or having certain attitudes and interests in common". Further, an urban community is defined as "a particular area or place considered together with its inhabitants" or as "the people of a district or county

considered collectively, especially in the context of social values and responsibilities” (Oxford Online Dictionary).

**Community Gardens** are located on public areas and are supported by public agencies such as the Church, the city, a foundation or else. Those public agencies are responsible for waste collection, water costs and provision and insurances. Most community gardens are accessible for all inhabitants or passers, but individual garden beds or plots are assigned to specific people or groups of people. (Gartenpolylog)

There are several forms of urban community gardens: Neighbourhood Gardens, Guerrilla Gardening, Women’s Gardens, City Farms, Tenant’s Gardens, Window Gardens, Vertical Farms, Subsistence and Horticulture, Market Gardens, Cross-generational Gardens, Student’s Gardens and Intercultural Gardens (Müller, 2011:31-32). Community gardens are one form of urban gardening. The first community gardens emerged in 1970 in New York, where people tried to re-appropriate their neighbourhood by planting plants illegally on abandoned areas. The aim of those communal projects was to improve inhabitants’ well-being, and to revitalise and activate living spaces.

Christa Müller (2011) describes the foundation of community gardens, usually located on public abandoned lands, as an important issue for improving the well-being of public society. The Austrian Association for Urban Gardening, called Gartenpolylog, describes community gardens as gardens, which are run by a group of people. Not only does gardening as action play an important role, but also communal work, co-creation of the neighbourhood, the possibility of participation in a community, the development of communal senses and the communicative action do as well.

According to Wilfried Endlicher (2012:201-201) community gardens base on volunteer engagement, which enables an organised form of communal life and which contributes to a meaningful usage of abandoned areas. Rosol (2006) outlines that community gardens are characterised by active gardening, communal care for plants and publicness.

Before explaining various **motives** for urban community gardening in more details, the term motive has to be clarified. Following Reinhold (1992:409) **motivation**

can be explained as the sum of motives, which activate individual actions. Further, Rosol describes (2006:216) motivations as a combination of individual motives, whereas a motive has a specific aim or purpose and only is one part of a motivation. The Oxford Online Dictionary describes motives as “a reason for doing something” and the Cambridge Online Dictionary describes it as “something that makes a person choose to act in a particular way”.

For this study, only individual motives, describing specific aspects of urban community gardening, will be respected. The motives will not be set in context with or compared to individual motivations for urban community gardening. The aim of this research is to find out if the motives *community, experience of nature, individual design, food production, political commitment, tradition, manual work or time with family and friends* are relevant for activities in urban community gardens.

### **3. Methodology**

Individual's basic needs result from individual living circumstances, preferences and experiences. The well-known theory by Abraham Maslow (Figure 1) shows what people force to act in specific ways or to do specific things (Abraham Maslow, 1997). He explains that people do everything in order to reach the top of all basic demands. In order to present his ideas better he designed the well-known pyramid of basic needs which explains what is most important for being happy. The very basic needs, such as health, food and sleep are located on the bottom of the pyramid. Less important needs for being able to survive, but more important for being happy and fully satisfied, are located at the top of Maslow's pyramid.

## ABRAHAM MASLOW HIERARCHY OF NEEDS

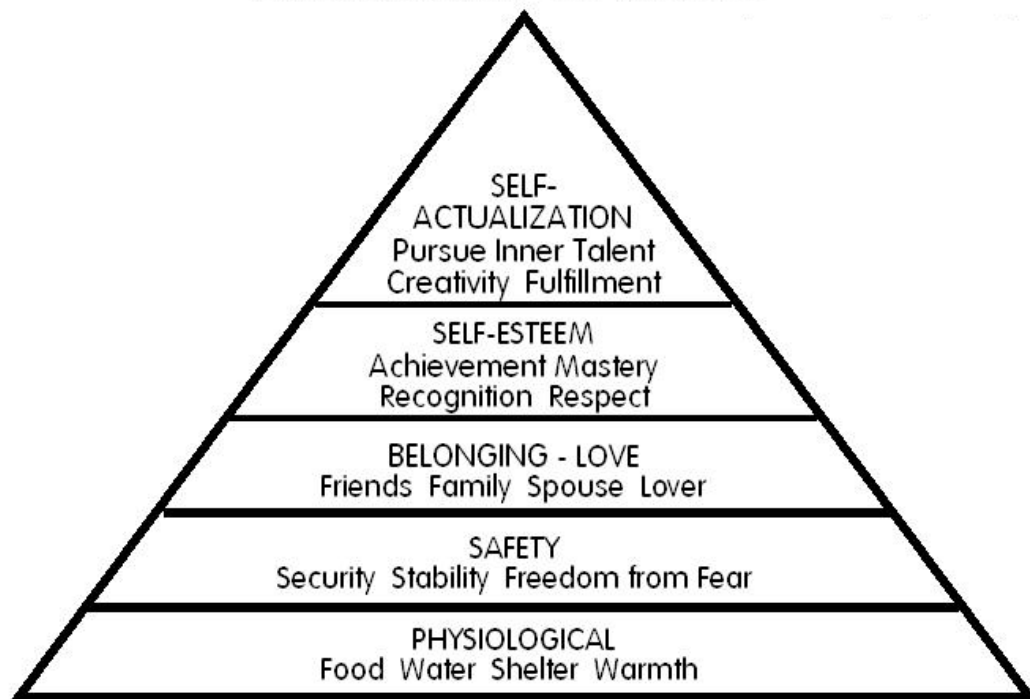


Figure 1: Maslow, A. (1970).

Westen (1999, 447) explains Maslow's pyramid, in context of gardening, as followed:

At the most basic level is physiological needs, such as those for water and food. Next are safety needs, for security and protection. Having satisfied physiological and safety needs to some extent, people are motivated to pursue closeness and affiliation with other people, or what Maslow calls belongingness needs. Next in the hierarchy are esteem needs, including both self-esteem and the esteem of others. Finally, at the highest level, are self-actualization needs, the need to express oneself and grow, or to actualize one's potential. Self-actualization needs differ from all the previous levels in that they are not deficiency needs; that is, they are not generated by a lack of something (food, shelter, closeness, the esteem of others). Rather, they are growth needs, motives to expand and develop one's skills and abilities.

This definition leads to eight fields of questions containing five to six response possibilities:

### ***Community***

Many projects, or associations, aim to re-socialise and re-connect urban citizens and to break up social segregation. Community gardens have become to an important tool for

reaching those aims. Community gardens are places of social interaction and communicative exchange (Gartenpolylog). For many gardeners, communal work and being together (share identity, belonging n Mazlow) are the most relevant motives for urban community gardening. Moreover, social contact, exchange and communication in people's natural environment make urban community gardens so important (Rosol, 2006: 220).

### ***Experiencing nature***

Being in and experiencing nature (Kaplan, Kaplan, Ryan 1998) is another important motive for urban community gardening. Many people like to experience nature in urban spaces, enjoy the natural view of plants, or learn more about products and animals practically. (Rosol, 2006: 224).

### ***Individual design***

Another motive for urban community gardening is the wish or need for designing one's environment actively. Community gardens are places which tie on existing spatial structures and develop or encourage new possibilities of orientation, learning and acting. The community garden experiences itself, again and again, in new contexts and allows gardeners to perceive their self-images and worldviews, concerning urban design, autonomously and independently (Gartenpolylog). Gardeners satisfy their demands for changing, beautifying, and greening urban space and, through that, make urban space available and usable (Rosol, 2006:221).

### ***Food production***

Globalisation in the agricultural sector, the dominance of various agricultural corporations (such as Monsanto) and the production of genetically modified food motivates people to urban gardening. Through self-production of food, people are able to observe and control all processes during food production. Another explanation for substantial motives is that organic products, sold in the supermarkets, often are too expensive for people and growing products on their own is the only possibility of consuming organic products. (Gartenpolylog)



### ***Political commitment***

There are two basic ideas about political commitment. The Austrian association Gartenpolylog states that people search for political commitment in urban community gardens because they would like to experience and live political hierarchy and political rules. They also mean that urban gardeners like to follow democratic basic ideas and structures of an urban community garden, in which concerns about the garden's structure, the garden's everyday life and social events can be discussed democratically. Being a part of such political processes and decision making processes enables the gardeners to increase their well-being (Gartenpolylog).

Christa Müller (2009:29), in this context, explains that urban community gardens function as new political urban space, in which the disagreement about the economisation of society can be expressed. Urban community gardens are places of opposition against the neoliberal doctrine.

Further, Rosol (2006:225-226) describes that urban community gardeners try to create an opposite pole against the individualisation of capitalistic societies, build references to global issues and reach self-organisation and self-determination.

### ***Tradition***

The first urban community garden in Germany was created in order to integrate Bosnian refugees into German society. For them, gardening is an important part of culture, tradition and individual identity. Through the gardening project they had the chance of getting into contact with locals more easily. This basic idea has spread and urban community gardens, today, often function as a link between foreign cultures.

Another traditional reason for urban community gardening is that persons were used to gardens in their childhood, when gardening with parents or grandparents. The act of caring for plants and getting in contact with nature prompts childhood memories and feelings of safety and happiness.

### ***Manual work***

After a day in the office, many people enjoy the manual work whilst gardening. Perceiving wind, sunlight and feeling the soil in one's hands makes many people feel

happy and more balanced. This and the spiritual and therapeutic aspects of gardening is a major motive for urban community gardening (Rosol, 2006:218). Manual exaggeration, reached through working with plants and soil, helps to balance the human body and increases health and fitness (Lawson, 2006, Kingsley et al. 2009).

### ***Time with family***

Sowing, harvesting and processing food sensitises people for nature (Müller, 2011:30) and enables people, especially children, to experience cycles of nature (Rosol, 2006:225). Parents enjoy community gardens as they enable them to communicate with other parents and keep their children busy. In comparison to playgrounds, parents and children see their time in community gardens more meaning and useful (Rosol, 2006: 222)

For the research the following four community gardens in Birmingham City have been visited:

### **Martineau Garden,**

27 Priory Rd, Birmingham B5 7UG, United Kingdom

Martineau Garden is a community garden of one hectare, located two miles outside of Birmingham City. It resembles a forest in the countryside. Following a footpath, the visitor or gardener experiences different stations, such as

- the forests,
- a field for ants,
- a beekeeping area,
- a pond,
- a fireplace,



Figure 2: Volunteers at work at Martineau Garden

- a clay oven,
- a wooden playground,
- a garden of roses,
- a wildflower meadow,
- garden beds,
- greenhouses,
- an orchard,
- a meeting place,
- a communal house, and
- a bird's place.

Each station presents important facts on nature and tries to help people understand nature and urban environments more easily.

Martineau Garden was established in the 1960s by the city in order to help teachers to learn how to teach their students environmental and natural coherences. The city planned the area in detail and made sure that all important facilities, such as water conduits and electricity, are accessible. Martineau Garden, since 1977, is an independent and self-responsible organisation, which gains no public funds or any public help. By selling the products, such as honey, wood, plants, vegetables and fruits, four people can be employed. With the help of 40 volunteers the garden represents itself in good and manicured condition.

The garden's aim is to educate children, especially, with learning difficulties and to help and re-socialise patients of psychological diseases. Generally the garden is open for all passers and the regular team is happy for every helping hand.

It is located in a suburb called Edgbaston, which is known for green space and cleanliness. This suburb also locates the Birmingham Botanical Gardens, Winterbourne Gardens, The Priory Lawn Tennis Club, Canon Hill Park, Birmingham University buildings and typical middle-class terraced houses. Nearby more exclusive detached houses of upper class families characterize and shape the surrounding. All in all, the garden's neighbourhood is rich in Green Infrastructure.

## **Secret Garden in the Library of Birmingham,**

Centenary Square, Broad St, Birmingham, West Midlands B1 2ND, United Kingdom

The Library of Birmingham is located in the inner city and can easily be reached by foot, train or bus. Around it you find monuments and historic buildings as well as bank and company buildings. Many local people pass the library on their way to work; and foreign people during their touristic city trips. The



Figure 3: View from Secret Garden on roof of Birmingham Library

urban appearance and dominance of buildings around the library, does not remind someone of gardens or the possible existence of a community garden on the roof of one of those. The Secret Garden is located on the library's two terraces and was established in 2013, following the concept by Meccanoo and Birmingham City Council. A group of eleven volunteers, between the age of 21 and 67 years, meets regularly and cares for the plants and facilities. They are responsible for the garden's appearance and shape. The garden's aim is to educate people in environmental issues and try, as a pioneer, cut carbon emissions. Foreign people are surprised by the garden's existence and local people appreciate and like the secret gardens. Many people stay, relax and watch plants and animals working in an urban area.

## **Salop Drive Market Garden,**

Oldbury, West Midlands B68 9AG, United Kingdom

Salop Drive Market Garden is a three acre community garden in Sandwell. The garden is located seven kilometres outside of Birmingham City in an area which was characterized by traditional heavy industries (coal etc.).



Figure 4: Garden beds of Salop Drive Market Garden

Therefore, the ground is much polluted and it was difficult to grow food in this area. The area was an important allotment garden for workers of the industries. The urban community garden was created by an organisation in 1970. Tim Botfield organises and runs the garden, which is only farmed by local volunteers. Salop Drive was set up in the late 1990's with a view to aid the health and well-being of the local community and a significant funding stream to get the project off the ground came from Sandwell Primary Care Trust. The main aim of this community garden is to educate mostly uneducated people earning little money in food production and healthy diets. Once a week the products are sold in packages for four pounds each. The community garden is a community food project for families and people with health problems. The garden's aim is to re-socialise overweight, uneducated, released or unhealthy people and to provide healthy products.

## Edible East Garden

122 Fazeley St, Birmingham B5 5RS, United Kingdom

Edible Eastside Garden is “a unique vibrant and contemporary urban garden covering a quarter of an acre of canal-side land” (Edible Eastside). The area of the community garden is a former gas filling station and has been converted into an urban community garden in 2012.



Figure 5: Garden beds made of recycled wood

Edible Eastside Garden is a charity and receives funding from various sources. It also provides educational space for children and students, and is partly supported by Birmingham City University and through their ECOGrow initiative. The gardener’s aim is to “integrate food systems into [their] thinking about urban environments and explore a new aesthetic for productive landscapes” (Edible Eastside). Artists play an integral part of this community garden, and so, events of art, communal cooking events etc. play an important role. The garden consists of various individual beds, which people rent for twenty pounds per year. People are responsible for their beds, but usually all gardeners help each other keeping the beds manicured. Edible Eastside Garden is a green oasis in the inner city.

Unfortunately, many gardeners of the community gardens have reading and writing problems and, perhaps therefore, they need more time than expected to fill in the questionnaires. Another reason for little responses might be the length of the questionnaire. Supervisor Mr. Russell Good suggested a shorter version of the questionnaire. For this reason, there will be a second evaluation in December 2014 and the outcomes of Birmingham will be compared to those of Salzburg.

### **3.1. Questionnaire**

Hans Mümmendey and Ina Grau (2008:13) explain that questionnaires offer clearly structured submittals for evaluating and answering specific items. This means that all interviewees judge according to the same characteristics. In order to proof if summarised items (ideas, terms or statements) are admissible and which items fit the whole questionnaire, all items pass through statistical analyses.

For this mission eight areas of questions with five to six response possibilities have been developed on basis of relevant literature. The questions have been formulated by me and corrected by my supervisors Mrs. Dr. Annette Voigt and Mr. Russel Good. The conduction has not yet finished and, therefore, there will be a second evaluation. The following items, concerning motives for urban community gardening have been asked with help of the questionnaire. The full questionnaire can be found in the appendix.

## **4. Findings**

A questionnaire, containing eight areas of questions with five to six response possibilities was created in order to collect demographic information to find out about motives for urban community gardening. The survey was administered from March 2014 until September 2014 and will go on until December 2014. The questionnaire was created with the help of an online creation website and spread via community garden's e-mail lists. Until now, seven gardeners have filled in the questionnaire. The gardeners were contacted personally during site visits, via e-mail and through the garden's persons in authority. Further reminding e-mails will be sent monthly until December 2014. The outcomes of the conduction from March 2014 until December 2014 will be discussed in the longer version of the scientific report. The creation website is a German one; therefore some words of the outcomes have to be translated:

Anzahl Teilnehmer = Amount of participants

Arithmetisches Mittel = Arithmetic average

Standardabweichung = Standard deviation



There are six response possibilities representing a specific amount of points:

- 1) Complete disagree → one point
- 2) Disagree → two points
- 3) Partly disagree → three points
- 4) Partly agree → four points
- 5) Agree → five points
- 6) Completely agree → six points

The website created on basis of all answers and arithmetic average and the standard deviation. The arithmetic average gives information about which answer mostly was chosen by all participants. The standard deviation explains in which frame the outcome of the average deviation may move.

1. The solidarity in community gardens is important to me. \*

Anzahl Teilnehmer: 7

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)		Arithmetisches Mittel (Ø)	Standardabweichung (±)						
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%			1	2	3	4	5	6
please tick	-	-	-	-	-	-	-	-	4x	57,14	3x	42,86	5,43	0,53						

2. I am, due to reasons of solidarity, a member of the community garden. \*

Anzahl Teilnehmer: 7

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)		Arithmetisches Mittel (Ø)	Standardabweichung (±)						
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%			1	2	3	4	5	6
please tick	-	-	1x	14,29	-	-	2x	28,57	3x	42,86	1x	14,29	4,43	1,27						

3. The collaborative work (organisation of events, watering division or mutual watering of beds, teamwork, etc.) in the community garden is very important to me. \*

Anzahl Teilnehmer: 7

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)		Arithmetisches Mittel (Ø)	Standardabweichung (±)						
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%			1	2	3	4	5	6
please tick	-	-	-	-	1x	14,29	-	-	4x	57,14	2x	28,57	5,00	1,00						



4. I am a gardener in the community garden because I am looking for sympathizers. \*

Anzahl Teilnehmer: 7

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	2x	28,57	1x	14,29	4x	57,14	-	-	-	-	3,29	0,95

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

5. Through the community, which I experience in the community garden, I feel more integrated in my neighbourhood. \*

Anzahl Teilnehmer: 7

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	-	-	-	-	1x	14,29	4x	57,14	2x	28,57	5,14	0,69

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

6. By gardening in the community garden I feel more connected with nature. \*

Anzahl Teilnehmer: 6

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	-	-	-	-	-	-	4x	66,67	2x	33,33	5,33	0,52

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

7. Since I am active in the community garden I spend more time outdoors. \*

Anzahl Teilnehmer: 6

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	1x	16,67	-	-	1x	16,67	2x	33,33	2x	33,33	4,67	1,51

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

8. I actively operate in the community garden because I want to spend time in nature. \*

Anzahl Teilnehmer: 6

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	-	-	-	-	1x	16,67	4x	66,67	1x	16,67	5,00	0,63

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

9. I like being a member of the community garden because, there, I can observe animals such as birds, hedgehogs, cats, etc... \*

Anzahl Teilnehmer: 6

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)				
	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\bar{x}$	$\pm$	
please tick	-	-	-	-	1x	16,67	3x	50,00	-	-	2x	33,33	4,50	1,22	<div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>

10. I operate in the community garden because, otherwise, I would have little contact with nature. \*

Anzahl Teilnehmer: 6

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)				
	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\bar{x}$	$\pm$	
please tick	-	-	4x	66,67	2x	33,33	-	-	-	-	-	-	2,33	0,52	<div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>

11. I am a gardener in the community garden because I actively would like to design my neighbourhood. \*

Anzahl Teilnehmer: 6

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)				
	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\bar{x}$	$\pm$	
please tick	-	-	-	-	1x	16,67	4x	66,67	1x	16,67	-	-	4,00	0,63	<div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>

12. By gardening in the community garden I can actively implement my own ideas for design in my neighbourhood. \*

Anzahl Teilnehmer: 6

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)				
	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\bar{x}$	$\pm$	
please tick	-	-	1x	16,67	-	-	5x	83,33	-	-	-	-	3,67	0,82	<div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>

13. The ability to play an integral part in my neighbourhood makes me happy. \*

Anzahl Teilnehmer: 6

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)				
	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\bar{x}$	$\pm$	
please tick	-	-	-	-	-	-	-	-	5x	83,33	1x	16,67	5,17	0,41	<div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>

14. The community garden offers me the opportunity to design my living space. \*

Anzahl Teilnehmer: 6

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	-	-	2x	33,33	1x	16,67	3x	50,00	-	-	4,17	0,98

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

15. I am a gardener in the community garden, because I am able to partake in creating my living space. \*

Anzahl Teilnehmer: 6

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	-	-	-	-	4x	66,67	2x	33,33	-	-	4,33	0,52

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

16. Producing my own food strengthens my well-being. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	-	-	-	-	-	-	4x	80,00	1x	20,00	5,20	0,45

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

17. It is a pleasure for me being able to grow and harvest crops. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	-	-	-	-	-	-	2x	40,00	3x	60,00	5,60	0,55

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

18. The self-production of food is important to me. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	-	-	-	-	1x	20,00	1x	20,00	3x	60,00	5,40	0,89

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

19. The possibility of self-production motivates me for gardening in the community garden. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	-	-	-	-	1x	20,00	1x	20,00	3x	60,00	5,40	0,89

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

20. Since I grow vegetables and fruit, especially in the community garden, I eat healthier. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	1x	20,00	-	-	2x	40,00	1x	20,00	1x	20,00	4,20	1,48

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

21. I actively operate in the community garden because I seek contact with plants and foods. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	-	-	-	-	1x	20,00	4x	80,00	-	-	4,80	0,45

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

22. I am an active member of the community garden because I want to oppose the mass production of food. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	1x	20,00	-	-	2x	40,00	1x	20,00	1x	20,00	-	-	3,20	1,48

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

23. Because I do not want to buy sprayed and highly cultured foods I grow them myself. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	-	-	1x	20,00	3x	60,00	1x	20,00	-	-	4,00	0,71

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

24. Organic products are, for me, too expensive in the shopping. Therefore, I resort to products from the community garden. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)				Arithmetisches Mittel ( $\bar{x}$ )	Standardabweichung ( $\pm$ )						
	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\bar{x}$	$\pm$			1	2	3	4	5	6
please tick	-	-	1x	20,00	1x	20,00	1x	20,00	2x	40,00	-	-	3,80	1,30								

25. Because I would not like to buy hybrid products from the market, I grow my own products in the community garden. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)				Arithmetisches Mittel ( $\bar{x}$ )	Standardabweichung ( $\pm$ )						
	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\bar{x}$	$\pm$			1	2	3	4	5	6
please tick	-	-	1x	20,00	-	-	2x	40,00	2x	40,00	-	-	4,00	1,22								

26. I am a gardener in the community garden, because, there, I am able to do something for the environment. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)				Arithmetisches Mittel ( $\bar{x}$ )	Standardabweichung ( $\pm$ )						
	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\bar{x}$	$\pm$			1	2	3	4	5	6
please tick	-	-	-	-	-	-	1x	20,00	3x	60,00	1x	20,00	5,00	0,71								

27. I have gardened in my childhood with my parents / grandparents. Because I would like to relive associated positive memories and feelings, I am a member of the urban community garden. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)				Arithmetisches Mittel ( $\bar{x}$ )	Standardabweichung ( $\pm$ )						
	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\bar{x}$	$\pm$			1	2	3	4	5	6
please tick	-	-	1x	20,00	1x	20,00	3x	60,00	-	-	-	-	3,40	0,89								

28. Gardening is an important aspect of my culture. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)				Arithmetisches Mittel ( $\bar{x}$ )	Standardabweichung ( $\pm$ )						
	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\Sigma$	%	$\bar{x}$	$\pm$			1	2	3	4	5	6
please tick	-	-	1x	20,00	-	-	1x	20,00	2x	40,00	1x	20,00	4,40	1,52								

29. Gardening is an important aspect in my family life. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	-	-	1x	20,00	3x	60,00	1x	20,00	-	-	4,00	0,71

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

30. The community garden connects me with people of my culture, which I would not have met without it. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	1x	20,00	-	-	2x	40,00	2x	40,00	-	-	4,00	1,22

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

31. Without the community garden I would be missing something in my neighbourhood. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	-	-	-	-	2x	40,00	3x	60,00	-	-	4,60	0,55

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

32. I like the physical work in the community garden. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	-	-	-	-	1x	20,00	3x	60,00	1x	20,00	5,00	0,71

Arithmetisches Mittel (Ø)

Standardabweichung (±)

1 2 3 4 5 6

33. The physical work in the community garden is good for my well-being. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	-	-	-	-	-	-	4x	80,00	1x	20,00	5,20	0,45

Arithmetisches Mittel (Ø)

Standardabweichung (±)

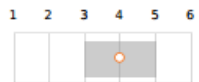
1 2 3 4 5 6

34. The physical work is one reason why I'm a gardener in the community garden. \*

Anzahl Teilnehmer: 5

														Arithmetisches Mittel (Ø)		Standardabweichung (±)				
completely disagree		disagree		partly disagree		partly agree		agree		completely agree										
(1)		(2)		(3)		(4)		(5)		(6)										
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±	1	2	3	4	5	6
please tick	-	-	-	-	2x	40,00	1x	20,00	2x	40,00	-	-	4,00	1,00						

Arithmetisches Mittel ( $\bar{0}$ )  
Standardabweichung ( $\pm$ )

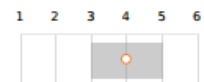


35. Because I like the physical work, I am a gardener in the community garden. \*

Anzahl Teilnehmer: 5

		completely disagree		disagree		partly disagree		partly agree		agree		completely agree									
		(1)		(2)		(3)		(4)		(5)		(6)									
		Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Arithmetisches Mittel (Ø)	Standardabweichung (±)	1	2	3	4	5	6
please tick	-	-	-	-	-	2x	40,00	1x	20,00	2x	40,00	-	-	4,00	1,00						

Arithmetisches Mittel ( $\bar{0}$ )  
Standardabweichung ( $\pm$ )

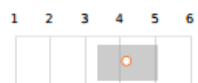


36. Because I like working with my hands, I am a gardener in the community garden. \*

Anzahl Teilnehmer: 5

		completely disagree		disagree		partly disagree		partly agree		agree		completely agree									
		(1)		(2)		(3)		(4)		(5)		(6)									
		Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	0	±	1	2	3	4	5	6
please tick		-	-	-	-	1x	20,00	2x	40,00	2x	40,00	-	-	4,20	0,84						

Arithmetisches Mittel ( $\bar{0}$ )  
Standardabweichung ( $\pm$ )

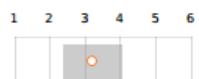


37. I am a gardener in the community garden because I want to connect my children/grandchildren/nephews/nieces/etc. with nature. \*

Anzahl Teilnehmer: 5

														Arithmetisches Mittel (0)		Standardabweichung (±)					
		completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)									
		Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	0	±	1	2	3	4	5	6
please tick	-	-		1x	20,00	2x	40,00	2x	40,00	-	-	-	-	3,20	0,84						

Arithmetisches Mittel ( $\bar{0}$ )  
Standardabweichung ( $\pm$ )



38. I am a gardener in the community garden because I want to show my children/grandchildren/nephew/nieces/etc. the production of fruits and vegetables. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	-	-	-	-	3x	60,00	1x	20,00	1x	20,00	4,60	0,89

Arithmetisches Mittel (Ø)  
 Standardabweichung (±)

123456

39. Through the community garden I spend more time with my kids / my family / my friends. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	1x	20,00	4x	80,00	-	-	-	-	-	-	2,80	0,45

Arithmetisches Mittel (Ø)  
 Standardabweichung (±)

123456

40. The fact that I can bring my children closer to nature, motivated me to garden in the community garden. \*

Anzahl Teilnehmer: 5

	completely disagree (1)		disagree (2)		partly disagree (3)		partly agree (4)		agree (5)		completely agree (6)			
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Ø	±
please tick	-	-	2x	40,00	2x	40,00	1x	20,00	-	-	-	-	2,80	0,84

Arithmetisches Mittel (Ø)  
 Standardabweichung (±)

123456



## 5. Discussion

The following graph opens the discussion about the outcomes of the survey and presents the dominance of the summarised motives.

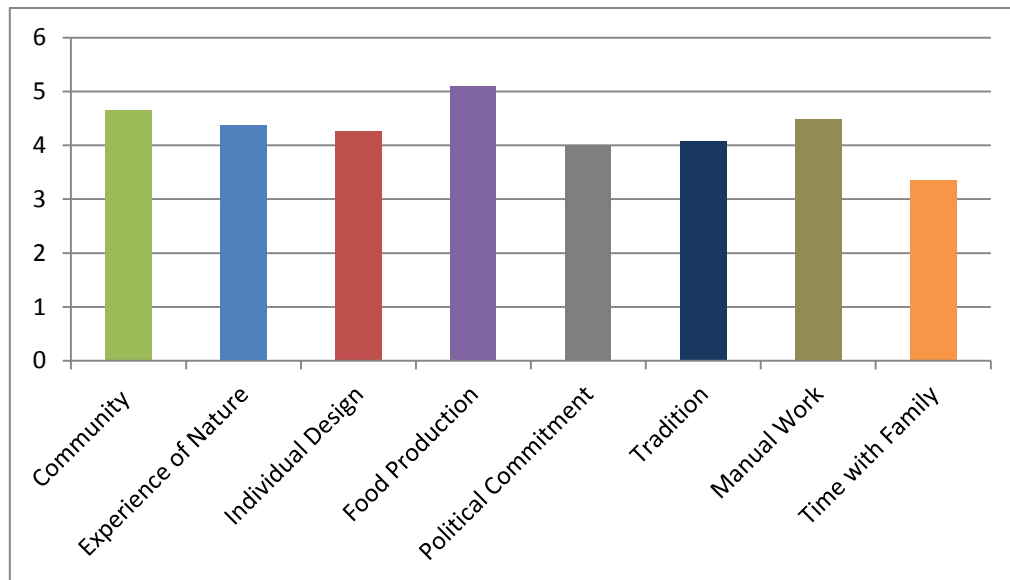


Figure 6: Average points per set of questions

Participants have answered the questions concerning the items: community, experience with nature, individual design, food production, political commitment, tradition, manual work and time with family. The possible answers ranged from *completely disagree* (1 point), going on to disagree (2 points), partly disagree (3 points), partly agree (4 points), agree (5 points), and completely agree (6 points). The graph shows that

- community reaches 4.6 points in average,
- experience with nature 4.3 points in average,
- individual design 4.2 points in average,
- food production 5.1 points in average,
- political commitment 4 points in average,
- tradition 4,1 points in average,
- manual work 4,5 points in average,
- And time with family 3.4 points in average.

The graph also shows that all items function as motives for urban community gardening. In fact, food production is the most relevant motive for urban community gardening; community the second most important motive and manual work the third most important motive.

Looking at the items in more detail one finds out that solidarity, collaborative work and the feeling of integration are important motives for urban community gardening. Gardeners also feel more connected to nature and, through gardening in the community garden, spend more time in nature.

Further, it is important to play an integral part in their neighbourhood and to produce own food, grow and harvest food. Volunteers also like the thought that their urban actions help to improve the environment. Physical work is another relevant motive, because through working outdoors with plants gardeners experience an increased well-being. (Those mentioned items have all reached more than 5 points in average).

## 6. Conclusion

This research is about motives for urban community gardening bases on a quantitative online questionnaire, containing 40 questions concerning the motives community, experience with nature, individual design, food production, political commitment, tradition, manual work, and time with family or friends.

The survey was administered from March 2014 until September 2014 and will go on until December 2014. Until now, seven gardeners have participated in the survey. More findings and a comparison with Salzburg (Austria) will be published in the longer version of this short-term-scientific-stay report.

Food production is the most relevant motive for urban community gardening, followed by community, manual work, and experience with nature, individual design, tradition, political commitment, and time with family or friends.

Looking at questions with more than five points in average, solidarity, collaborative work, feeling integrated and more connected with nature are important motives for urban community gardening. Further, spending more time in nature and playing an integral part in one's neighbourhood are important motives as well. Producing food and growing and harvesting crops is, also, a major motive for being an active urban gardener. The idea of doing something for the environment and doing manual work increases the well-being of urban community gardeners.

For the reason that many gardeners in the urban community gardens in Birmingham have problems with reading and writing, or because the questionnaire was too long (suggested by supervisor Mr. Russell Good) only seven gardeners finished the questionnaire. Therefore a second evaluation and a comparison with Salzburg (Austria) will be made and published in the second report of the short term scientific mission.

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## **8. Appendix**

## Motivations for urban community gardening

Page 1



University of Salzburg  
Geography and Geology  
Urban and Landscape Ecology



European Union  
COST Action TU 1201  
Urban Allotment Gardens

Dear Gardener,

Thank you for participating in this survey.

With this questionnaire I would like to ask you about your motivations for urban community gardening and I would like to find out which motives are the most relevant ones.

Please read the questions carefully: you do not scroll forward or back and should answer the questions in order. Also, please do not think about a question too long because it is about your spontaneous answers. In this respect, I do not intend to test your knowledge: there is no "wrong" or "right" answer, rather, I am interested in your personal opinion.

The survey is part of my master's thesis at the Institute of Urban and Landscape Ecology at the University of Salzburg (Austria) in cooperation with the EU COST Action TU 1201 Urban Allotment Gardens. It is used exclusively for scientific purposes and your information will be treated anonymously and will not be passed to third parties.

Thank you for your cooperation. Kristina Pleschberger

### Community in City Gardens

The solidarity in community gardens is important to me. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I am, due to reasons of solidarity, a member of the community garden. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**The collaborative work (organisation of events, watering division or mutual watering of beds, teamwork, etc.) in the community garden is very important to me. \***

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**I am a gardener in the community garden because I am looking for sympathizers. \***

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Through the community, which I experience in the community garden, I feel more integrated in my neighbourhood. \***

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Experience of Nature in the City Garden

**By gardening in the community garden I feel more connected with nature. \***

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Since I am active in the community garden I spend more time outdoors. \***

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**I actively operate in the community garden because I want to spend time in nature. \***

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**I like being a member of the community garden because, there, I can observe animals such as birds, hedgehogs, cats, etc... \***

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**I operate in the community garden because, otherwise, I would have little contact with nature. \***

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Individual Design

**I am a gardener in the community garden because I actively would like to design my neighbourhood. \***

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
--	---------------------	----------	-----------------	--------------	-------	------------------

please tick





By gardening in the community garden I can actively implement my own ideas for design in my neighbourhood. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The ability to play an integral part in my neighbourhood makes me happy. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The community garden offers me the opportunity to design my living space. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I am a gardener in the community garden, because I am able to partake in creating my living space. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Food Production

Producing my own food strengthens my well-being. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

It is a pleasure for me being able to grow and harvest crops. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The self-production of food is important to me. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The possibility of self-production motivates me for gardening in the community garden. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Since I grow vegetables and fruit, especially in the community garden, I eat healthier. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I actively operate in the community garden because I seek contact with plants and foods. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Political Commitment

I am an active member of the community garden because I want to oppose the mass production of food. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Because I do not want to buy sprayed and highly cultured foods I grow them myself. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Organic products are, for me, too expensive in the shopping. Therefore, I resort to products from the community garden. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Because I would not like to buy hybrid products from the market, I grow my own products in the community garden. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I am a gardener in the community garden, because, there, I am able to do something for the environment. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Tradition

I have gardened in my childhood with my parents / grandparents. Because I would like to relive associated positive memories and feelings, I am a member of the urban community garden. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Gardening is an important aspect of my culture. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Gardening is an important aspect in my family life. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The community garden connects me with people of my culture, which I would not have met without it. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Without the community garden I would be missing something in my neighbourhood. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Manual Work

I like the physical work in the community garden. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The physical work in the community garden is good for my well-being. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The physical work is one reason why I'm a gardener in the community garden. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Because I like the physical work, I am a gardener in the community garden. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Because I like working with my hands, I am a gardener in the community garden. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Time with Family, Children, Friends...

I am a gardener in the community garden because I want to connect my children/grandchildren/nephews/nieces/etc. with nature. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I am a gardener in the community garden because I want to show my children/grandchildren/nephew/nieces/etc. the production of fruits and vegetables. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Through the community garden I spend more time with my kids / my family / my friends. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The fact that I can bring my children closer to nature, motivated me to garden in the community garden. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The fact that I can show my kids how to garden, motivates me being a member in the community garden. \*

	completely disagree	disagree	partly disagree	partly agree	agree	completely agree
please tick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Personal Data (anonymus)

Age \*

in years

Gender \*

- ☐ female
- ☐ male

Kind of Employment \*

- ☐ Independent
- ☐ Worker/ Employee
- ☐ Unemployed
- ☐ Education (school, university, apprenticeship etc.)
- ☐ Retired

Living Conditions \*

- ☐ Flat without balcony or garden
- ☐ Flat with balcony
- ☐ Flat with garden
- ☐ House without garden
- ☐ House with garden

Do you have children?

- ☐ yes
- ☐ no

If yes, how many children do you have?

Are your children actively working in the community garden?

- ☐ yes
- ☐ no

The fact that I can bring my children closer to nature, motivated me to garden in the community garden. \*

completely  
disagree

disagree

partly disagree

partly agree

agree

completely  
agree

What is the name of your community garden? \*

Since when are you member? \*

in months

Personal reasons why you are actively gardening in the community garden.

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