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Introduction to the report

Urbanization, i.e. the population shift from rural to urban areas, is a phenomenon that has significant impact on our way of living. In the context of food production and consumption, urbanization results in less or no involvement of urban inhabitants into farming activities. Additionally, fertile soils at the fringes of cities are sealed to expand the cities. While these could be worrying developments, we can at the same time observe that consumption trends move towards regional and local food, and that urban gardening is booming in countries of the Global North.

Taking these opposing trends (i.e., pressure of urbanization vs. demand for local food and urban gardening) as a starting point, we decided to take a closer look at urban farming and gardening in different cities of the Global North (with an emphasis on Vienna). The project course “Organic Farming and Regional Development” offered a suitable frame to focus on different aspects within this broad topic. The involved students worked in five teams on the following issues:

- Literature review on urban and peri-urban agriculture and the linkages to local food systems;
- Bottom-up urban gardening initiatives in Vienna;
- Political framework of urban agriculture in Vienna;
- Urban agriculture in Detroit in the context of food insecurity; and
- Food Policy Councils as tools to support local food systems in urban areas.

Urban and peri-urban agriculture and local food systems

A review of literature

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Introduction

In the past twenty to thirty years numerous alternative food systems established to show solutions to ensure food sovereignty. The term of food sovereignty received international attention in 1996 at the World Food Summit held by the United Nations Food and Agriculture Organization (Pimbert, 2009:10). Around cities a variety of efforts to develop the capacity to raise food was participated by individuals, communities, organizations and the government within the last decade (Brown and Carter, 2003:4). Food security is becoming more important for the global north and its urban areas (Opitz et al., 2015:341). As one example the Urban Agriculture Committee of the Community Food Security Coalition prepared the *Urban Agriculture and Community Food Security in the United States*, to spread awareness of food insecurity and ways urban agriculture can respond to it (Brown, 2002:4). To maintain access to nutritionally adequate food and a healthy population, the supply is an exigent priority. Therefore, an important source for local and fresh food could be urban and peri-urban agriculture. (Opitz et al., 2015:341)

Urban agriculture and peri-urban agriculture (UPA) are two ways of creative effort to raise food independency in and around cities that we are going to further discuss. The aim of this seminar work is to give a broad insight into the topic of UPA by answering the following research questions:

- What is UPA?
 - When and why did UPA evolve?
 - How can different forms of UPA be characterized?
 - What are examples of UPA?
- What are the advantages and disadvantages of UPA?
 - What are its opportunities and constraints?
- How have policies been adapted to or changed by urban agriculture?
 - Which factors support, which factors hinder the development of urban agriculture?

Methods

The research for scientific literature began on the 25. of March 2017. The data collection and the selected literature results were collected in the library of the University of Natural Resources and Life Sciences (BOKU) in Vienna and several sources like google scholar and scopus were

used. The authors used literature sources which were former discussed in the beginning of the seminary. The obtained literature was analyzed for its usability. Attempts were made to reduce the information content to essential core statements and to refer to the research questions asked.

Results

History

Historically, the roots of UPA in North America are related with crisis. A way to increase food security and patriotism was wartime gardening during World War I and II (Mok et al., 2014:22). The maintenance of self-respect and independence shifted to American patriotism and gardening got associated with the language of war with the emergence of “victory gardens” in World War II (Mok et al., 2014:23).

Backyard food production became unnecessary after the wars, because of the emergence of refrigerators and convenient neighborhood supermarkets. The consumerism lifestyle was the new way to show equality and democracy. The interest in backyard gardening just reappeared in the 1960s and early 1970s with unemployment and inflation as well as growing environmental awareness and a movement against industry, consumerism and conformity driving the people’s motivation. Economic and ideological ideas were the reasons for people to cultivate their own food for the decades that followed (Press and Arnould, 2011:s.p.).

What is urban (UA) and peri–urban agriculture (PUA)?

Diverse definitions of UA were developed by scientists in the last years. The understanding that UA involves food production in urban areas is at the core of all these definitions. (Opitz et al., 2015:342)

The RUAF foundation is a global partnership on sustainable Urban Agriculture and Food Systems, it is a non-profit organization and in operation since 1999. They are seeking for a development of sustainable cities and they have edited a definition on urban agriculture:

“Urban agriculture can be defined as the growing of plants and the raising of animals for food and other uses within and around cities and towns, and related activities such as the production and delivery of inputs, and the processing and marketing of products. Urban Agriculture is located within or on the fringe of a city and comprises of a variety of production systems, ranging from subsistence production and processing at household level to fully commercialized agriculture.” (Veenhuizen, 2014:s.p.)

A commonly agreed spatial definition of peri-urban agriculture or peri-urban areas is missing, peri-urban agriculture is rather a residual of agriculture at fringes of growing cities. “They are described as the transition zone between urban and rural areas with, on the one hand, lower population densities and a lack of infrastructure compared to cities, and therefore not “urban”, and on the other hand a limited amount of agricultural and natural land, and therefore not “rural” (Opitz et al., 2015:342). Due to increasing urbanization pressure the urban structures tend to permeate the agrarian landscape and it is becoming more a peri-urban entity (Opitz et al., 2015:344).

Venn et al. give an example of categorizing alternative food systems which is not only applicable to categorize UPA as well to some degree but also forms part of certain types of UPA itself. In order to “depict the diversity and differing starting points of schemes” (Venn et al. 2006:254) they suggest to differentiate four groups according to their relative “connectedness” between the food producers and the consumers. (1) In “producers as consumers” the food is produced and consumed by the same people (e.g. community gardens, family gardens, self-harvest). (2) “Producer-consumer partnerships” like Community Supported Agriculture (CSA) represent the second category. (3) “Direct sell initiatives” cut out middlemen to sell directly to consumers (e.g. farmers markets, box schemes, food co-operations). (4) “Specialist retailers” often sell high value-added quality foods with a shortened food supply chain.

An overview of types of UPA

Within UPA there lays a vast array of types impossible for a single definition to encompass them all. Commonly used definitions of UPA are not sufficient to grasp the depth and diversity of this sector that has (re)developed creative and innovative ways to bring food production back into the cities. Within one type of UPA different dimensions may be present in regard to land ownership, purpose and organizational structure e.g. (own listing):

- Land ownership may be public, private, unauthorized etc.
- Purpose may be commercial, educational, social, political etc.
- Organizational structure may be individually, by a community, a NGO, the public sector, a company etc.

For example, a simple community garden can vary in multiple dimensions. The land it occupies can be owned privately or publicly, its purpose may be recreational and/or tackle community development and it may be organized by a non-governmental organization or the neighborhood etc. One example of UPA may also fall into more than one category. For example, rooftop gardens of private households can also be considered as an example of Z-Farming. As the high diversity of UPAs cannot be captured in a one-fit-all definition, this chapter will shortly present the main types of UPA. Keeping the diversity and dimensions of UPA in mind, the following table (Table 1) gives an overview of the main types of UPA.

Table 1: Types of UPA (own compilation)

Type of UPA	Description
Urban gardens	Probably the most popular form of UPA. They may vary in its dimensions (e.g. occupy both public and privately-owned land, focus on community development, food production, education etc.) comprising community gardens, allotment gardens, family gardens, rooftop gardens, educational gardens, therapeutic gardens, guerilla gardening (growing things on land that does not belong to you (The Guardian, 2014)). If livestock is involved, it is limited in most cases to chicken and bees (see extra category below).
Urban farms	Mostly occupy more space than community gardens, are more commercially-oriented and/ or are established in the peri-urban area. Urban and peri-urban farms may use direct marketing tools for distribution, e.g. farmers markets, box schemes, CSA or food cooperations.

Self-harvest parcels	Farmers prepare a plot of arable land, mostly organically, that are then rented to individuals who attend the land and harvest all produce (Vogl, 2003:67ff.)
ZFarming (Zero-acreage Farming)	Comprises all forms of food production that are characterized by the non-use of land or acreage (e.g. rooftop farms and greenhouses, productive facades, indoor farming on and in existing or newly built urban structures, mushroom cultivation in cellars, aeroponic tower farm at Chicago O'Hare International Airport etc.) (Thomaier et al., 2014:34)
Beekeeping	With the awareness of the bee die-back raising and the variety of trees and flowers present in cities, urban beekeeping has become popular among city dwellers (Moore, 2013:15ff).
Edible cities	Often without (yet) the purpose of food production, many cities possess a great number of publicly accessible fruit trees, nut trees, herbs etc. (e.g. the urban garden Huerto Tlatelolco in Mexico City includes an edible forest). The community platform mundraub.org helps to locate these spots.
Vermicomposting	On an industrial scale as well as on household level, vermicomposting makes use of the high amount of organic waste that accumulates in cities by recycling the plant nutrients present and converting it into a valuable resource (Singh, 2011:727). It may complement/ substitute livestock manure in cities as organic fertilizer for UPA.
Urban chicken keeping	Keeping chicken in an urban context has increasingly become popular. It is not only for the provision of fresh eggs, but also for the efficient recycling of kitchen waste that cities like Austin promote urban chicken keeping within its Resource Recovery program, e.g. by offering free classes (City of Austin, 2017)

Examples of UPA in Europe and North America

Metropolis Ruhr, Germany (Pölling et al., 2016:367ff)

Ruhr is an urban industry agglomerate with about 5 million inhabitants (more than 1100 inhabitants/ km²). Farmland covers 33% (mostly in the outskirts) but land use inside metropolitan's core zone is also relevant. 500 ha of farmland is lost every year, turned into residential and industrial area, and competition for remaining farmland is increasing. Only 2% of the farms and farmland are certified as organic (6% at national level). Organic farmers name unpredictable conditions and insecurities to short-term leasing contracts and urban construction activities as major obstacles for conversion. Some 2,500 ha (2.5% of the metropolitan's cropland) are cultivated with vegetables, berries and other special crops, and most are in the central North of Ruhr in close proximity to many consumers. On average, every 10th farm in urban municipalities performs direct marketing. CSA and agrotourism can also be found. Some urban farmers offer small gardening plots for seasonal rent to interested customers (self-harvest parcels).

Berlin, Germany (Specht et al., 2015:753ff)

Zero-acreage farming is developing and getting popular in Berlin as an aspect of urban farming. The majority of stakeholders of ZFarming in Berlin perceive the greatest potential benefits of

ZFarming at the social level, which include the aspects of improved transparency, consumer awareness and educational benefits. They claim that ZFarming projects can bring urban consumers closer to food production and re-connect them with their food sources, which is to them more important than the food quantity produced. Further perceived benefits are improvements in community building, empowerment, fun and living quality. Other benefits of ZFarming are reduced CO2 emissions, recycling waste products, good usage of empty rooftops and abandoned industry buildings, generation of new jobs, and aesthetical benefits.

Paris, France and Montreal, Canada (Pourias et al., 2015:258ff)

In Paris and Montreal four main types of city gardens are present, differences mostly being the ownership of the plot and the division of labor. Most of the gardeners in Paris and Montreal find the possibility of producing food as one of the main motivations for participating in urban gardens, which is then linked to the quality of the gardens and economic benefits. Urban gardens mostly produce vegetables and small fruits, aromatic herbs and flowers (decorative, edible, and plant-protecting). To a smaller extent stone fruits, pome fruits, nuts, eggs, snails, honey and wood are produced. Supplying themselves with fresh and self-produced food is important for all gardeners as well as the diversity and quality of products, especially in aspects of taste, freshness and sanitary characteristics. Gardeners can choose which plants and which varieties to cultivate, choosing them by nutritional value and taste. To gardeners, urban gardens also have social functions being places for socializing, sharing food, learning and teaching and also being a place for work, leisure and contact with nature, which benefits mental and physical health of the individual.

USA (Rogus and Dimitri, 2014:64ff)

In the USA, there are many different types of urban farms - from community gardens, farms created for educational purposes, to professional urban and peri-urban farms which raise food only for sale, without a socially minded mission. Many clusters of farms are present in the metropolitan areas, most of them are small and produce high value products like eggs, vegetables, goats etc. Decline of farmland was detected in recent years but the number of farms has increased. People create awareness of local food, which leads to situations where they are willing to pay more and resulting in a positive effect on the viability of urban farms. Many jurisdictions which promote healthier food systems and urban agriculture also have positive effects on the development and viability of UPA in the USA.

Advantages and disadvantages of UPA

This seminar work focuses on the advantages and disadvantages of UPA where urban farming is a voluntary choice, in contrast to cities where food is scarce and it is not a choice of the people to start urban farming but an urgent need (food deserts).

Public health and food security

Food growing in cities offers nutritional benefits through improving the quality of people's diets by providing fresh fruits and vegetables, particularly to people in the low-income bracket. The Cagayan de Oro study (Potutan et al., 2000) shows that urban farmers generally eat more vegetables than non-urban farmers of the same wealth class and also more than consumers from a higher wealth-class (who consume more meat). There is also an increased willingness to eat fruits and vegetables by youth participating in gardening programs. Public health can be improved by gardening as a way of physical activity for every age group and has possible mental health and therapeutic benefits (e.g. stress reduction, providing purposeful activity, cognitive

stimulation, creating a sense of pride and accomplishment, connection to nature) (Santo et al., 2016). Ecosystem services provided by UPA (e.g. air filtration, temperature moderation) have downstream benefits to the health of urban residents (Santo et al., 2016). However, the potential to supply products depends on the interest and support among urban dwellers to participate in food production and, in some cases, to adopt more restricted seasonal eating patterns. Some food may not be culturally appropriate or desired by local residents. Soil contaminants and airborne pollutants may pose a health risk to growers, consumers, and community if adequate preventative measures to reduce exposures are not taken. (Santo et al., 2016).

Environmental aspects

UPA provides a habitat for pollinators. The vegetation filters particles and therefore reduces air pollution. Transpiration processes of the vegetation regulate the micro climate and reduce urban heat islands. Vegetation also increases rainwater drainage and reduces the risk of flooding, ground water contamination and depleted ground water levels (Santo et al., 2016). Another main beneficial impact of urban agriculture is the potential to recycle urban waste products. Both solid and liquid organic wastes of the city (e.g. harvested agricultural produce and animal manure) are popularly being used as compost (Santo et al., 2016). Disadvantages related to UPA are mainly related to both chemical and biological pollution that could cause health problems. Inappropriate handling of agrochemicals by producers could cause problems. Fertilizers, insecticides, pesticides and herbicides may significantly increase agricultural yield, but the residues from them can also have negative impacts on the environment and on human health (Mougeot, 1998). Crops grown on polluted soils and in the vicinity of railroads and industrial areas can be contaminated with heavy metals (mostly lead), pesticides, sulphur and nitrate, affecting the nervous, digestive and circulatory systems, particularly threatening the health of young children. The distance of the production area from the source of pollution and the duration of exposure to the toxicants is crucial to assess health risks (Santo et al., 2016). Also, the type of crop cultivated determines the potential contamination. In general, leafy vegetables and crops with a longer growing period are the most sensitive (Mougeot, 1998). Livestock is an important carrier of parasites, bacteria and viruses that are dangerous to human health. For example, cattle, sheep, goats, pigs and horses are important reservoirs for *Cryptosporidium* parasites, excreting them in their feces (Mougeot, 1998). Attention must be given to health risks from the handling and application of manure from vector-carrying animals and unsorted or insufficiently treated organic wastes to vulnerable crops (Mougeot, 1998). Poor handling with dangerous conditions during marketing and distribution may bear further risks.

Social and educational aspects (Santo et al., 2016)

Urban agriculture promotes social interaction, strengthens social ties and creates new social connections. It creates or uses places so that community members can meet and interact, which is especially important in places where open green spaces and parks are rare. It gives opportunities to neighborhood residents of diverse backgrounds to interact and gain a sense of belonging. In some cases, it may be important to express and maintain cultural heritage and strengthen intergenerational relationships. Also, UPA offers the chance to gain new skills and to learn about the provenance of food, agricultural processes, nutrition, sustainability.

Economic aspects (Santo et al., 2016)

It is estimated that today more than 800 million people worldwide work on urban agriculture. Entrepreneurial UPA may attract capital and create profitable business opportunities, particularly in distressed areas. Costs are reduced in transportation and direct marketing where middlemen

are cut out. Reduced distances also lower the quantities of produce that perish during transportation and reduce greenhouse gases.

However, UPA projects offering opportunities to the “least employable” require additional expertise beyond technical farming skills, which may require more staff time and higher labor costs. Most projects cannot survive on profits from produce, especially when incorporating social missions and financial support is needed.

UPA at the policy level

Land use policy is a very important factor determining the potential for establishment and development of UPA, since it provides the legal environment for the development of agricultural activities in cities (Ahern, Cilliers and Niemelä, 2014). Land use policies determine which activities are allowed in which areas of the city and the specific regulations and conditions for any of the land uses allowed in a certain area. These regulations are established through zoning laws by either the state or the local authorities, and are usually based on a balancing of different interests (i.e. public vs private) and objectives (i.e. city economic development vs city greening).

Nowadays, in a context where cities are experiencing rapid growth and land pressure for different uses or purposes is high, the role of land use policy is very important for securing and contributing to the development of UPA activities (Krishnan et al., 2016). Till the date, UPA activities received little attention along the processes of urban planning, and thus most of the times these activities have been carried under a scheme of provisional or exceptional activities (Castillo et al., 2016). This supposed a difficulty for those stakeholders dedicated to UPA activities since there were no official schemes providing for guidelines or aid measures for the development of such UPA activities.

Although it is usually the case that many cities do not have a comprehensive and integrating land use policy that considers and tries to promote UPA in all its forms, there have been in the last years (starting in USA and slowly expanding to UK and Europe), several initiatives to create food policy plans that try to address common problems in cities like food poverty, unhealthy eating habits, lack of employment or social margination (Calhoun, 2014).

These initiatives have come mainly in the form of Food Policy Councils and Food Charters created by representative members of all the different stakeholder groups involved in UPA (Koski et al., 2016).

Food policy councils

Food policy councils appeared for the first time in 1982 in Knoxville, Tennessee, and spread along many cities, counties and states in the USA along the last decades (Harper et al., 2009). FPC appeared as the result of a collaboration between many actors of the food system of cities who tried to face individual and common policy barriers to their activities. The development of food policies which consider the needs and interests of a very diverse number of stakeholders is a very complex task that cannot be fairly carried by one group of stakeholders alone. In this sense, FPC allow for different stakeholders to collaborate in the planning and decision making for the development of UPA activities in urban and peri-urban areas. General objectives of FPC are (Harper et al., 2009):

- Promote policy changes and improvements to support UPA
- Research and analyze the existing status of the current food systems

- Design of programs to address different problems within the Food System
- Facilitate communication and knowledge transfer among the members of the UPA activities and between these and the general public
- Support partnerships and collaborations between UPA stakeholders
- Organization of meetings or events

Many of these FPC share the characteristics that they try to seek for long term projects or solutions by using a participatory and comprehensive approach, adapting to the realities of the area of action and negotiating and offering solutions with the different groups of stakeholders involved in the decision-making processes of the local food systems (Setälä et al., 2014). Since they appear as a response to a community's need, usually FPC are found in the way of non-profit organizations that operate with low capital but high involvement of the members. FPC can act as a platform that can pressure and influence local authorities by transferring the opinions and needs of a whole community of UPA stakeholders or people interested in the improvement and sustainability of their local food systems.

Food charters

Food charters are documents written in a collaboration of stakeholders involved in UPA, where the principles and aims of UPA and its role within the city are defined. Such food charters are a recommended option in literature (Hardman and Larkham, 2014), since they contain a set of guidelines and values which have been negotiated by all the participants previously to the formation of any food council or the implementation of any new measure. There are many examples of cities or regions that have developed a food charter, like Vancouver, Michigan, Minnesota or Glasgow.

Key issues for development of UPA land use policies:

1. Definition of the categories and types of UPA which will be allowed.

Cities should choose what type of agricultural activities will be allowed and develop proper regulations and policies, taking into account the different operational realities and social, environmental or economic purposes of the activities (La Rosa et al., 2014).

2. Planning UPA categories in view of zoning

Some zones and their communities might be willing to accept different kinds of UPA in their areas (i.e. industrial areas, residential areas, city centre). The practical possibilities and the opinion of the communities must be considered for planning the allowed types of UPA and for developing the corresponding policies (Scherb et al., 2016).

3. UPA as a land use type

Many cities have a zoning plan based on land uses. When none or few of the different types of UPA are considered in urban policies as a land use type, it is difficult that the existing regulations can apply for, and directly support, UPA activities. It is frequently the case that an UPA activity is not in line with the regulations for a city zone and this means an additional bureaucratic burden for urban farmers who need to get exceptional licenses (Harper et al., 2009).

4. Defining operation standards and accessory uses

There is a need to define, when zoning, which types of operational activities are allowed within the different UPA activities allowed in each community or zone (i.e. on-farm shop, animal husbandry, hours of working, etc.). This would apply also for the construction of facilities in UPA

farms or the carrying of educational/social activities (Freedgood, Pierce-Quiñonez and Meter, 2016).

5. Reviewing land tenure and leasing conditions for UPA stakeholders

Since UPA activities are usually based on long term projects, ensuring that stakeholders may dispose of the land for a long time might encourage and facilitate the apparition of new initiatives or projects related to the enhancement of the city's food system (Camps-Calvet et al., 2016).

Discussion and conclusions

Food security and food independency is becoming more important for urban areas and UPA is one opportunity to raise food production in and around cities. The last several decades showed that during crisis, wars or unemployment UPA was reappearing as an alternative source of food.

There is a great diversity of types of UPA which is not easily captured at a glance. Definitions are either very broad or lack to comprise the variety and creativity that exists within UPA. Therefore, one should always keep in mind that UPA is dynamic, diverse and creative. From a short overview of urban agriculture in Europe and North America it can be concluded that the majority of urban farms and gardens are small and mostly used to produce products of high value. Although the urban farmers naturally consider growing their own food as a relevant aspect of urban farming, they also highly appreciate it as leisure time in contact with nature, and social functions like gathering, learning, working together etc.

There are different advantages and disadvantages in UPA concerning public health, environment, education, economy and society. Although different opinions or interests regarding UPA may be in conflict, its advantages make it very promising for the future of more sustainable cities. A comprehensive approach is necessary to include UPA activities in the planning of cities development.

Cities in Europe and North America are currently at different stages of development of UPA, and efforts are being made to introduce appropriate policies that support and regulate UPA activities in all their diversity. The apparition of food policy councils seems to be in many cases an appropriate tool to represent and give voice to the many and diverse stakeholders involved in UPA activities.

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Urban Gardening in Vienna

a Bottom-Up Perspective

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ABSTRACT

Urban Gardening is a growing urban phenomenon - also in the city of Vienna. In order to get an overview over bottom-up initiatives we conducted a qualitative and a quantitative study - including three focus initiatives: Guerilla Gardening, Community Garden and Self-Harvest. From the founder's perspective, the most relevant reasons to create their initiatives were to bring people closer to the source of the food that they consume and to build ingrain neighbour communities. There was no clear support from governmental institutions, even though some of the initiatives did find financial support through political parties. Concerning the active members of the initiatives, has different reasons for joining in between the initiatives. The major differences have been found in members' involvement between Community Gardens and Self-Harvest. A survey with organic market shoppers showed that about 50% of the participants were interested in joining an Urban Gardening project. Due to difficulties in obtaining useful information about Guerilla Gardening, we were not able to include findings regarding this initiative into our report.

INTRODUCTION

Urban Agriculture (*in the following UA*) has always been binded to the necessity of a human being to have a stable food supply close enough to its settlement. It is a major truth that cultivation does not only increase the food supply and therefore supplements the income, but it also provides a feeling of self-respect and independence. Moreover, these systems have helped to survive in times of crisis, for example the so-called Victory Gardens during WWI and WWII (Bassett, 1981). In recent times, gardening became popular not only for contributing to food security, but also for its mental and physical health benefits as well as for social ones. For many persons, a garden plot seems much more useful, productive and important than a vacant lot or lawn (Bassett, 1981). Nowadays, people are seeking these organisms for leisure, but they also want to reconnect with the sources of their traditional local food and the cultural knowledge passed from generatio to generation.

Urban Gardening - Community Garden, Guerrilla Gardening and Self-Harvest

Since there are different definitions of Urban Gardening (*in the following UG*) and the distinction from Urban Agriculture is not always clear, we decided that, for this project, it was necessary to come up with one stated by our own. We therefore defined UG as follows:

"UG includes all initiatives and projects, where the producer and the consumer are the same person. By being directly involved in the production of her/his own food, she/he 'gets her/his hands dirty', reconnecting her/him with its source. However, this only applies to cases where is not aspired financial gain from the harvested food; i.e. the gardener is the final consumer".

In our opinion, the concept of “Community Garden” (*in the following CG*), “Guerilla Gardening” (GG) and “Self-Harvest” (SH) are in line with this definition. All of these initiatives require personal participation of the consumer in the production of food. Also, the producer does not sell the food to another party, contrary to commercial farms located within city borders (which we understand to be UA). Moreover, we consider these concepts to be operating in a bottom-up way, since the initiative is not taken by authorities.

Objectives of the Study and Research Questions

Research Question 1

The objective was to get an overview about why and how the UG systems were founded and to gain insight into related motivations and problems. Further, the outcomes of these organizations as well as their structures were investigated. Therefore, the following research question was asked:

What is the situation of four exemplary UG projects (see Methods - Focus Initiatives) in Vienna?

- What were the motivations of the founders of the UG projects?
- What were problems related to the foundation as well the current situation of the projects? How are/were these problems overcome?
- How are these systems structured/organized regarding the involvement of members, the sharing of responsibilities and the decision making processes?
- Did these projects get any support from governmental institutions and in which way were they supported?

Research Question 2

The objective was to gain insight into the drivers of consumer participation in UG projects. Therefore, the following research questions was asked:

What are the drivers that lead to participation in UG projects and how do they shape the projects?

- What were members' motivations to join a UG system?
- How were these motivations fulfilled?
- How do members evaluate these initial expectations against the actual outcomes?
- How are the members' motivations expressed in the projects' shapes?

Research Question 3

The objective was to evaluate the situation concerning the supply-and-demand of participation-possibilities in UG systems in Vienna. Therefore, the following research questions were asked:

What is the situation concerning the supply-and-demand of participation-possibilities in UG systems in Vienna?

- How many people are interested in participating in UA projects?
- How many participants can the exemplary projects accommodate?
- Which projects are non-members most interested in joining and why?
- If the demand exceeds the supply, how could the situation be improved?

METHODS

In order to answer our different research questions, we chose a qualitative and also a quantitative approach. The Qualitative interviews provided us insight into history, motivation, structure and the functioning of the four chosen focus initiatives (see section Situation of Focus Initiatives). On the other side, Quantitative surveys were handed to the active members of these focus initiatives as well as potential members.

Focus Initiatives

Following our definition of UG, we decided on four exemplary projects in Vienna.

- "Community Garden Rosenberg" in Josef-Kaderka-Park, 1170 Vienna, is located adjacent to a park (the area amounts to 1.100m² of municipal soil). It was established in 2011, providing space for 33 members and 39 beds.
- "Döbling Community Garden" in Springsiedelgasse 32, 1190 Vienna is a project in a Viennese communal building, which is used to redesign an unused asphalt surface to convert it to the cultivation of fruit and vegetables by means of raised beds. It was established in 2014 and now has around ten members.
- "Parzelle Kirchenacker" in Kirsteweg 2, 1100 Vienna is among the projects that carry the "Self-Harvest" brand name. It was established in 2015 and now has around 400 members.
- "Guerilla Gardening Wien" in Dunkler Gasse 7, 1120 Vienna. We were not able to establish contact to potential interviewers and therefore did not receive data to include this UG initiative into our analysis.

Data Sampling

All data was sampled from March to May 2017.

Qualitative Interviews

In order to conduct the Qualitative interviews, we chose to proceed through a combination of narrative interviews and semi-structured interviews. We prepared list of topics (see Research Question 1) we wanted to cover, but we mainly left space to the interviewed to tell us what was important for them. Depending on the setting (oral interview/telephone call) and the interview partner (comfortable with narrative interview or not), we shifted our approach from a narrative to a semi-structured one. These two approaches were selected in order to let the interview partners express their opinion as freely as possible without forcing anything upon them. The interviews were conducted at the working place of the interview partners, in the Community Garden, at the Self-Harvest plots or by phone call.

The interviews we conducted:

- 29/03/2017: Responsible person for SH organization - via telephone (interviewers: Nina, Laura & Lucas)
- 08/04/2017: Responsible person for Döbling CG (interviewers: Nina, David & Lucas)
- 09/04/2017: Responsible person for Rosenberg CG, Hernals (interviewers: Laura, David & Lucas)
- 06/05/2017: Two responsible farmers at Kirchenacker SH (interviewers: Laura & Lucas)

Quantitative Surveys

Members of Focus Initiatives

Questionnaire 1 (see Annex) was handed out to the active members of the focus initiatives. Two questionnaires were given to CG Döbling, 16 to CG Rosenberg (during one of their meetings) and 19 to SH Kirchenacker (during their start-up day) respectively. Due to lack of accessibility, no questionnaires were handed to members of the GG.

To evaluate the members motivations to join the initiatives all Survey participants could check boxes for each reason, according to their personal motive (see Annex).

The fulfilment of members' expectations was measured by the overall satisfaction (two boxes: rather satisfied, rather un-satisfied) and different aspects that were further differentiated consisting of mostly the same points as the motives to join (same boxes to check as with satisfaction) (see Annex).

Customers of Farmers' Markets

In order to gain insight into the basic interest in UG initiatives from non-members, we decided to sample shoppers of organic farmers markets. We assumed that this group has a higher basic interest than shoppers of conventional supermarkets.

Questionnaire 2 (see Annex) was handed three shoppers at "Servitenmarkt" (1090 Vienna), to 11 shoppers at "Biomarkt Lange Gasse" (1080 Vienna), to 22 shoppers at "Naschmarkt - organic corner" (1060 Vienna) and to 22 shoppers at "Karmelitermarkt" (1020 Vienna). It is important to mention that the interviewer team was looking for shoppers which substantially bought part of their weekly purchases at such specific market-point for all that a small sweet snack helped to gratificate the respondents.

Data Analysis

The information collected through qualitative interviews was digital tape recorder, transcribed, translated from German to English if necessary, summarised and ordered into the four themes of Research Question 1. Structuring the outcomes of the interviews in this way made it easier to compare the gathered information between the different initiatives.

All qualitative data was analysed with *Microsoft Excel for Mac version 15.6 (151105)*. We did a descriptive analysis with *Numbers Version 3.5.3 (2150)* of the data and did not apply any statistical tests.

Results

Situation of Focus Initiatives (RQ1)

Founder's Motivations and Take-off

The Döbling CG was founded in 2014 as a result of the fruitful collaboration between a couple of motivated people and *Wohnpartner*, an association dealing with well-functioning of the municipality's housing. The persons who initiated the project were driven by different ideals such as free food production, knowledge sharing on how food is grown and produced, bringing people closer to the food they consume, a pedagogical tool for children, area rearrangement and social interaction between neighbours. After collecting signatures from tenants and being given green light for the CG, they received support from the municipality and a couple of political parties

helped them financially.

The story at the Rosenberg CG is a different one. The initiative came as a response from Gartenpolylog and Wohnpartner to the high demand for gardens in the area. Those two organizations managed the garden during the first year and gave sessions on how to run the garden, how to manage group discussions and how to cultivate plants. The second year, the group was strong enough to take over the management.

The person who developed the SH concept together with a farmer and who now runs the SH organization found her motivation in the importance of reconnecting consumers to farmers and to foster collateral learning from each other. She wanted the consumer to better understand what it means to be a farmer and the work it takes to produce food. The motivation of the initiating farmer was different. For him it was more of an alternative way to market his products and to earn money. He shares this motivation with the two farmers at Kirchenacker who took over a big part of his clientele when he quit SH. They saw an additional foothold for their farms and as 1000 potential customers all of a sudden appeared, they did not hesitate to step on board of this concept.

Problems related to the Foundation

At the Döbling CG, the most difficult part in founding the project was creating the association, collecting tenant's signatures and getting hold of the parcel. It required a lot of administrative work and bureaucratic procedures. Luckily, one of the founders did not have a job at that time and thus was able to invest a lot of time and energy into the project. They had little vandalism problems and communication issues, but those were handled easily.

The Rosenberg CG did not have many difficulties with creating the association. On the other hand, communication was said to be a very important factor which did not always come without difficulties. This was dealt with through Gartenpolylog who offered sessions on mediation and good communication. Regarding vandalism, they did not have much troubles apart from a couple of tomatoes that disappear every now and then.

The SH organization is guiding farmers who are just taking off with the SH concept. They get advice on different topics such as how to communicate and interact with their members, how to organise their parcels, how to manage the administrative tasks that come with it or what needs to be done so that create an association. The organization hosts session where different farmers come together, exchange on their practices and give each other advice. Through the SH organization, the farmers are partly protected from repeating others' mistakes and they get assistance in how to deal with problems.

Functioning (how they perform)

The functioning and rotation of the members is different in the two CGs. The one in Döbling can only be joined by tenants of the community housing. Each member pays €10/month which covers rent, water and shared tools. A new member also has to procure or build his/her own plant bed, amounting between 80 and 250 euros. Once they become a member, they receive a key to the garden for which they sign a document. Actually there are 10 fix members and there would be space for 6 more as the situation is today.

In Rosenberg CG the structure is slightly different as the demand is much higher. At first, Wohnpartner and Gartenpolylog set up a 3-year rotational system. Once the community took over, they decided 3 years are too short to become part of the community and to learn how to

garden properly. They proposed a 6-year fluctuation model in which each year at least five people have to leave to create space for newcomers. Members have to sign the garden rules and pay €15/year for half a bed (2,5 m²). They receive a key and are demanded to participate in the yearly general meeting. Furthermore, they have a meeting every three to four weeks to discuss the functioning of the garden and to delegate responsibilities.

At SH farm Kirchenacker, members can rent a 32m² parcel for €149/year. For that, the farmer offers to seed a couple of different plants and members can plant more plants in addition if they want. Usually the farmer hands over the parcels to the members at the end of April and that is when the members take it over from him. The only responsibility the farmer still has after that is watering the plots when needed. In autumn, after the harvest, he gets back the plots and prepares them again for the new season. The Kirchenacker SH is organized through an association which is run by a board. No SH members can be elected into the board, but they do have the opportunity to communicate with the board members in order to discuss new ideas.

Governmental and Institutional Support

At the start of their project, the founders of the Döbling CG found financial help at different organizations and institutions: a couple of political parties, a picture contest and the discount chain Hofer who supported 10 CGs. They were the first to link a garden to a Gemeindebau (municipal housing). Later, the municipality started promoting the concept and made a catalogue to help and inform people who wanted to start a CG.

The Rosenberg CG did not receive much financial support at the start, but they were very well helped by Gartenpolylog and Wohnpartner through guiding sessions and workshops. One plant bed has been won through a photo contest and has been designated to a nearby school and kindergarten for cultivating plants together with the children. The members of the garden have always been very creative in collecting useful tools and materials from neighbours, at construction sites, abandoned places or from the trash. In that way they limited their material costs at much as possible.

Neither the SH organization, nor the SH farmers got any help from political institutions. They do support and advice each other, but no help comes from outside. After three years of existence, the city of Vienna approached the SH organization to ask if they could give a small presentation. As result of this, the city founded "Ökoparzellen", which is similar to the SH concept. On the other hand, according to our contact person at the SH organization, the Ökoparzellen are not a big competition for the SH farmers.

Guerilla Gardening

The explanation of GG is the act of gardening on land that the gardeners do not have the legal rights to cultivate, such as abandoned sites, areas that are not being cared for, or private property. The goal of Guerilla Gardening in Vienna is to use free spots and for them to be managed by residents and to create intercultural places where encounter without the need for consumption is possible. By reorganizing green spaces, GGs show an alternative way of garden policies. After all, our team was not able to establish contact with members of this system and hence further information is missing.

Motivations and Participation of the Initiatives' Members (RQ2)

Motivations to join the Initiatives

For most members of both CG and SH organically produced and healthy food were important reasons for joining the initiatives (see Figure 1). Some reasons were especially important for members of either CG or SH initiatives. The current life-situation and proximity were mayor reasons for CG members to join while SH members were motivated by aspects related to organic production as well as healthiness and quality of food. Highest differences between CG and SH members were in the aspects of networking, social change, identification and self-sufficiency.

About one third of the members were already participating in SH projects before the focus initiative Kirchenacker started with SH in Februar 2015.

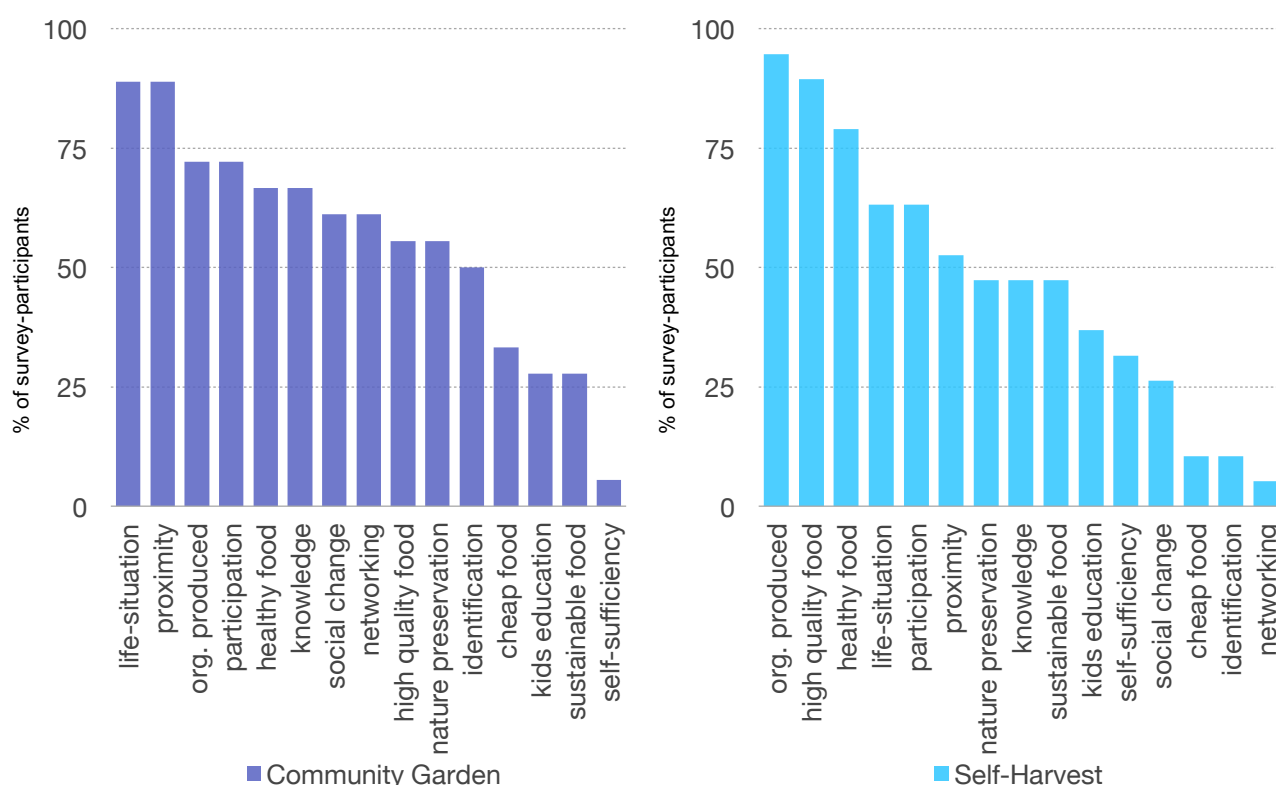


Figure 1: Reasons for Members to join the Initiatives (n = 37; no. of survey participants from CG = 18; no. of survey participants from SH = 19. Multiple answers possible).

Evaluation of expectations against outcomes

Although some expectations were not fulfilled in both UG projects, the overall satisfaction is generally high in both UG-projects (CG: 90 %; SH: 94 %). For CG-members, self-sufficiency and cheap food were the least fulfilled aspect (39 % and 33 % of the members) while healthy food and active participation was fulfilled for most of the members (94 % and 83 % of the members respectively). The active participation is additionally reflected in the experienced possibility to realise ideas, which is lower for SH-members (50 %) than for CG-members (82 %) (see Annex). For SH-members, most of the expectations were fulfilled but neither the expectations for *changes in society*, *preservation of nature*, *cheap food* and *networking* got fulfilled for 21 % nor *self-sufficiency* for 16 % of the members.

Desired changes by members of Initiatives

Based upon the expectations, desired changes were expressed in both UG projects (see Figure 2). In general, more CG-members desired changes than SH-members. Changes by CG-members were desired regarding *active participation* (33 %), *communication* (31 %), *ideology* (23 %) and *reliability* (19 %), whereas no change was desired regarding *decision making*. Contrary to CG-members changing the process of *decision making* was of general interest for 39 % of SH-members, while no interest in changing *ideology* and low interest (6 % each) in changing the other aspects was evaluated.

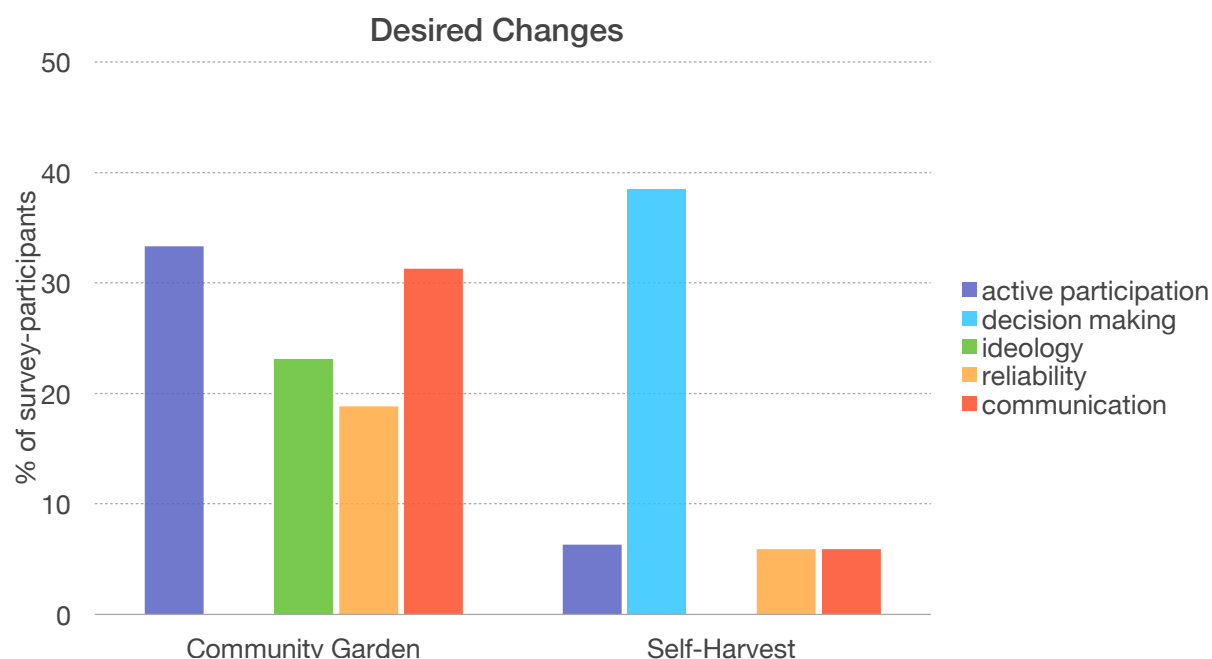


Figure 2: Changes desired by the projects-members in CG or SH (n = 37; nr. of survey participants from CG = 18; nr. of survey participants from SH = 19. Multiple answers possible.)

Supply and Demand for Urban Gardening in Vienna (RQ3)

Interest of Non-Members in UG initiatives

When comparing interest versus non-interest for different UG initiatives among market shoppers, we saw that 57% of market shoppers were interested in joining CGs, 52% in GGs and 53% in SH (see Figure 6, Annex).

Furthermore, we compared the interest in relation to the living situation. Data presented in Figure 3 was analysed as follows: If the participants expressed interest in none of the initiatives, they were assigned to the no-interest group. Interest expressed in one, two or all three initiatives was assigned to the interest-group.

Illustrated is the dependency of interest for one or more initiatives on the living situation. While 66% of shoppers living in a flat without balcony and 58% in a flat with balcony, only 14% people living in a house with garden were interested in joining an initiative.

While this clearly shows a higher interest in UG initiatives from people without an own garden, it has to be noted that this result is based on different sample sizes. From 54 survey participants stating their living situation, 35 lived in flat, 12 in a flat with balcony and only 7 in a

house with garden. In order to verify the living situation-interest-dependency, further research with equally-sized samples is needed.

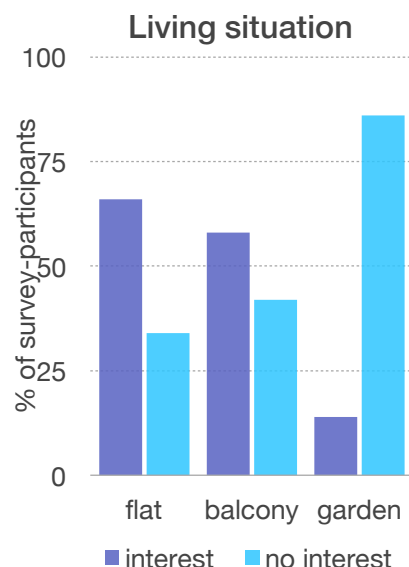


Figure 3: Interest for participation in Initiatives according to living-Situation. (n flat=35, n balcony=12, n garden=7)

In addition to that, we looked into the main reasons for interest among potential members. Market shoppers were asked to indicate which of the 11 reasons provided on the questionnaire they thought applied to them. In the analysis we focused on the four reasons that were indicated most often.

On the one hand, we found that the four main reasons were the same for CG and SH: 94% said that “regional food” is a reason to join SH (91% for a CG, respectively). 89% (84%) found “healthy food” to be a reason. For 83% (75%) “high quality” of the food was an important factor. The factor indicated fourthly-often was that the food is “organically produced, with 67% (66%).

On the other hand, we saw that while the reasons for interest in joining a GG were the same for the most often and second-most often indicated factor (75% for “regional food” and 75% for “healthy food”), in terms of GGs also political and environmental motivations came into play. 56% said that they want to set a “political sign” and 56% said that they want to contribute to a “green city” (see Figure 4, Annex).

Comparison of Supply and Demand

Table 2 summarizes the supply and the demand for the three exemplary UG initiatives in Vienna, with the capacity being the supply and the utilization rate the demand. The utilization rate presents itself very differentiated; therefore, further discussion is needed.

Initiative	Capacity	Utilization	Utilization (%)	Interested Shoppers (n=51 market shoppers)
SH Kirchenacker	250 parcels	200 parcels	80	53%
CG Döbling	16 beds	10 beds	57	57%
CG Rosenberg	32 beds	32 beds	100	57%

Table 2: Comparison between supply and demand for UG initiatives

DISCUSSION

Situation of Focus Initiatives (RQ1)

Founder's Motivations and Take-off

The founders and responsible persons of the different initiatives we took into account all shared the vision of bringing people closer to the food they consume. They all mentioned as a founding motivation, the importance of increasing the awareness on how food is produced, processed and distributed as an important motivation for founding their UG initiative. By growing their own food in CGs or on SH-plots, people became more aware of what they eat and the energy it takes to produce it.

A second motivational reason mentioned was the social side of these initiatives. People work together on the plots, they interact with people from different origins, ages and cultures, they exchange knowledge and experiences, they teach and help each other and they cultivate friendships as they cultivate their vegetables. As one of the Rosenberg CG members explained: "When two strangers meet, they will not talk. When two strangers and a dog meet, they will start talking about the dog. We try to do exactly the same, but we exchange the dog for a garden and a couple of vegetables." (personal communication).

The SH farmers have beside raising awareness and social aspects a financial and economical motivation. Of course, they have to live from their land, which is not the case for the CGs. The farmers found an interesting economic activity in the SH concept, if certain criteria (accessibility, member's interest and infrastructure) are fulfilled, it works perfectly. For them it creates a diversification in their work, in their revenues and in the contact with their consumers who become members. Since they are very satisfied with their SH business and with the help they receive from the SH organization, they would recommend every farmer to follow their example, with the condition of fulfilling certain criteria.

At both CGs members are involved in decision making through the meetings that are organised on regular basis. Both CGs thereby, have a board which is constituted of active members that propose their candidature and are then elected by the whole CG. The members of Rosenberg CG felt better and more responsible once they took over the management of the garden from Wohnpartner and Gartenpolylog. They organized themselves in a democratic way and decided together on a new rotational model for membership which all the members agreed upon. Döbling CG has less members which makes member's involvement and responsibility taking easier to handle. In the case of the SH, members are less involved in decision making as they only rent the parcel for one season. However, the SH is also operating through an association which consists of a board, but which the SH members cannot join. On the other hand, there is much communication between the members and the farmers which makes that they can exchange new propositions or new ideas.

The Döbling CG suffered in particular under the many bureaucratic and administrative tasks which had to be met in order to start the CG. As their plot of land is owned by Gemeindebau and that they created the CG for the tenants of the Gemeindebau, these had to give permission, which was not an easy task. From other sources we also understood that the people at Gemeindebau make problems out of nothing when it comes to allocating unused land to gardening initiatives. These are clear examples of measures that could be taken from higher-up in order to improve and trigger bottom-up garden initiatives.

Gartenpolylog fulfils the role of counsellors or advisors by being an intermediate between the CGs and the district government or the landowners (interview Vienna top-down group with Gartenpolylog, 22/05/2017). They do play an important role which is much valued by the CGs. Furthermore, Gartenpolylog agrees that there should be a better use of the unused plots in the different districts. For that, the district government should open-up for new initiatives and give motivated people the possibility to realize their projects, instead of hindering them with administrative issues.

Motivations and Participation of the Initiatives' Members (RQ2)

Motivations to join the Initiatives

The drivers leading to participation in the focus initiatives differ slightly between evaluated CG and SH initiatives. The different motivations seem to follow the ideology and structural base of the different concepts: The two evaluated CG's aimed on connecting the close-by living people by creating a platform to meet and talk on one hand and the consumer with the production process of food on the other hand. The SH aimed on offering a productive system for food generation of high quality and value to the people involved, so that they would care themselves for its continuity in a set frame by the initiative. Still there are common structures for both UG projects valued by both CG- and SH-members such as organically produced food, active participation and knowledge generation.

Although changes are wished for in both UG projects, the overall satisfaction of the members remains high. The clear structure of SH seems to lead on one hand to fewer possibility for participation in decision making but on the other hand to a higher satisfaction with the overall concept. This could be connected with to a high productivity while still focusing on environmental and health sustaining food. Some structural changes regarding active participation (CG) and decision making (SH) ought to strengthen the satisfaction in the future development of the projects. Structures expected by the SH-members regarding decision making might be inspired by former suppliers as "Haschahof", since about one third of the surveyed members have gained experiences before joining in SH Kirchenacker.

Supply and Demand for Urban Gardening in Vienna (RQ3)

Interest of Non-Members in UA initiatives

The results obtained from the comparison between supply – indicated by the capacity of the initiative – and demand – indicated by the utilization rate and the percentage of interested market shoppers – for UG initiatives, require to be discussed individually for each initiative.

For the GG no quantification was possible; however, our observation was that all available space was utilized, pointing in the direction of a 100% utilization rate.

The rather low utilization rate of 57% (5%, if based on the number of 300 living units in the complex) in CG Döbling could be explained by the rather high, initial one-time-investment of 80-250 € for the construction of the bed. This financial hurdle might deter people from joining the project.

At CG Rosenberg, utilization rate is 100% (173%, if taking into account the approximately 20 people who have been on the waiting list permanently for several years). Here, the capacities (constrained by topology and shading of the location) are clearly too little, considering that a

fluctuation model had to be introduced in order to give more people the possibility to seize the UG opportunity.

The SH Kirchenacker in Unterlaa shows a utilization rate of 80%. This might be explained by two reasons. On the one hand, the parcel size is relatively big, requiring for a rather high time-investment. On the other hand, the location is very far away from the city centre, resulting in a very long traveling time for people from the inner districts, which might even form too big an obstacle for interested people. These two factors, parcel size and location, are optimally solved, for example, at the 120 UG beds at Augarten, established by the city of Vienna in the heart of town. This project provides smaller beds and an excellent connection, resulting in an extremely high demand (beds are distributed through a lottery system). However, the SH concept can reach a considerable grade of self-sufficiency with vegetables.

When we compare these results with the percentage of interested market shoppers, we see that free capacities can be filled easily, if certain criteria (compare with the Augarten example) are fulfilled. However, if these criteria are fulfilled, the case of CG Rosenberg and Augarten shows that initiatives for UG are highly demanded by the population, requiring for strategies of restricting the number of members (fluctuation model, lottery.) Even though these initiatives give each person a fair chance to participate in a UG project, we still encourage increasing the supply.

Conclusion and Outlook

Throughout this report we saw that Urban Gardening is important and meaningful for many city inhabitants. The members of the initiatives became more aware of the food they consume, the way it is produced and the effort it took to produce it. With members' involvement in growing their own food, it also had an influence on the food they consume through other pathways. Furthermore, Urban Gardening creates a common ground between consumers and producers, strengthens the bonds and enforces the mutual respect between them.

The results of both surveys (one focused on motivations and participation of the initiatives' members and the other targeting the supply and demand for urban gardening in Vienna) pointed towards a high valuation of gardening areas within the city borders, in proximity, and a transparent food production. According to the different possibilities in infrastructure and needs, i.e. interest in social interactions in the neighbourhood, either CG, GG or SH would be appropriate to ensure additional food-supply based on participation. A close interaction between project founders and members was important in order to address the need for transparency in decision making, active participation and therewith satisfaction.

The situation of the capacities and the supply presented itself very differently for each focus initiative, compared to the interest of potential members however, we can say that full utilization is possible under certain conditions. Therefore, we recommend offering more possibilities for Viennese citizens to actively participate in the production of their own food. This can be achieved through the loosening of tight regulations and the reduction of bureaucracy. Thus, empty spaces could be used legally (compare GGs) and inhabitants of Gemeindebauten could install garden possibilities more easily. Also, we embrace the mandatory integration of gardening possibilities in the planning of newly-built residence-buildings. Overall, we think that governmental institutions have ability to guide and support.

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Bassett, Thomas J. (1981) Reaping on the Margins: A Century of Community Gardening in America. Landscape, Illinois

Annex

Figures for Research Question 2:

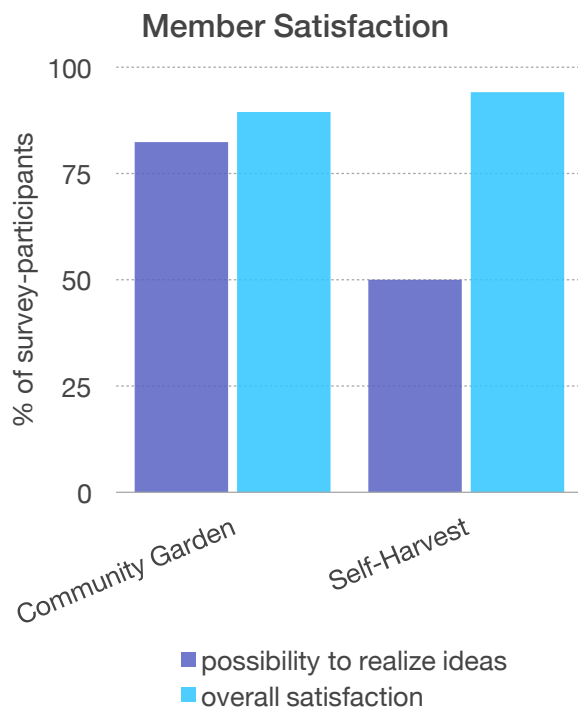


Figure 4: Comparison of member satisfaction and possibility to complement ideas between CG and SH. (n=37; n CG = 18, n SH = 19; members could check boxes indicating to be rather satisfied or rather unsatisfied for both questions)

Figures for Research question 3:

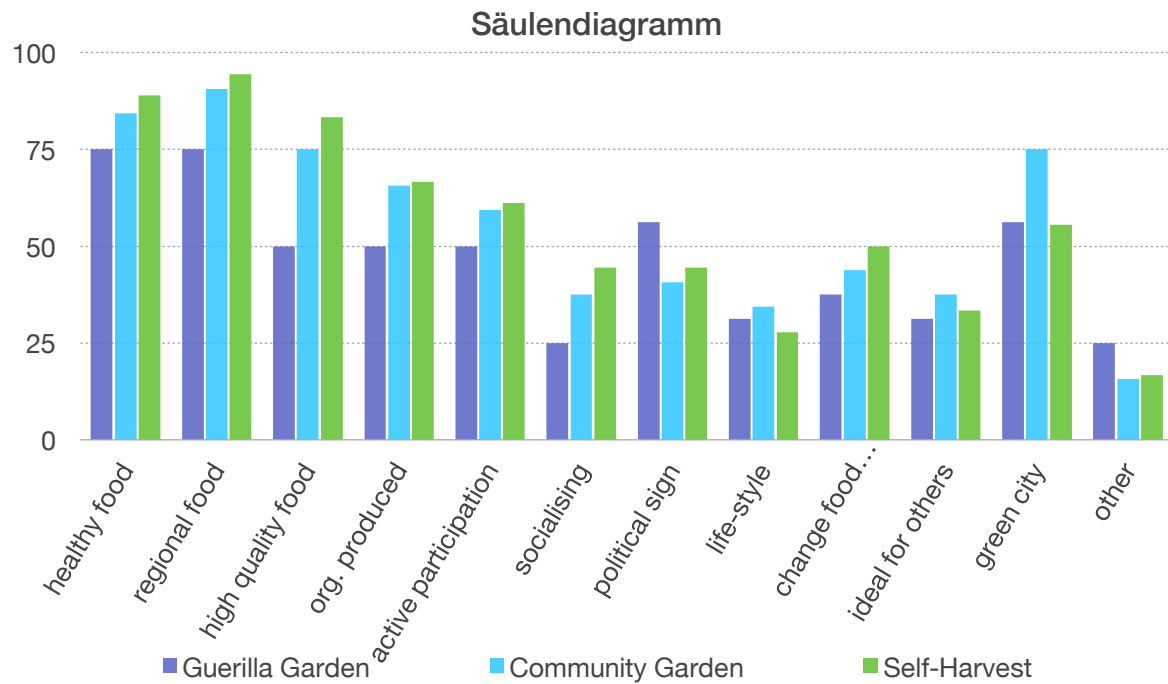


Figure 5: Comparison of main reasons for interest between CG, SH and GG.

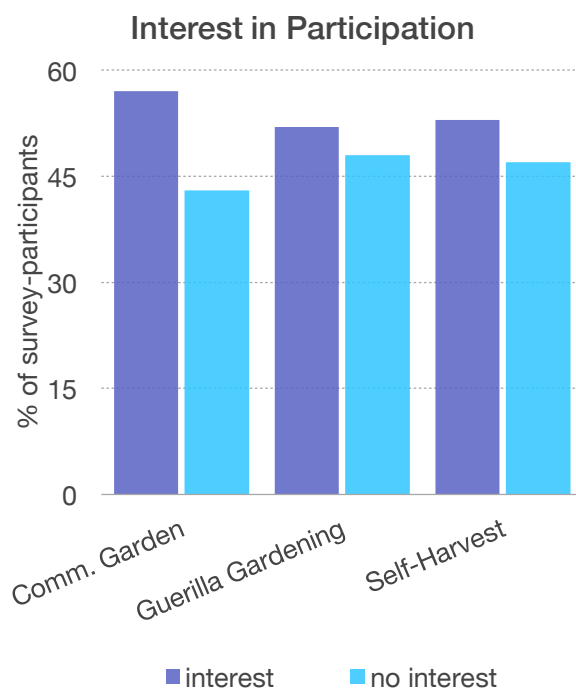


Figure 6: Comparison of interest versus no interest between the different UA initiatives.

Market Survey



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Ihre Daten werden selbstverständlich anonym erfasst und werden nicht auf Sie zurückzuführen sein. Es gibt keine richtigen oder falschen Antworten. Wir bitten Sie herzlich ehrliche Antworten zu geben. Die ermittelten Daten werden in einem Bericht im Rahmen des Kurses ausgewertet.

Bei Rückfragen melden Sie sich bitte bei nina.kovacs@students.boku.ac.at

Angaben zur Person

Geschlecht: ☐ weiblich ☐ männlich ☐ _____

Alter: _____ Jahre Postleitzahl: _____

Familienstand: ☐ alleinstehend ☐ in einer Partnerschaft/verheiratet

Ich wohne in: ☐ einer Wohnung ☐ in einer Wohnung mit Balkon/Terrasse
☐ einem Einfamilienhaus ☐ _____

In meinem Haushalt leben _____ Personen (mich eingeschlossen), davon _____ Kinder.

Das durchschnittliche Einkommen meines Haushaltes liegt bei _____ € pro Monat.

- davon plane ich wöchentlich ca. _____ € für Lebensmittel ein.

Block A - Gemeinschaftsgarten

1. Kennen Sie das Konzept des Gemeinschaftsgartens?

- ☐ ja ... und zwar durch ☐ Freunde/ Familie ☐ Medien
☐ ehemalige Beteiligung ☐ „Vorbeifahren“
☐ _____
☐ nein (weiter zu Block B – Seite 3)

2. Sind Sie an einer Beteiligung in einem Gemeinschaftsgarten interessiert?

- | <input type="checkbox"/> Ja, und zwar weil
(Mehrfachnennungen möglich) | <input type="checkbox"/> Nein, und zwar weil...
(Mehrfachnennungen möglich) |
|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> ich mich mit gesunden Nahrungsmitteln versorgen will. | <input type="checkbox"/> ich keine Zeit dafür aufbringen möchte/kann. |
| <input type="checkbox"/> ich Wert auf Regionalität lege. | <input type="checkbox"/> es keine solche Initiative in meiner Nähe gibt. |
| <input type="checkbox"/> ich qualitativ hochwertige Nahrungsmittel will. | <input type="checkbox"/> ich meine Nahrungsmittel gern auf dem Weg/ ums Eck besorge. |
| <input type="checkbox"/> ich ökologisch erzeugte Nahrungsmittel will. | <input type="checkbox"/> ich die Anfahrtszeit zur nächsten Initiative nicht aufbringen möchte/kann. |
| <input type="checkbox"/> ich aktiv an der Produktion meiner Nahrungsmittel beteiligt sein will. | <input type="checkbox"/> ich Bedenken habe, wenig Wertschöpfung aus meiner Arbeit zu erhalten. |
| <input type="checkbox"/> ich Gemeinschaft erleben will. | <input type="checkbox"/> es mir körperlich zu anstrengend ist. |
| <input type="checkbox"/> ich ein politisches Zeichen setzen will. | <input type="checkbox"/> ich kein Gemüse und Obst mag. |
| <input type="checkbox"/> es zu meinem momentanen Lebensstil passt. | <input type="checkbox"/> ich in meiner freien Zeit gerne andere Dinge tue. |
| <input type="checkbox"/> ich das Ernährungssystem verändern will. | <input type="checkbox"/> mir die Vorgehensweise zu radikal ist. |
| <input type="checkbox"/> ich durch mein Handeln ein Vorbild für andere Menschen sein will. | <input type="checkbox"/> mir die Verantwortung zu groß ist. |
| <input type="checkbox"/> mir der Erhalt von unverbauten Grünflächen in der Stadt wichtig ist. | <input type="checkbox"/> ich nicht weiß, wie ich mich einbringen kann. |
| <input type="checkbox"/> Anderes, und zwar _____ | <input type="checkbox"/> ich keinen grünen Daumen habe. |
| | <input type="checkbox"/> Anderes, und zwar _____ |

Falls Sie bei Frage 2 nein gewählt haben:

3. Aktuell kommt für mich die Teilnahme in einem Gemeinschaftsgarten nicht in Frage, unter folgenden Umständen könnte ich mir die Beteiligung aber vorstellen:

- ☐ ich habe mehr Freizeit ☐ es gibt eine Initiative in meiner Nähe
☐ Familie/Bekannte sind Mitglieder ☐ _____

Block B – Guerilla Gardening

1. Kennen Sie das Konzept des Guerilla Gardening?

- ☐ ja ... und zwar durch
 ☐ Freunde/ Familie
 ☐ Medien
☐ ehemalige Beteiligung
 ☐ „Vorbeifahren“
☐ _____
☐ nein (weiter zu Block C – Seite 4)

2. Sind Sie an einer Beteiligung in einem Guerilla Garden interessiert?

<input type="checkbox"/> Ja, und zwar weil (Mehrfachnennungen möglich)	<input type="checkbox"/> Nein, und zwar weil... (Mehrfachnennungen möglich)
<input type="checkbox"/> ich mich mit gesunden Nahrungsmitteln versorgen will.	<input type="checkbox"/> ich keine Zeit dafür aufbringen möchte/kann.
<input type="checkbox"/> ich Wert auf Regionalität lege.	<input type="checkbox"/> es keine solche Initiative in meiner Nähe gibt.
<input type="checkbox"/> ich qualitativ hochwertige Nahrungsmittel will.	<input type="checkbox"/> ich meine Nahrungsmittel gern auf dem Weg/ ums Eck besorge.
<input type="checkbox"/> ich ökologisch erzeugte Nahrungsmittel will.	<input type="checkbox"/> ich die Anfahrtszeit zur nächsten Initiative nicht aufbringen möchte/kann.
<input type="checkbox"/> ich aktiv an der Produktion meiner Nahrungsmittel beteiligt sein will.	<input type="checkbox"/> ich Bedenken habe, wenig Wertschöpfung aus meiner Arbeit zu erhalten.
<input type="checkbox"/> ich Gemeinschaft erleben will.	<input type="checkbox"/> es mir körperlich zu anstrengend ist.
<input type="checkbox"/> ich ein politisches Zeichen setzen will.	<input type="checkbox"/> ich kein Gemüse und Obst mag.
<input type="checkbox"/> es zu meinem momentanen Lebensstil passt.	<input type="checkbox"/> ich in meiner freien Zeit gerne andere Dinge tue.
<input type="checkbox"/> ich das Ernährungssystem verändern will.	<input type="checkbox"/> mir die Vorgehensweise zu radikal ist.
<input type="checkbox"/> ich durch mein Handeln ein Vorbild für andere Menschen sein will.	<input type="checkbox"/> mir die Verantwortung zu groß ist.
<input type="checkbox"/> mir der Erhalt von unverbauten Grünflächen in der Stadt wichtig ist.	<input type="checkbox"/> ich nicht weiß, wie ich mich einbringen kann.
<input type="checkbox"/> Anderes, und zwar _____	<input type="checkbox"/> ich keinen grünen Daumen habe.
	<input type="checkbox"/> Anderes, und zwar _____

Falls Sie bei Frage 2 nein gewählt haben:

3. Aktuell kommt für mich die Teilnahme in einem Guerilla Garden nicht in Frage, unter folgenden Umständen könnte ich mir die Beteiligung aber vorstellen:

- ☐ ich habe mehr Freizeit
 ☐ es gibt eine Initiative in meiner Nähe
☐ Familie/Bekannte sind Mitglieder
 ☐ _____

Block C – Selbsternte

1. Kennen Sie das Konzept der Selbsternte?

- ☐ ja ... und zwar durch
 ☐ Freunde/ Familie
 ☐ Medien
☐ ehemalige Beteiligung
 ☐ „Vorbeifahren“
☐ _____
☐ nein (schon fertig – Vielen Dank!)

2. Sind Sie an einer Beteiligung in einem Selbsternte-Projekt interessiert?

<input type="checkbox"/> Ja, und zwar weil (Mehrfachnennungen möglich)	<input type="checkbox"/> Nein, und zwar weil... (Mehrfachnennungen möglich)
<input type="checkbox"/> ich mich mit gesunden Nahrungsmitteln versorgen will.	<input type="checkbox"/> ich keine Zeit dafür aufbringen möchte/kann.
<input type="checkbox"/> ich Wert auf Regionalität lege.	<input type="checkbox"/> es keine solche Initiative in meiner Nähe gibt.
<input type="checkbox"/> ich qualitativ hochwertige Nahrungsmittel will.	<input type="checkbox"/> ich meine Nahrungsmittel gern auf dem Weg/ ums Eck besorge.
<input type="checkbox"/> ich ökologisch erzeugte Nahrungsmittel will.	<input type="checkbox"/> ich die Anfahrtszeit zur nächsten Initiative nicht aufbringen möchte/kann.
<input type="checkbox"/> ich aktiv an der Produktion meiner Nahrungsmittel beteiligt sein will.	<input type="checkbox"/> ich Bedenken habe, wenig Wertschöpfung aus meiner Arbeit zu erhalten.
<input type="checkbox"/> ich Gemeinschaft erleben will.	<input type="checkbox"/> es mir körperlich zu anstrengend ist.
<input type="checkbox"/> ich ein politisches Zeichen setzen will.	<input type="checkbox"/> ich kein Gemüse und Obst mag.
<input type="checkbox"/> es zu meinem momentanen Lebensstil passt.	<input type="checkbox"/> ich in meiner freien Zeit gerne andere Dinge tue.
<input type="checkbox"/> ich das Ernährungssystem verändern will.	<input type="checkbox"/> mir die Vorgehensweise zu radikal ist.
<input type="checkbox"/> ich durch mein Handeln ein Vorbild für andere Menschen sein will.	<input type="checkbox"/> mir die Verantwortung zu groß ist.
<input type="checkbox"/> mir der Erhalt von unverbauten Grünflächen in der Stadt wichtig ist.	<input type="checkbox"/> ich nicht weiß, wie ich mich einbringen kann.
<input type="checkbox"/> Anderes, und zwar _____	<input type="checkbox"/> ich keinen grünen Daumen habe.
	<input type="checkbox"/> Anderes, und zwar _____

Falls Sie bei Frage 2 nein gewählt haben:

3. Aktuell kommt für mich die Teilnahme in einem Selbsternte-Projekt nicht in Frage, unter folgenden Umständen könnte ich mir die Beteiligung aber vorstellen:

- ☐ ich habe mehr Freizeit
 ☐ es gibt eine Initiative in meiner Nähe
☐ Familie/Bekannte sind Mitglieder
 ☐ _____

UG Member Survey



Universität für
Bodenkultur Wien



Institut für Ökologischen Landbau

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Ihre Daten werden selbstverständlich anonym erfasst und werden auf Sie nicht zurückzuführen sein. Es gibt keine richtigen oder falschen Antworten. Wir bitten Sie herzlich ehrliche Antworten zu geben. Die ermittelten Daten werden in einem Bericht im Rahmen des Kurses ausgewertet.

Bei Rückfragen melden Sie sich bitte bei nina.kovacs@students.boku.ac.at

Angaben zur Person

Geschlecht:	<input type="checkbox"/> weiblich	<input type="checkbox"/> männlich	<input type="checkbox"/> _____
Alter: _____ Jahre	Postleitzahl: _____		
Familienstand:	<input type="checkbox"/> alleinstehend	<input type="checkbox"/> in einer Partnerschaft/verheiratet	
Ich wohne in:	<input type="checkbox"/> einer Wohnung	<input type="checkbox"/> in einer Wohnung mit Balkon/Terrasse	
	<input type="checkbox"/> einem Einfamilienhaus	<input type="checkbox"/> _____	
In meinem Haushalt leben _____ Personen (mich eingeschlossen), davon _____ Kinder.			
Das durchschnittliche Einkommen meines Haushaltes liegt bei _____ € pro Monat.			
- davon plane ich wöchentlich ca. _____ € für Lebensmittel ein.			

Initiative

In welcher Initiative sind Sie beteiligt? Um diese Initiative wird es in den folgenden Fragen gehen.

- ☐ Gemeinschaftsgarten ☐ Guerilla Gardening ☐ Selbsternte

Seit welchem Jahr nehmen sie die Angebote der Initiative in Anspruch?

Bitte geben Sie hier eine Jahreszahl ein, und wenn möglich den entsprechenden Monat.

_____ (JJJJ) _____ (MM)

Was hat Sie dazu bewegt die Initiative zu unterstützen? (Mehrfachnennung möglich)

Ich bin Mitglied, weil ich Wert lege auf...

- ☐ gesunde Nahrungsmittel
☐ qualitativ hochwertige Lebensmittel
☐ ökologisch erzeugte Nahrungsmittel
☐ praktische Beteiligung und Gestaltung
☐ Erweiterung meines Wissenshorizonts
☐ Einblicke für meine Kinder in die Lebensmittelproduktion
☐ gesellschaftliche Veränderungen und das hiermit umsetzen kann
☐ den Schutz der Natur
☐ Kostengünstige Lebensmittel
☐ Beteiligung an Netzwerken

Was hat Sie dazu bewegt die Initiative zu unterstützen? (Mehrfachnennung möglich)

Ich bin Mitglied, weil...

- ☐ meine Lebenssituation es mir ermöglicht.
☐ ich mich verbunden fühle mich den Akteuren.
☐ ich ganz in der Nähe wohne, und zwar in _____ km Entfernung.
☐ ich meine Lebensmittelbedarf zum Großteil über die Initiative decken möchte und kann.
☐ es mir im Bereich Lebensmittel besonders leicht fällt mich nachhaltig zu verhalten.

In welchen Bereichen wurden Ihre Erwartungen erfüllt und in welchen nicht?

Haben sich Ihre Erwartungen in den Bereichen eher erfüllt oder eher nicht erfüllt?

- | eher erfüllt | eher nicht erfüllt | |
|--------------------------|--------------------------|---------------------------------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | gesunde Nahrungsmittel |
| <input type="checkbox"/> | <input type="checkbox"/> | qualitativ hochwertige Lebensmittel |
| <input type="checkbox"/> | <input type="checkbox"/> | ökologisch erzeugte Nahrungsmittel |
| <input type="checkbox"/> | <input type="checkbox"/> | praktische Beteiligung und Gestaltung |
| <input type="checkbox"/> | <input type="checkbox"/> | Erweiterung meines Wissenshorizonts |
| <input type="checkbox"/> | <input type="checkbox"/> | Einblicke für meine Kinder in die Lebensmittelproduktion |
| <input type="checkbox"/> | <input type="checkbox"/> | gesellschaftliche Veränderungen und das hiermit umsetzen kann |
| <input type="checkbox"/> | <input type="checkbox"/> | den Schutz der Natur |
| <input type="checkbox"/> | <input type="checkbox"/> | kostengünstige Lebensmittel |
| <input type="checkbox"/> | <input type="checkbox"/> | Beteiligung an Netzwerken |
| <input type="checkbox"/> | <input type="checkbox"/> | Deckung des Lebensmittelbedarfs |

Im Folgenden geht es um ihren persönlichen Beitrag zur Initiative.

Wie viele Stunden sind Sie im Monat durchschnittlich durch die Initiative eingebunden?

_____ Stunden pro Monat.

Wie viel Geld wenden Sie persönlich monatlich im Kontext der Initiative auf?

_____ € pro Monat.

Wie würden Sie Ihre Einbindung in die Initiative charakterisieren?

Bitte geben Sie eine Tendenz an entsprechend einer Skala auf drei Stufen, auf der die Zweite ein Mittelmaß darstellt.

passiv	-----	aktiv
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
weniger als zu Beginn	-----	mehr als zu Beginn
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Verpflichtung	-----	Freizeit
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
demotiviert	-----	motiviert
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Was hat sich Ihrer Meinung nach durch Ihre Beteiligung in der Initiative verändert?

- ☐ angebotene Bereiche
- ☐ Wissen
- ☐ Anzahl beteiligter Personen (mich ausgeschlossen)
- ☐ Wahrnehmung der Initiative in der Öffentlichkeit
- ☐ Entscheidungsfindung
- ☐ Möglichkeiten der Beteiligung

Inwiefern können Sie eigene Ideen umsetzen?

eher schwer ☐ eher leicht ☐

Wie zufrieden sind Sie in der Initiative insgesamt?

eher unzufrieden ☐ eher zufrieden ☐

Wie zufrieden sind Sie mit bestimmten Aspekten in der Initiative und in welchen sollte sich nach Ihrem Ermessen etwas verändern?

- | zufrieden | Veränderung
erwünscht |
|--------------------------|-------------------------------------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> aktive Beteiligung |
| <input type="checkbox"/> | <input type="checkbox"/> Einfluss auf Entscheidungen |
| <input type="checkbox"/> | <input type="checkbox"/> Erreichbarkeit und / oder Zugänglichkeit |
| <input type="checkbox"/> | <input type="checkbox"/> Ideologische Ausrichtung |
| <input type="checkbox"/> | <input type="checkbox"/> Zuverlässigkeit |
| <input type="checkbox"/> | <input type="checkbox"/> Kommunikation |
| <input type="checkbox"/> | <input type="checkbox"/> Bisherige Entwicklung |

Vielen Dank für Ihre Zeit!

Urban Agriculture and its Political Framework in Vienna

Brieuc Desaint, Grégoire Turpin, Lucia Gruber, Thibault Leclerc, Walter Gössinger

Introduction

In a context of global urban population growth, urban and peri-urban agriculture has become an important focus for many cities and for research as well. Urban Agriculture, by its many advantages, is an answer to the needs of city inhabitants and an indicator for their willingness to become active. Often, urban farms or community gardens are created by collective or individual initiatives of citizens. But these projects still need a supporting framework from the side of city governments in order to make urban and peri-urban projects feasible for private individuals and to give citizens the possibility to claim their rights for starting projects or protecting their projects.

So in this report the political and institutional support given by the City of Vienna for urban and peri-urban agriculture projects is examined with a focus on the following research questions:

1. What are the official positions of the governing parties and political institutions concerning urban and peri-urban agriculture (UPA) in Vienna?
1. How are these official positions affecting UPA projects in Vienna – in a supporting or a hindering way?
2. How can supportive policy structures be improved in order to bring political theory and practical reality of UPA closer together?

In order to answer these questions, we used literature and online research to collect information about urban agriculture advantages and policies in Vienna. Our main data collection was done through interviews of urban agriculture actors in the capital city, from urban farmers to policy makers.

The report is structured in the following way: First the methods used for the report will be explained. Followed by a collection of advantages of UPA, which were gathered through a literature and online research, and selected according to their relevance for actors involved in UPA in Vienna. It continues with a comparison of political statements – concerning UPA – of the major parties in Vienna, which were as well researched online. Afterwards, the results of each of the conducted

interviews will be presented and finally – to discuss these results and give an overview – they were processed into a Force Field Analysis of the present situation of UPA in Vienna.

Methods and collected data

In the following chapter, the methods for conducting this research project are explained. Beforehand, it has to be mentioned that this study is not a census of the situation of UPA in Vienna, it is rather an insight into the different perceptions of the present situation from the point of view of urban farmers, policy makers and connected institutions.

We began our project with a literature and online research with two goals: First of all, to gather information about positive effects of UPA in general, in order to underpin the importance of the topic, and thereby to state reasons why UPA should further be lifted by Viennese policy makers and institutions.

The other research target was to get an overview of the official positions and programmes concerning UPA stated on the homepages of political parties and the agricultural chamber of Vienna. Herewith, we could show where UPA stands in the political discourse and who the involved political actors are in this field.

Additionally, we conducted a stakeholder analysis to determine interview partners, which are relevant for our report. We decided to distinguish the – for us relevant – actors in two groups: The first group encompasses UPA farmers and networks; the second one involves policy makers and institutions concerned with UPA. So the rationale behind the selection of our interviewees is the idea of a comparison between the perspectives of the two actor groups on the current political framework for UPA in Vienna.

In table 1 the interview partners are listed, the first four are from the first actor group; the other three belong to the second group.

The interviews were carried out in a semi-structured manner; hence, in preparation for each interview a set of questions was compiled to serve as guideline for the dialogue. The semi-structured character of the interviews enables to lead a true dialogue, during which questions can evolve, the direction of the interview can change and new questions can appear. It is the interviewer's responsibility to keep the dialogue topic-centred [1]. The collected information can be characterised as qualitative data; it gives an insight into the present situation of UPA in Vienna, narrated from the angles of various actors in the field. By combining the different perceptions, we drew conclusions about the current political framework regarding UPA.

All interviews were held face-to-face; two or more interviewers were present each time, in order to divide the main responsibilities of posing question and writing the protocol between them.

Table 1: List of all interview partners

Interview Partners	Main function	Year of foundation	Location of the farm or organization	Short description
Bioschanze farmer	Urban farm	2012	Donaufeld 21st district of Vienna	<ul style="list-style-type: none"> • 0,5 ha of open space • 3.000 m² of greenhouse • Direct marketing of fresh organic food • Possibility to visit the farm [2]
Two activists Feld X	Action group of former self-harvesters and agricultural activists	2016	Rothneusiedl, near the southern border of Vienna	<ul style="list-style-type: none"> • Initiative for self-organised social agriculture projects on the area of the former Haschahof [3]
Two members of Wilde Rauke	Organically certified community garden project	2012	Stammersdorf 21st district, between Marchfeldkanal and Orasteig	<ul style="list-style-type: none"> • Cultivation 1 ha • Forest and pasture protection status („Wald- und Wiesenschutz“) • 25 members • all products are so far privately consumed [4]
A Representative of Garten Polylog	Non-Governmental Organisation	2007	Lilienbrunnngasse 18, 1020 Vienna	<ul style="list-style-type: none"> • Managed by 3 people • Dedicated to help community gardening and urban farming in Vienna [5]
Two employees of Bio Forschung Austria	Research centre focusing on organic agriculture	1980	Esslinger Hauptstrasse 132-134 1220 Vienna	<ul style="list-style-type: none"> • Support and improve organic agriculture and inform consumers • Control compost collected from the organic waste bin [6]
A representative of the Green Party Vienna	Political party	1986	Lindengasse 40 A-1071 Vienna	<ul style="list-style-type: none"> • One of the governing parties in Vienna • Focus on sustainable development in all sectors of society [7]
Employee of the Agricultural Chamber Vienna	The principal body representing agricultural interests	1920	Gumpendorfer Straße 15, 1060 Vienna	<ul style="list-style-type: none"> • Support agricultural initiatives with communication and educational projects [8]

After completing the interviewing, the data from each dialogue was evaluated in the light of the guiding research questions; the most relevant information was summarized in the second part of the results chapter.

For the conclusion the approach of a Force-Field-Analysis is used - a concept designed by Kurt Lewin [9] - to compare supporting and hindering forces affecting UPA in Vienna. Usually it serves as a decision making tool, but in the case of this report it is used in a slightly modified way: there won't be weighing numbers on the different forces; instead it will give an overview to easily see the contradicting forces present around UPA in Vienna. The goal of this force-field-analysis is to make it comprehensible for the readers, which impacting forces were found while conducting the research for this report; so they can interpret the current situation of UPA projects from their own point of view, and additionally compare it to the conclusions drawn by the authors of this report [9].

Results

The following chapter will show the results of the literature and online research on UPA and its legal and political framework in Vienna, as well as the information gathered during the interviews with some major actors in the field of UPA in Vienna.

Results from the literature and online research

Definition of UPA and its benefits

With the rapid development of urban areas, the food demand is continually increasing and the pressure on agrarian land has grown stronger and stronger. In this context, UPA is defined as the growing of plants and the raising of animals within and around cities [10].

UPA has many benefits on different fields. From an environmental perspective, UPA can improve air and soil quality, participate to saving biodiversity of old plant species, utilize empty green public spaces and be a shelter for wildlife in cities [11].

Moreover, the proximity to consumers helps to reduce transport impacts and packaging, as well as it permits to recycle organic waste - e.g. in form of compost - produced in cities. Additionally, this proximity enables the reconnection of urban people to their environment and it contributes to make them aware of present issues by gaining knowledge about food production and consumption. Sharing knowledge is only one of many social and educational benefits of UPA.

Finally, UPA can also impact the economic development positively by creating local goods and services and by promoting to build an alternative economy.

This list of benefits exemplarily shows the importance and possible outcomes of UPA to be considered on political level [10]&[11].

Political advantages of Urban Agriculture

The creation of initiatives in the field of urban agriculture and local food systems could lead to the settlement of wealthier population into the concerned areas. The advantages of such gentrification for a municipality are numerous: higher local tax revenues, reduction in crime, higher real estate values, increased purchasing power of consumers in local businesses and greater social mix. Depending on the goal and the priorities of the municipality, gentrification has also disadvantages, mostly for “local” population [12].

UPA could also be a way to create jobs. While community gardens are based on voluntary work, the creation of city farms, especially in underprivileged areas could be an opportunity to hire people. Moreover, if the farm is certified organic or bio-dynamic, because of the importance of manual work, the bigger amount of workforce needed will lead to an increased number of available jobs. The jobs can be proposed to close inhabitants or to anybody in need for a job.

City farming can as well be a way to reintegrate people in situations of social precariousness or returning to working life after a prison sentence. It can also be a mean to appreciate the knowledge of newly-arrived people, who can express their own culture through farming, and make it a tool for a better integration in urban areas.

According to some sources, urban agriculture is contributing less to food security within cities, but it can, at least, ensure food sovereignty for certain types of products, during the growing season [13]. Food sovereignty presents plenty of advantages for citizens: it is a tool for enhancing democracy in food systems, while it gives more choice to consumers. UPA gives people an alternative to the conventional food system and thereby reduces the power of it.

Finally, even if it is more important in developing countries, Urban Agriculture allows cities to have more resilience in their consumption habits and thus be more adaptable to disturbances, such as climate change, droughts or floods.

To conclude, all the mentioned advantages of Urban Agriculture allow cities to increase their attractiveness within their borders; all social, health and environmental services provided by UPA can help to improve the welfare of inhabitants [14].

Vienna and UPA

Not only in the developing world, the urban pressure is very intense [10], as well is - as a concrete example – Vienna’s population growing rapidly [15]. The new inhabitants need space. This often leads to conflicts of interest, e.g. when it has to be decided if construction of new living areas and parks or urban gardens and farms should be prioritized. So in the following paragraph the positions

of parties and institutions in Vienna concerning UPA, which are communicated on their homepages and political programs available on the Internet, are shown.

On Vienna's website „wien.at“ information about UPA is found under the title “*urban farming*”. Although there are only urban gardening projects described, where groups of citizens work together with the main aspect on nature experience and social activities [16]; this description fits for Wilde Rauke and the activists of Feld X, in this report we also included an example for a commercially producing urban farm – Bioschanze.

The following table sums up the different statements from main parties on UPA:

Table 2: Official positions concerning UPA stated by Vienna's main political parties (information retrieved from official websites of the respective parties)

Party	Position concerning UPA
The Green Party [17]&[18]	<ul style="list-style-type: none"> • Creating more green spaces in the city • Promote urban farming in urban expansion areas • Promote pesticide free agriculture
SPÖ [19]	<ul style="list-style-type: none"> • Creating more green spaces in the city • Implement the construction of floating gardens in the danubian channel • GMO-free agriculture
ÖVP [20]&[21]	<ul style="list-style-type: none"> • No direct statements concerning UPA • Preserving green space in the city • Support regional agriculture
FPÖ	<ul style="list-style-type: none"> • No statements - concerning UPA - found

Additionally to the parties, positions of the Agricultural Chamber were examined. Especially interesting was the Agricultural City Development Plan („AgSTEP“) - as part of the General City Development Plan („STEP“) - which was created in a collaboration between the Agricultural Chamber and members of the Viennese municipal administration. There, categories for agricultural used areas in the city and its periphery were determined:

- Category A: All primary agricultural areas
- Category A1: All large connected areas which are mainly used for agricultural activity
- Category A2: All large connected areas which are mainly used for agricultural activity with an uncertain future use [22].

Particularly the third category seems like a protecting status at first sight, but is actually inviting for land speculations. Having land categorized as A2 does not give any assurance for the urban farmers or gardeners working on it; already this uncertainty can prevent projects from happening or lead to an abandonment of the project.

Results from personal interviews

The information in the following chapter summarizes opinions and statements from the interviews.

Farmer's perspective

In order to get to know the situation of urban farmers and gardeners in Vienna, three projects were examined exemplarily: Feld X, Bioschanze and Wilde Rauke. In the following part the outcomes of the interviews are presented.

The self-harvesting project at Haschahof stopped in the end of 2014, when the farmer - for the former members quite unexpectedly - announced that there will be no plots available anymore from the following year on. Little later it became clear that the city of Vienna bought the farm.

A similar situation could be observed when having a look at "Bioschanze" in the Donaufeld. During the interview the farmers explained that they will stop their farming activity in around five years, due to construction plans for the area. Even though the soil has great quality for agricultural cultivation, according to the farmers, investors are waiting to build on it. Among other investors it is, again, the city-own Wohnfonds and the situation looks quite determined. First building activities on the 60 hectares big area will start in 2019.

For both above-mentioned projects, citizens showed big concerns and tried to protect the farms in different ways. In the case of Bioschanze, several local parties including "Wir für Floridsdorf" or "Die Grünen" showed concerns about the project and a local initiative started a petition to preserve green space and some of the traditional vegetable production in the area. According to Bioschanze, even the Green party on city level stepped in for some preservation, but it seems like the way they expressed it: "In politics there is a lot of talking, but little action."

Similar initiatives were formed around Haschahof and some former self-harvesting plot owners started a petition to save the area, which was signed by more than 2000 people. Additionally, while the petition was still running, rumours about a demolition of the historic buildings came up and the

“Wohnfonds Wien”, official owner of the property, seemed to be willing to get rid of the buildings quite fast. But as the outcry of citizens, including mentioned plot owners, was taken up by the media, an intervention by the green party could prevent the demolition.

After these happenings, plot owners teamed up with further activists and formed the group “Feld X”, which started working on the preservation of the agricultural land including the buildings by setting up a concept for a diverse, self-organized use of the farm.

In several talks between activists and district as well as city politicians it was made clear, that many of the politicians would be interested in using the potential of the farm. But in the case of Haschahof as well as in the case of Bioschanze the district parties’ actions to protect the discussed areas were stopped at the city level [24].

Additionally, a conflict of interest becomes visible when regarding initiatives of the locals: People living in the neighbourhood moved to these areas, because they wanted to be close to open, green spaces, but by moving for example to the Donaufeld they increase the urban pressure on this area and thereby accelerate the city development. Especially the arable land prizes of 200-600 € per square meter seems an unbeatable force leading to a conversion of agricultural land to construction area.

Bioschanze’s farmers, as well as the interviewed former members of Haschahof, do not see the city council as a supporting force for urban farming; in their opinions there are no regulations protecting the agricultural area at the Donaufeld or policies to foster urban agriculture in a certain way. Giving the green areas in the city a protected status would be one way to help the urban farmers in the farmer’s mind, but as he understands, politicians prioritize common areas for urban gardening projects over city agriculture.

On the opposite to this stands the information, that at the moment the Haschahof area is cultivated by a conventional farmer - despite the official position of the city of Vienna and the agricultural chamber to foster organic and city adequate agriculture - and not open for alternative agricultural initiatives, like urban farming or community garden projects; but according to information from Feld X, a feasibility study for a socio-ecological use is currently being made.

In big contrast stands Wilde Rauke, a community garden project in Stammersdorf, which seems to thrive and one of the founders described their good connection to the city of Vienna. This might also be due to the fact that their field is in a landscape protection area. They also consider themselves lucky to get support from the city and hope to be a good example, so that the city of Vienna would easier foster similar projects.

Garten Polylog [22]

In 2007, Garten Polylog was established to support UPA projects at the city government level. Currently the support is rather coming from district level; people can bring their ideas like founding

a CSA or gardening project to the district advisor and to Garten Polylog in order to get information and to work out a strategy. Of course the level of support varies from district to district.

Many projects Garten Polylog is advising are temporary, reasons therefore can be the urban pressure as well as personal decisions of the participants or leaders of the projects. So far, no project Garten Polylog was involved in has ended up to now; additionally, if an area is threatened by speculations about construction or construction itself, there is still the possibility of moving the plots to another space.

At the district level, there is no legal framework or law for UPA. The only incentive is a 3000 Euro fund, which will be provided to the first community garden settling in the district, which already came to use in almost every district.

One of the main hindering forces concerning the establishment of UPA projects seems to be worried neighbours, who are afraid of the change due to new people arriving in their district, making noise or spoiling the green spaces.

According to Garten Polylog, the city government could be more supportive. Until now the initiative comes from private individuals or groups of citizens, even though having more community gardens is a communicated goal in the governmental program. UPA in Vienna is currently consisting of small projects, there is no concept existing that would overarch the projects and give a framework or guideline. Furthermore, support for UPA by other institutions could be improved or specialized. The interviewed Garten Polylog representative mentioned, that there are conflicts of interest with MA69, which is the administration for building and property management [23] (source: <https://www.wien.gv.at/verwaltung/grundstuecke/>). Their focus lies on building activities rather than UPA projects.

Political parties [24] – Die Grünen

According to the green party, Vienna has a great potential for organic and urban agriculture: Two million potential consumers and only 650 farms, very few of them organic. Furthermore, Vienna itself owns 600 ha of organic agricultural land in the surrounding area.

Asked for which projects the city ever supported with the provision of land, they mentioned around 5 projects in two different locations. Even though the city owns quite some land, one of the units in charge (namely MA69) seems not to be interested in agricultural activities at all. In general, it seems that there are no clear structures or processes about how and where people can get support or ask for land.

Two structures, where people can at least get practical advice for e.g. gardening or marketing are „Bio Forschung Austria“ and the agricultural chamber of Vienna. Bio Forschung Austria is a Think Tank doing research and providing knowledge around organic farming or marketing strategies for 20 years. Since a few years, they also get (additional?) financial support from the city for additional

consulting services for (private) small and smallest scale agriculture, as for example balcony or terrace gardening.

The interviewee explained that the agricultural chamber, as the official representative body for farmers, furthermore distributes the agricultural subsidies in Vienna. They also created programs like „Green Care“ (advice around the topic of „social agriculture“, also as a new form of diversifying farm activities) and the „Bio-Cluster“, a pilot project for associating organic farmers in order to sell their products together.

But there are some conflicts between the agricultural chamber and the city of Vienna, about further fostering organic farming practices. In the Greens' opinion, a lot of the farmers in and around Vienna are not doing city-adequate agriculture, i.e. vegetable farmers, growing organically with direct marketing. So the plan would be to redistribute subsidies: less for conventional big farmers (producing e.g. cereals and rapeseed on UPA areas) and more for organic farmers. In the interviewee's opinion, it will hardly work without financial incentives and sales possibilities. One big possibility here could be contracts with public institutions like schools or hospitals, but the problem often is, that these institutions would need quite big amounts and in-time deliveries, which are often hard to fulfil for single farms.

Agricultural Chamber of Vienna

The agricultural chamber of Vienna is the official representative body of all farmers in Vienna and therefore at least all commercial or professional UPA farms. They support farmers through diverse consultation services, lobbying in relevant policy negotiations or marketing and info campaigns.

The interviewee explained that supporting farmers starts with communication to sensitize people about farmer's images and agricultural values. This communication starts with education and 19.500 children attended "farm schools" in the last year. The agricultural chamber also facilitates access to local products via a website and furthermore, they conduct projects around regional supply and public acquisition like "Ökokauf Wien", a guideline for public acquisition, "Schulfrucht Wien", a program dedicated to regional products in schools, "farmers islands", a project for Viennese food markets and LGV - "Gärtnerkistl" and "Gärtnergeschäftl", a box scheme and shop for regional products.

Together with the city government, the agricultural chamber also developed the agro-structural development plan - the AgStep - where they defined areas for agricultural development and formulated measures to develop and support UPA, which is unique according to the agricultural chamber.

Finally, there are also financial supports like a starting support (Existenzgründung) of 12 - 16.000 Euro for people under 35 years taking over the family's farm or starting one (6-9 applications per year) and, a unique thing in Vienna, a support for converting to organic production.

Asked for the critique about not focussing on organic agriculture enough, the interviewee replied that it is not just about the way of production, but mainly also if there are markets for these products. Organic products might be more expensive and also the city is following the lowest prices in public acquisition.

Another question was about the high numbers of farms closing every year. According to the interviewee, Vienna lies in the Austrian average in this field and the chamber cannot prevent people from closing down or selling their land. All they can do is trying to create a suitable environment for agricultural production. That this is sometimes not an easy task, especially in urban areas, where the pressure on land is high, seems quite clear to them.

Bio Forschung Austria

Bio Forschung Austria (BFA) has various projects concerning organic farming and UPA. In some of these they collaborate with the City of Vienna, mainly in the way that the city provides infrastructure and has commissioned two county employees to work for BFA; as example some of these projects are concerning fertilization and plant species in organic agriculture. According to the interviewee, organic farming was always in the political program of Vienna, particularly coming up with mayor Häupl, who is a biologist.

The gardening information centre is at the BFA since 2016. It supports all present initiatives and provides help for forming new ones by creating networks of active people and establishing a UPA info-hotline. Here the city supports the projects as well by providing contact persons from “Wiener Wohnen”, “Wohnpartner Wien” and Garten Polylog, so they can mediate upcoming problems and give advice.

The BFA interviewee also mentioned the AgStep as a program developed by the cultural landscape initiative in the end of the 90s at the Boltzmann-Institut, together with BOKU, Social Ecology Vienna and University of Economics. The interviewee explained that in accordance with the AgStep, city areas are spatially determined to have priority areas for agriculture, which are not legally binding, but they have to be taken into account for city planning, and give at least some protection. But the city development is quite fast, so especially agriculturally used areas are hold as reserve areas.

According to the interviewee, a study was conducted where the income possibilities of the “Südrandbauern” (the farmers on the South Edge of Vienna) were examined and the results were 23 different types including many small niche products. This study also shows that the big „normal“ farms do not work well in Vienna anymore and city adequate agriculture is needed, with directly consumable goods and creative niches [24]. At BFA they see a trend moving towards conversion to organic farming in Vienna.

Nevertheless, it was also recognized that it is often a decision of the farmers or the successors to sell their land made in regard of the comparison between the profitability of farming the land or selling it to investors.

Discussion and Conclusions

The following figure (**Table 3**) shows the force fields around UPA in Vienna. On the left side the supporting forces are found, on the right side the hindering ones. The analysis summarizes the findings of this project. Beforehand it has to be mentioned that this analysis reflects the authors' understanding of the situation resulting from the interviews. So this analysis should serve as cause for thought, might look different from each actor's point of view and has to be adjusted over time.

Table 3: Force-Field-Analysis of the situation of UPA in Vienna

Supporting Forces	Hindering Forces
Dedicated citizens	Urban pressure
Some agricultural areas are protected with long term status	MA69 prioritizing construction over UPA
UPA anchored in the political program of the governing parties of Vienna	Various landowners of agricultural land in Vienna, which complicates to get information about contact persons or further plans for the area
Increasing awareness of environmental issues in population	Category A2 of the AgStep is no true protection and can lead to land speculation
Increasing interest in alternative ways of food consumption	Unclear future of the agricultural land, farmers might leave because of the uncertainty
Space for UPA projects does exist	High land prices for potential construction areas
Knowledge, workforce and ideas coming to the city with newly-arriving people	Worried neighbours who fear disturbance by UPA projects in their neighbourhoods
Good environmental conditions in Vienna	Little top-down initiative for projects
Existence of institutions (e.g. Garten Polylog, Agricultural Chamber)	No legal framework allowing citizens to use open green spaces for UPA
Existing structure of farmers markets	No vital need for urban agriculture in Vienna
UPA as growing trend - worldwide	

A central perception after doing all these interviews and research is inconsistency:

On the one hand, urban agriculture is a topic in some of the political programs of Vienna's parties and especially in the agreement of the city government, where they write about a "clear commitment to new forms of urban agriculture" and even support through "provision of urban agricultural areas" [25].

On the other hand, quite some of our interviewees do not feel supported or even see the city as a hindering force. They observe the increasing urban pressure on agricultural land and cannot really see the above-mentioned "clear commitment" to urban agriculture.

Predominantly UPA projects in Vienna are formed in a bottom-up manner, so initiated by citizens rather than by policy makers and district governments. So the support by policy makers is more of a reaction to these actions and since UPA is quite a recent phenomenon the quality of support available is varying depending on the interests of landowners and priorities of district governments. The network around UPA is not developed, so it can be hard to find the right contact point for support.

In general it seemed like the topic is very present in the citizens minds, as well as in the political programs and as topic in agricultural institutions, but the way of sharing knowledge and supporting or even giving incentives for people to start with their own UPA projects should be enhanced.

According to the interviewees, supportive policies can be improved in many ways. One example would be putting more agricultural land under protection status in order to have clearer long-term perspective. Additionally a legal framework could be created to facilitate the conversion of long-lasting empty spaces to UPA. Finally, the city of Vienna can count on existing structures like Garten Polylog, in collaboration with them stronger UPA projects could be build.

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Urban Agriculture in Detroit

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(Picture: Held 2015)

Introduction

“You really have to place Urban Agriculture within this social, global, political context in which capitalism, we’ve experienced this first hand [in Detroit], is not just in decline but it doesn’t work, it’s not sustainable, it’s a bubble that’s waiting to burst [...] Urban Farming has become such a highly-regarded act of resistance, a political and radical act and notion within itself” (Interview with: Bernardo 2017).

In recent years, Urban Agriculture (UA) and gardening has become part of the urban environment in the Global North. From community gardens, to rooftop gardens and agricultural holdings, the face of Urban and Peri-urban agriculture differs immensely. While the Global South has always practiced UA as a means of survival and a way to make a living, the discourse of food security and UA has just recently re-emerged in the Global North and has developed differently in various cities and contexts (Opitz;Berges;Piorr;Krikser 2015).

With the rise of the urban population, estimated to reach 67% worldwide by 2050, the question of food security has evolved to include not only the rural, but the urban population (Opitz et. al. 2015). Accessibility, affordability and availability of food are the main aspects of food security. These aspects are not ensured to everyone by society, politics and the economic system. This is where UA comes in; where the urban citizens are “Using urban agriculture for self-sufficiency and self-determination and self-reliance” (Bernardo 2017).

Detroit, Michigan is one such case where UA has become a strategy to address, among other things, the problem of food insecurity. Detroit was once a booming city in the first half of the 20th century, home to the auto industry of Ford and General Motors. But starting in the 1950s, a combination of the decline of the automobile industry with discriminatory policies along race and class lines led to a city mired by economic and social problems. Since then, three out of five residents have left the metropolitan area, these being mostly white residents moving into the more affluent suburbs (“white flight”). Now, four out of five Detroit residents are African-American. This segregation, supported by housing discrimination, has resulted in the flight of businesses, taxes, capital, and housing foreclosures, leaving the city in poverty, unable to pay for city services, education, and ultimately leading to the city declaring bankruptcy in 2013 (Pothukuchi 2015).

The city of Detroit has an unemployment rate of 40%, three times more than the national average. Around 20% of those living in the Detroit metropolitan area do not own a vehicle, whilst others do not have access to public transportation. This means that their ability to find employment, as well as access to health services or healthy food, is severely limited. With the withdrawal of the upper and middle class to the suburbs, many supermarkets pulled out, leaving the neighborhoods with mostly fringe food retailers. These retailers, consisting of liquor stores, dollar stores, gas stations etc., do not carry healthy, quality food and fresh fruits and vegetable. Nevertheless, almost 80% of the Detroit residents (must) buy their food from fringe food retailers. Many of the neighborhoods

in Detroit are considered to be food insecure and “food deserts”, a term used to describe areas where nutritious food is difficult to find. Nevertheless, more than 15 urban farms and gardens hope to influence and ultimately change the situation of food security in Detroit. (White 2011)

This paper aims at analyzing UA in Detroit with four main research questions:

1. How does the history of food insecurity and community food security projects contribute to the development of the urban agriculture initiatives?
2. Which local (organic) food initiatives exist in Detroit?
3. Which challenges do the initiatives of local organic food face?
4. What lessons can be learned from Detroit for the global organic urban agriculture movement?

First, we will describe our methods and the development of our research, before coming to our results, deriving from scientific literature, primary and secondary sources. Afterwards, we will discuss our results and then our conclusion.

Methods

The following chapter deals with the methodology used for the research paper as well as the procedure of investigation. To begin with, the scientific data was analyzed in the scientific journals that already exist about the topic of urban agriculture in Detroit. Secondly the focus was set on the initiatives themselves, using three different methods. On the one hand qualitatively analyzing the data found on the initiative’s websites. On the other hand, we researched the web and facebook pages of the initiatives in order to get an impression of the marketing and general information provided for public. Then we collected further data through non-probability sampling by sending a questionnaire with open-ended questions and lastly, we conducted a qualitative interview via skype. Before the actual interview was succeeded, the interview questions for the questionnaire and the skype interview were developed through the knowledge gained in class and the researched data. Multiple open questions were used, as Jacob proposes to begin with the phrase “tell me about” to get the interviewee into a talkative mood (Jacob, Furgerson 2012). The preparation of non-suggestive questions was done to keep it simple to answer and by reason to avoid any influence by the questioning.

To all of the initiatives an online questionnaire created on “Survey Monkey” was sent as part of an email explaining the background of the survey. The interviewee and initiatives were chosen because they practice organic farming in the urban area of Detroit. The contact details were searched in the internet to be able to reach out to the numerous initiatives and their contact persons.

Finally an appointment for the skype interview was made, which took place on the 15th of May. The stipulations for the interview were mentioned in the beginning and the interviewee agreed on them. For further use of the documented material, a declaration of consent was asked verbally. The recording methods were not bothersome in any way, as they were invisible. Besides, the atmosphere was quiet, as the interviewer and the interviewee were at their homes. As well the purpose of the interview was introduced and the interviewer's background was explained. The qualitative interview was realized "to gain insights on why and how, for example, an individual reflects, argues or reacts" (Freyer, Klimek 2014).

Transcript and Analysis

The questionnaire was sent to 16 initiatives, unfortunately we received no answers to the questionnaire. Therefore, data was collected from the webpages, videos on YouTube, scholarly articles and the qualitative interview we conducted. The sources can be found in the references. We have data from 15 out of 16 initiatives because one initiative does not have a web page nor any other information available. The initiatives are: *Feedom freedom group*, *Georgia Street Community Collective*, *Neighbors Building Brightmoor*, *D-Town*, *Michigan Urban Farming Initiative*, *Keep Detroit Growing*, *Detroit Market Garden*, *Earthworks Urban Farm*, *Hope Takes Root*, *Brother Nature Produce*, *Spirit Farm Urban Garden*, *Recovery Park Farms*, *Oakland Avenue Urban Farm*, *Rising Pheasant Farms*, *Lafayette Greens Urban Garden*, *North Cass Community Garden*. Unfortunately, the lack of participants for our questionnaire has left us with some incomplete aspects of certain topics. Therefore sweeping statements are not possible and we are very considerate in mentioning which initiative we are speaking about.

Nevertheless, we were able to make one interview with Shane Bernardo, the outreach coordinator from *Earthworks Urban Farm*. The data from all sources was summarized in 11 points: Mission statement, year founded, size, products, branches and means of production, production system, organization (members and organization of the initiatives), funding, activities, distribution of products, challenges. The data collected from the 15 initiatives on the 11 points is summarized in the annex 1.

Results

In this chapter, we will illuminate the results of our research, beginning with a brief history of UA in Detroit, then describing the current local food initiatives themselves and ending with the challenges they face.

A History of Urban Agriculture in Detroit

Although many of the UA initiatives have started in the last ten years, Detroit actually has quite a long history of UA. It started in the late 1800s, where in the wake of an economic crisis of that

time, the current Mayor developed the “Potato Patch Program”, where residents were provided with empty lots in the city to grow potatoes as a means of subsistence. His daughter continued this legacy during the Great Depression of the 1930s, supporting a program called Thrift Gardens. “Victory Gardens”, which were UA gardens cultivated during WWII in support of the war effort, had one of its biggest following in Detroit (Walker 2016).

In 1974, the first African-American Mayor, Coleman Young, created the “Farm-A-Lot” program. Already in the middle of the “white flight”, the many vacant lots were leased to residents for gardening. In addition, seeds, fertilizers and farming equipment were provided. One year later, 3,000 people on 525 lots were farming, producing food for subsistence and for donations to local community organizations. “Farm-A-Lot” continued until the 1990s, before budget cuts led it to be discontinued. Nevertheless, this idea of using vacant lots for farming as a formal city policy is rooted in this program, as well as a framework for city-wide UA. Ultimately, even after the discontinuation of the “Farm-A-Lot”, the knowledge and capabilities that were fostered during this time remained and some of the older UA initiatives in Detroit can be traced back to this program (Pothukuchi 2015). As the initiative *Hopes Take Roots* describes, UA is re-emerging, “it’s like if it’s coming back to its roots” (Detroit: Urban farming documentary. 2014).

Which Local Food Initiatives Exist in Detroit?

Description of the Initiatives

Most of the 15 initiatives we analysed were founded between 2007-2009. The only exception is the Earthworks Urban Farm which started in 1997. To have an idea about their general structure and their diversity, the table 1 describes information from the four most relevant initiatives, which are the initiatives where we were able to collect the most data.

Table 1: Description information collected from the four most relevant initiatives

Categories	Georgia Street Community Collective	D-Town Farm	Lafayette Greens Urban Garden	Earthworks Urban Farm
Mission Statement	Provide the residents of the community with health, education, leadership skills, protection and rebuild and sustain our community	“Healthy food, healthy planet, healthy people” Pioneer of a new green economy.	“Bring together green space, public space, public health, community engagement and sustainability”	“Build a just, beautiful food system through education, inspiration, and community development.” “Restore the connection between community and environment”

Year Founded	2008	2006	2010	1997
Size	2.5 hectare	2.8 hectare	0.2 hectare	1 hectare
Products	vegetables, herbs strawberries, apples, plums, cherries, peaches, pears	25 fruits & vegetables, herbs honey and wax products, compost	Fruits and vegetables	60 varieties of fruits and vegetables, herbs, flowers transplants, honey and wax products
Branches and Means of Production	Orchards, hoops house, chickens, a cock, goats and ducks	Greenhouses, hoop house, large-scale composting, apiary	Raised vegetable beds, orchards, children's garden, stormwater collection	Apiary (40 hives), greenhouse, hoop house, community orchard, community plots, vegetable transplants
Production Systems	non-certified organic	non-certified organic	non-certified organic	certified organic, permaculture

Community is a principle aim of many of the initiatives. For six initiatives (*Feedom Freedom farm*, *Georgia street Community garden*, *D-Town*, *Lafayette Green Urban Garden*, *earthworks Urban Farm* and *Oakland Avenue Urban Farm*), their vision consists of wanting to have a connection between the environment and their community. In addition, they emphasize the need for public space and health. The logo of *Earthworks Urban Farm* is meaningful: “We work for a just beautiful food system for all”. What motivates people to participating in gardening is that they can have access to healthy food which they can afford and “they can be a pioneer of a new green economy” (Detroit: Urban farming documentary. 2014). In addition, they are able to take the production of food into their own hands, understanding what it is they are eating, where it comes from and what it consists of.

Based on six initiatives (*D-Town*, *Lafayette Green Urban Garden*, *North Cass Community Garden*, *Detroit Market Garden*, *Earthworks Urban Farm*, and *Recovery Park Farm*) the surface is between 0,37 acres (0,15 ha) and 4 acres (1,6 ha), with an average of 2,1 acres (0,8 ha). For some, like *Hopes Take Roots*, they are not able to be completely self-sufficient with vegetables because they are not able to produce during winter. Nevertheless, the products of these initiatives are very diversified. *D-Town* produces 25 different types of fruits and vegetables, such as tomatoes, eggplants, cabbages, corns, melons, squash and *Detroit Market garden* produces 60 varieties of fruits and vegetables. The exception here is *Brother Nature Produce Initiative* who is specialized in salad mixes and herbs. This diversification is in stark contrast to conventional agriculture in the

U.S., which primarily focuses on only two or three cash crops (Detroit: Urban farming to revitalize the city. 2011).

The initiatives use different productions means such as greenhouses (hydroponic greenhouse for the *Recovery Park Farms*), hives (*Earthworks Urban Farm*) and they recycle materials (*Lafayette Green Urban Garden*). The greenhouses are important due to the climate, as the winters are very harsh, limiting production outdoors. The greenhouses therefore enable them to extend their production period. Hand tools are seen by many initiatives as an integral means of production, such as the *Rising Pheasant Farms*. *Lafayette Greens Urban Garden* manages its use of water by collecting stormwater, thanks to an urban bioswale. This uses drought tolerant Fescue and a high-efficiency irrigation system. *Georgia Street Community Collective* is atypical due to the fact that they have animals, such as chickens, goats and ducks. The plants of the *Spirit of Hope Urban Farm* are grown in raised beds made of tires to avoid the contaminated soil, while the tires keep in the heat. In *Earthworks Urban Farm* they save many seeds for themselves but as they are certificated organics, they are required to buy seeds which are organically certified. Unfortunately, this means they cannot use their own seeds for production but must buy them from retailers (Bernardo 2017).

People Involved in the Initiatives

The initiatives' members come from different parts of society. That being said, most of the volunteers and workers are people who have experienced or currently experience food insecurity and poverty, preventing them from traveling to quality stores for accessible produce. *North Cass Community Garden* explains that plots are available for neighborhood residents and businesses, but also for Americans with disabilities and local restaurants which grow their products. They have 75 gardeners who work on 0,37 acres and 12 restaurants. *Earthworks Urban farm* have six to seven full time employees, part time and season employee, and two farm managers. Most of the work is done by volunteers and training participants who work with them nine months a year.

The organizations differ depending on the size and location within the city. In the *Neighbors Building Brightmoor*, they do monthly meetings in order to share information and decisions. Most of them are community gardens with main workers being volunteers, as it is the case in the *Michigan Urban Farming Initiative*. Some are smaller and are more of a family-type initiative. In the *Brother Nature Produce*, they have two students who help during the market and five people who help in the garden. Some of the workers are allowed to trade labor for fresh produce where they are working.

When discussing financing, the *North Cass Community Garden* receives funds from the institute named The Kresge Foundation or First American Title Insurance Company. *Georgia Street Community* explains that they do not really receive help from the city because, in 2012, growing food was technically still illegal in Detroit (Earthrise: Detroit's urban farming revolution. 2012).

There is an inequality on the distribution of funds. Three initiatives out of five receive funds from private sources, whilst others receive individual donations such as materials and/or money.

Educational Activities and Events

All the initiatives are dynamic, offering various activities for the community and the broader public (table 2). Most of the initiatives offer educational activities, such as school visitations days, farming workshops, cooking classes, farming and/or gardening class etc. Other events include markets, festivals, dance classes, music performances, and movie nights. *Earthworks Urban Farm* is one initiative which is very active in educational activities. They offer a nine month training programme, the EAT Earthworks Training Program. This program helps people from Detroit develop skills needed to create their own urban agriculture business or to find jobs in agriculture. *Earthworks* also runs two youth programs called Growing Health Kids (GHK) and Youth Farm Stand (YFS). The other training programs are APIARY and youth education. The GHK program addresses young people, going into schools and explaining to them where vegetables come from and engaging them in health food topics. The YFS is a program for teenagers, where they are given plots to grow their own food and have the possibility of selling them at markets. In doing this, they gain skills in entrepreneurship and communication (Earthworks Urban Farm, 2017).

Table 2: Data collected from the four most relevant initiatives about activities and distribution of products

Information	Georgia Street Community Collective	D-Town	Lafayette Greens Urban Garden	Earthworks Urban Farm
Activities	Educational component, mentor students. movie night, egg hunt, parties	Harvest festival, workshops, kids' games, cooking sessions, Food Warriors Youth Development Program, Food Co-op	Educational space with discussion about sustainability land use and food security,	Tours for visitors, education with a garden program, training programs, programs with children
Distribution of Products	Self-consumption	"Grown in Detroit" label. D-Town farm, Eastern Market, and urban growers markets	Give their products to Gleaner's Community Food Bank and Freedom House	Capuchin Soup Kitchen, markets and they provide seedings

Distribution

Most of the initiatives sell their products at farmer's markets. According to Detroit Community Markets, a network of neighborhood farmers' markets and alternative food distribution programs, there are 13 different food markets in Detroit. The most important one is the Eastern Market. Covering 17 hectares, more than 45 000 visitors come and go in this market every Saturday from 7am to 4pm. Eastern Market Corporation, a public-private actor, leads this market. Its main

mission is increasing access to good and fresh food by managing resources, programs and partnerships (Eastern Market Corporation, 2017).

In addition, the initiatives sell their products to local restaurants or distribute their produce to food banks. *Oakland Avenue Urban Farm*, *Detroit Market Garden* and *D-town Farms* directly sell their products at their locations. *Acre Detroit*, *Keep Growing Detroit* and *Rising Pheasant Farms* market their products through community supported agriculture (CSA), bringing the vegetables to markets or collection points (Detroit Community Markets, 2016).

Challenges the Consumers and Initiatives of Local Organic Food Face

Food Assistance for the Consumers

One of the main goals of many of the initiatives is to create access to nutritious and fresh food for people in Detroit that have experienced structural and political detachment from food sources. Some financial help programs have been developed to support families and individuals experiencing joblessness, homelessness, and poverty. Indeed, different food assistances supported by the state government of Michigan have been implemented for people in need. The Bridge card and Double Up Food Bucks programs propose special coins to spend on Michigan fresh products. Senior Market Fresh and WIC Project Fresh programs propose coupons for old poor people and women and children up to age five. They can pay the farmers with these coupons for fruits and vegetables grown in Michigan. There is also a fresh prescription program to help people with chronic diseases and food insecurity. It corresponds to a doctor's prescription to eat more fruits and vegetables. The prescription is redeemable for \$10 of fresh products each week (Detroit Community Markets, 2016).

Challenges for the Initiatives and Ways of Overcoming Them

Shane Bernardo from the *Earthwork Initiative* explains that their biggest challenge is addressing all the needs of people. In the end, they are just one organisation and the issues that they are trying to address are much larger than their own capacity, resources, time and people power. They are looking at very systemic, chronic and historical issues of racism and classism (Bernardo 2017). With the help of their nine month training program (Earthworks Training Program or EAT), they try to focus on problems of poverty, underemployment and racism but also disparities around power, like accessibility of housing and loans. This training program devotes itself to building self-sufficiency for the community and for the people.

The Earthworks Training Program was also started because they were very concerned about how local black residents were being overlooked in terms of employment and jobs in the urban agricultural field. Many of these new jobs are being taken away by young, white, college educated people who are moving into Detroit to work in the UA sector. Although they may be likely with

good intentions to be a part of this movement, this can be seen critically as a further consequence of systemic racism (Bernardo 2017).

“We observed that many of the key players in the local urban agriculture movement were young whites, who while well-intentioned, never-the-less, exerted a degree of control inordinate to their numbers in Detroit’s population. Many of those individuals moved to Detroit from other places specifically to engage in agricultural or other food security work. It was and is our view that the most effective movements grow organically from the people whom they are designed to serve” (Detroit Black Community Food Security Network 2016)

Directing connections between the initiatives on a national and global scale, Bernardo says that the whole supply chain is affected by consumer foods choices and the global food system is a “business of creating scarcity”. Urban agriculture directly battles the exploitation of vulnerable people around the world. He states that many are “invisibilized” and exploited by capitalism and the food industrial complex. This is due to the disenfranchisement of labourers, food waste, and de-localized food structures. Bernardo sees a direct relationship between systemic food insecurity with capitalism and consumerism, in Detroit as well as worldwide.

“For international communities that are in, that have these really huge economies, that have enough buying power to affect these systems, that we also have to look at the other side of sustainability, which is all the waste that we create and the mass consumerism that we have as ‘developed’ nations. So, in terms of sustainability, do we want to keep sustaining our current rate of consumption?” (Bernardo 2017).

Asking for the end goals of Earthworks, Bernardo stresses that urban agriculture should be used as a model for self-sufficiency, self-determination and self-reliance.

Discussion

Food insecurity is an on-going problem in the city of Detroit, Michigan. UA has for decades contributed to community health in many ways, starting with access to produce and knowledge of food production. When looking at the multiple food programs that have existed over the years, it becomes understandable why UA has been booming for the past decade, as they can be seen as a continuation of UA from the 20th century. The initiatives do not develop by themselves, but rather lean on an understanding that UA is possible, not only with the help of city or state wide programs but as well through the efforts of the community.

From a wider context, it is import to see the interconnections between city planning and policies and food insecurity. The failed city planning and the decline of the automobile industry resulted in many empty lots and neighbourhoods, opening new possibilities for UA. This situation though is unique and Detroit’s development of UA can not be easily transposed to other contexts. It remains

to question how easily such grassroots UA initiatives can gain footing in cities with stricter and more enforced ordinances, as well as in cities which are denser.

UA in Detroit is not solely seen as a means to produce food for the community, but has rather a much broader understanding of the food system. Encompassing topics such as empowerment, black power, education and community building, UA becomes one aspect of a larger strategy of revitalising discriminated communities from the bottom-up. Some of the UA initiatives (such as D-Town and Earthworks) are at the frontlines of fighting systematic racism and food insecurity. Through focusing on grassroots efforts to empower black community members, they can bring about innovation and food sovereignty from within the movement. The Detroit Black Community Food Security Network plays here an important role.

Nevertheless, not all UA initiatives have these goals. Some, such as Lafayette Greens Gardens stand in stark contrast to those initiatives subsumed in the Detroit Black Community Food Security Network. Lafayette for example is organised by a IT-company and has no community connections. It illustrates the instrumentalization of grassroot-developed UA for green-washing purposes and for the gentrification of neighbourhoods. As DeLind explains in 'Where have all the houses gone?', UA "may unwittingly be helping to rationalize the displacement and continued social and political inequity of urban neighbours rather than reinforcing greater place-making, neighbourhood empowerment and sustainability" (DeLind 2013, 3). There is a risk that those strategies developed by the marginalised community are used against them by the dominant culture.

The example of Detroit opens up a broader discourse of placing UA in a larger context of globalization, food insecurity, and race and class intersections. The UA initiatives in Detroit show that within the food sovereignty and UA movement in the Global North, there is a black perspective that needs greater attention in the white-dominated space. In understanding the systems-root-cause of food insecurity and the intersectionality of systematic racism and the industrialized global food system, we can collectively improve quality of life for many people and future urban generations to come (Draus et al. 2013) Within a world affected by crisis and climate change, the preparation of people to live self-sufficiently has and will become more important. UA can be a way of developing city dweller's power in community, personal, and environmental stewardship.

Conclusion & Outlook

Detroit has succeeded in revitalizing its long tradition of UA and it is currently considered as a model in the sector. Each city can have different motivations, due to its history and background, such as accessing to fresh products, gathering people and improving local economy. The initiatives are dynamic and do a lot of educational activities, distribute products within different sources and gather people from various classes. Nevertheless, we still have to consider some challenges, such as sustainability and self-sufficiency.

According to Bernardo, Detroit became such a significant place because of post capitalism in terms of figuring out what the world looks like after capitalism. He explains that we "... really have to place urban agriculture within this social political global context in which capitalism has - we have experienced it first hand; to not just be in decline but it doesn't work, it's not sustainable. It's a bubble waiting to burst." (Bernardo 2017). People in Detroit have found their own way to face these challenges. "That's why urban farming has become such a highly regarded act of resistance, a political and radical act in notion with itself" (Bernardo 2017).

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Appendix

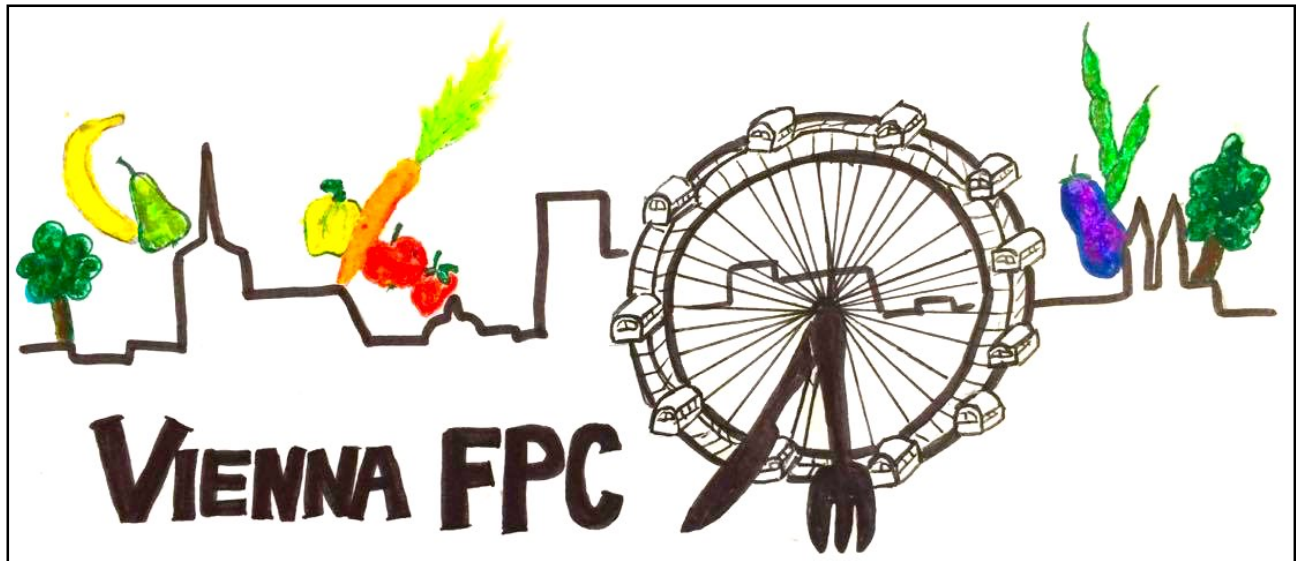
Annex 1: Number of initiatives' data collected for each information point

Categories	Amount of initiatives
<i>Mission statement</i>	10
<i>Year founded</i>	7
<i>Size</i>	6
<i>Products</i>	7
<i>Branches and means of production</i>	5
<i>Production system</i>	5
<i>Organization</i>	7
<i>Funding</i>	5
<i>Activities</i>	10
<i>Distribution of products</i>	11
<i>Challenges</i>	2

Table 3: Number of initiatives' data collected for each information point (n=15)

Food Policy Councils

European inspiration for Vienna



Artwork by Mélanie Surchat

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Introduction

A Food Policy Council (FPC) is an umbrella organisation, which includes a high diversity of members working or being interested in a city's food movement. Normally, there are various organisations who are fighting for changes in their current food system. Indeed, there are many social movements and institutions participating, such as food justice, fair food, fair trade, organic food, slow food, food security, public health, food sovereignty, family farms and local people trying to improve their personal food system. Often such food movements are not coordinated, which dilutes its effect. By synchronising their actions, a higher impact on a city's food system could be reached (Harper et al., 2009).

In that sense, FPCs act in such movements as platforms for coordinating actions or run as forum for food issues. Most of the FPCs try to achieve a more sustainable, fair, effective and ecological food system in their cities (Pothukuchi & Kaufman, 1999). Usually a food system is composed by five different sectors: production, processing, distribution, consumption and waste management and many different actors on different levels are working in this five sectors. Therefore, the food system in a city represents a complex unit, often lacking connectivity between the actions undertaken on different levels and sectors (Harper et al., 2009). Therefore FPCs could be seen as important tools for organising food systems on a local scale (Pothukuchi and Kaufman, 1999). With the idea of democratising the food system by *“attacking the structural racism inherent in the food system and creating space for greater economic democracy and food justice”* (Harper et al., 2009, p.6) a FPC tries to:

- Affect national and state level policy debates
 - Connect multiple sectors that would otherwise not work together
 - Bring local food policy into mainstream politics
 - Boost local economies and combat poverty
- (Harper et al., 2009)

Food movements in Europe and North America differ in their origin. Indeed in the USA food movements started from the ground level as a claim for the most basic human right of having access to healthy food. In European cities the situation is different. Food movements more frequently arise from the upper middle class concerned about a more local, healthy and sustainable food system (Knoxville-Knox County Food Policy Council, 2012).

To get an impression of the current situation and motivation of Food Policy Councils in European cities, this report wants to take a closer look on three different FPCs: Bristol, Cologne and Milan. In the first part, the FPCs of Cologne, Bristol and Milan are analysed following certain specific characteristics in order to give an overview of the structure and function of existing European FPCs. In a second part, the case of Vienna is studied, as there is already a group of citizens that wants to establish an FPC there. Therefore, the second part is addressed to this initiative, as it

tries to show which could be the focus of an FPC in Vienna and which actors could be involved in it.

Objective and research questions

The objective of this report is to get an overview of how different FPCs in Europe are structured and which goals they want to achieve with their work. Additionally, reasons and motivations for establishing FPCs in different European cities were investigated. Another objective is to take a closer look at actors in the Viennese food system and identify potential focus areas of an FPC in Vienna.

To achieve the mentioned objectives the following research questions were formulated:

1. What was the motivation for the formation of FPCs in selected European cities?

2. How do different cities in Europe interpret the concept of Food Policy Councils?

- In which aspects do existing FPCs differ from each other concerning their structure and context?
- Which are the main goals FPCs want to achieve in the middle term?

3. How could an FPC be implemented in Vienna?

- Who could be suitable contact persons for building up an FPC in Vienna?
- What are the potential focus areas of an FPC in Vienna?

Methods

Literature research

A first literature research was conducted on the overall topic of Food Policy Councils within two main networks - Google Scholar and ResearchGate. Some further results from didactic websites were considered too. The research focused on FPCs in Europe but also included overseas examples in order to broaden the basic knowledge about FPCs.

Further literature research was conducted on European FPCs in order to select the most interesting cases to be successively contacted and asked for interviews. The research was based on many translations of the concept “food policy councils” (in Italian, German and French) as keywords. The main sources of information were websites from municipalities and existing FPCs in Europe.

Parallel research was conducted within Viennese/Austrian institutions and organisations in order to identify the most suitable interview partners to get a better understanding of the present situation and suggest potential focus areas for the Vienna FPC.

Qualitative Interviews

A set of organisations, FPCs and institutions were contacted and five personal interviews, as well as two Skype interviews were conducted. A table containing the dates of the interviews and their methods, as well as the interviewees and locations is contained in Annex I.

A semi-structured interview was considered the most appropriate interview typology in order to deal with the amount of information required and the lack of time. A semi-structured interview is based on an interview guide (a list of questions) with a specific order; the questions are specific but open-ended so that the interviewee is able to deepen the themes considered of relevance or add new ones. This provides to the interviewer the opportunity to understand the topic in new and unexpected ways, but still maintaining the focus on the most important information. The output of semi-structured interviews consists in reliable and comparable data (Cohen & Crabtree, 2006).

Two interview guides (list of questions) were prepared for the two main typologies of interviewee: a European FPC spokespersons and the Viennese delegates. The interview guide for the FPCs was prepared in order to cover the main features of FPCs to be further compared. Considering the Viennese interviews, a different interview guide was prepared and adapted to the different interview partners and their professional background.

The preparation for the interviews consisted in the identification and appropriation of adequate recording tools. Mobile phones were used for the personal interviews and the “MP3 Skype Recorder” program for the Skype interviews. For the Europeans cases, before conducting the interviews, basic information about the selected FPCs was collected from their websites, to avoid asking redundant information. In addition, it provided more time and freedom for the interviewee to focus on their points of interest.

Report structure

The report contains a first section that explains how the FPCs have been compared and most significant results of this comparison are shown. In the second section, the Vienna interviews are presented through a SWOT table which stands for Strength, Weaknesses, Opportunities and Threats. The advantages of this tool is that it provides an analysis of the current situation (strengths and weaknesses), while it is simultaneously oriented towards the future (potential opportunities and threats). To conclude, the discussion chapter presents some considerations about the previous results.

The annex contains a set of information that are considered to be relevant only for the most interested and involved readers: a calendar from the interviews, detailed explanations on the FPCs establishment modalities, complete interviews from Bristol and Cologne FPC and potential stakeholders for the Vienna FPC.

Context of European FPCs

As the FPC movement in Europe is still growing, this chapter wants to give an overview of different stages of FPC developments in Europe. It also wants to compare approaches and organisational forms of the already established FPC`s. The example of Milan provides an insight of an FPC in the process of establishment. The FPC Cologne is newly established and is now in its first years of work. Finally, the example of Bristol wants to show how the activities of a long existing FPC could look like.

Starting from the beginning - Milan FPC establishment process

At date, the Milan Food Policy Council is still not existing, but the process of its establishment has been going on during the last few years and could be of inspiration for the Vienna case. The process is led by two main public actors (the government of the city of Milan and Fondazione Cariplo) supported by an independent research center (EStà). EStà (that stands for economics and sustainability) is a non-profit research center on the topic of sustainability. Fondazione Cariplo is a private, grant-making, charitable foundations in Milan, existing since 1991. It is one of the main philanthropic organisations in the world supporting projects and associations focused on youth, wellbeing and community-based welfare, such as EStà.

In 2014 Fondazione Cariplo signed a partnership with the city of Milan with the purpose to finance and work on a new food policy for Milan (http://www.comune.milano.it/wps/portal/ist/st/food_policy_milano). The process started with the analysis of the food system in Milan, carried out by EStà: the research was based on the huge amount of data possessed by different Milanese universities. The data were processed and organised by EStà into a very dense document that was later condensed into a lighter paper called “The 10 questions of Milan food policy” (EStà, 2015).

The city of Milan then arranged a public consultation inviting citizens and associations through personal and open calls: the aim was to define the priorities of the Milan food policy. “*The 10 questions of Milan food policy*” was presented to the consultation and used to stimulate the discussion. All the suggestions proposed during the consultation were synthesised and delivered to the city of Milan that also added its own priorities: all the process was meant to gain the broadest support from the government. The final document was discussed in the city council and a few proposals were made: the most relevant were the establishment of a Food Policy Council and of a monitoring system.

As a contribution to the establishment of the FPC, EStà produced a document that intends to raise the common awareness and stimulate discussions between different actors in the Milan food system (Elementi per l’istituzione del “Consiglio Metropolitano del Cibo” di Milano, EStà 2016). Among other things, the document tries to identify the main features of an FPC (called “relevant

dimensions”) that should be carefully designed before and during the establishment process.

FPCs “10 relevant dimensions”

To integrate the EStà theoretical suggestions, the already established European FPCs Bristol and Cologne will be analysed according to the same ten relevant dimensions.

Table 1: The 10 relevant dimensions for the process of structuring a Food Policy Council according to EStà, 2016

1. Why to establish a FPC	2. The name	3. The functions	4. The establishment modality	5. Hosting organisation
6. The structure	7. The geographical/ territorial scale	8. Monitoring and evaluation	9. First steps	10. The themes

1. Why to establish a FPC

Generally speaking, it is a big challenge to maintain an efficient food system in urban areas, as they have a growing demand for food but they totally depend on other regions and countries for food acquisition and waste disposal. In addition, there could be more specific reasons why to establish a FPC.

2. The name

Giving a name to a FPC is not a banal issue. Every name entails different powers, objectives, degrees of formalisation and themes. Each name should be examined in order to discover the history, the institutional power, the limitations of a FPC. For example in the English idiom there are many different definitions: Food Council, Food Board, Food Advisory Committee, Food Policy Workgroup, Food and Agriculture Coalition etc.

3. The functions

The most common functions worldwide are the following:

- Support discussions between different actors of the agri-food system.
- Promote the coordination of the different sectors of the agri-food system (production, processing, distribution, consumption, waste).
- Propose and sustain programs for specific problems or for the consolidation of the FPC.
- Evaluate and influence policies (strengthening the favourite themes or integrating them in more popular ones), propose changes, highlight the outcomes of the FPC activities.

4. The establishment modality

Many different actors could launch a FPC:

- Country or the Region (above the Local Authority)

- Local Authority -independently-
- Non-profit organisations or even
- Non-official organisations or civil society

The borders are very ephemeral as often many actors gather together in order to establish a FPC. The most successful experiences show that the ownership of the FPC is not only limited to the Local Authority but shared with many actors (public pact). See Annex II for the pros and cons of different establishment modalities.

5. Hosting organisation

The FPC could be affiliated to the Local Government, to citizen committees, non-profit organisations and so on - according to its degree of institutionalisation. The physical meeting place/office location of the FPCs strongly influences their opportunities.

6. The structure

The structure is defined by the interaction of the following components:

- *Powers exercised*: deliberative power, power to address, advisory power, control power etc.
- *Staff personnel*: paid or volunteering from institutions or associations.
- *Links with public administration*
- *Financial aspect*: public administration, foundations, individuals, in-kind etc.
- *Spokespersons*: from all sectors of the agri-food system and from culture, rights, economy and territory experts.
- *Leadership, internal structure, decisional process*: consensus, formalisation, hierarchy etc.
- *Members selection*

7. The geographical or territorial scale

Even if it is difficult to circumscribe the topic of food into defined administration entities, it is possible to link it to a territorial scale that should be chosen according to the FPC main themes.

8. Monitoring and evaluation

The activities of FPCs and their effectiveness should be evaluated. This is often done by analysing and comparing the initial state of the agri-food system and its development after the establishment of the FPC.

9. First steps

The most recommended first step is the analysis and evaluation of the agri-food system (termed food system assessment). Once the FPC is put in place, some authors suggest to pursue what they call a “Quick win project”: a project easy and fast to implement which could help to build credibility for the organisation, to motivate the members (Harper et al., 2009).

10. The themes

The topics a FPC works on differ a lot according to its local context. For example, the main themes approached during the establishment of the Milan FPC are food governance, education, waste, accessibility, well-being, environment, agro-ecosystems, production, finance, commerce.

Results Cologne and Bristol

According to the research questions the four dimensions “Reasons and motivation, Structure, Function and Themes” and additionally the FPCs’ future goals are shown in the following results, as they provided sufficient information to answer our research questions. Detailed information about all the ten dimensions can be found in Annex III.

Results Cologne

The FPC Cologne is called “Ernährungsrat Köln und Umgebung” as its geographical scale covers the whole administrative region of Cologne. There are eight rural districts divided in ninety-five smaller ones. In this area there are four major cities. The FPC Cologne was officially established in March 2016 after a preparation time of one year and a half. The association “*Taste of Heimat*” was the main driver for the implementation of this FPC. The filmmaker and president of the association, Valentin Thurn, had the initial idea for creating the FPC (Ernährungsrat Köln und Umgebung, Skype communication, 2017).

Table 2: Relevant dimensions of the FPC Cologne (Ernährungsrat Köln und Umgebung, Skype communication, 2017)

Reasons and motivations for the establishment
<ul style="list-style-type: none">• The missing of municipal politics on nutrition in the city• The increase of local food procurements in the city• The preservation of small farms in and around the city• The change of the city’s food system into more sustainable, regional and healthy ways
Functions
<ul style="list-style-type: none">• Working as an advisory board• Promoting networking between different stakeholders working in the city’s food system• Supporting the exchange and active dialogue between politicians, producers and consumers• Consultancy of municipality concerning relevant food topics• Increasing awareness of people who are important players in the local food system

Structure
<p>The FPC Cologne describes itself as an independent, neutral, free platform where all members (except the project coordinator) work voluntarily. It consists of:</p> <ul style="list-style-type: none"> • 1 chairman (Valentin Thurn) • 1 coordination team (chairman, spokesman of committees, project coordinator) • 30 members (30 fixed seats) consist of: <ul style="list-style-type: none"> • ⅓ Civil society: Slow Food, Urban gardeners, NGO's, Foodsharing, Food Assembly, Church, journalists, nutritionists,...etc. • ⅓ Politics & administration: members of the city council, district administrators, Environmental office Cologne, Agricultural chamber, Nature park "Bergisches Land" • ⅓ Food industry: Farmers, bakers, butchers, millers, trade, marketing, gastronomy • 4 committees (each working on another topic) including parts of the members and interested citizens who wanted to join. Every committee has 2 spokesmen who are part of the 30 members and represent the working groups in the FPC • FPC meetings <ul style="list-style-type: none"> • All 30 members meet every 3 months • Every committee meets every 6 weeks • The Coordination team meets every 4 weeks
Themes
<p>The first themes were developed during the first stakeholders' meeting. More detailed content was formed in the committees working groups. Organic agriculture is a topic, but not the main goal for food or agricultural corporations. The main focus is the support of local farmers in the region whether they are small or big scale, conventional or organic. The main topics are:</p> <ul style="list-style-type: none"> • Regional direct marketing - Small scale producers in the region should get supported and the contact between producers and consumers should become easier. • Food education and school catering - Healthy and regional food should get available for all children in the city in schools or childcare. Educational programmes about food should be established. • Urban agriculture/edible city - Conservation of agricultural land in the city and supporting urban agricultural programs like community gardening. • Gastronomy and food trade - A new developed topic with a kick-off meeting in May 2017
Future goals
<ul style="list-style-type: none"> • Increasing the visibility of the "Ernährungsrat Köln und Umgebung" in the whole city • Increasing the awareness of civil society about the role they could play in the food system and that they are more than just consumers

Results Bristol

The FPC of Bristol, named “Bristol Food Policy Council”, covers the whole of the Bristol city sub region (four municipalities). This FPC was established in autumn 2011 after a preparation time of six months. This time was used to make presentations to the senior politicians and to conduct a survey with all the members of Bristols’ food network in order to check if they thought that a FPC was needed. The main drivers for the establishment of this FPC were a group of activists in the food sector, supported by Professor Kevin Morgan, who was the first chairman of Bristol FPC, and by the major of the city of Bristol.

One particularity of the Bristol FPC is that at the beginning it had a really strong support from the city of Bristol but after the political context changed, it became more and more independent. Being totally separated from any municipality allows this FPC to have free hands, however, it does not receive any funding or administrative support.

Table 3: Relevant dimensions of FPC Bristol (Bristol FPC, Skype communication, 2017)

Reasons and motivations for the establishment
Achieving a healthier, more sustainable and resilient food system by bringing together the relevant stakeholders working in this field (http://bristolfoodpolicycouncil.org/).
Functions
<ul style="list-style-type: none"> • Dealing with the topic of “Divide and Move”. In the interviewee’s opinion, food industries take advantage of “dividing” consumers concerning food habits, creating artificial niche markets. For example, meat eaters versus vegans, conventional versus organic agriculture and so on... • Organising events and discussions to show that the Bristol FPC is working hard to promote a better food system. In addition, the goal is to bring people from different sectors that usually do not get in contact, together. • Taking part in the “anti-supermarket movement” in Bristol. • Production of reports such as “Who feeds Bristol?” (March 2011) which defines “Bristol’s good food” as tasty, healthy, affordable, socially and environmentally friendly, with respect to animals and promoting local economy. In addition, they also published a report on Food poverty.
Structure
In the early years of the Bristol FPC, they had administrative support from the Bristol city, which designated two of their employees to help establishing the FPC. Today, the two employees are still working for the FPC in a team of 11 members, which is not enough in their opinion. They are seeking for some new stakeholders in the future that would come from as many different parts of the food system as possible in order to get a more accurate overview of Bristol’s food system.

- 1 chairman : Simon Wood
- 10 members consist of people from:
 - Bristol food network
 - Local politicians
 - Public health sector
 - Waste management sector
 - Bristol food producers

Concerning the FPC meetings, they don't have an office forcing them to meet in different locations. The core team meets every month in a café, whereas the extended team meets four times per year on a "Learning visit". On these special occasions, the FPC tries to organise a meeting on a farm/start-up in order to learn more and share an experience.

Themes

- Working to improve their legitimacy and recognition by the city as important stakeholders in the food system
- Achieve a higher political support with funds and resources (meeting space) in order to gain importance

Future goals

- Take part in the event called "Healthy city week"
- Potentially going to be part of a partnership on the topic of food poverty
- Try to organize events to attract new members and become more visible in the public arena

Results Vienna

This last section is addressed especially to the "Ernährungsrat Initiative Wien" (FPC-initiative-Vienna), which is currently working on the implementation of an FPC in Vienna, but also to interested stakeholders involved in Vienna's food system. For now the "Ernährungsrat Initiative Wien" consists mainly of a group of former students that met during their master studies in 'Social and Human Ecology' at Alpen-Adria Universität in Vienna. The initiative is currently working on a "food system assessment" in Vienna and an aspired goal of this report is to offer a very modest contribution to their work.

After having displayed the main features of FPCs Cologne and Bristol and having gone through the establishment process of the Milan Urban Food Policy Council, information has been gathered through four different interviews on the specific case of Vienna. The aim was to only give a rough overview of the Vienna food system because of the limited amount of time available to work on

this topic. Therefore, the information given here should not be taken as scientific truth, but rather as a first insight in the Vienna food system. Four interviews have been conducted with different actors working on the topic in Vienna in order to broaden the point of views as much as possible: MA 22 (Umweltschutzabteilung der Stadt Wien), Ernährungsrat Initiative Wien, Bio-Forschung Austria and Stadt Umland Management (SUM). Our interviewees have all shown a great interest in the potential of an FPC, approving the point that it could be a relevant structure to connect different actors in the food system.

Present situation in Vienna

The information from the four Vienna-interviews was structured into a SWOT analysis (Table 4 page 12), it is to say, the strengths, weaknesses, opportunities and threats of the current food system (production, processing, distribution, consumption and waste management) in Vienna. The aim is to provide an overview of the current situation, a snapshot of Vienna's food system, reducing its complexity. Certainly not all of the food system is covered, but the information gathered can be helpful to grasp a part of this complex reality.

Potential Focus areas for the Vienna FPC

One of the questions asked in the Vienna-interviews concerned the potential areas of improvement in the current food system in Vienna. One of the main topics that was discussed was the need for more consumer awareness. There are already many existing programmes tackling this (e.g. "Schule am Bauernhof" shows great potential to educate children about food, health and environmental issues). However, this type of programmes could be further developed emphasising the capacity of urban areas to become more environmentally friendly when citizens are more informed about the functioning of the food system. Some of our interviewees also stressed the necessity for policy makers to facilitate the access to local, fresh food and not just leaving the food choice to the consumers. Indeed, in their opinion, today the consumer is left alone with making "responsible food choices", and they felt that there could be a stronger political intervention to push the big retailers to offer local food. Not every consumer is interested in nutrition and the environmental impact of food production and we cannot expect from consumers to become experts. Therefore politicians should work on regulations that increase the food quality standards, in order to assure that even the "cheapest choice" is still a healthy choice. Furthermore, our interviewees saw space for improvement in the reduction of food-waste. Here again there is a need for informational and educational work. A fourth aspect that has been mentioned is the potential for increasing the green public food procurement in Vienna. A very interesting and advisory document on this topic has already been published by Bioforschung Austria. It entails short-, mid- and long-term measures for increasing the share of local and organic produce in the municipal food procurement (Bioforschung Austria, 2016).

To collaboratively work on these topics, a stakeholders' list is provided (Annex IV) which maps out potential stakeholders for the Vienna FPC. This list is based on the information gathered from the Vienna-interviews and personal research. Obviously, it is not exhaustive.

Table 4: SWOT-Analysis of Vienna's current food system

<p>Strengths</p> <ul style="list-style-type: none"> • Programmes concerning green public food procurement and the reduction of food waste already in place, e.g.: Okokauf, Wiener Tafel, Lebensmittelpunkt Wien, Natürlich Gut Teller... • Educational programmes already in place, e.g.: GreenCare, Schule am Bauernhof... • Many bottom-up initiatives developing in different neighbourhoods: community gardens, food hubs, urban gardening, Agenda 21 groups... • Increasing interest of big retailers (Hofer, Billa, Spar) to develop sustainable food chains, and to increase the offer of organic products • Very fertile agricultural lands in and around Vienna that are close to consumers • A lot of research on organic agriculture and related topics is done in Vienna, e.g.: BOKU, Bioforschung Austria.... • Collection of organic wastes in the city "BioTonne" for the production of compost • Many green spaces inside the city that make the city especially green and increases life quality of vienna citizens, and simultaneously, increasing the awareness around sustainability 	<p>Weaknesses</p> <ul style="list-style-type: none"> • Most of the food policies are on national or EU-level, which makes it difficult for Vienna to decide on new legislation in favour of local and organic products. • Coordinator from the the MA22 responsible for the implementation of the MUFPP is not really given enough funding and resources to achieve these new goals • Changing the food system requires deep changes on the long term. Finding budget for long term goals is always challenging, as politics are often short term oriented seeking to show the cost efficiency of their measures. The effects of a project on the long term are much more difficult to assess, and therefore, hard to promote politically. • Legislation around food processing and distribution can be heavy and not practical for farmers to respect. For example, hospitals are not allowed to receive food that is not perfectly cleaned which would consist of a time consuming task to fulfill for an urban farmer, if he needs to wash and scrub all his vegetables before selling them to a hospital.
<p>Opportunities</p> <ul style="list-style-type: none"> • Coordinator designed in the MA22 to be responsible for the implementation of the goals of the MUFPP • International networking and collaboration with other city regions has started and could be further developed to increase the learning from others experiences • AgSTep (Agrarstruktureller Entwicklungsplan) = development plan for agricultural land, showing which land has the priority for agriculture in Vienna. However ≠ legally binding → Meanwhile has to be considered in the city planning. • Farms in and around Vienna tend to diversify themselves towards other activities such as a shift to education, tourism or renting land to individual gardeners (vacation on farms, Schule am Bauernhof, Selbststernte...). This new approach towards agriculture can help to connect the production to the consumption and help raising awareness around food. Subsidies are provided to farmers that fulfill specific requirements and develop certain measures on their farm. • Many farmers markets in Vienna that could even be further developed to make it more convenient for consumers to buy through direct schemes and not through big retailer shops. • In the climate change context, building a local food system helps to increase the resilience of the system and at the same time it decreases the carbon footprint of the city. • Many big farms and big food processors close to the city that could be potential actors to further develop a local food system. 	<p>Threats</p> <ul style="list-style-type: none"> • Although some priority areas for agriculture have been designed (AgSTEP), there is still a high pressure on the land in Vienna since the city is growing. The tendency to shift from agricultural to construction areas, which highly increases its economic value, is very tempting. Therefore, the exceptionally fertile soils in Vienna are threatened.

Discussion

FPCs Europe

Concerning the motivations and main drivers for the establishing of Food Policy Councils in the respective cities, the investigations showed, that both in Bristol and Cologne it were people from civil society who wanted to change their food system and started the initial establishing process, because they were unsatisfied with their current situation. The FPC Cologne quickly found reliable support on municipal level, whereas the FPC Bristol had very strong support from the city at the beginning and then become more and more independent. Nowadays it has no municipal assistance. In the case of Milan the establishment process was led by Fondazione Cariplo, which is a charity of banking origin, but the proposal of the FPC itself was made by a member of the City of Milan government: the process shows opposite dynamics (top-down) compared to Cologne and Bristol FPC's (bottom-up).

The structure of both established FPCs differs a lot. In Cologne they relied on a very clearly arranged concept to achieve a proper division of work in order to reach their ambitions goals of changing their food system on a big scale in high levels of influence. With their fixed members from civil society, politics and food industry and their well organised working groups, they reach a high level of exchange and are able to work in a very productive way. In contrast to that, the FPC Bristol, has only 10 members who cover many different parts of Bristol's food system such as politicians, food network, food waste and public health. FPC Bristol is seeking for some new stakeholders to get an overview of the whole food system of Bristol. For Bristol's FPC it is important to continue to evolve and not get attached to any particular form or name.

Although the FPC Cologne works hard to achieve changes, they still were not yet able to reach a proper reputation in the whole food system. By increasing their visibility among all participating sectors and by starting their work on a basic level with the people living in the city, they want to become important key consultants in their cities' food system.

It's time for the Vienna FPC!

Recently the Food and Agriculture organisation (FAO) and the Resource centres on Urban Agriculture and Food security (RUAF) published a booklet called "A vision for City Region Food Systems - Building sustainable and resilient city regions". In this booklet, they argue on the importance of having an integrated strategy for food procurement in a city-region. Some cities around the world have already responded to this challenge by creating a new municipal food department only concerned with food issues, or creating an FPC (FAO/RUAF, 2015).

Concerning the European context, in 2015 "*Milan advocated an international protocol, engaging the largest number of world cities for the development of food systems, based on the principles of sustainability and social justice*" -the Milan Urban Food Policy Pact MUFPP (Milan urban food

policy pact n.d.). It has been signed by 138 cities including Vienna. In 2017 Frau Adelheid Sagmeister from the environmental protection department of the city of Vienna (MA 22) has been appointed to coordinate the implementation of the MUFPP goals. Therefore, Vienna is part of a movement to make cities' food systems more resilient and environmentally friendly. In addition, we believe there is a high potential for further development in this direction in Vienna, which is already considered as a best practice example for its especially high percentage of agricultural land inside the city and a high level of organic production (MA 49, <http://www.wien.gv.at/kontakte/ma49/landwirtschaftsbetrieb.html>). In our opinion, further building on this "green leadership characteristics" could attract young people and scientists working on the topic of sustainable agriculture and developing the local economy.

Major potential and challenges for the FPC Vienna

Vienna already is a rather 'green' city that implements many programmes and initiatives at the municipal level (Stadt Wien) and on the level of different civil organisations (such as ÖBV, Nyeleni etc.) However, our interviewees mentioned that these two types of actors are quite separated. On the side of the civil organisation, they have shown fear that the connection to the municipality would weaken the voice of the consumers they want to defend. Nevertheless could an FPC have the strength to increase the dialogue between these two sectors and mind-sets, towards a better cooperation.

Another advantage of the FPC is that it offers the possibility to focus on long term goals. Political actors are often focused on short term goals as they are elected for short periods of time, and want to show the effectiveness of the programmes they implemented. But in the case of environmental issues, short term measures absolutely need to be seen in a larger context. An FPC could allow to define a long term strategy for the local food system in Vienna and then have actors working on different programs, scales and time spans, but all that under the same long term vision.

A major challenge that often determines the efficiency of an FPC is the access to sufficient budget and therefore the city of Vienna should provide funds/resources for the establishment and management of an FPC. Indeed, establishing an FPC entails a lot of administrative work, which is difficult when it is only based on voluntary workers. However, this money that the city of Vienna could invest in the FPC should be perceived as a delegation of workload on the city level and an investment in increasing the city's local economy and further developing the green leadership of Vienna.

Finally, concerning the situation of urban farming, Vienna is very special since there are extremely fertile soils in and around the city. However these agricultural lands are threatened by the growing population of the city, seeking new places for housing. Finding compromises between two essential needs - food and housing - is difficult, and although there is technically a document defining priority areas for agriculture in Vienna, it is not legally binding and rather considered as a

city planning tool.

Conclusion

Concerning the European Food Policy Councils the investigations showed that different forms of FPCs can exist. Depending on their municipal support and participation there are differences in the level of influence they can reach and food policy changes they are able to make with their work. Nevertheless every single FPC achieves system changes by bringing people from different food relevant sectors in a dialogue and by increasing the awareness of the need to change a city's food system to a more local, sustainable and healthy one.

It appears that there has already been quite some background research on the food system in Vienna. The fact that there is already a sprouting FPC gives a great opportunity to further build on it. In addition, learning from other cities can be good advice, such as involving the citizens via public consultation as Milan has proven and considering the ten relevant dimensions defined by Està. Further research on this topic should consist of a detailed food assessment of the Vienna food system, in order to take actions based on the local necessities.

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Annexes

Annex I: Interview list

City	Date	Interviewee	Interview method
Cologne	26. April, 2017	Project coordinator of FPC	Skype
Bristol	28. April, 2017	Member of FPC	Skype
Milan	19. April, 2017	Member of EStà	Personal meeting
Vienna I	03. April, 2017	MA 22	Personal meeting
Vienna II	13. April, 2017	FPC Initiative Vienna	Personal meeting
Vienna III	10. May, 2017	Bioforschung Austria	Personal meeting
Vienna IV	11. May, 2017	Stadt-Umland-Management	Personal meeting

Annex II: Pros and cons of the different establishment modalities of FPC (according to Harper et al., 2009)

<i>Establishment modality</i>	<i>PROS</i>	<i>CONS</i>
Civic movement (outside of the government)	Grassroots groups have a broad support base and a good understanding of what the community really needs.	Lack of funding and lack of the necessary links to the government bodies that could have made it easier to make policy recommendations.
Political initiation of the FPC by the government	Access to public funding and sometimes paid staff can help to free up some time for the council members that otherwise would be spent on seeking funding! Furthermore, closer ties to government allows to make policy recommendations.	Distance from the civic needs => policy recommendations may not be as responsive to the needs of the community.
FPC formed by non-profit organisations	Better access to foundation funding and to a broad network of NGOs, since they are usually quite well connected forming a large web and providing potential partners.	Forced to compete with other NGOs for the same pool of funding which can limit the effectiveness of an FPC in building partnerships. Furthermore, the lack of funding and staffing is also an issue.

Annex III: 10 points Cologne and Bristol

Cologne FPC

1. Reasons (see Results)

How long did it take to implement the Council after the awareness of its need?

- June 2014 – foundation of the association “Taste of Heimat”
- March 2015 – first meeting of relevant stakeholders for the “Ernährungsrat Köln”
- March 2016 – official establishment of the “Ernährungsrat Köln und Umgebung”

2. First steps

Which were the first steps that lead to the establishment of your FPC?

- Find out who are important and relevant players/stakeholders in the food system of Cologne (located in the sectors civil society, city administration and economy)

- Inviting stakeholders to an network meeting to introduce idea and model of FPC
- Finding themes and topics the FPC should work on (bottom up process out of participating stakeholders)
- Creating working groups for the main themes
- Finding concrete projects in the working groups to the main themes
- Finding partners for realising projects and finding financing options

3. Name

What is the name of your FPC in your mother tongue language?

- “Ernährungsrat Köln und Umgebung”

Which are the FPC limitations and possibilities implied in its name?

- The very formal sound of the word “Ernährungsrat” could have dissuasive effect on people. The word “Rat (council)” could be associated with anti-democratic actions after world war one in Germany, where communist groups wanted to create a “Räterepublik”. Also in DDR times different types of “Räte (councils)” existed, like the “Arbeiter- und Bauernrat”. Depending on individual background the word could have negative associations. Also associations to an expert committee, where only politicians are located, could be possible due to the name.

4. Functions (practice implementation of the purpose)

Which were the main functions of your FPC at the time of the establishment?

Did something change?

- The FPC Cologne works as an advisory board
- Promote networking between different stakeholders in the food system
- Support exchange and active dialogue between politicians, producers and consumers
- Consultancy of municipality concerning food relevant topics
- Increase awareness of people who are important players in the local food system

5. Establishment modalities

Which type or organisation/institution started the official establishment of the FPC?

- The non-profit association “Taste of Heimat” started the establishment in 2015.

Are there policies supporting the work of the FPC in your country?

- The “Office for environment” from the municipality supported the FPC from its beginning on (and are still important partner in the municipality)

Were there any difficulties in the establishment of the FPC? (Which ones?)

- Finding people in different municipal offices, who want to support the FPC, was sometimes hard. With some offices they have very good contact, others are harder to convince to support the

FPC.

6. Hosting organisation

Which is the hosting organisation of your FPC?

- The non-profit association "Taste of Heimat"

Where is the main office of the FPC located?

- At the association "Taste of Heimat" in Cologne.

Which influence does the hosting organisation have on FPC activity?

- The "Ernährungsrat Köln und Umgebung" is a project of the association "Taste of Heimat". They work as a middleman between the members of the FPC. The only person is salaried, works for the association "Taste of Heimat" (Anna Wissmann – project coordination). They also do the work in the background like making requests for aid money.

7. Structure (see Results)

8. Geographical/ Territorial scale (see Results)

Are you satisfied with the scale? (Do you plan to expand or reduce the scale of your FPC?)

- Also other big cities are located in this administrative region (Bonn, Aachen, Leverkusen) which actually have their own city food system but are also part of the territorial scale.

9. Monitoring and evaluation

Does your FPC practice monitoring and evaluation? (if not: why?)

- At the moment all of the projects are in a planning stage so there is nothing to evaluate. But measurable targets are verbalised in the committees.

10. Themes (see Results)

How the topics were identified (process, locations)?

- The topics developed during the initiative stakeholder meeting in the beginning. More detailed content was formed in the committees working group.

Are you still satisfied with the focus of your FPC?

- New themes develop over time. The FPC is open for new ideas and committees.

11. Organic agriculture

What is the role of organic food and farming within the food policy of the city?

- Organic agriculture is topic but not the main goal for food or agricultural cooperation. The main focus is the support of local farmers in the region whether they are small scale or big scale. But sustainable production is important for the FPC Cologne. They also try to bring organic, non-

organic, sustainable small scale farmers together for exchange. At the moment they work on an indicator set, for a self-evaluation of all farmers who are involved.

12. Future (see Results)

Bristol FPC

1. Reasons

Which were the main reasons for implementing a Food Policy Council in your city?

(The interviewee answered to the question: Who was the main driver for implementing a FPC in your city?)

- The junior staff who were themselves kind of crossing the boundary, there were kind of activists and were very well connected with the food activists in the city.
- Political leadership of the city, at the moment the leader of the council cared about food. It was like a window of opportunity.
- Professor Kevin Morgan who was the first chair. He came and spoke at the conference where they launched "Who feeds Bristol".
- It was a combination of Kevin Morgan who was the chair, the council leader thought it was good and we had the junior staff and the activists.

How long did it take to implement the Council after the awareness of its need?

- It took about 6 months. This time was used to make presentations to the senior politicians, to do a survey to all the members of Bristol food network, hundreds and hundreds people. Ask them: what do you think about having a small group of activists? a FPC?. They said yes.

2. First steps

Which were the first steps that lead to the establishment of your FPC?

- The first steps were to write some terms of reference. Fix the aim, the structure (how to choose their memberships, how to choose their chair, how often they meet). They review our term of reference every year
- Then they had to choose who to invite and then to invite them
- The first meeting was in autumn 2011

3. Name

What is the name of your FPC in your mother tongue language?

- Bristol Food Policy Council

Which are the FPC limitations and possibilities implied in its name?

- They call it a food policy council because there are examples in other places in the world. For preparation they did a literature review about FPC in the world, so what does that mean to them. And the leader on Bristol city council, she wanted name of FPC.

4. Functions (practice implementation of the purpose)

Which were the main functions of your FPC at the time of the establishment?

Did something change?

- Dealing with the topic of “Divide and Move”, which is, according to the interviewee, the way that the big food industries (Monsanto...) manage to press activism about food by confusing everybody and by setting one against the other.
- Organising events and discussions to show that the Bristol FPC is working hard to promote a better food system. In addition, the goal is to bring people from different sectors that usually do not get in contact, together.
- Taking part in the “anti-supermarket movement” in Bristol.
- Production of reports such as Who feeds Bristol which defines “Bristol’s good food” as tasty, healthy, affordable good for nature, good for workers, good for animal worker, and good for local business. In addition, they also published a report on Food poverty.

5. Establishment modalities

Which type or organisation/institution started the official establishment of the FPC?

- Bristol FPC in early years had administrative support from Bristol city council. It had a city council employee Steve Marriott. His job was sustainability. The interviewee was an employee of Bristol city council. She was working in the public health part of Bristol City council. They had other offices inside Bristol City Council, it was like an intern office group called the food interest group.
- Everything changes all the time. At the beginning we had very strong support from: national home service, public house, Bristol city council. Because of this changing environment Bristol FPC has become more and more independent and right now it has zero administrative support from anywhere, no funding.
- At the moment this FPC is not governed by anybody. In other cities it is quite different: they are much more embodied in status organisation, they had official partnership with institution. When political changes then food partnership disappear... Bristol FPC has been quite undefined and it manage it to survive.

Are there policies supporting the work of the FPC in your country?

- An organisation called Sustain, a NGO helped them
- An association called Soil Association which is very helpful
- Funding bodies which have funding for city network working on sustainable food
- Elective major was very implicated

Were there any difficulties in the establishment of the FPC? (Which ones?)

- Have a critical mass of scaled food activist, that one essentially ingredient. These people have to be prepared to keep going whatever happens and more interested in achieving the goals than get personal credit.

6. Hosting organisation

Which is the hosting organisation of your FPC?

- None

Where is the main office of the FPC located?

- They don't have any office

7. Structure

How is your FPC structured?

- 1 chairman : Simon Wood
- 10 members consist of people from:
 - Bristol food network
 - Local politicians
 - Public health
 - Food waste
 - Bristol food producers...

Concerning the FPC meetings, they don't have an office forcing them to meet in different locations. The core team meets every month in a café, whereas the extended team meets four times per year on a "Learning visit". On these special occasions, the FPC tries to organise a meeting on a farm/start-up in order to learn more and share an experience.

8. Geographical: Territorial scale

Which is the geographical scale of your FPC (what are the reasons for that)?

- It is Bristol because it is too complicated to have something bigger. Bristol is seen as the west of England. Sometimes they met outside the city of Bristol.

9. Monitoring and evaluation

Does your FPC practice monitoring and evaluation? (if not: why?)

- They have so little resources so it is very hard. In 2014 they produces a baseline report. They got some help from public people. They put anything measurable that they could find : obesity raise, statistic about food poverty, umber of food project...

How are the outcomes of the evaluation implemented in the development of the FPC activity?

- It shows some good stuff but also a lot of improvement. Wasted food by businesses, the obesity rates are bad but they stop going higher. Bristol FPC have to work now on obesity. The number of independent throw businesses has going up. There were fantastic thing done by businesses who are getting involved in food campaign. Bristol FPC had a really brilliant healthy school program doing good job on food. So according to the interviewee the outcomes are good.

10. Themes

Which are the main topics your FPC is working on?

- Now Bristol FPC tries to organise events that bring new and influential people. Last October they had workshop to really make sure that they are working all together, to become more powerful.
- In October they will take part of the healthy city week
- Potentially going to be a member of a partnership around food poverty
- Work hard with people in city planning to become more powerful. Changing the policy around planning is a big thing. We want to gain political support and equipment.

11. Organic agriculture

What is the role of organic food and farming within the food policy of the city?

- There is no specific work on organic in Bristol FPC. This FPC doesn't say that all ground have to be organic, just have to be good food.

12. Future

What are your goals for the future development of your FPC? (If the previous question was answered no: do you have some plan to implement organic sector in the food policy of the city in the future?)

- Continue to evolve, never get attached to any particular form or any particular name, work with everyone and show the people how wonderful the city would be.

Annex IV: List of potential stakeholders in Vienna

Ernährungsrat Initiative Wien ernaehrungsrat-wien@posteo.at
MA22, Environmental Protection, Adelheid Sagmeister, coordinator of the MUFFP, https://www.wien.gv.at/kontakte/ma22/ post@ma22.wien.gv.at
Bioforschung Austria, Herr Kromp, http://bioforschung.at/ office@bioforschung.at
MA49 - Agricultural production and woodlands in Vienna, https://www.wien.gv.at/kontakte/ma49/
MA58 - Agricultural authority of the State of Vienna, https://www.wien.gv.at/umwelt/wasserrecht/agrarwesen/
Stadt Umland Management SUM - http://www.stadt-umland.at
Andreas Exner - Universität Wien, "Green Urban Commons" https://greenurbancommons.wordpress.com/about/
Die Umweltberatung, http://www.umweltberatung.at/
Lokale Agenda 21 (Plus), https://www.wien.gv.at/stadtentwicklung/projekte/landschaft-freiraum/soziale-aspekte/la21plus.html
Garteln in Wien, urban farming in Vienna, http://garteln-in-wien.at/
Landwirtschaftskammer, Agricultural chamber, https://wien.lko.at/
AGES, Austrian Agency for Health and Food Safety Ltd, https://www.ages.at/en/ages/basics/#
Lebensministerium, National Minister for Agriculture and the Environment, https://www.bmlfuw.gv.at/
"Schule am Bauernhof" http://www.schuleambauernhof.at/
BioTonne: http://www.wien.gv.at/umwelt/ma48/beratung/muelltrennung/biogener-abfall/sammlung.html
Vienna association of hospitals (Wiener Krankenanstaltenverbund). http://www.wienkav.at/kav/texte_anzeigen.asp?id=24619
AgrarAttac http://community.attac.at/agrarattac.html
Via Campesina Austria: ÖBV http://www.viacampesina.at/cm3/presse/kontakt.html
Bio-Austria http://www.bio-austria.at/startseite/niederoesterreich-wien/
Further potential actors: producers (!), retailers, health sector, consumer protection,...

Recommendations & examples

First, the city could explicitly protect agricultural land in Vienna and support the direct marketing of food produced in the city (on-farm selling, farmers' markets). Second, support for urban organic agriculture and gardening should be provided, which could represent an opportunity for the city itself by making active use of the benefits of gardening activities, e.g. in the areas of education, nursing, eldercare or integration. Finally, in order to increase the life quality in the city, policy regulations could set environmental goals like dedicating a certain percentage of the city's land to urban agriculture and urban gardening. Greening of rooftops, offering public unused spaces for gardening, equipping apartments with green balconies could contribute to increase the welfare of citizens.



Photo by S. Kummer, 2017: Wilde Rauke, Community gardening, Vienna
Document written by the students of the course: Organic Agriculture and Regional Development, June 2017.

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How to increase Urban Agriculture in Vienna?

Vision

Imagine it is the year 2030. This is what your day as a Viennese citizen looks like:

“For breakfast you go to your balcony and pick some home-grown strawberries for your muesli and herbs for your tea. After breakfast you take your organic waste with you on the way to work. Indeed, the compost collection station is just two blocks away. As you continue walking, you pass many fruit trees, as well as your personal tree. You grab a handful of apples and continue walking. Then, you pass a school where a group of children are harvesting vegetables in their school garden. The humming of the bees from the rooftop hives welcomes you to your workplace. At lunchtime you enjoy a tasty and fresh meal at the cafeteria with mostly products from the canteen's kitchen garden or directly delivered by a local organic farmer. On the way back home, you do the groceries at the farmers market where the farmers from in and around Vienna sell their products. This short transportation allows high quality and local products in the city. You are happy to ask a couple of questions to the farmers you buy from. As an after-work activity you go to your community garden to relax while weeding and socialising with friends and neighbours. Hand work and fresh air brings change to your daily office job. You hear a lot of birds sing as the green flat roofs and walls of the surrounding buildings enrich biodiversity. While you relax after this long day, you are thankful for living in a green city.”

Vienna in 2030 in keywords

- Parks & Donau Insel are not only green but green, edible & organic
- Partnership for trees and raised organic beds to involve citizens
- “Juice station” in each district (to process fruits from city orchards)
- Rooftop gardens and green roofs to decrease pollution and improve isolation
- Fixed flower pots on every balcony
- Organic vegetable gardens in schools and kindergartens
- Five minutes walking distance to a green, organic & edible area with composting facilities
- Bee hives and insect hotels on rooftops
- Supportive regulations concerning establishing organic community gardens
- Forum to gain and share knowledge on gardening
- „Support hub“ where people can rent tools, get material and find relevant information
- Cities fringes are used by local organic farmers
- Frequent organic farmers’ markets in each district
- Organic community gardens with different focus of interest
- Support for backyard organic animal keeping



Photo by S. Kummer, 2017: Bioschanze, Vienna

Present situation in Vienna

Vienna counts numerous urban farms, each with their own interests and needs. However, they often have little to no secure land rights and are confronted to overpriced land leases. The city’s government would need a more coherent policy supporting urban agriculture. Nevertheless, in the last ten years, the number of urban agriculture initiatives has increased, showing the need and interest of citizens towards greener cities. In addition, these initiatives have shown positive interactions between neighbours.

Motivations: Why urban agriculture is important

Economic

- Creating local jobs
- Diversifying the income for farmers
- Reducing heating cost through ‘green isolation’ (green roofs/walls)

Environmental

- Increasing biodiversity
- Reducing pollution
- Heat evacuation from the city
- Waste reduction through composting
- Valorisation of unused city spaces
- Reducing food transport

Social

- Increasing social interaction between people from different background, culture and age
- Psychological impact on people’s well-being (stress reduction)
- Integrating environmental education in the scholar curriculum through gardening
- Raising awareness concerning food production