



PROVÉ, Charlotte

COST Action Urban Agriculture Europe: Urban Agriculture in Warsaw Short Term Scientific Mission Report

Warsaw, Poland 25/02-18/03/2014



COST Action Urban Agriculture Europe: UA in Warsaw Short Term Scientific Mission Report

Warsaw, Poland 25/02-18/03/2014

Author:

PROVÉ, Charlotte

Photography:

PROVÉ, Charlotte

DOWGIALLO, Janek (where indicated)

Supervisor:

SZULCZEWSKA, Barbara

Illustrations and resources are under the responsibility of the author

COST Action Urban Agriculture is chaired by:

Prof. Dr. -Ing. Frank Lohrberg

Chair of Landscape Architecture

RWTH Aachen University

e-mail: science.cost@la.rwth-aachen.de

Professor Lionella Scazzosi

PaRID - Ricerca e documentazione internazionale per il paesaggio

Politecnico di Milano

e-mail: parid@polimi.it

This publication is supported by COST



ESF provides the COST Office through an EC contract



COST is supported by the EU RTD Framework Programme

Index

Purpose of the STSM.....	5
Methodology	7
Introduction	11
Results.....	13
Discussion	23
Conclusion	27
Final remarks	29
References	31
Annex	33
Author	37

Purpose of the STSM

This report has been written as a summary of the findings for the Short Term Scientific Mission (STSM) performed in the period of February 25th until March 18th 2014 in Warsaw, Poland. This work will be presented during the 4th workgroup meeting of the COST Action TD1106 Urban Agriculture Europe (UAE) which will take place April 2-4, 2014 in Warsaw and is organized by the Department of Landscape Architecture of the University of Life Science in Warsaw (Poland). The organizer of the STSM and the workgroup meeting is Prof. dr. Barbara Szulczewska.

The purpose of the COST Action TD1106 is to develop a common European approach based on existing research projects on urban agriculture issues and reference regions in partner countries. The action UAE started with four working groups, but has recently been expanded to a fifth working group. Each of them focuses on specific topics:

- WG 1: Urban agriculture definitions and common agriculture policy (CAP)
- WG 2: Urban agriculture and governance
- WG 3: Entrepreneurial models for urban agriculture
- WG 4: Spatial visions for urban agriculture
- WG 5: Urban agriculture metabolism

The subject of the STSM is as follows: *"Possibilities and constraints of Urban Agriculture in Warsaw: Identification of different types and functions of Warsaw Urban Agriculture Areas (WUAA) based on interviews"*. More specifically, the purpose of the STSM in Warsaw was to perform a situational analysis of the types of urban agriculture that can be found in the city and to identify the current opportunities and constraints of urban agriculture in the city region.

Upon arrival, ideas were exchanged with the research team at the University of Life Sciences of Warsaw, under the guidance of Prof. dr. Barbara Szulczewska. It was agreed that, although allotment gardens have a long-standing tradition among the Polish, the focus should be elsewhere. One of the reasons is that there already is COST research on allotment gardens (see TD 1201 in figure 1 below).

Overall perspective (Dealing with the whole range of UA)

Fringe farming	Urban farming	Family gardens	Educational gardens	Urban gardens	Allotment gardens
----------------	---------------	----------------	---------------------	---------------	-------------------

TD1106 aims at a cross-disciplinary perspective on UAE. To develop a common ground, it is quite necessary to examine the whole range of UAE's approaches. It is within the scope of TD1106 to identify those (new) approaches that need to span the whole range of UA, e.g. social or environmental orientated policies, spatial planning tools, ...

Focus perspective TUD 1106

Farming level			Urban agriculture		Gardening level	
Fringe farming	Urban farming	Family gardens	Educational gardens	Urban gardens	Allotment gardens	

TD1106's work so far has made clear that on the gardening level, a broader variety of types has already been identified. In contrast, the farming level and its potentials for the urban system is poorly examined. Thus, TD1106 lays focus here.

TD 1201's work starts with the study of traditional allotment gardens, but encompasses new forms of corporately gardening as well, e.g. community gardens or educational gardens.

Figure 1. Allocation scheme of TD1106 & TU1201 (Nov. 2013)

Even though this is a useful and clear distinction, it is difficult to ignore allotment gardens in Warsaw (and Poland in general) as they play a substantial role in understanding the situation of urban food production in Warsaw **over time**. Therefore, they will still be taken up in the analysis, but an attempt has been made to focus on other urban agriculture activities (as described in the typologies developed by COST Action UAE).

By all means, urban agriculture is a new topic for Warsaw and most other cities in Poland. The main challenge of this STSM was to find actors involved in urban agriculture or working on agriculture activities in the Warsaw region. The main goal of this STSM has thus been to formulate the right questions, in order to gain a better understanding of why urban agriculture in Warsaw is not yet in the picture like in other European cities. Those questions will then serve as a good starting point to

address the future development of urban agriculture in the Warsaw region. It was decided to explore the following research questions:

- Who are the actors involved in urban agriculture in the Warsaw region? And not less important, which actors are missing?
- How do these actors perceive urban agriculture?
- What are the opportunities and constraints of urban agriculture in Warsaw?
- Which efforts are done to promote urban agriculture in Warsaw?
- What are the peculiarities of the situation of urban agriculture in the Warsaw region?
- And ultimately, which are the important questions to address in the future?

In the next section, the methodological choices will be clarified. In the introduction, the context of both Poland and Warsaw will be explained based on a literature review. The results section outlines the current efforts, initiatives and stakeholders of urban agriculture, together with a presentation of the current opportunities and constraints of urban agriculture in Warsaw. The opportunities and constraints will be analyzed based on their location in one of the following domains: state, market or civil society. In the discussion section, the overall situation of urban agriculture in Warsaw will be complemented with a reflection on the research questions formulated above. In the conclusion, the future development of urban agriculture in Warsaw is addressed with a reflection on new questions and suggestions.

Methodology

Methodological choices

In this STSM case study research on urban agriculture in Warsaw was proposed. The most practical choice would be to integrate the results into methods and tools developed or proposed by the different workgroups of the COST Action. For example, the STSM Reports in the Barcelona Metropolitan Area and Dublin region made use of a typology by Ejderyan & Salomon Cavin (2012), which can be found in figure 2 below.

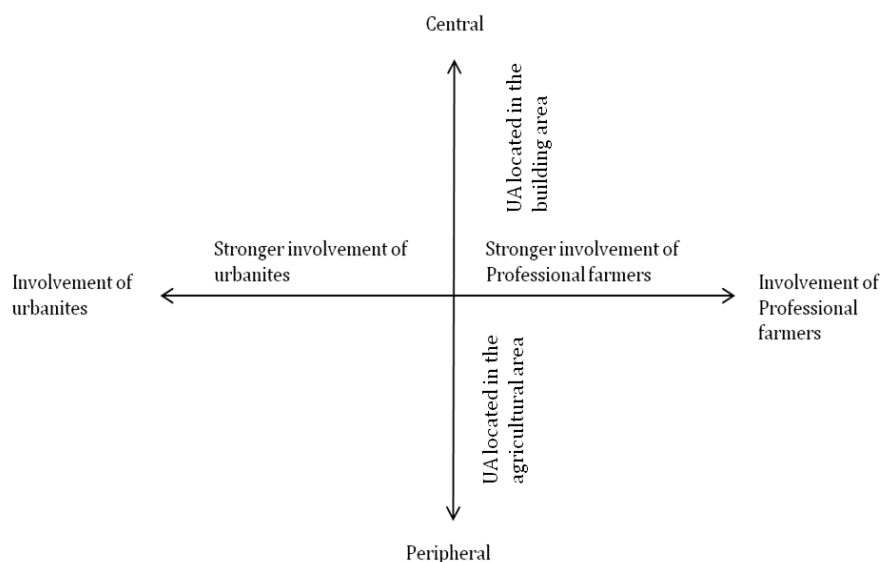


Figure 2 UA characteristics by the type of actors and the location in the urban fabric (Ejderyan & Salomon Cavin, 2012)

It can be clarifying to position actors and stakeholders on the one hand geographically (from the center to the peri-urban areas of a city region) and on the other hand professionally (from leisure to professional farming), as is the case in figure 1. Typologies such as these present in a structured manner the situation of urban agriculture in a given context. Besides location and actors, Workgroup 1 also stresses other components which can be used to describe urban agriculture in a given context such as function, origin and motivation. In addition, Mougeot (2000) adds scale, product destination, type of activities (production, processing, trade, ...), and food/non-food categories of production.

However, it soon became clear that urban agriculture is a fairly unexplored topic in Warsaw. Initiatives or attempts to promote urban agriculture currently taking place should be seen as experiments and therefore situated in an early stage of development. Consequently, it seems more appropriate to perform exploratory research conducting literature review and in-depth interviews in order to gain a deeper understanding of the situation in Warsaw, rather than categorizing and structuring UA activities - which seem to have a rather short life span - in a preset typology.

The starting point here is that typologies are merely descriptive and in this early stage of UA development (if we can call it development at all), current policies, dynamic, (missing) actors, initiatives and efforts should be better understood.

Table 1 below presents the types of stakeholders which are looked for in the case of Warsaw. To comply with the categorization of WG 2, they have been organized into three broad groups: policy/government actors, market actors and civil society actors.

Table 1. List of stakeholders relevant for urban agriculture

Stakeholders located in:		
Policy/government at	Market	Civil Society
International level (f.e. CAP)	Farmers	NGO's
National level (Polish policy)	Farmer's associations	Advocates/Pioneers
Regional level	Private actors	Architects
Local government	Research institutes	Artists
	Entrepreneurs	Nutritionists
		Universities
		Social workers
		Educators/teachers
		Planners ¹

In short, data will consist of transcripts from in-depth interviews with stakeholders, secondary data and available literature. Data will also consists of observational data as well as data obtained from informal conversations held at visited sites and the university. The goal of the data analysis is then to formulate barriers, opportunities and subsequently appropriate questions for the future of urban agriculture in the municipality of Warsaw.

Research process

In a first step, a literature study was performed in order to gain an overall understanding of the current situation for agriculture in Poland and Warsaw. Consulting the table of relevant actors/organizations, the stakeholders in the case of Warsaw were identified. These actors can be: farmers, representatives of NGO's, project leaders, activists and advocates (that are not associated officially with any organization), board members of allotment gardens, entrepreneurs (who are setting up an innovative business), local authorities/administrators, social workers, educators, planners, architects, nutritionists, ... This list will at the same time serve to identify which actors are missing. The stakeholders were found through mixed methods. They have been identified through internet search, literature review, contacts maintained by the local organizer (Prof. Barbara Szulczewska) and the snowball procedure. All the interviewees were enthusiastic and very motivated to participate. Only three persons/institutions rejected. The first was a representative of a food-cooperative who did not appear the time and date arranged. The second was a monastery in the city center which produces a considerable amount of food on the land they own. They are in a period of meditation and preferred not to be disturbed. Lastly, even though we have tried to explain a meeting would be interesting, the Department of Environmental Protection stated that they do not play a role in urban agriculture development.

Before conducting interviews, a questionnaire was developed. The set of questions refer to the opportunities and constraints of urban agriculture development in Warsaw. Important topics to be discussed are: the context and background of the initiative/work/responsibilities of the concerning stakeholder, how their initiative/work/responsibilities is affected by the current policy, the bottlenecks & the opportunities that are experienced or perceived, with whom they interact in the development of their initiative/work/responsibility for urban agriculture. In annex, a sample of the questionnaire/s is/are presented.

All of the interviews and informal conversations relevant for the STSM were recorded. All but one of the interviews were held in English. In case the interviewee did not speak English, a translator assisted in the interviews who communicated back and forth to the interviewee and interviewer. The recorded English language

¹ It could be debated that - in case these functions are performed in a governmental institution - they could be located in the first column. However, in this case study people were asked to speak from their personal standpoint and experience. Therefore, they were located in the latter column and considered as part of the 'bottom-up' group who are advocating urban agriculture activities.

was transcribed and used as the basis for in-depth analysis. Below, table 2 shows the sites visited and interviews held during the data gathering period.

Table 2. Timing of interviews and visits

Date	Interview	Visit	Interviewee/Initiative
Saturday 1/3/2014		X	Allotment garden (near Czerniakowska): field observations
Monday 3/3/2014	X		Prof. Renata Giedych: professor at university of life sciences Warsaw
Monday 3/3/2014	X		Mirosław Gajdak: Town Planning Office
Tuesday 4/3/2014	X		Magdalena Zaliwska: Representative of the National Council of Polish Association of allotment gardens
Tuesday 4/3/2014	X		Michał Pachlewski: Ecofarm for children "4 seasons"
Wednesday 5/3/2014	X		Krzysztof Herman: Sie-je w miescie & Zielony Jazdow & parque-no
Wednesday 5/3/2014	X		Jodie Baltazar: Activist, urban gardener (Pixxe)
Wednesday 5/3/2014	X		Iza Streszevska: slow food youth + Sie-je w miescie
Wednesday 5/3/2014		X	Biobazar: Visit and talk with farmers and sellers on organic food market
Thursday 6/3/2014		X	Visit market: Hala Mirowska & Visit market: Hala Koszyki
Thursday 6/3/2014	X		Skype meeting with Robert Blaszczyk: Activist & collective of urban farmers 'Trawnik To Nie Wszystko'
Friday 7/3/2014	X	X	Fieldtrip: Municipality Konstancin (important area for agriculture)/interview with mayor
Friday 7/3/2014	X		Anka Zawadzka & Janek Dowgiallo: series of experimental, architectural and artistic gardening projects (+Sie-je w miescie)
Friday 7/3/2014		X	Hala Koszyki
Saturday 8/3/2014		X	Visit : Targ Sniadaniowy (local food market)
Sunday 9/3/2014		X	Visit : SOHO food market
Monday 10/3/2014	X		Jakob Kowalewski: Kwiatki Bratki
Tuesday 11/3/2014	X		Iga Kolodziej: Landscape architect, urban gardener, Sie-je w miescie
Tuesday 11/3/2014	X		Ingeborga Janikowska-Lipszyc: elected district council (one of 18 districts of Warsaw)
Wednesday 12/3/2014	X		Maciej Lepkowski: curator contemporary art museum
Wednesday 12/3/2014	X		Maciej Czeredys: Palacyk Konopackiego
Thursday 13/3/2014	X		Jerzy Zdunek: local farmer
Thursday 13/3/2014		X	Event: opening new food cooperative
Friday 14/3/2014	X		Restaurant Funkcjonalna: local and seasonal food restaurant
Sunday 16/3/2014	X		Piotr Trzaskowski + Claudia Ciobanu: CSA (outside Warsaw)

Introduction

The agricultural context of Poland

Poland is a country located in Central Europe, with a surface of 321.7 km² and a population of approximately 38 496 000² (2013). The current trend is a slight decrease in overall population growth, which is mainly due to a drop in the birth rate.

Poland is divided into 16 voivodeships, 314 poviats, 65 cities with the rights of poviats, and 2 478 gminas³. It is an extremely rural country (European Commission, n.d.), with a total agricultural area estimated at 60% in 2007. The Polish agriculture sector is an important producer of wheat, rye, potatoes, sugar beets, rapeseeds, onions, cabbage, cauliflowers, apples, berries, meat and dairy. The sector varies widely in terms of size of the agricultural holding. According to the survey “The structure of the agricultural holdings” conducted by CSO, the number of agricultural holdings in Poland is 2 579 000, of which 1 808 000 have an area of >1 ha. A large number of producers still produce small-scale, with the goal to produce for own use. These mostly still use traditional farming techniques, that limit the use of fertilizers, chemical plant protection, industrial feed. According to a media source (The Warsaw Voice online, 2012, December 21), this fragmentation of farms, traditional farming methods, and moderate use of artificial fertilizers and pesticides is one of the reasons why Poland would lend itself as an excellent country for the growing organic agriculture sector in Europe, even though the development is slow today.

Despite the high number of small agricultural holdings, Poland is a thriving agricultural country. Over the last years, and especially since its introduction into the European Union in 2004, Poland's export market is increasingly growing. In 2013, 78% of Polish agri-food products have made their way to other members of the EU and it is expected that export to non-EU markets will grow steadily in the future as well (Ministry of Foreign Affairs, 2013; Warsaw Voice Online, 2013, January 30).

One of the drivers behind the increasing export is the government's priority to modernize and develop agriculture practices to the level of other EU-members (European Commission, n.d.; Ministry of Agriculture and Rural Development, 2012). The Ministry of agriculture has monitored or developed several events like fairs, exhibitions and programs to promote Polish food. One program called ‘Good Polish Food’, set up in 2000, aims to identify top quality products based on domestic ingredients and label these products in order to increase the visibility of these products. Even though they will attract Polish consumers as well, the overarching goal is to increase the Polish agri-food export. However, there are other programs monitored or set up at the national level that aim to promote healthy and/or local food (mostly designed for children and teenagers):

- ‘Glass of milk’ (which is funded by the EU School Milk Programme)
- ‘Fruit in schools’ (which is funded by the EU School Fruit Scheme)
- ‘Keep fit’ - the Polish Federation of Food Industry set up this program to promote the the balanced diet principles and physical activity in the population of secondary school adolescents in Poland (PFPZ, 2005).
- ‘Organic Food as a Guarantee of Good Taste’ is a nationwide advertising campaign, launched in October 2012. The campaign is being conducted by the Agriculture Ministry and is designed to promote the consumption of certified organic food (The Warsaw Voice online, 2012, December 21)
- ‘Try fine food picnic’. This is a picnic, organized by the Ministry of Agriculture and Rural Development at the Warsaw University of Life Sciences (SGGW) in June 2013. It serves to promote and celebrate local, high quality food. It



Figure 3
<https://historyfacebook.wikispaces.com/Poland>

² www.stat.gov.pl/gus

³ Voivodeship = region, poviats = counties, gminas = municipalities

has attracted about 18 000 people (The Warsaw Voice online, 2013, August 1)

In short, the Ministry of Agriculture and Rural Development has set its priorities on the modernization of the agriculture in rural areas and a continuing increase in export of agricultural produce.

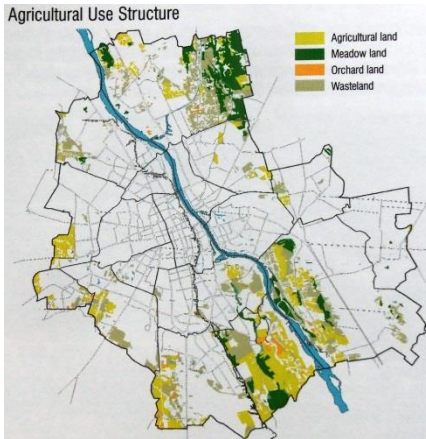


Figure 4. Agricultural use structure (Office of Architecture and Spatial Planning, 2007)

The agricultural context of Warsaw

The municipality of Warsaw consists of 18 districts. In 2012, it had a population of approximately 1 711 491 (Central Statistical Office, 2013), which makes it the largest city of Poland in terms of population. The surface of Warsaw is 51 724 ha. The population density is high with an average of 3304 inhabitants/km². Generally, it is stated that there is a decline in the population (in Poland in general, but also in Warsaw). However, this was contested by the Architecture and Urban Planning Department, which argues that the population is still increasing, but it remains unnoticed in the statistical database as many choose not to register in the municipality of Warsaw.

Of the 517 km², 62 km² is land with an agricultural use (Office of Architecture and Spatial Planning, 2007), and this does not include the family allotment gardens which have a surface of 17 km². The family allotment gardens are categorized under the green open areas, together with three other categories: forest vegetation, developed vegetation (parks) and cemeteries. In 2006, agricultural land was removed from spatial policy as a category and are incorporated now as green areas (together with green public spaces such as allotment gardens, parks, cemeteries and forest land). All these spaces are considered part of the 'Warsaw natural system'. The goal is to preserve them in order to achieve the ecological goals. Directions are taken by Warsaw's spatial policy to involve creation and maintenance of protected areas in line with European standards, however, the Warsaw natural system is planning concept, designed to inform planners. These areas are not formally protected.

The growing season lasts about 200 days per year. The climate of Warsaw is humid continental, with cold winters and warm summers. The average temperature is +7.8°C. Average temperature is -3.3°C in January and 18°C in July. The yearly rainfall averages 493 mm.

There are about 1694 agricultural holdings (Statistical Office Warsaw, 2010). However, about 57% of this land is fallow land and this number is still increasing (this has mainly to do with the structure of the land, which will be dealt with below) (Szulczewska & Bruszewska, 2013). Agricultural activity within the city has a low profitability. Major products are vegetables and fruits such as apples. According to the Architecture and City Planning Department (interview), greenhouses and nurseries for shrubs used to be popular in the suburban areas. Now they have disappeared. An upcoming trend is horse keeping.

Results

In this section, the results of the data collection and data analysis are presented. As mentioned above, a combination of interview transcripts, field observations and field notes, and formal and informal (such as media sources) document analysis are presented. The results are categorized according to the three domains wherein stakeholders are situated: policy, market and civil society domain.

1) The current policy framework

The policies which currently may have an impact on the development of urban agriculture (both in positive and negative ways) are broadly discussed under spatial planning policy and green infrastructure policy. In addition, the (lack of) current food or agricultural programs are discussed and an exercise is done for the potential responsibilities the local government of Warsaw could take up.

Spatial planning policy

To date, urban agriculture has not yet been adopted in any policy; neither in the Polish agricultural policy nor in the spatial development policy of Polish cities (Szulczewska & Bruszewska, 2013). However, there are other spatial policy developments that can and will play a major influencing role on the future of agricultural land within the municipality of Warsaw. They need to be taken into account in an analysis of urban agriculture in Warsaw. Three issues are of particular importance.

The first issue concerns the article (5b, which was added to the 'Protection of Agricultural Land and Forest Land Act' in 2008, and stated that it was no longer needed to get consent to convert agricultural land into non-agricultural purposes. This amendment paved the way for uncontrolled urban sprawl. It must be noted that this amendment is effective in every Polish city, but only within city borders.

The second issue is related to the different applicability of the spatial development plans. Municipalities have to prepare two spatial planning documents: Study of Conditions and Directions of Spatial Development and Land Use Development Plan (also called Local Plan in other documents) (Grochowski & Pieniazek, 2008). The former is a planning document and determines spatial policy and rules of spatial management in the municipalities (Malasek, 2012). It takes into account national, regional goals and directions for development. For every municipality it is an obligatory document. However, this document is not legally binding. The latter is prepared for a long-term spatial development policy. These local plans are not obligatory, but it is the only legally binding spatial planning document. Although it is required that the local plan is consistent with the spatial policy of the whole municipality (which is covered by the Spatial Planning and Development Document), the local plan is mostly prepared for fragmented areas. As a consequence, there are areas not covered by the local plan which have no legally binding destination. The decision to invest in service or residential areas on current agricultural land is a possibility, even if this is not in accordance with the Spatial Planning and Development Document. If an area is not covered by the local plan, decisions are based on local permissions. However, they are easy to obtain.

Moreover, the future scenario of disappearing agricultural land is more likely to become a reality because of the historical processes of land reform. It is out of the scope of this report to go into more detail, but the picture below shows an area of agricultural land which characterizes the suburban area of Warsaw. The plots are very long (up to 1km), but very narrow. As a consequence they are very unattractive for farming. Much of this land is left fallow, waiting for investors to give it another

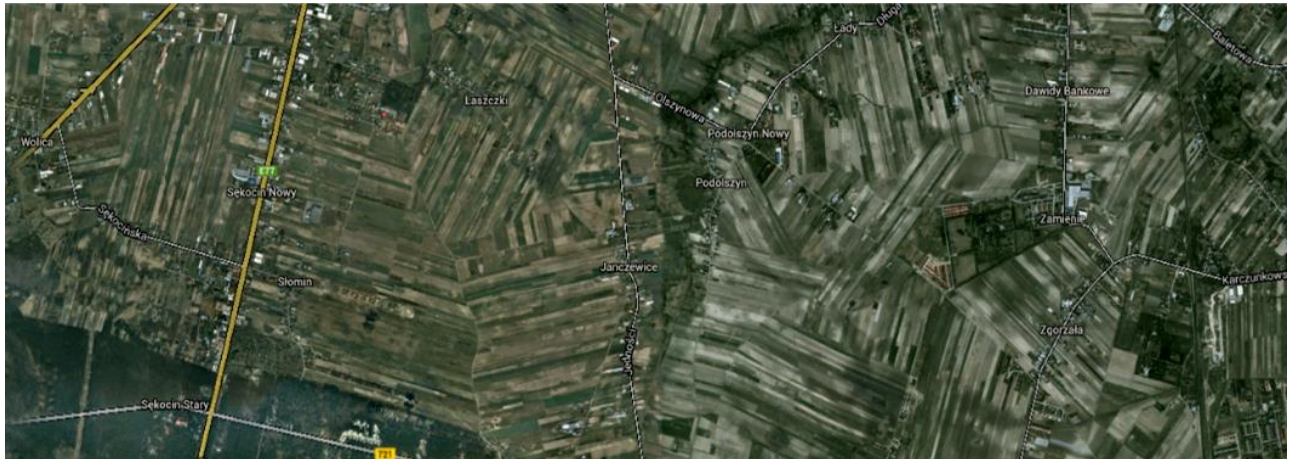


Urban sprawl



Pressure on green spaces from private investors

destination. Municipalities are in favor of agriculture, but they do not have the tools and money to protect this (interview mayor of Konstancin-Jeziorna).



Structure of the land outside the city center of Warsaw (Google Maps, 2014)



Common landscape view: new residential areas in the middle of agricultural landscapes

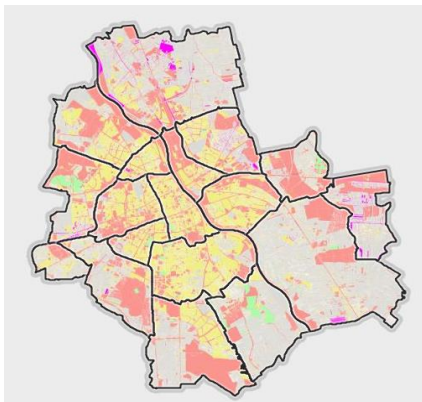


Figure 5. www.mapa.um.warszawa.pl

The third issue is that in 2006, agricultural land has been removed from the urban planning policies. According to Warsaw spatial policy provisions (2006, amended 2010) existing agricultural areas ultimately are to be transformed into other types of land use, green areas included (allotment gardens are to be transformed into first of all formal green spaces). As the Architecture and Urban Planning Department has stated in the interview: *“From this moment we had in Warsaw only urban area: housing, services area, airport, and factories. Some areas still have farming activities, but in our policy, it was changed and we cannot change this decision. All what we do, the farming which we can find here or here...in the future it should be changed. And we cannot do anything about the origin of this decision.”* Figure 5⁴, wherein yellow indicates land owned by the ‘city’; orange is land owned by ‘the state’; green by ‘other public’; grey is ‘private’; and pink is land ‘in transition’, shows that most of the land which is currently farming area (in the south, east and north of Warsaw) is privately owned. As a consequence, the city has no grip on the evolution of these farming areas.

To conclude, agricultural land in the municipality of Warsaw is currently in a very defensive position for several reasons. Taken together they increase the speed at which agricultural land is disappearing. The spatial policy in Warsaw takes an unfavorable position towards agricultural land. Its amendments (or the lack of policies) have ceased to support agriculture and have facilitated the conversion process of agricultural land into other uses. In addition and at the same time, farming is less attractive which is partly due to the structure of the land. To continue a thriving farming sector would require a restructuring of the land and a major mentality shift (interview Architecture and Urban Planning Department). But as the

⁴ Obtained from: http://www.mapa.um.warszawa.pl/mapaApp1/mapa?service=mapa_wlasnosci

actions taken seem to either promote the opposite, the opportunities for agriculture in the peri-urban areas of Warsaw looks rather grim.

Green open areas planning

About 28% of Warsaw is categorized as green area. This makes Warsaw a city with a significant amount of open space. The green spaces include (since 2008) the parks, allotment gardens, forest area, agricultural land and cemeteries. However, the municipality has a special relation with the allotment gardens.

30 years ago, the Polish association of allotment gardens were assigned the land on which allotment gardens were constructed, with the goal to maintain them on a national level. They used to be out of the city centers, but as cities grew, they are now often strategically located. This is often valuable and expensive land which has come under pressure. Investors, the municipality and some people of the different neighborhoods have laid their eye on these green, open and unbuilt spaces in the city. Investors would like to build residential or service areas, whereas the municipality and some community members would prefer to change them into public parks or other public functions.

Some of the reasons are that they are considered as something from the past, they look untidy and attract waste dumping. The change in name from Workers Allotment Gardens to Family Gardens reflects the changed attitude towards them. Where they used to serve mainly for food production, they have now mostly recreational purposes. This then raises the question again of social exclusion as they are privately owned and not always freely accessible.

However, even though these gardens have moved away from a focus on food production and are mainly privately owned, it can be said that they are the only secured places where agricultural activities could go on today. Because they represent a part of the Polish culture, many stakeholders in the interviews still refer to the allotment gardens as 'the' place where urban agriculture could go on, if it would take place in Warsaw.



Family garden allotment Zelmot"



Typical view of Warsaw: apartment buildings and large open spaces in between



Many people live in small apartments and have no private garden



Access denied in allotment garden



Waste in and around allotment gardens

Food and agricultural programs

At the level of the municipality, programs or initiatives designed to promote agriculture, local food consumption, organic food consumption or educational programs have not been found. These programs are initiated at the level of the national government and have been described above.

Exercise: review of potential responsibilities of the government

Because it is not always clear which tasks exactly the government could take up, it merits to turn to Mougeot (2000) who made a list with proposals how urban agriculture could be promoted officially. Below the list is presented and discussed within the context of Warsaw, Poland:

- National and local political leaders appeals for self-reliance
- Provision for urban agriculture in city master plans
- Revised urban regulations

A law dating from several decades ago prohibits the keeping of any animals (including for example pigs but also bees) in the city center. This makes the few apiary initiatives an illegal activity. It has been stated in the interviews that the government is in the process of revising these regulations.



Allotment garden (February)

A member of a local council group stated that the city has very conservative ideas about the maintenance of the green spaces in the city. They maintain a list of the official greenery and they have little tolerance for greenery (plants, trees, flowers, vegetables) planted on the initiatives of others.

- New institutional mechanisms for urban agriculture

Participatory budget: each of the 18 districts in Warsaw makes a small percentage of their budget available for projects proposed by the community. Through voting, projects can be selected. This participatory budget opens the way for funding of urban agriculture activities

Local initiatives grants: the municipality offers grants to support individuals who initiate projects. Although here again, no explicit support for urban agriculture activities, this is a way to fund bottom-up projects.

- Allocation of municipal open space

Historically, the establishment of family allotment gardens (Działki) have shaped the character of the city and how its citizens experienced and valued green, productive space within the center. Their maintenance until today is still a part of the image Polish people are happy to present.

However, the allocation of space outside the official allotment gardens is done much more sporadically, unsystematically. It is often demand-driven and temporary (one can ask if this has anything to do with the strict separation of family allotment gardens for citizens and the remaining space belonging to the city).

- Officially promoted urban agriculture projects

- Direct public engagement in urban agriculture production

- International agency support to public urban agriculture interventions.

As can be noticed, there are several points in which the local government is somehow active, whether positive or negative. But this exercise is especially clarifying in where the local government could be engaged where it is now rather passive.

Opportunities and barriers at the policy level

A large proportion of the barriers identified by the respondents were situated at the level of the local government and its policy making. In table 3 below the opportunities and barriers for the development of agriculture at the level of the local government are described.

Table 3. Opportunities and barriers situated at the level of the local government

Opportunities	Barriers
A large amount of small plots in the suburb area lying fallow	Fallow land in suburb area easily taken by investors for residential purposes
Tradition of small-scale, organic production among Polish farmers	No policy or money to protect agriculture within Warsaw. Beyond the control of the departments
	Traditional thinking concerning the functions and possibilities of green areas
	Support (provision of space, land, information, ...) of local government (but also authorities at higher levels) is often temporary and unstructured. Projects are unsure about continuation of funding, if there is funding at all
	Insufficient transparency according to civil society actors. Lack of information, or information needed is difficult to find

2) Market

Actors

Of the 1 694 agricultural producers in the municipality of Warsaw, no data is obtained on how much of this production is sold and consumed locally. However, several interviewees indicated that many producers come to the local markets in Warsaw. Markets are still a very popular way to purchase food and can be found in abundance (see for example Hala Mirowska and Biobazar below).



Hala Mirowska

Some interviewees stated that new fashionable markets also pop up (see for example Soho food market below). They are rather for the younger generations who are concerned with a certain lifestyle and have specific health objectives. Besides markets, local producers even sell from the car or set up unofficial (and sometimes illegal) stalls in the city (see pictures).



Soho Food market



Organic food market: Biobazar

Warsaw is by no means an exception, but caution should be used when stating that food is local. Often producers come from several hundred kilometers away (f.e. at the organic market Biobazar, a farmer comes to Warsaw twice a week to sell, while he lives 300km away). In other cases, it happens that the food sold under the label 'local' is not more than produce purchased by wholesalers (called 'Bronisze'; see www.fresh-market.pl)



Carrefour most common supermarket

These alternative points of selling are in sharp contrast with the bigger international retailers spread all over the city. Chains like Carrefour (French) and Tesco (British) attract an ever bigger part of the population for food shopping. The impression is that there is a considerable gap between the infrastructure of foreign food chain stores on the one hand and Polish shops, markets and selling points on the other hand. The question can be raised whether the presence of international food retailers explain part of the fractured and unorganized local food sellers. They could potentially hamper the development of a well-organized local food system.



Many alternative points of selling produce in Warsaw

Considered as market actors, the owner of a local food restaurant and two farmers were interviewed. One is a vegetable producer with an area <1 ha, while the other manages an ecological care farm for children. Overall, these entrepreneurs are more occupied with the day-to-day management of their business and do not seem to position themselves as active urban farmers (or in the case of the restaurant: part of the urban agriculture movement).



Ecofarm "four seasons": carefarm for children

None of them receive any subsidies or grants from special programs. Interestingly, they didn't defend the argument that they should be eligible for subsidies. When asked to the local food restaurant whether he would like to be covered for the extra costs incurred by working with only local food he states: *"That would be nice. Local products are rather handmade and thus more expensive. But this is the free market, so that is the way it works"*. In his vision he has a preference for local products he should not ask the government to support his decision.

Opportunities and barriers at the market level

The opportunities and barriers identified at the level of the market are described in the table below. In short, the greatest opportunity would be that there is a great interest in locally produced food, in contact with the producer and in markets. However, this is linked to the greatest barrier in that this local food system is unorganized. It is a fractured movement and the fact that co-operations and organizations are still not a popular working method, change is not in short-term sight.

Table 4, Opportunities and barriers identified at the level of the market

Opportunities	Barriers
Many markets, many local producers or organic producers sell their produce on markets in Warsaw	Farmers co-operations not popular, partly due to the Communist history of Poland
Growing interest of the population in food, tradition and agriculture	Few subsidies or other governmental support
Sense of entrepreneurship, low dependence on government for support	Invisibility of locally produced food
Taxes are rather low (according to the farmers)	Meaning of local = Polish
	Owners of land are not favorable to the idea of agriculture on their property

3) Civil Society

Actors

The initiatives taken at the bottom-up level vary from local food promotion, promotion of greenery in the city, art projects, food education and design of innovations. In the public policy section it became clear that local government isn't explicitly promoting urban agriculture. I was told very often during my research mission that regarding urban agriculture, there was nothing to be found in Warsaw. However, at the level of the civil society, I found that interesting things are going on. This proves their invisibility and the insecurity about the significance of their own initiatives. Table 2 below lists the most important current and past initiatives that could be related to urban agriculture, according to the COST Action UAE definition.

Table 5. Overview of initiatives related to urban agriculture in the Warsaw region

Name	Core description	Start-end period
1. Sie je w mieste	A collective supporting urban food gardening	Unclear
2. Kwiatkibratki	Collaborate with other initiatives to design and plant greenery throughout the city	2010-present
3. Pixxe	Food growing on a plot of land owned by the city, rather for private use or awareness-raising	On-going
4. Parque-no	Artistic collective of three people: garden, music and art	On-going
5. 'We're like gardens'	Artistic project at center of contemporary art with Juliette Delventhal and Pawel Kruk	2012 (ended)
6. Zielony Jasnow	Green outdoor design project at center of contemporary art, promoting topic of ecology and healthy lifestyle	2013 (ended)
7. Palacyk Konopackiego	A group of people started the so-called first community garden in Warsaw. However, their main goal was to create attention to the building and find strategies to renovate the building.	2013 (ended)
8. Slow food youth	An NGO promoting and teaching young adults about local, high quality food and how to cook it. They cooperate with local farmers	2010-present
9. Guerilla gardening	Some people are involved in planting fruits, vegetables and flowers in public spaces	On-going
10. Design	Build a greenhouse, recuperating the heat coming from a crematorium	2014 (planned for +/- 8 years)
11. Architectural urban agriculture	Group of architects who participate in design competitions and exercises to improve the sustainability of Warsaw and its buildings in particular	On-going
12. Trawnik To Nie Wszystko'	Collective of urban farmers	Ended activities
13. Community supported agriculture	A group of 25 families in Warsaw collaborate with part-time farmers. Farm located +/- 100 km outside Warsaw	2012-present
14. Educational gardens	Efforts to promote vegetable gardens in schools both by Jodie Balthazar (negative experience) and plans by Kwiatkibratki and Slow Food Youth	Experiments + plans in progress



Art project at center of contemporary art © Janek Dowgiallo



Educational vegetable growing project © Janek Dowgiallo



Guerilla gardening © Janek Dowgiallo

In terms of size of the city this is not a large group of activists. The majority of the respondents felt they formed a network in the sense of collaborating and exchanging information. One activist explained: "When I go to a related event, I look

⁵at the faces and I have the impression that I know them. Of course I don't know them, but these are faces that I have seen somewhere"

Unfortunately, the majority of these projects had the character of an experiment and only existed for a short time. Some projects are unsure about their future or others have ceased their activities for a different reasons amongst which, lack of money/funding, lack of engagement, lack of (long-term) access to land, lack of support from the community. Taken together, the temporary nature of initiatives and support for these initiatives is said to be one of the main barriers to move from experiments and awareness-raising to something that could be called real urban agriculture.



Allotment garden on governmental land, without official permission



Jadalia Warszawa 5



Posters for food related events in Warsaw



Posters for food related events in Warsaw



Posters for food related events in Warsaw

⁵ JADALNIA WARSZAWA (Warsaw Canteen) is an experimental map-making project to explore and mark sites for wild food, fruits, bioindicators, and the traces of land use by humans and animals as a means to understand and assess the health of our city. www.pixxe.org

⁶ Posters- if the picture not taken by me - retrieved from the following websites: <http://pixxe.org/>; <https://www.facebook.com/siejewmiescie/>;

Opportunities and barriers at the civil society level

In the table below, the opportunities and barriers identified at the level of the society are presented. Opportunities are that in a multitude of places in the city, ideas are generated with a specific intent, meaning that actors try to realize a certain vision. These actors are essential for awareness raising, pushing through change and communicating with governance actors at higher levels than the level in which their action is situated. The main barrier herein is not unique to Warsaw, which is that it is hard to speak to a broader public and bring these initiatives to a higher level of meaning.

Table 6. Opportunities and barriers identified at the level of the market

Opportunities	Barriers
Core group of activists, form a network	Only alternative people are very active
Participatory Budget and grants through Local Initiatives Program	To go from experiments and pioneering activities to long-term projects seems impossible
A lot of space, possible areas to practice urban agriculture activities	Mentality of the Polish is not positive towards agriculture. Agriculture is thought of as something for the countryside. The city is too polluted to grow food
Experimenting is welcomed in Warsaw	Danger of fatigue with experiments. Pressing need for "something bigger".
Growing interest in topic of food, health and sustainability	Farming is not popular among population, especially after 1989

Discussion

The results of this analysis have shown that in all three major domains, actors and efforts are situated that serve to promote urban agriculture activities. If we would place these activities in the typology developed by WG 1 (Retrieved from Wiki - types of urban agriculture), we can come to the conclusion that there is a wide variety in types of food growing. Within these, consumers and producers are linked to food in many different ways. The continuum of the types found (at some point in time) in Warsaw would look like the figure presented below:

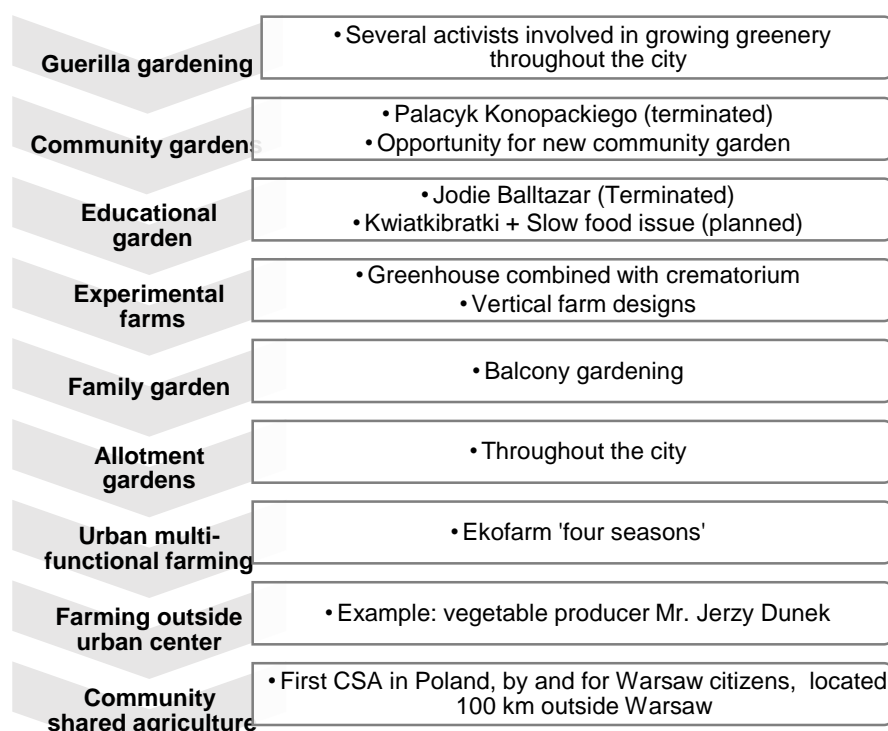


Figure 7. Types of urban agriculture found in Warsaw

However, this should not lead us to conclude that urban agriculture is thriving in Warsaw. We have to take into account the small-scale and temporary nature of many of these initiatives. In addition, all of the efforts concerning **active** promotion should be located in the civil society as efforts coming from bottom-up. They most often have the purpose of experimenting, awareness raising or providing education.

This early development stage in which urban agriculture is finding itself in Warsaw is not unique. A long list of other European cities would easily recognize the situation described in this report. However, this does not mean that the analysis should stop here. In order to go one step further, it is important to gain an understanding of the underlying dynamic influencing the development process of urban agriculture. This dynamic is dependent on the specific context of Warsaw and may be explained by a combination of the following points.

First, cultural values and ideas towards agriculture and health. Warsaw is (in European terms) a very recent city. Due to its destruction during WW2, it had to be almost completely rebuilt. Most of the Polish living in Warsaw migrated from rural areas. As a consequence, this recent move entails that the rural (and consequently agricultural) past is still lingering fresh in the collective memory. Moreover, the rural past is associated with a difficult life. The city on the other hand, promises for a higher standard of living. In this logic of thinking, agriculture in the urban areas seems counter-intuitive. Moreover, respondents stated that one is associated with poverty when producing food for subsistence in Warsaw. In addition, according to many respondents, Polish appear to be very concerned with health issues. They do

not believe that food produced in the cities is healthy. The quality of the soil and air are believed to be of low quality.

Second, the use of and attitude towards space. Polish people are still very hesitant towards the use of land which belongs to the public or in other words the community. The awareness that public land should serve the public is weak. According to many, the origin of this idea can be situated in the communist time. However, it appears to be changing slowly. As some respondent state: *"I think that the mentality is changing. During communist times, people were not used of taking common spaces. Nobody took care of it. Now people start to do these things. If they have some plants they think that they can make a nicer neighborhood"* and another respondent adds: *"We try to show people that public space is public and that they can use it and not just work, go home and go to the shopping mall or the movie theater. The space connecting all these places is common...I think that people can use public space more. And it is changing a lot. I have been living here for 9 years and it really has changed."*

Third, ideas and inspiration tend to come from abroad, from people who migrated to Warsaw or from people who have experience living abroad: *"So, I studied in the States and after a year I came back and decided to also do the parking day"*. Often Berlin was mentioned as an example of how they would like to see it. Many respondents said that the internet and books were a very important source of information. This implies that the bottom-up activities in Warsaw are rather pulled in (than pushed through), through inspiration and influence from abroad. This finding is interesting, because it shows that drivers for urban agriculture are not always situated within the same location. Cities seem to interact. The ones with a more advanced urban agriculture landscape seem to appear to exert a great influence on the idea and activity formation in early stage cities. The fact that Berlin is the most often mentioned reference, probably has to do with its geographical location.

Fourth, an important missing link is a connection between visions and goals from bottom-up and top-down. The government is rather focused on other development issues Warsaw is currently struggling with. They see urban agriculture from the perspective of professional agriculture in the peri-urban areas and are very much focused on the issues of the land. Contrary to this view, stakeholders acting from within society see the urban agriculture movement coming from within civil society, meaning that ownership is an important element in this movement. For these actors, multi-functionality should be strived for, meaning that food production in the city serves educational, social, economical, environmental and other functions. *"What we want to achieve...well, to make people more open-minded and caring for their environment, to keep their green areas tidy... Also another important problem is children. I talk with a lot of young parents living in Warsaw. They found out that in a lot of cases their children 3-4 years, didn't know that milk is from a cow and not from a carton."* It is this missing link between important actors which causes that these bottom-up activities in fact don't go 'up'. There is a danger of fatigue with experiments, as expressed by some activists. At the moment, there is no overarching institution, organization or coordinator which fulfills this function. The Center of Contemporary Art has hosted several projects, but did not succeed in formally taking up this coordinating, maybe linking role. This has already been recognized by a respondent who is both a researcher at the university and an activist: *"So it is always the center of contemporary art. And this case it is kind of playing the role that the city could or should have if it were interested in creating this organism that connects all those people and all those interests and initiatives... I think the city doesn't see these initiatives as the start of something bigger. I think they see it as those kids, doing their little thing here and there. We, on the other hand have these big ideas on urban planning. Maybe they think about urban agriculture in the sense of: we have to have those farms on the outskirts of the city. But they don't connect those two things I guess"*. This missing link is visualized in figure 8 below. Again, it shows that civil society actors emphasize the 'urban' in urban agriculture and that the government emphasizes 'agriculture' in urban agriculture. Both parties should find a common ground wherein each other's potentials and efforts are recognized and the different goals and visions are linked.

Top-down needs the partnership of bottom-up and vice versa. For example, if the government wants to protect the agricultural areas in and around Warsaw, agriculture as a topic has to be promoted among the citizens. But, if the bottom-up actors want to realize something more significant, they will need assistance and recognition of larger institutions and government levels.

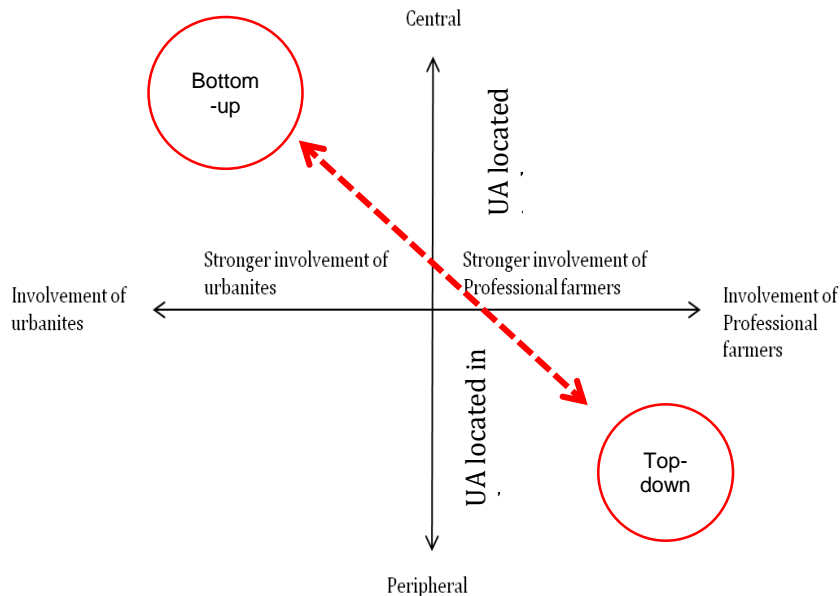


Figure 8. Schematic presentation of location of stakeholders

And lastly, an important factor to consider: time. All of the points mentioned above should be looked at from a time-perspective in order to do more justice to the case of Warsaw. The issue that appeared in almost every interview is the fact that Poland is still developing its economy at a very fast pace. It is '*catching up with the Western countries*', to use the words of one of the respondents. From this perspective then, and according to the majority of the respondents, the presence of urban agriculture is just a matter of time. Maybe in a few years, it will be ready to catch-up again with other Western European cities?

Conclusion

Taken together, the development of urban agriculture in Warsaw currently seems to have little room for maneuver for several reasons already discussed above. First, there is a core group of activists at risk of fatigue with experimenting and raising awareness. They would be happy to see an organization or institution taking a coordinating and stimulating role for larger and long-lasting projects, including a broader part of the population. Second, there is the current spatial situation which threatens agricultural land in and around Warsaw. Even though pioneers and activists are currently only active in the core center of Warsaw, this might pose problems in later stages of urban and peri-urban agriculture development, when stakeholders and land are to be linked. At that moment, Warsaw might realize its agricultural land has disappeared. In order to stimulate the debate about the future urban agriculture in Warsaw, some questions are formulated below:

- How can, in this fast developing city, bottom-up and top-down objectives be connected?
- How can the development of urban agriculture be incorporated in the economic development process the city is currently very concentrated on?
- How can urban agriculture become a movement for a broader public among Polish society?
- How can investment money or funding be introduced into the movement?

One exceptional opportunity in Warsaw which could offer a way out, is the presence of many allotment gardens. At this moment, activists and pioneers are not active in allotment gardens, while governmental initiatives foresee parks or other public destinations for these areas. Considering urban agriculture, it is in these allotment gardens where the space and the knowledge are currently situated. These are thus areas where bottom-up and top-down objectives could meet (see figure 9). The last question to address is thus as follows:

- How can allotment gardens be employed to serve urban agriculture purposes in the future?

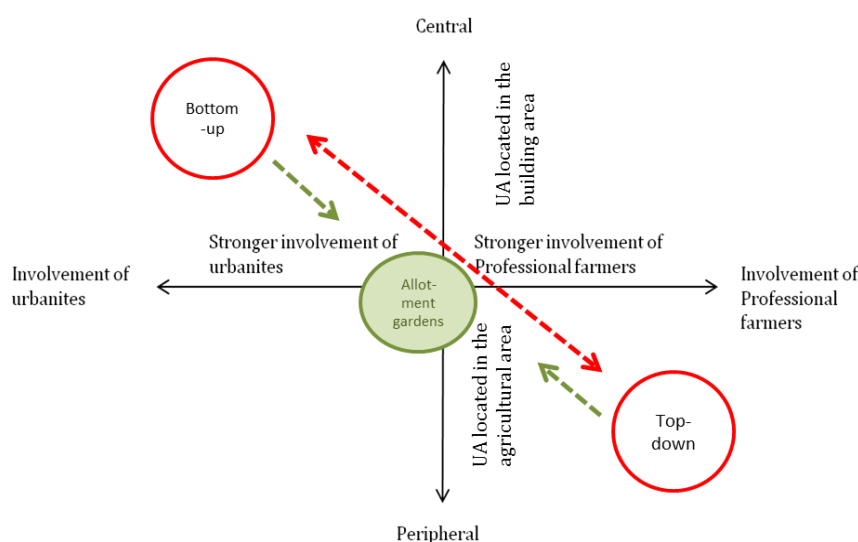


Figure 9. Schematic presentation of location of stakeholders + allotment gardens

By raising these last issues, I hope to have provided some food for thought. To conclude with one last observation, during the search for respondents and the interviews, it was noted that many respondents were not familiar with the concept of urban agriculture, let alone identify themselves with the concept. Often respondents wanted to refuse the request for an interview as they didn't see themselves the appropriate candidate. This at the risk of missing important data. It merits thus to adopt the point of view (manner of framing) of the respondents and

avoid the topic of urban agriculture at least until the end of the interview. After all, it is up to the researcher to categorize and name.

Final remarks

The duration of the STSM was rather short (22 days, including travel days), while the ambitions formulated in the research questions required profound and hard work. Both parties (the organizing institute of the STSM and Prof. dr. Barbara Szulczewska in particular, and I) have come to the conclusion that the mission has been accomplished successfully. It proved to be a serious task to identify stakeholders involved in urban agriculture initiatives, especially given the time constraint. Thanks to the combined efforts of the research team and the willingness of the respondents, the data covers a wide variety of stakeholders and proves sufficient to formulate a series of key conclusions and questions regarding the current (and future) situation of urban agriculture in Warsaw.

Another constraint from my part, is that I am not a member of the COST Action TD1106. Therefore the specific goals and content of the different workgroups of the action and to what extent an STSM is supposed to incorporate the different topics, was not always clear to me. However, with my experience in the topic of urban agriculture, I hope to have presented all members of the COST Action an interesting case study. No future collaboration has been planned yet within the COST Action. However, I'm open to suggestions or future opportunities.

Future collaboration in the form of publishing the data in scientific journals have been discussed with the University of Life Sciences of Warsaw (SWWG) and with Prof. dr. Barbara Szulczewska. I also plan to incorporate the data into my own doctoral research. I am doing a comparative analysis of urban agriculture in different cities. The case of Warsaw will most likely become one of the cases I will use throughout my PhD.

References

Literature:

Ejderyan, O., & Salomon Calvin (2012). Urban agriculture in Geneva. Unpublished working report retrieved at <http://www.urbanagricultureeurope.la.rwth-aachen.de/mediawiki>

Malasek, J. (2012). Greening Warsaw's transport system by sustainable urban planning. In M. Pacetti, G. Passerini, C. A. Brebbia, G. Latini (Eds.). *Sustainable city VII: Urban regeneration and sustainability* (pp. 267-278). Southampton, UK: WIT Press.

Mougeot, L. J. A. (2000). Urban agriculture: Definition, presence, potentials and risks. In N. Bakker, M. Dubbeling, S. Guendel, U. Sabel Koschella, & H. De Zeeuw (Eds.), *Growing cities, growing food: Urban agriculture on the policy agenda* (pp.1-42). Feldafing: German Foundation for International Development.

Suchoka, M. (2011). *The role and importance of allotment gardens with examples of Polish research*. COST Action TUD Report 'understanding participation' Training School Malmö, 2012.

Reports:

Central Statistical Office (2013). *Demographic yearbook of Poland*. Retrieved from http://www.stat.gov.pl/cps/rde/xbcr/gus/rs_rocznik_demograficzny_2013.pdf

European Commission (n.d.). *Agricultural Situation and Perspectives in the Central and Eastern European Countries*. Retrieved 2014, March 20, from http://ec.europa.eu/agriculture/publi/peco/poland/summary/sum_en.htm

Grochowski, M. & Pieniazek, M. (2008). *Analysis of regional spatial planning and decision making strategies and their impact on land use in the urban fringe: Warsaw case study*. Retrieved from <http://www.plurel.net/images/d334.pdf>

Ministry of Agriculture and Rural Development (2012). *Agriculture and Rural Economy in Poland, Warsaw*. Retrieved from <http://www.minrol.gov.pl/eng/content/view/full/18560>

Ministry of Foreign Affairs - Republic of Poland (2013). *Social and economic impact of Poland's membership of the European Union (1 May 2004 - 1 May 2013). Key conclusions on the 9th anniversary of Poland's EU membership*. Retrieved from <http://www.msz.gov.pl/resource/1f6677e7-cc34-45ab-9587-446ca4f33428:JCR>

Office of Agriculture and Spatial Planning (2007). *The spatial policy of Warsaw*. Warsaw, Poland: the Office of Architecture and Spatial Planning of the Capital City of Warsaw City Hall. Retrieved from http://www.architektura.um.warszawa.pl/sites/default/files/files/PP_studium_ang_1ekki.pdf

Statistical Office Warsaw (2010). *Agriculture in urban areas in Mazowieckie voivodship*. Report on the results of the agricultural census 2010. Warsaw, Poland: Statistical Office Warsaw. Retrieved from http://www.stat.gov.pl/warsz/69_1649_ENG_HTML.htm

Sustainable Development Department Europe and Central Asia (2010). *Poland. Public land and property asset management in Warsaw: Strategic opportunities*. Retrieved from: http://www-wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2010/07/27/000333037_20100727001034/Rendered/PDF/558430ESW0PL0P1Box0349464B01PUBLIC1.pdf

Media:

Baltazar, J. (2014, March 6). Polish space. *Proximity magazine*. Retrieved from <http://proximitymagazine.com/2014/03/polish-space/>

Dubrowska, M. (2013, May 25). Nowa moda opanowała miasto: targi z wiejskim jedzeniem. *Warszawa Gazeta*. Retrieved from http://m.warszawa.gazeta.pl/warszawa/1,106541,13969647,Nowa_moda_opanowala_miasto__targi_z_wiejskim_jedzeniem.html

Engler, M. (2012, November 3). Hyatt Regency Warsaw now has its own honey. *Online pr news*. Retrieved from <http://www.onlineprnews.com/news/278699-1351848379-hyatt-regency-warsaw-now-has-its-own-honey-321azienki-gold.html>

Fun and fine food (2013, August 1). *The Warsaw Voice Online*. Retrieved from <http://www.warsawvoice.pl/WVpage/pages/articlePrint.php/26444/article>

Opportunities for organic agriculture (2012, December 21). *The Warsaw Voice Online*. Retrieved from <http://archive.is/Ds2nU>

Pole uprawne od 300 lat trwa w centrum Warszawy (2012, November 17). *Warszawa Gazeta*. Retrieved from http://m.warszawa.gazeta.pl/warszawa/1,106541,12869745,Pole_uprawne_od_300_lat_trwa_w_centrum_Warszawy.html

Golden Era for Polish Exports? (2014, January 30). *The Warsaw Voice Online*. Retrieved from <http://www.warsawvoice.pl/WVpage/pages/article.php/27025/article>

Wybieralske, M. (2013, May 31). Kurniki, grządki i ule na dachach wieżowców. Rolnictwo w miastach - od Nowego Jorku do Warszawy. *Warszawa Gazeta*. Retrieved from <http://wyborcza.pl/>

Web pages:

Center of contemporary art - We're like gardens:
<http://csw.art.pl/index.php?action=wydarzenie&id=592&lang=eng>

Kolektyw Precel: <http://ulicaekologiczna.pl/miniaturki/kolektyw-precel/>

PFPZ (Polish Federation of Food Industry):
<http://www.pfpz.pl/index/?id=b922ede9c9eb9eabec1c1fecbdec45d>

Sie-je w miescie: <http://siejewmiescie.pl/o-nas/>

Warsaw Foodie: <http://warsawfoodie.pl/en/category/new/latest-opening/>

We're like gardens - Juliette Delventhal & Pawel Kruk: <http://vimeo.com/47302026>

Annex

A. Questionnaire for urban agriculture advocates/pioneers

Context and background

1. How would you describe the work you do? What is your role?
-Why or why not call it urban agriculture?
2. What is the vision of the organization/project?
3. Why did you want to start this/spend time on this?
4. Why do you think it is important? Necessary?
5. How did you become inspired to work in the project?
6. Which sources of information did you use? Who did you learn from?
-Friends
-Family
-Colleagues
-School/university/educational setting
-Books/magazines
-Internet
-Examples in cities (which city?)

Meaning (details of values, beliefs, habits, ...)

1. Significance: What would you like to achieve with your work/project?
2. Does your work fit in a larger movement? (Explain: does this relate to a movement that is happening at a larger scale, societal change?)
3. More specifically: Do you see your work/project as part of an environmental movement?

Network

1. Do you work alone or with other people?
2. Who are your partners? Point of contacts?
- Would you call it cooperation, coordination or collaboration?
3. Are there many people involved in what you do, or some other activities in Warsaw? Do you know many people? Who are they? What do they do? (age, profession, economic situation, gender)
4. Is there a lot of cooperation? (Is there at all?)
5. Which organizations/other people do you work with? What is their role?

Policy

1. What do you know about the policy regarding your projects?
2. Do you experience the existing policy framework as hindering or stimulating?
- Did it help? Or not? Which aspects? And how?
3. How did the local government receive your initiative?
-Support? Attention? Funding? Recognition?
4. Do you think that future policy from the city Warsaw should play a significant role for the development, scale and magnitude what you do? And why is that so?

Opportunities

1. What are the opportunities you think there are for the development of your ambitions/project in Warsaw? Can you tell me at which level they are situated please?
- *On geographical level*
City Warsaw
Region of Warsaw
Province
National
European level
Global level
- *On bureaucratic level*
Rules, laws, permissions

- Certification
 - *On market level*
 - Sale
 - Customers
 - Infrastructure
 - Competition
 - *On operational level*
 - Production problems (weather, diseases, plagues)
 - Management
 - Staff
 - Financing
2. Which aspects around urban agriculture that are happening motivate you (worldwide)?

Constraints

1. What are the constraints you think there are for the development of your work/ambitions in Warsaw? Can you tell me at which level they are situated please?
 - *On geographical level*
 - Region of Warsaw
 - Province
 - National
 - European level
 - Global level
 - *On bureaucratic level*
 - Rules, laws, permissions
 - Certification
 - *On market level*
 - Sale
 - Customers
 - Infrastructure
 - Competition
 - *On operational level*
 - Production problems (weather, diseases, plagues)
 - Management
 - Staff
 - Financing
1. Of all the constraints mentioned, which will have to be tackled
2. Which aspects around your work discourage you?
3. What were the doubts for you before your engagement?

Meaning of urban agriculture

1. In the literature and scientists often refer to this as it being urban agriculture. Question: do you relate your work with urban agriculture?
 2. Can you please give your own definition of urban agriculture?
 3. What did you think of urban agriculture when you first heard about it?
 4. Has the policy of the city government been stimulating for *urban agriculture*
- Additional questions:
5. How do you think people of Warsaw think about urban agriculture?
 6. Is there a difference between an urban farmer and a rural farmer to you?

Future

1. How will urban agriculture evolve in the future, according to you?

B. Questionnaire for public officers

Tasks department

1. Can you briefly describe the tasks of your department concerning agriculture?
2. Which tools do you have to support agriculture?

3. What is the position of the department with regards to promoting agricultural activities in Warsaw?
4. What are the main purposes of the planning department with regard to agriculture?

Current issues

1. Problems: Land? Population pressure? Resources? Globalization? Mobility?
2. Which other departments are needed for the development of agriculture?
3. How are farmers integrated into the planning process? Is there room for improvement?
4. Do you work together with f.e. department of environmental protection?
5. Is there conflict between planning/environmental/agricultural policy?
6. Is there conflict between agriculture and green areas?

Urban agriculture

1. Can you give your own definition of urban agriculture?
2. For who is urban agriculture/ who are the consumers and producers?
3. Do you have specific tools to support it?
4. Which levels should have responsibility? Local/regional/State/EU?
5. Can CAP support this?
6. Does your department have projects to integrate agriculture with the city?

Opportunities and constraints

1. Similar to questions on opportunities and constraints in annex A

Author



PROVÉ, Charlotte

-Institute for Agriculture and Fisheries Research (ILVO) - Social Sciences Unit
-Ghent University (Belgium) - Department of Bioscience engineering

-MSc in sociology (Ghent University)
-MSc in nutrition and rural development (Ghent University)
-PhD Candidate in "Governance of urban agriculture"

General research interest:

- Urban & peri-urban agriculture, governance dynamics, societal change, sustainability, equity

COST UAE research interest:

-Values and interests of different UA stakeholders
-European perspective - comparison between different member states
-Definition of urban agriculture



COST- the acronym for European **CO**operation in the field of **S**cientific and **T**echnical Research- is the oldest and widest European intergovernmental network for cooperation in research. Established by the Ministerial

Conference in November 1971, COST is presently used by the scientific communities of 35 European countries to cooperate in common research projects supported by national funds.

The funds provided by COST - less than 1% of the total value of the projects - support the COST cooperation

networks (COST Actions) through which, with EUR 30 million per year, more than 30.000 European scientists are involved in research having a total value which exceeds EUR 2 billion per year. This is the financial worth of the European added value which COST achieves.

A "bottom up approach" (the initiative of launching a COST Action comes from the European scientists themselves), "à la carte participation" (only countries interested in the Action participate), "equality of access" (participation is open also to the scientific communities of countries not belonging to the European

Union) and "flexible structure" (easy implementation and light management of the research initiatives) are the main characteristics of COST.

As precursor of advanced multidisciplinary research COST has a very important role for the realisation of the European Research Area (ERA) anticipating and complementing the activities of the Framework Programmes, constituting a "bridge" towards the scientific communities of emerging countries, increasing the

mobility of researchers across Europe and fostering the establishment of "Networks of Excellence" in many

key scientific domains such as: Biomedicine and Molecular Biosciences; Food and Agriculture; Forests, their

Products and Services; Materials, Physical and Nanosciences; Chemistry and Molecular Sciences and Technologies; Earth System Science and Environmental Management; Information and Communication Technologies; Transport and Urban Development; Individuals, Societies, Cultures and Health. It covers basic and more applied research and also addresses issues of pre-normative nature or of societal importance.csd

