COST Action TU1201

Urban Allotment Gardens in European Cities
Future, Challenges and Lessons Learned

Lisbon Joint MC and WG Meeting
March 20th - 22nd 2014

Event Report

Laboratório Nacional de Engenharia Civil - LNEC
(National Laboratory for Civil Engineering)
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Abbreviations:
AG     Allotment Garden
CG     Core Group
COST   European Cooperation in Science and Technology
MC     Management Committee
WG     Working Group
Program of Event

Thursday March 20th

Opening Session

Welcome Addresses
- Dr. Carlos Pina, President of Laboratório Nacional de Engenharia Civil, Lisbon
- Mr José Sá Fernandes, Lisbon City Council Member
- Ms Runrid Fox-Kämper, Chair of COST Action TU 1201 - Towards a New Understanding of Allotment Gardens
- Keynote: Mr Duarte d’Araújo Jorge Cardoso da Mata, Landscape architect, Lisbon City Council Member - The Lisbon’s Green Plan Implementation. A Strong Tool Towards a New Urban Landscape

National Presentations
- Ms Avigail Heller, Israel Ministry of Agriculture and Rural Development and Dr Efrat Eizenberg of The Technion, Faculty of Architecture and Town Planning, Haifa - Community and Allotment Gardening in Israel: variations and challenges,
- Dr. Annette Voigt, University of Salzburg, Research Group Urban and Landscape Ecology - Cultivation, Leisure Time and the Housing Market - An Overview of Urban Allotment Gardens in Austria
- Dr Laura Calvet-Mir, Universitat de Barcelona - Urban Gardens in Spain: Insights from Barcelona, Madrid and Sevilla

Working Group Presentations
- WG1 - Dr. Byron Ioannou, Frederick University of Nicosia, Faculty of Architecture - Urban Community Gardens in Cyprus - Background and Recent Trends
- WG2 - Dr. Susan Noori, Birmingham City University, School of Architecture - Edible Eastside and the Social Process of Place-Making

Friday March 21st

Working Group Presentations
- WG3 - Dr. Teresa E. Leitão, Laboratório Nacional de Engenharia Civil, Lisbon - Environment aspects of soil and water in allotment gardens
- WG4 - Ms Ina Suklje Erjavec, Urban Planning Institute of the Republic of Slovenia, Ljubljana - The Planning and Designing of Allotment Gardens in Slovenia

Working Group 1 to 4 Parallel Meeting

World Cafe and MC Meeting

Saturday March 22nd

Field Trip
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Introduction

Since the start of the Action in 2013 the network of scientists and stakeholders has constantly grown to more than 130 participants from about 80 institutions and from 31 European and international countries. This is a very promising achievement and quite a good result and in Lisbon we continued to collaborate and brainstorm about the topic of urban allotment gardens in European cities in order to fulfill our promised milestones and goals.

New countries that signed our Action’s MoU since our last meeting in Poznan are the Netherlands and Malta. We are very pleased to have you all on board and I am sure we will be able to make the best use of our collaboration and valuable scientific network.

The Lisbon event gave us a great opportunity to meet not only our enthusiastic members but also representatives from the Lisbon city council that welcomed us in our opening session such as José Sa Fernandes, famous member of the Lisbon City Council and Carlos Pina, President of the Laboratório Nacional de Engenharia Civil which hosted the event. Here I would like to thank them once again for their kind attention and reception of our research network. The LNEC team has done a fantastic organization work that need to be thanked and cherished once more for their laborious efforts that should not be underestimated.

We all were very much impressed by the gorgeous presentation of Duarta d’Araújo Jorge Cardoso da Mata, who in his function as member of the Lisbon City Council gave insights in the Lisbon’s Green Plan implementation.

I also would like to thank the WG Chairs and Vice Chair who have done a great job arranging and organizing their meeting by writing WG agendas, preparing WG meeting materials, and promoting the work of their WG member.

The Lisbon event was more than the meetings before dominated by presentations from our members who gave us one the one hand fantastic insights in the situation of their country with national reports from Austria, Israel and Spain. On the other hand we had thematic presentations with relation to the topics of the four working groups, through which issues such as governance regime, placemaking, environmental aspects and the planning and designing of allotments gardens were addressed.

As in recent meetings our working group phases were very intensive, and we always feel that the space given is too short, as our discussions are fruitful and constructive. In all working group the writing process for our book publication went on with developing a sub-structure and naming the teams of authors and
contributors for all chapters.

The writing process has started in Lisbon and shall hopefully lead to a delivery of the book by the end of the Action. To better exchange between working group we used a format according the World Café idea after the working group phase. To my opinion this new format was successful as we could not only hear report of results of WG meetings to the plenary, but could exchange about them more actively.

I would like to have a short look at our future events. Besides this meeting next combined MC, WG and Plenary session will take place in September in Riga. You all were informed about our Summer School in July in Salzburg, where our colleagues from Salzburg University developed a very interesting program. And we are going to have a Joint Training School together with COST Action UAE in October in Ljubljana. Beside this about nine STSM will be approved and I am sure that they will contribute a lot to our scientific program. I am sure that this ambitious program will allow a lot of co-working and exchange.

The report of this meeting differs significantly from recent reports. For Lisbon the lecturers provided papers of their presentations which enhanced the scientific value of the report substantially although papers that are presented in this report are not peer reviewed and authors are fully responsible of the contents of the papers. My sincere thanks are given to all authors in this publication.

I am looking forward to meet you all in Riga for our next meeting in September 2014.

Runrid Fox-Kämper, Chair of the COST Action TU1201
Opening Session

Welcome addresses were made by:

Dr Carlos Pina, President of Laboratório Nacional de Engenharia Civil, Lisbon

Mr José Sá Fernandes, Lisbon City Council Member

Ms Runrid Fox Kämper Chair of the COST Action TU1201 from ILS - Research Institute for Regional and Urban Development, Aachen/Germany

Introduction Speech by Ms Runrid Fox-Kämper, Chair of the COST Action TU1201

Urban Allotment Gardens Towards a New Understanding of Allotment Gardening

The Chair of the Action, Runrid Fox-Kämper, welcomed all participants for the three days meeting in Lisbon. She thanked Carlos Pina, president of the National Laboratory for Civil Engineering and Jose Sa Fernandes from Lisbon City Council for their warm welcoming words. She acknowledged the National Laboratory being host for the especially thanked Teresa Leitao and her team for preparing this meeting. She welcomed participants of countries that were approved since last meeting from Malta and The Netherlands.

She then gave a short overview on the meeting’s program with a keynote by Duarte da Mata who will show insights into Lisbon’s green plan, three national presentations from Israel, from Austria and from Spain and four presentation related to the topics of the four Working Groups and two half days for Working Groups to co-work intensely together. One highlight will be the field trip on Saturday supported by Lisbon council.

Runrid Fox-Kämper then recalled the status of the Action. In 2011, when the first application was written, eight 8 countries belonged to the team who developed the proposal. Now, in 2014 there are 30 European countries that joined the Action, and with New Zealand also a cooperating country from outside Europe joined. Since the start many activities happened. The first event one year ago in Dortmund was followed by the second one in Poznan last September. Although being quite a young Action it managed to approve 7 Short Term Scientific Missions with very interesting subjects of research and a good quality of reports.

The program for 2014 is even more ambitious: Besides this meeting next combined MC, WG and Plenary session will take place in September in Riga. The first Summer School will take place in July in Salzburg, where colleagues from Salzburg University developed a very interesting program. Then in October a Joint Training School together with COST Action Urban Agriculture in Europe is planned. And last but not least the first call for STSM ended with a sufficient number of applications.
Runrid Fox-Kämper reminded that our objectives are more than to build up a network of interested scientists and to exchange about different practices of urban gardening. The Actions wants to expand knowledge in these four scientific areas of Urban Development, Sociology, Ecology and Urban Design. To achieve this a scientific program for four working groups and milestones were developed. The Action at this stage is in line with the timetable. At present material, data and else are collected for an overview, a state of art report, and consecutively for an analysis of this material within the provided cases studies.

Regarding the title of her speech Runrid Fox-Kämper asked whether the Actions will lead to towards a new understanding of allotment gardening. She referred to the Office International du Coin de Terre et des Jardins Familiaux which is part of the Action and presents allotment garden associations in 14 European countries with 3 Mio. members. The organization provides a lot of comparative information from these countries and that is a value for itself. She pointed out that the cooperation of the International Office here in the Action is more than welcome and that benefits from a stakeholder organization will be high. But the Action is supported by 31 countries, and there are countries co-working that don’t have allotment gardens in the classical form, but have urban gardening in different ways. First insights show that over Europe on the whole the phenomenon of urban gardening has more facets than one might expect. With some examples Runrid Fox-Kämper demonstrate that the Action’s comparative work is still in progress, but that by end of it hopefully will contribute to a new understanding of urban gardening. The relevance of Urban Gardening in European countries differs a lot and one question is how this can be measured. Available data provided by the Office International about the number of Allotment plots shows that number of classical plots per 1,000 inhabitants differs significantly. Even within one country these figures differ a lot. For instance in Germany due to the wall the situation in West and East Germany is quite different with West Germany having the same number of plots as Austria or Switzerland have and East Germany with 40 plots per 1000 inhabitants due to a complete different development for 40 years.

The wording to describe urban gardening in the case studies also shows the variety.

A last example Runrid Fox-Kämper demonstrated different forms of the governance regime. In WG 1 information is collected on that topic. It is a complicated topic because it has first to be agreed on what kind of law is meant: Public law that protects allotment sites or private law with regulations for the gardeners, law on the scale of the nation, federal or local regulations.

These examples show on the one hand that there are a lot of subjects that can be addressed in the Working Groups and on the other hand that the COST Action will certainly contribute to a new understanding of urban gardening in Europe. Runrid Fox-Kämper finalized with best wishes for a productive exchange.
Keynote Speech

Mr Duarte d’Araújo Jorge Cardoso da Mata, Landscape Architect, Lisbon City Council Member

Lisbon’s Green Plan Actions: Towards a Green City

Over the last decades, Lisbon inhabitants have been continuously moving away from the inner city towards the outskirts as a result of real estate issues, expensive (soil) prices, poor environmental conditions; reduced availability of good public spaces and decline in associated quality of life.

A change in this negative trend was imperative. Since 2007/2008 that a wide range of measures and improvements have been implemented with careful priority being given to environmental issues. This includes improvements on green structure area rates such as raising its diversity and functionality; developing a new culture for public space attractiveness; changing (the negative) impacts of car use and promoting walking and cycling as a mode of transport.

As part of the green structure measures, the focus goes to the “Green Plan” - a municipal document that brings together and to the same level different requirements, and by doing so, enables the development of transverse/cross sectional proposals. In 2008, and based on this plan, the Lisbon City Council has approved/defined special measures to save its most sensitive ecological areas that were not yet protected by the municipal regulations. These “preventive measures” document was integrated on the Master Plan revision framework, which was being revised at that time. Meanwhile, in 2012 the New Master Plan was completed and it adopted now the ecological structure as a global achievement base. Sustainability measurements were included as specific targets, which includes several specific workfields of the “Green Plan” such as Urban Allotments, Green Structure Areas, Water Cycle improvements, among others.

Green Structure predicts an improvement of 20% of current areas, achieving 23.6% of the total of Lisbon’s area; generally concentrating the new parks and green connections over proposed greenways.

In 2012, the City has implemented a 2.3 km greenway connection between Monsanto Forest Park (900ha) and the Main Central Park. There are other similar projects underway, some of them are being executed or already partially built; the implementation of these projects is crucial for the ecological consistency.

The Master Plan includes several monitoring variables such as urban allotments. The City has developed a specific programme for promoting urban allotments as a new use for green parks and gardens.

Before 2011 all urban allotments were spontaneous on the Landscape with 304,0
hectares in 1987 of productive areas. In 1995 the number drop to 190,0 hectares. Nowadays, the total area of urban horticulture including private and public

areas is 84,0 hectares, but with almost 12,0 hectares of organized municipal parcels being located on 8 Municipal Urban Allotments Parks. The majority of the parcels continues to be related with derelict land. The most updated figures indicates that Lisbon has almost 70,0 hectares of other types of agriculture, such as Olive trees, Cereals and Pastures for cattle.

The fact that great part of these allotment gardens were unplanned or disorganized have created however several changes to the Municipality. This include public health risk associated with use of poor water supplies; social impacts, as some of these places were used for a range of activities, including illicit activities or a more general degradation of the landscape. For the Municipality, planning and converting unorganized allotments gardens on urban allotments parks was not the main goal for itself, however the methodology developed creates the conditions for planning mixed uses in public spaces, with social and economical advantages for all.

Fig 1: Image of the New Master Plan (2012) with main greenways strategy

Fig 2: Image of the first Urban Allotment Park – Quinta da Granja Park (2011)
The Urban Allotments Parks Programme intends to implement more than 20 urban allotment parks until 2017. Some of them seem to be of very large scale, such as Chelas Valley with almost 220 parcels. The idea of mixed use of urban allotment gardens with conventional parks and garden uses is a strategical option of the City.

Some of these uses that have been promoted as part of the establishment of green structure are social and recreational activities. For this purpose, facilities such as kiosks and coffee points have been implemented in Parks and children playgrounds have on the immediate surroundings have been implemented or renovated. They have created together incentives for using the parks at the same time with urban allotments parks with a materialization of a more safety feeling.

At the same time, a first green network infrastructure for bicycles of 40km and 5 cycle bridges was designed and implemented. This has created new routes for cyclists and promoted the use of bicycle as mode of transport, including for commuting journeys. As at the present, cycling rates are very low, it was vital to define a carefull step-by-step implementation. In fact, many users have now cycled through this network and the number of commuters by bicycle has visible increased on a daily basis and it still continues to raise. The green bicycle’s strategy has connected cyclepaths in Parks with some renovated Streets and is attracting different daily commuters, from students to employes and sport
cyclists. Today, with almost 60km of paths, the cycle network continues its consolidation process with local 30km/h zones being also implemented and widening its positive impact on cyclist’s safety. In downtown, an ambitious renovating plan to public space is being accompanied with specific traffic volumes measures, in some streets achieving up to 50% of effective reduction.

A specific programme, acting like layers overlapping the ecological structure for urban biodiversity, was developed in 2010 and launched in 2013. It includes specific actions for water reduction in public spaces such as a recycled water plan, a transverse action on biggest water gardens consumers and the introduction of biodiverse pastures as an specific alternative to lawns.

In conclusion, Lisbon has been making a wide commitment on ecological issues with some results to be visible on the field, but a considerable part of this project needs to be closed until 2017 in order to create an effective urban ecological network.
National Presentations

Three national reports from Austria, Israel and Spain and four Working Group reports from Cyprus, UK, Portugal and Slovenia were presented during the event by MC members:

*Dr Annette Voigt, University of Salzburg, Austria, Working Group urban and Landscape Ecology*

**Cultivation, Leisure Time and the Housing Market - An Overview of Urban Allotment Gardens in Austria**

In this paper, I will give an overview on allotment gardens (AG) in Austria on the basis of the very different situations in Vienna, where now AGs are transformed into residential areas despite their designation as “green area - recreational area” and Salzburg.

**Urban allotment gardens in Austria**

There are approx. 53,000 AGs in Austria. The “Central Association of Allotment Holders and Settlers Austria” (founded in 1916) is the umbrella organization with currently 39,234 plots (~1000 ha) organized in 384 clubs/sites and 5 regional associations (ZKGÖ n.d.).

How to become an allotment gardener? In general, the land owner (e.g. the municipality) leases areas to the Central Association, which then transfers the rights of use of each plot by a sublease agreement to the leaseholder. This is organized by the clubs. The rent depends on the size of the plot, the location in the city, neighbourhood, etc. (e.g. 500,- € – 1,200,- € / year for 250 m²). Lease contracts are often life-long. If the leaseholder resigns, there will be a “transfer fee” (for the cabin, the plants and other values) from the new to the former leaseholder. (MA 69 n.d.)

Besides the AGs that are members in the Central Organization, there are also gardens of the Austrian railway (ÖBB- Landwirtschaft) for railway employees or retirees and their families (900 ha, ca. 13,500 members, see http://www.obbl.at). Sites are usually alongside railways. Some of these lease contracts are limited to some years.

Since 1958 there is an Austrian allotment garden law (with various changes till today, see www.ris.bka.gv.at/), but the states have „regulatory competences“, leading to crucial differences (see below). AGs are usually designated in the regional development plans and the land zoning plans as “green area (general category) - recreational area (subcategory) – allotment garden (sub-subcategory)”. Each AG site/club has its own regulations on the usage of the garden, e.g. the choice of plants, the avoidance of shading of neighbour gardens, fencing, compost, pest control, etc.
Urban Allotment gardens in Vienna – Or: How to keep the city green and to damp down the housing shortage at the same time

In 2008, 68% of all AGs of the Central Association were located in the city of Vienna (Schindelaar 2008: 78). Today there are 26,831 AGs in Vienna, organized in 247 clubs/sites (LVKW n.d), mainly located at the urban fringe. In Vienna with its 1.7 Mio inhabitants on 415 km², the demand for AGs is growing. In the following, I will outline the history of AGs in Vienna that – of course – respectively reflects the social and economic situation of the time.

From health to survival

The first AG (“Erster Wiener Lust- und Nutzgarten”) in Vienna was founded in 1910 (54 plots, 200m² each), influenced by the German Schrebergarten-movement. Its aim was to provide light, air, sun, and garden work for the health of urban dwellers.

At the end of World War I, Vienna, just as other European cities, had a strong demand for AGs due to food and housing shortage. People lived in their garden houses, cultivated food plants and kept small domestic animals for survival. In addition, a law from 1916 promoted to use urban brownfields as temporary “war-vegetable-gardens”. In 1918 an allotment garden bureau of the city administration organised the placing of urban gardens, but the majority of AGs and “garden settlements” were built informally in Vienna’s green-belt. This was called the “settler movement” that can also be seen as a political power in Vienna between the wars, due to their cooperative and mutual self-help organisation (Novy 1983). In 1921 there were about 30,000 plots (900 ha) of AGs (or 60,000 plots, Novy 1983). Also at the end and after World War II the AGs played an important role because of food and housing shortage (Glotter 2007, ZKGÖ n.d.).

...from (informally built) subsistence gardens to (legalized and designated) recreational areas ...

As in other European cities, since 1955 the main function of the AGs changed from subsistence to recreation. 1959 the Vienna allotment garden law was implemented with the aim to long-term protect the AGs as well as to develop new „modest“ AGs (restriction for summer-huts to < 25 m² and for cabins (Lauben) <16m² as lightweight constructions). In the 1960/70ies, insensitive municipal building activity led to the reduction of AGs, to the relocation of AGs to the urban fringe and to the designation of some areas as „temporary AGs“. (Glotter 2007, Wohatschek 2009)

From 1985, an Allotment Garden Plan was developed based on the mapping and assessment of AGs. The results of this mapping showed that 45% of the sites were not in accordance with the planning purposes and the designations of these areas and that 41% were not in accordance with the AG-law (mainly the buildings were too big). The aim of the Allotment Garden Plan was to preserve the “green character“ of the AG sites. In addition, it was claimed that AGs have to be affordable and that socially disadvantaged families have to be prioritized. (Glotter 2007, Schindelaar 2008: 27f.)
As a consequence of this Allotment Garden Plan, the regional development plan and the land utilisation zoning plans were adapted to reality, i.e. most areas with existing AGs were now designated as „green area – recreational areas – allotment garden“ (or “Gartensiedlung” = residential area – small single-unit detached houses with gardens) (Schindelaar 2008: 70). To preserve the green character, limitations for buildings and constructions were defined for the land use designation „recreation area AG“; amongst others the size of plot (> 250 m²), the buildings size < 35 m² built-up area, the building height < 5 m, and the volume < 160 m³. (WKG 2008, § 13)

...from recreation to residential building and private property

In 1992, a modification of Vienna’s AG law allowed all year continuous living in a part of the AGs. Therefore a new land use designation was developed “recreation area allotment garden – year-round living” that allowed up to 50m² built-up area with building heights < 5,5 m, building volume < 265 m³, construction under the terrace < 33 m², basement < 83,3 m² (< 25% of garden area) (Glotter 2007:57 ff., WKG 2008, § 13). In 1995 another important change took place. The AG plots that previously could only be leased now could be purchased from the municipality of Vienna to build a “detached house with a small garden” (with the help of discounts of up to 45% and residential building subsidies). Prices of the sites are varying from 200,- € / m² to 400,- € / m² depending on the location within the city (Schindelaar 2008; MA 69 n.d.). In 2005 a program called the “new settler movement” was initiated by the municipality which also fosters residential constructions, including row housing, on AG sites.

The purpose of these measures from the local administration was to limit the pressure on the housing market, to reduce migration out of the central city to the green suburbs and to meet the demands of the allotment holders (Glotter 2007: 57 ff., Schindelaar 2008: 92).

As a consequence, in 2007 already 2/3 of all AG area in Vienna had the designation „year-round living“, the private property of plots increased from 27% in 1983 to 44% in 2007 (Glotter 2007). In 2010, 89% of the AG plots had the designation “year-round living”. In 2012, nearly 100% of the new AG plots contracts and sales are for “year-round living” (Schikowitz 2007, Schindelaar 2008:128; http://www.wien.gv.at/statistik/verkehr-wohnen/tabellen/kleingarten-zr.html)

So today, in Vienna, AGs are seen as an attractive – affordable, urban, green – alternative for living in the city with an own garden and house. The owners are mainly a „new generation“ of allotment holders; still working, 66% are under 55 years, and 25% have an academic education (Schikowitz 2007).

It is easy to anticipate that the AG sites with the designation “year-round living” will practically change completely into residential areas. Also it is not unlikely that the limitation of 50 m² built-up area will be changed to 60 m² (Schindelaar 2008: 128). From an ecological perspective, these developments lead to more sealing and less plant diversity in the gardens. Also fruit-trees and vegetables
have only little relevance in today’s gardens (Letzbor-Kalusch 2013). From a social point of view it is a development from a recreational to a more private residential area with no or limited public access. A residential AG could well – or at least in many aspects – meet the residents’ needs or desires. Nevertheless, there could also be – depending on the site – deficits in infrastructures such as parking or social infrastructures (Foester 2002) that might have to be supplied by the local authorities. The fundamental socio-economic aspect of these changes is that people who want to become allotment holders need much more money than before. Even if the allotment holder does not buy the plot, the transfer fee is rising because of building sizes and facilities. With the modification of the law, the municipality of Vienna is giving up the social ideas and ideals of the AGS as a recreational area for urban dwellers with low income as well as those of the AGs as part of the green infrastructure of the city. Now people have the opportunity to live in their AGs year-round and to build small family houses. As a consequence, AGs are new products on the real estate market and there is a new market as well for architects as for the prefabricated house industry. From a planning perspective, green recreational areas are changed into construction sites, without even changing the land utilisation zoning plan.

Some interpret the modification of Vienna’s AG law from 1992 already as the abolition of the allotment gardens (Foerster 2002). In spite (or perhaps because) of this development, in Vienna various new forms of urban gardening emerged in the last years; community gardens, intercultural gardens, sites for harvesting, urban bee-keeping, neighbourhood gardens, vertical farming etc. Today, alone in the network „Gartenpolylog” 76 Austrian urban gardening projects are registered, 36 of them in Vienna (http://www.gartenpolylog.org/de/3, access 06.03.2014).

Salzburg

Salzburg (Austria) with its 150.000 inhabitants is a relatively small city. The total area is 6.568 ha. It is located near the border to Germany. The city region of Salzburg is one of the most expensive regions in Austria (mainly due to land and real estate prices). Significant parts of the city’s green areas are protected by the Grünlanddeklaration (Green-Area-Declaration). Most of these are used for agriculture, but there are also forests on the hills within the city. The baroque old town is a UNESCO World Heritage Site. Both policies spawn a unique phenomenon; as further construction activity in the core is aggravated due to preservation measures, densification proceeds especially in the surroundings. But the surrounding communities are not willing to resolve Salzburg’s social housing problems. However, the pressure on Salzburg’s open spaces is very high due to a continuously rising demand for new housing developments. Housing shortage is an important topic in the current election campaign; some demand to change the Green-Area-Declaration.

In the city of Salzburg, the first allotment site was founded 1940 (LVKS n.d.). Due to the land designation plan 1960, 48 ha were designated for AGs, of which in 1997 only 25 ha were left (Atzensberger 2005: 44). This loss is mainly due to the re-designation of AG area into rural areas or recreation areas in accordance with
landscape conservation policies. In addition AGs were relocated to the urban fringe. Today, there are 490 plots organized in 8 sites that are members of the federal Association (LVKS n.d.). There are also some railway gardens (93 plots) left; since 1989 more than 250 railway garden plots were lost due to construction or sale (Atzensberger 2005: 44). In addition, there is a private allotment site (62 plots) and some private single plots and allotment sites without designation, part of these conflicting with nature conservation areas (Stadt Salzburg 2007: 239). In total, 24 ha are designated as AG site (< 05 % of the city’s area). There are plans to build new AG sites in the north of the city (Stadt Salzburg 2007:70), but the focus is on the development of urban green structures in the core area, also with gardens for people who live in multi-story residential buildings (Mietergärten).

There is no specific state AG-law in Salzburg. Only the building of houses is regulated; just little wooden huts are allowed for gardening tools and for shelter with max.14 m² without heating. In the zoning plan of Salzburg, the designation is “green area - allotment garden”, therefore the sites are part of the Green Area Declaration.

In the Salzburg AGs, the trend towards lawn and ornamental areas is still replacing the land for growing fruit and vegetables. There are still a lot of “classic AGs”, mostly hold by elderly people, who spend a lot of time and work in their gardens (Atzensberger 2005: 53ff.). Even though AG cabins are very moderate in comparison to the new “Vienna style” and also the rent is moderate (160,- - 280,- € / m² / year in 2008 for 350 m²), the transfer fee was and is rising, leading to social selection (Atzensberger 2005: 57f.).

In Salzburg, there are also some new urban gardening projects: Two intercultural gardens (founded 2008, 2013), self organized community gardens (both founded 2013) as well as one site for harvesting. The association „Blattform Salzburg: eine Stadt, ein Garten“ (since 2011) tries to organize and promote all kinds of urban gardening projects. The aim of this network is community participation in urban development and planning, the promotion of the diversity of design as well as of society, the promotion of guerilla gardening, and of other urban gardening projects. As interviews in 2013 show, these new urban gardeners are much younger compared to the AG holders and mainly base their collective gardening on a more or less critical perspective to capitalism, globalization, and the food industry. To some of them, gardening is a political activity. In addition people like the opportunity to do some gardening in a community, to try out something new (or something they know from their childhood) without being obligated to spend much money and time or to be member of an AG association.

The two Austrian examples show how the differences in AG laws influence the use and the development of the sites, even if the AG sites are threatened by becoming built-up in both cities. In Vienna as well as in Salzburg one can see a trend towards a social change in the urban AGs mainly due to the prices for
the cabins or houses built as well as a change in usage. New urban gardening projects are an attractive alternative for people who are not able to or do not like to bury money and time in the garden, but like to cultivate food plants. It is an alternative, ironically leading back to older ideas and ideals of allotment gardening.

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Community and Allotment Gardening in Israel: Variations and Challenges

The Israeli case of community and allotment gardens presents a complex and somewhat deviant from what we have learned so far from other European cases. It is a very new phenomenon date back only to 2000 and it is highly diverse.

Our data are based on: various data sets that were provided to us by municipalities, activists, academics and civil society organizations that support the gardens. We compiled all these information together but we believe that both the number of gardens and budget information does not cover everything that actually exist. We decided to present only the reported numbers.

What we would like to present you here is a taste of this complexity

We will talk about:

- Numbers and typology of community and allotment gardens
- Geographic distribution of gardens mainly center and periphery
- Demographic distribution of gardens among specific population
- Distribution vis-à-vis open space per capita
- Different actors involved in initiating, supporting and progressing community and allotment gardens
- Economic infrastructure available for community and allotment gardens
- Statement NO NATIONAL OR LOCAL POLICY
- Challenges for the future

**Numbers and typology of community and allotment gardens**

At least 330 gardens in Israel that fall into several definitions:

Urban community gardens; allotment gardens (the minority of cases); urban farms; therapeutic gardens; and more (e.g. community forest; urban natural sites)

**Geographic distribution of gardens mainly center and periphery**

Most of the gardens are in major cities of Israel – Jerusalem, Tel Aviv, Beer Sheva; municipalities that have relatively more resources to invest and where more civil society organizations that are involved in the gardens are active. There are about
Demographic distribution of gardens among specific population

In many cities community and allotment gardens target to special population:

- Gardens for Immigrants take a third (1/3) of the total and many municipal and organizations resources are directed to them.
- Ethiopian – few farms and plans for more. And other immigrants mainly from Former Soviet Union [1M NIS were allocated in 2013 for gardens for immigrants]. Also in this list – population with special needs.
- The elderly – Jerusalem municipality begun its endeavor with gardens as a service for the elderly population providing recreational activity; and poor population – the underprivileged to which we will devote some more attention...
- Population that have the least of gardens are Israel are the Arabs and Jewish orthodox population: why?

Few possible explanations: They live in very dense areas with almost no open space available. Arabs settlements are mostly based on private ownership of land and public space is somehow contested and hard to define. Jewish orthodox population have many cultural limitations and are constrained by the decree of the rabbi.

Nevertheless, there are gardens in Haifa and Jaffa for example [olive garden in Haifa] that are used for integration of population such as Jewish and Arabs, work immigrant.

Poor population ----several municipalities, especially the poorer ones, viewed community gardens as a social tool to treat and empower the poor population in their area. Budget from organization and national offices was recruited for this specific purpose with a major Joint budget that was limited to cities below the 5th socio-economic rank (out of 10). Jerusalem municipality undertook this specific vision for gardens in it area.

However – as this map as well as interviews with policy makers suggest – most gardens are located in the middle to high socio-economic class. Gardens in poor neighborhoods were dissolved and stop operating after the Joint and other budgets ended.

Tel Aviv progress with community gardens shows a mirror image from the onset. Community gardens are allocated to areas of the city where the affluent population live where gardens will not become politically or socially radicalized and where residents have their own capital to invest in the gardens.
Distribution vis-à-vis open space per capita

Many urban areas suffer from lower than the agreed upon standard of open space per capita. In these areas community gardens are highly necessary but very difficult to establish.

2 examples – Jerusalem, Beer Sheva

Different actors involved in initiating, supporting and progressing community and allotment gardens

National community gardens steering committee

Municipalities and their agencies - community relations, welfare, recreation, environmental education, elderly...

As well as the round tables that they established to oversee the operation of the gardens – these round table include municipal representatives, civil society organizations

Civil society organizations, that provides financial support, educational and organizational support for the gardens. They are directing their investments mostly toward poor and immigrant population: they are` JDC – Joint Israel have invested money and other resources

The Israeli society for the protection of nature

The Jerusalem foundation

And other

Academic institutions – courses for community gardens coordinators

Activists, informal associations and forums working to exchange information, develop their agenda, increase visibility for gardens though mapping them for example.

Economic infrastructure available for community and allotment gardens

Budget – who and how much

- Statement: NO NATIONAL OR LOCAL POLICY

- Challenges for the future
Dr Laura Calvet-Mir, Universitat of Barcelona

Urban Gardens in Spain: Insights from Barcelona, Madrid and Sevilla

Spain is a sovereign state and a member state of the European Union. It is located on the Iberian Peninsula in southwestern Europe. Its mainland is bordered to the south and east by the Mediterranean Sea except for a small land boundary with Gibraltar; to the north and northeast by France, Andorra, and the Bay of Biscay; and to the west and northwest by Portugal and the Atlantic Ocean. With an area of 505,992 km², Spain is the second largest country in Western Europe and the European Union, and the fifth largest country in Europe. It is a developed country with the 13th largest economy in the world. As of 2014, Spain ranks 24th-highest on the worldwide quality of life index rating. It is a member of the United Nations, NATO, OECD, and WTO.

Europe has had a clear institutional recognition of urban gardening, primarily through legislation (e.g. laws on various allotments in Britain, kleingartenen Germany), and also by promoting vegetable growing within the city at specific historical moments. The first of these moments would be the industrialization process with consequent rural-urban migration and the formation of working class neighborhoods. The second moment has to do with WWI and WWII and the campaigns of urban gardening promoted by various national governments. However, in Spain there is not an urban garden tradition comparable to that of northern Europe due to the peculiar characteristics of (late) industrialization and urbanization (more or less steady rural exodus until 1980). These particularities were largely driven by the isolation of the Franco’s dictatorship (1939-1975) and the autarchic economy model of the Spanish post-civil war, especially until the 1960s (Morán, 2009; EME, 2011). In any case, it is important to highlight that the Spanish dictatorship, under the guidance of the National Colonization Institute, promoted an equivalent mechanism to the European “gardens for the poor”, but with a strong rural character and with a limited repercussion (Gómez-Herráez, 1999).

In few cases urban planning schemes of Spanish cities have included urban gardens. On the contrary, urban gardens have been traditionally considered precariously and informal activities at the periphery of the cities to be eradicated. However, while urban gardens were considered a marginal activity in Spanish cities until mid-90s (Morán, 2009), more recently there has been a boom of urban allotments and community gardens in some Spanish cities (Morán, 2010).

CITIES: BARCELONA, MADRID AND SEVILLLE

Barcelona is the second largest city in Spain with a population amounting to 1.6 million in 2013, and among the most densely populated cities in Europe with 16,000 inhabitants per km² (IDESCAT, 2013). Barcelona is geographically limited by the Mediterranean Sea, the Collserola mountain range, and the rivers Llobregat and Besós (Ajuntament de Barcelona, 2013a). The city has some 6m² of
green space per capita, including public parks and gardens, cemeteries, urban forests and urban allotments (Ajuntament de Barcelona, 2013b).

Urban gardening had a long tradition in Barcelona but, the fast developments of built infrastructure provoked a decline of gardens in the city since the mid twentieth century (Huertas & Huertas, 2004). Furthermore, many gardens were removed following urbanization in the course of the Olympics in 1992 (e.g. Roca, 2000) and therefore urban gardens in Barcelona have mainly emerged only in the last 20 years. As of 2013 Barcelona had 27 urban gardens (allotments and community gardens) distributed across the different districts of the city with a total surface of approximately 48 Km2 (about 0.05% of the total surface of the city). Recently the Barcelona City Council has included urban gardens in its Barcelona green infrastructure and biodiversity plan 2020 (Ajuntament de Barcelona, 2013c).

Madrid is the capital of Spain and its largest city, with a population around 3.3 million. The city spans a total of 605.77 km2 with a population density of 5,294.5 inhabitants per km2. If we take into account all the metropolitan area, the population is around 6.5 million. In the view of these figures, Madrid is the third-largest city in the European Union, after London and Berlin, and its metropolitan area is the third largest in the European Union after those of London and Paris.

The first attempt to plan and develop urban gardens in Madrid was in 1983 when the city council asked for an assessment of urban and peri-urban agriculture in the city. In the urban organization plan of 1985, urban gardens were referred as green infrastructure and a leisure space. However urban gardens practically disappeared from the city’s urban plan of 1997, which rezoned green areas in urbanized areas (Morán, 2009).

Currently there is not clear data on the number of urban gardens and the surface they occupy. There are different initiatives, with disparate characteristics in terms of management and purpose, so the general picture is quite heterogeneous. Nonetheless, since 2010 there has been an important (and unplanned) surge of urban community gardens led by neighborhood associations (Morán & Casadevante, 2012). Against this backdrop, since the end of 2010 the Urban Community Gardens Network of Madrid has been consolidated (Casadevante, 2012) in order to better coordinate the existing and new initiatives.

The city of Seville had a population of some 700,000 people as of 2013. The city spans a total of 140.8 Km2 with a population density of 4,972.79 inhabitants per km2. Its metropolitan area accounted for some 1.5 million.

Seville City Council has never had a policy on urban gardens in the city and all the existing experiences have arisen from the neighborhood initiative. Currently we can find in the city 11 urban gardens (10 allotment and one community garden). There is variety in the number of plots in each garden, with figures ranging from 50 to 220 plots. The size of the plots ranges from 75 m2 to 150
m2. The city council did not have any ties with those urban gardens beyond granting some subsidies to them. Currently, only the allotment garden of Parque de Miraflores maintains a low monetary subside from the city council.

CASE STUDIES

BARCELONA

The study comprises the 27 urban gardens existing in Barcelona as of 2013. The sample does not include private urban gardens but includes the 14 municipal gardens, formally managed by the Barcelona City Council, and 13 squatted gardens, run more or less informally by groups of neighbors and local associations based on their own rules, norms and conventions. Urban gardens in Barcelona follow two general types of management models: that of allotments gardens (17), tendered in separate parcels that are managed individually, and shared gardens (10) collectively managed without individual parcels. The most frequent use of these gardens is to growing vegetables for own consumption.

The fieldwork was carried out from March to October 2013 and consisted of 44 interviews and a survey to 200 users of urban gardens. The results suggest that urban gardens of Barcelona are a source of multiple ecosystem services (i.e. benefits that nature provides to humans), identifying 20 different services, most of them socio-cultural. The most valued services were “biophilia” (i.e. the innate desire of human beings to interact with nature), „place-making“ (i.e. garden as a tool for improving the neighborhood and the city within a transformative perspective), „relax and stress reduction“, „provision of quality food“, “maintenance of cultural heritage” and “entertainment and leisure”. The dominant profile of gardeners is that of retired men who immigrated to Catalonia from the rest of Spain in the 60s, with low formal education, low income and who goes very often and spend a lot of time in the garden.

The results show that urban gardens provide a lot of benefits to city dwellers. The predominance of socio-cultural benefits responds to some of the most important problems of the urban lifestyle such as disconnection from nature and increasing individualization of urban population. In addition, the creation of access to land for the poorest could offer a possibility to mitigate the negative effects of the crisis, both economically (as they can grow their own food) and psychologically. Finally, urban gardens can be seen as urban spaces that act as connectors between people, between communities and between people and nature. Thus the emergence of urban gardens in recent years in Barcelona could allow the emergence of more equitable and emancipatory urban socio-environmental. The study points out to the need to recognize the role of urban gardens in urban sustainability policies and initiatives.

MADRID

The study includes 20 of the 31 urban community gardens which are part of the Urban Community Gardens Network of Madrid (ReHd mad!).
The fieldwork was carried out between January and June 2013 and consisted of 162 surveys community garden users, participant observation and an inventory of each community garden. The community gardens under study had a size ranging from 100 to 1,000 m², all of them were managed following agro-ecological principles growing both vegetables and ornamental plants. They are self-built public spaces opened to public participation, with free access and collective funding mechanisms. Most of them are not dived into individual parcels and the production is collectively distributed to the members and/or destined to popular meals. Community gardens are normally located in brown-fields to be urbanized, which confers a degree of instability to the projects. This instability is aggravated by the lack of a clear public administration support even though many of them have applied for the transfer of land to the city council. Decisions on the management of each urban garden are made in assemblies open to all the users. In general terms the origin of the community gardens was the gathering of a group of people who organize themselves under the umbrella of an organization or association, in most of the cases a neighborhood association.

Similarly to the results presented for Barcelona, the study in Madrid identified 18 ecosystem services, most of them socio-cultural. Within these 18 benefits the most valued were “biophilia”, “environmental education”, “social cohesion”, “entertainment and leisure”, “provision of quality food” and “calmness and meditation”. As in the case of Barcelona, community gardens in Madrid offer the possibility to reconnect city inhabitants with nature and within themselves. The results show the importance of respecting and promoting community urban gardens on empty brown-fields in the cities. In the city of Madrid these space, many of them vacant after the housing bubble could be destined for the installation of community urban gardens as they are a tool of management and integration of biocultural diversity.

SEVILLE

Seville case study is based on Parque de Miraflores; a public space owned by the city council but managed by a local association, Committee pro-Miraflores Educational Park. This urban garden is composed by four different projects: 1) Allotment gardens, 180 plots of 150 m² managed by individuals or families; 2) School gardens, 12 plots in which different schools participate; 3) Young greenhouse, where teenagers (from 12 to 15 years old) participate in the project of ecological agriculture in greenhouses; and 4) Pedagogical itineraries, which are organized visits for schools and associations scheduled all over the year. Historically the area where Parque de Miraflores is located was characterized by an agricultural landscape that disappeared during the 20th century due to the development of new neighbourhoods in the city. The limits between the rural and the urban land were delineated in the 1980s by a dumping site of more than 90 hectares. In 1983 the association Committee pro-Miraflores Educational Park was created, with the goal of building a park with a marked cultural and educational character, linked with the social environment and respectful with the historical, cultural and natural heritage of the city. The committee mobilized the neighbours during 1983-1986; afterwards they occupied the site (1986-1991) and started the pro-
ject formally in 1991. The project is self-funded by the association but receives an annual grant from the city council of Seville. Any individual can acquire a space in the allotment garden by the annually raffle with the empty plots that are left (about 15 annually). The association operates through a Board of Directors that manages the association and the projects. People of the Board cannot access gardening to avoid conflicts between personal and collective interests. Each year an annual assembly takes place with all the people involved in the project. Over the years Parque de Miraflores has researched, publicized and put in value and ignored and rich agricultural heritage of Seville (e.g. hydraulic system of ponds and wells (S. XVI- XVII)). Parque de Miraflores has been recognized within the Spanish state as a model to follow for other experiences developed later and the Committee pro-Miraflores Educative Park was awarded by the “Medal of the City of Seville”.

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Working Group Presentations

WG1 - Byron Ioannou, Frederick University, Nicosia CYPRUS

Urban community gardens in Cyprus. Background and recent trends

The aim of the paper is to outline the perspectives of developing community gardens in the urban areas of Cyprus, a peripheral insular state where no allotment or community garden existed before 2013. The paper is based on preliminary findings of graduate students' research at Frederick University and also on surveys conducted during the program SUDESCO2013 (www.frederick.ac.cy/sudesco2013).

At first, the background of urban development in Cyprus is briefly approached, focusing on the ongoing debate of urban sprawl and dormant land versus rural land. Then, the roots of urban agriculture in Cyprus are inquired in order to define the continuous existence of informal agriculture in the urban fridge. Finally, the recent phenomenon of urban community gardens is presented, assessing its limitations and growing perspectives.

During the last fifty years the towns of Cyprus have radically turned into extended fridges, expanded mainly against agricultural land. Urban areas have increased their surface up to thirty times than their initial footprint during this period, while their population increased only between six to eight times. The result is a low density fabric (15-30 inhabitants/ Ha) with enclaves of unbuilt plots or rural parcels, not following the development framework set by the official planning.

Up to 2013 urban agriculture in Cyprus is consisted of fragments of traditional agriculture enclosed by the city expansion and arbitrary or informal actions for greening dormant sites and plots as well. The patterns of informal farming are closely related to the land distribution scheme (multi segmentaion) as well as to the cultural attitudes and traditions. The production and offer of domestic agricultural products is a long standing tradition, still surviving as a social attitude and an appreciated every day gesture, even in the urban areas of Cyprus. There are neighborhoods where 5-10% of the total population is practicing urban agriculture. These are usually individuals older than 50 years, male and female, grown up in a rural environment or descent from farmer families. The purpose of farming is usually the domestic use or the offer to friends and relatives.

This study quotes four patterns of informal urban gardens regarding the land typology:

(i) Empty plots are cultivated by the owners or their relatives. The accessibility for the community people is quite limited similar to private gardens. Watering is provided from water supply or drilling. There they grow olives, vegetables and citrus for their own use.

(ii) Parcels of ex-agricultural zones are still surviving in residential areas. Farmers,
usually professionals, can rent this land from the owners or from the state. These types of farms are also not accessible for the community people. Irrigation system or drilling is used for watering cereals, olives, vegetables or citrus, disposed to the local markets.

(iii) Non landscaped public green areas are cultivated by neighbours that extend their private gardens. In some cases they form interesting arrays of arbitrary community gardens with open access to the neighborhood residents. Water supply or illegal drilling is used for olives, vegetables and citrus for the farmers own use.

(iv) Unbuilt public land is arbitrarily occupied by informal farmers usually neighbours who also extend their private gardens. Most of the informal lots are open and accessible for the community. Illegal drilling is used to water olives, vegetables and citrus, for the farmers own use.

The tradition preserving these patterns of informal gardening derives from the recent rural past of the Cypriot society, while the fact that the farmers are elderly or middle aged shows that this activity is gradually shrinking.

The Cypriot financial crisis of 2012-13 resulted; a vast increase of unemployment rate (from 6% to 17%, from 2010 to 2014); depreciation of land values, suspension of land development and consequent chain transformations to societal needs and cultural values. During 2013 more than six action groups closely connected to the organic farming associations have appeared and activated in urban areas. All of them aim to preserve domestic crops and species; promote cooperation, creativity and social interaction; enhance solidarity, interculturalism, experience the sense of offer; Improve human environment and the cities. At the same time, they run various cultural and educational events in order to promote their actions to the society and attract people mainly from the neighborhood. Four of the actions implemented during the last year are noted below. In one year function, they managed to cover an area of 4.000m², in total, involving approximately 400 farmers.

“Collective Bahçe” begun in April 2013 as a bi-communal organic garden on the border line that divides Cyprus. It has been established by an NGO, supported by United Nations funding, local authorities and private enterprises. The garden has been created in the edge of a linear park granted by the municipality for this purpose. Initially the farmers were mostly the NGO members, but gradually neighbours are attracted, as the final goal of the action is to leave the garden in the hands of the local community. The garden is watered by the public water supply and the products are distributed to the community households.

“Feed the People” is a garden initiated by volunteers of Pafos, aiming mostly to provide healthy food for marginalized people and promote gardening to the neighborhoods and especially children. It is supported from the local authorities and the local community. It is created close to Pafos public garden in a central location, bringing together locals from all over the town.

“Ellovos” is a social action group located in Lemesos, the aim of the group is to
promote community gardens in every neighbourhood through activating urban voids and dormant land. Their first community garden supported by Kato Polemidia Municipality is expanding on a large private parcel of unbuilt residential land offered by its owner.

“Amarantos” is another group in Nicosia working on the creation of networks of urban bio-farmers. Their greenhouse lies on a private parcel, granted by a member of the group, in a suburban zone at the outskirts of the city. The greenhouse is functioning as a meeting point, once in every one or two months, for training, exchanging crops and developing their common seedbeds.

Do community gardens in Cyprus have a future? A preliminary SWOT analysis could summarize the four above cases and shed some light on this argument.

STRENGTHS: (a) growing quickly and motivated by dynamic action groups with vision, (b) networking and cooperation with related social networks (organic agriculture), (c) attracting people from different backgrounds and age groups, (d) support by neighbourhoods, private stakeholders and local authorities.

WEAKNESSES: (a) gardens are mostly managed by the NGOs and the action groups than by the neighbourhood people, (b) the Cypriot urban fridge is consisted of many neighborhoods of low community notion, (c) the lack of any policy by the state and the absence of any institutional or planning regulation makes land regime unstable.

OPPORTUNITIES: (a) lots of available private land almost in every neighbourhood, (b) young, unemployed people willing to get into action, (c) low cost actions are attracting easily the support of the local politicians, (d) action groups have the capacity to get funding from various programmes.

THREATS: (a) failure to establish a more substantial commitment with the neighborhood people, (b) limitations in watering related to the water problem in Cyprus.

Small scale community gardens have appeared in almost one year in three of the main cities of the island. Even though their extent is insignificant related to the total built surface, and despite that the total number of gardeners is not more than 400, they are coordinated by dynamic social groups focusing not only in the specific neighborhood perspective but also in expanding their ideas to every urban district. Their action is not quite formal, there is still no institutional coverage or any kind of supporting public policy, but it is certainly not informal because it actively involves local authorities and stakeholders. Additionally it is a conscious, planned and collective action contrary to the traditional patterns, examined at the beginning of the paper, where private initiative was almost the only motivation. All of the new community gardening actions are attracting younger generations and people with no background in farming. Under these aspects there are tangible perspectives for substantial network of community gardens to be gradually created in the urban areas of the island.
Edible Eastside and the social process of place-making

Introduction

In October 2011, in one of the former heavy industrial parts in the heart of city of Birmingham, on a derelict brownfield land, a pop-up urban garden came to existence. The visionaries behind the Edible Eastside were two women, who wanted to trial the ideas of regenerating unused urban land and creating a sustainable urban food system. Three years on, while the latter idea is yet to be proved, Edible Eastside has shown success in proving that there is a need for urban allotment gardens in the core areas of cities as a place on which communities grow.

In this paper and presentation, the sociological concept of place and the social process of place-making will be explored in the context of socio-spatial analysis of Edible Eastside. The word allotment, as Crouch and Ward (1988) state, “... is curiously abstract: a legalistic term meaning simply ‘a portion’, but it is shorthand for a number of images of people, places and activities” (1988:5). Allotment, for the purpose of this paper, is defined as ‘a particular place, within a larger set of interacting systems of physical, environment and social processes’. A qualitative interview analysis will later look at this interpretation of allotment.

Theoretical context

The concept of place is complex. Doreen Massey (1995) has argued that ‘place’ is a social construct. In her view “we actively make places” (1995:48), and our ideas of place “are products of the society we live in” (1995:50). According to Massey (1994), place is a constantly shifting set of social relations brought together at a particular location. Like individuals, then, “places have multiple identities which shift and overlap creating conflict and richness” (Massey, 1994:153). Rather than place being bounded, inward-looking and resistant to change, place becomes a dynamic concept, interpenetrated by connections to other social and economic worlds.

In this sense, places come to existence and social process of place-making occurs through the interaction between space, i.e. location; objects, i.e. physical components; and people including their values, feelings, interactions, interpretations, imaginations, and understanding.

Thomas Gieryn (2000) states three defining features for place: geographic location, material form and investment with meaning and value. He believes the three should remain bundle. “They cannot be ranked into greater or lesser significance for social life, nor can one be reduced down to an expression of another” (Gieryn, 2000:466). Gieryn explains with reference to the work of Soja (1996) that “places are doubly constructed: most are built or in some way physically carved out. They are also interpreted, narrated, perceived, felt, understood, and imagined” (Gieryn, 2000:465).
The theoretical concepts of place and social process of place-making will be explored by a socio-spatial analysis of Edible Eastside and a qualitative interview analysis in the following sections below.

**Socio-spatial analysis of Edible Eastside**

[A series of accompanying slides - images of the geographic location and its relation to the city, spatial layout of the garden, physical elements including fixed and semi-fixed features, individual and social use, boundaries, personalisation]

Edible Eastside is a quarter acre raised-bed garden situated in the heavy industrial area of Digbeth, in the heart of Birmingham. It is a derelict canal side space which has been transformed into a temporary concrete garden within an industrial space marked for eventual regeneration.

There are over 50 raised-bed vegetable plots for rent on site – in two small square and large rectangular sizes. The original industrial features of the site have been intentionally kept and incorporated into the garden as aesthetic elements. There is no public view to the garden from the main road, and the entrance is through a high black gate wedged between two adjacent office buildings. The gate is locked at all times and plot holders are given a key and 24 hour access to the site.

The spatial layout of the garden is divided into three integrated linear sections. The entrance section is a narrow stone-paved path bounded by an office building on one side, and the Green Wall on the other side. Small planters of fruit trees are placed along the wall and their branches stretch over a mesh plant support.

The path leads to the main garden area where cultivation, growing and learning activities take place in different parts of the garden within large shared spaces. The space within the garden is transient and has no fixed spatial configuration due to its temporary nature. The only fixed elements are two existing brick enclosed spaces (used as material store and pot shed), a steel beam structure, and a large propane tank along the north side of the wall.

The Café, a portable container transformed into a small kitchen and café, marks the boundary for the third and end section of the site. This is a canal-side open area used for seating and social events. The Café is on a higher level than the garden and can be accessed by a ramp, which leads down to the other side of the Café to a canal-side seating area.

The spatial layout of the garden allows fluid communication and interaction between semi-fixed features, (i.e. raised beds, planters, green house, café, etc.) and non-fixed features (i.e. plot holders, on-site gardener, a resident artist and visiting people). Edible Eastside is a distinct example of an allotment garden that has been transformed from an unused urban space into a lived place, where people grow organic food, learn skills, share culture and interact with the environment.
Social process of place-making

To conclude the paper, the three features of place proposed by Gieryn - geography, material form, and meanings and values - is analysed in the context of a qualitative interview with Jane Bradley, director of Edible Eastside [interview transcripts or short pieces of voice recordings will accompany the slides]. For each of the defining features, a number of elements have been identified as contributing elements to a) the social process of place-making, and b) the working definition of allotment by this paper presented earlier.

- Location
- Brownfield land
- Proximity to the city centre
- Relationship with neighbouring areas
- Industrial setting
- Vernacular features
- Boundaries
- Recycled materials
- Productive landscape
- Autonomy and control
- Mobility
- Social capital
- Local heritage
- Environmental awareness
- Leisure and pleasure
- Food, culture and art
- Sense of belonging
- Skills development
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ENVIRONMENT ASPECTS OF SOIL AND WATER IN ALLOTMENT GARDENS

Urban allotment (UA) garden cultivation in Europe is facing a growing positive trend. Its relevance for urban sustainable development is evidenced, not only as a result of the increase in food production and the city green infrastructure, but also due to the social benefits and citizen’s well-being that it can drive. Hence, it is important to ensure that this new trend is in line with perhaps the major Societal Challenge of this century: food security and sustainable agriculture (Figure 1 and Figure 2).

Nonetheless, even in controlled situations and organised allotment plots managed in municipal green spaces, several risks can arise from the natural resources (i.e. soils and waters) that support food growing activities. Problems in soil, water and food quality in allotment cultivation may exist in EU countries as in many locations both spontaneous and historical UA are concentrated in industrialized and most densely populated areas, past management practice and new activity which typically utilises old industrial or brownfield sites, roadsides and verges to create their own city agricultural spaces (Figure 2).

These risks are twofold: (1) the potential accumulated impact of the city on the urban allotment gardens (potentially toxic elements (PTEs), such as heavy metals and/or organic pollutant compounds, derived from industrial processing, waste disposal, road traffic or the previous use of the site) and (2) the food production practices impacts due to lack of sanitation and/or bad gardening practices (e.g. excess use of fertilizers and pesticide application).
In this presentation, some examples relating to direct pollutant and secondary traffic sources (Figure 3) are presented as well as their inherent risks if contaminants are metabolised into crops and eaten by humans. Some examples are also given concerning the excessive use of chemicals and good practices in food production in AG (Figure 4).

Finally the author’s message is that there is a clear advantage in knowing in more detail the soil and water quality, helping with directing more sustainable management practices. Assessing risks for human health in allotment plots can be a valuable tool for a better management, even providing opportunities to keep allotments functioning when soil and water quality may be a concern.
Designing Allotment Gardens? What can be learned from experiences of Slovenia

Understanding the situation:

When discussing urban allotment gardening from the urban and landscape design perspective we have to understand all the particularities and characteristics of this type of an urban green space.

In this respect, it is very important to take into account the prevailing rural character of the urban allotment gardens’ areas, especially for the areas with predominantly food producing functions that are characteristic for Slovenian reality.

Entering the rural to the urban context may raise a number of important issues from both sociological, and spatial and perceptual aspects. Sociologists point out that the Slovenian society is characterized by preferences for rural way of life even within the urban settlements. This rejection of the urban lifestyle, or »Antiurbanity as a Way of Life” as they call it (Urišič, M. Hočevar, M; 2007), is also reflected in relation to urban green spaces. The most passionately expressed needs and preferences of the use of urban green areas in recent years is certainly a need for allotment gardens.

So for Slovenian urban designer the challenge is how the rural image and symbolic perception of allotment gardens is affecting the urbanity of the cities and what does it mean for identity of place? What kind of design intervention is needed to keep the urban character of this type of urban green space but still keep it understandable and accepted by users?

Like all urban green spaces are also allotment gardens strongly subjected to the influence of natural processes and seasonal changes, but due to their purpose, this correlation is even more noticeable. Without being designed with the idea to mitigate or guiding these changes for creating a certain spatial quality these areas represent a kind of instability of appearance and attractiveness of the whole area.

It is also very important to understand that the visual appearance of the allotment garden strongly depends upon type of gardening. There is a big difference if the gardening is based on permacultural and organic farming with extreme diversity of plants within one plot, or on classical agriculture with one plant type within one vegetable bed. There is completely different spatial structure in terms of perception of order, readability and identity of place (especially for those who are not familiar with different food growing concepts).

And last but not least the priorities of users of allotment gardens are influencing
a lot the spatial character of these spaces. If the users have a priority to get as better crop as possible (what is the case of the most allotment gardeners in Slovenia although it is nowadays changes from quantity to quality), all their attention and energy is focused on the process of growing vegetables and fruits and visual apperance of the area or its attractivenes and pleasenese for other inhabitants is of secundary importance. Also the aspects of leasure, recreation or social interactions are are subordinate to functionality, financial and spatial rationality and personal interests. The place is developed primarily due to the need to protect the area from intruders, storing work tools, water collection, composting, joined by the desire for the possibility of weather protection and short stays within the garden area.

This situation can be very clearly observed in Slovenia. Many allotnmet gardens in Slovenia are unplanned, pop up gardens in different more or less abandoned public or private green areas inside neighbourghoods, areas along urban rivers and steems , railway lines, under power lines, on former farmlands and simmilar. That are areas that people with interest in food growing for self-suply and personal preferences for rural lifestile, develop by themselves, renting them from farmers or municipalities, but manytimes also occupying ilegaly. Majority of such allotment areas are completelly unstructured, heterogenious and individually developed places of chaotic apperance withouth any urban place quality. They are completely non-planed and un-designed, withouth any regulations. Besides vegetable beds, the most commom elements of such gardens are small summerhouses or sheds, composed of different materials and residues and variety of other un-designed elements for water collecting, storage, waste, shelters, fences... Such places are not only withouth any spatial quality but also quite problematic from ecological aspects. But on the other hand those places have strong communities behind and strong personal touch and attachement of the gardeners.

What this situation on no design, no planning, no regulation really means? And how to approach it?

People who are gardening there usually like it a lot, other people living in the nearby areas usually see it as a degradated, upleasent, even dangerous are, urban designers wish to change it, design and plan it in a way to be appropriate for the context and an added value for all inhabitants, city administration wish to regulate and control it.

Recent trends in developing the allotment gardens in Slovenia are going in two directions:

Planned, designed and strictly regulated urban allotment areas:

On the one hand the cities are trying to regulate and improve the situation. In Ljubljana for example the mayor has decided to remove and destroy all the allotment areas on unsuitable locations due to ther urban context, cultural or ecological importance. The new, more siutable areas were planned and included into the city spatial development documentation, with policies and ordinances
to regulate, supervise and direct their development and appearance. As a basis a typical design of allotment area of 1 ha sitze was prepared and also implemented in some parts of the city.

Even though it was designed by the city architect, there is very little attention in the design of dedicated to the spatial quality and “urbanity” of the green space itself.

The design is very formal and functional with strictly regulated elements resembling a lot a rural food productive character. Each plot has its own shed that is built by the city in advance; available plots are of different dimensions but all in a very strict grid order. A at the entrance there is also a small common area with small playground and/or meeting place, parking places and other functional elements, but the majority of the area is only of functional characteristics for food producing. Although the area is owned by the city the use is limited only to gardening and gardeners as users of the area. Other inhabitants are excluded by design already.

The reactions from people were mostly negative – they felt it too formal with too much order, unhuman, unnatural... although with time, when nature takes over the design of place, things change a lot...

Urban community gardens and other new forms of urban gardening

There is quite a strong movement of young intelectuals of different professional backgrounds for developing different kinds of community gardens. This are bottom-up projects with lot of elements of guerilla gardening which are gaining different kinds of official public support through time.

Particularly interesting is the fact that the initiators of such actions are usually distinctly urban lifestyle oriented people, as opposed to rural lifestyle –oriented “traditional” allotment gardeners. Their gardens are a kind of representation of modern values linked with the environmental awareness, health and wellbeing and quality of life. Garden design is based more on the strong and comprehensive ideals private interests of the food production and leisure. The places are socially inclusive and usually have a strong identity that is closer to urban environment.

A typical example of such practice is a Community-Based Garden Intervention in a Degraded Urban Space in Ljubljana named “Beyond a Construction Site” (Onkraj gradbišča/ http://onkrajgradbisca.wordpress.com/)

Its location is in the very city centre, among the residential buildings of high density and near the main train station, so the context is very urban. The project was initiated by Culture and Art Association, “KUD Obrat” (http://www.obrat.org/) in 2010, in collaboration with another non-profit organization for the realization and organization of cultural events Bunker (http://www.bunker.si/eng). Their action was a kind of “guerrilla gardening”. Together with neighbourhood residents and other interested people, they occupied and started to transform a...
long abandoned and fenced building plot of the city ownership for urban gardens but also with strong emphasis to socializing, educational, and cultural issues.

The site is designed and un-designed at the same time. No professional landscape design project has been prepared for the area, but there was an art event of a young Slovenian architect and visual artist Polonca Lovšin, named “A day with goat” that resulted in a draft plan for the spatial organizing of the site.

Other design interventions have followed as a kind of bottom-up design that is still in progress, changing and developing all the time by users.

Currently around 100 people take care of ca 40 gardens and take part in different public and community based events.

Development of the project through time

Source: http://onkrajgradbisca.files.wordpress.com/2013/03/onkraj_gradbisca_3d_2010_final-iw.jpg
Does allotment gardens need to be designed? And by who?

From professional point of view this question is for sure a very challenging one.

To appropriately include the areas of allotment gardens in the urban context it is for sure very important to find a good design and planning approach that is not only functional and rational for food production but also inclusive and responsive to the local and wider urban environment. But on the other hand Slovenian experience calls attention to the fact that urban gardening (regardless the type) is predominately a bottom up activity, and so users are also very important (co) creators of the form and structure of the site.

So where to find a balance between clearly defined and flexible enough?

What to define and what to leave for bottom-up creation?

When trying to understand where the design interventions are possible and needed, we should take into consideration different levels:

- designing the area of allotment gardens
- designing an allotment garden itself (a plot)
- and designing elements of allotment gardens

One of possible answers is to design a strong frame that corresponds with the environment and create the image and identity of place and leave the content inside for flexible, personalized development.

Among the best examples of such approach is still design of Naerum Allotment Gardens in Denmark (Carl Theodor Soerensen, 1952)

Other possibilities are related to design of elements of allotment gardens that can be quite distinctive for structure and form of the place.

Especially elements characteristics for alternative types of gardening as raised beds can be also used as a designing tool for achieving a recognizable and connecting spatial form.
Bibliography and sources of photograph

- Vrtičkarstvo v Mestni občini Ljubljana kot vir onesnaževal v tleh, pridelani hrani in podzemni vodi http://giam2.zrc-sazu.si/sl/programi-in-projekti/vrt%C4%8Dkarstvo-v-ljubljani

- http://onkrajgradbisca.wordpress.com/
- http://www.delo.si/clanek/74922)

Naerum Allotment Gardens in Denmark (Carl Theodor Soerensen, 1952)

Parallel Working Group Meeting

For confidentiality purposes, details of discussions about book chapters are excluded from WGs Summary Report. Summary Report of WG2 Sociology is absent although the meeting was held.

WG1 Policy and Urban Development Summary Report

WG Chairs: Nazila Keshavarz, Matthias Drilling

Participants:
- Chiara Certomà (Sant’Anna School of Advanced Studies, Italy; Belgium)
- Bruno Notteboom (Ghent University, Belgium)
- Byron Ioannou (Frederick University, Cyprus)
- Simon Bell (Estonian University of Life Sciences, Estonia)
- Christine Aubry AgroParisTech - INRA France
- Jeanne Pourias AgroParisTech - INRA France
- Nazila Keshavarz (ILS Research Institute for Regional and Urban Development, Germany)
- Martin Sondermann (Leibniz University Hannover, Germany)
- Sophia Meeres (University College Dublin, School of Architecture, Ireland)
- Efrat Eizenberg (Technion Architecture and Town Planning, Israel)
- Madara Gibze (Riga City Council Development Department, Latvia)
- Kristine Abolina (University of Latvia)
- Malou Weirich (Office International du Coin de Terre et des Jardins Familiaux, Luxemburg)
- Willem Hoentjen (AVVN, Netherlands)
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- Lidia Ponizy (Adam Mickiewicz University, Poland)
- Kamila Stachura (Adam Mickiewicz University, Poland)
- Hanna Szumilas (Warsaw University of Life Sciences, Poland)
- Jelena Djordjevic (Municipality of Vracar, Serbia)
- Nerea Moran Alonso (Technical University of Madrid, Spain)
- Matthias Drilling (FHNW, Switzerland)
- Simone Tappert (University of Applied Sciences Northwestern Switzerland)
- Nicola Thomas (University of Applied Sciences Northwestern Switzerland)
- Uche Chukwura (University of the West of Scotland, UK)
Issues Discussed:

Prior to Lisbon meeting WG1 agenda was circulated and agreed by the members. The agenda covered the following topics:

- Roundtable question "What is new since Poznan"
- Presentations by members
- Discussions about WG1 theme and national case studies
- Introducing matrix of policies
- WG1 contribution in editing Action’s book
- Brainstorming through collection of questions and ideas/comments
- Setting out next steps for following event in September 2014 in Riga/Latvia

All topics were discussed including matrix of policies that was presented by the Chair of WG1 Dr Nazila Keshavarz. The presentation was a short summary of urban allotment gardens governance regimes in Europe which is briefed here:

**Governance Regimes of Allotment Gardens in Europe - A Short Review**

**Austria**
- Allotment gardens in Austria are governed by Federal and State laws:
- 6 Federal laws on the regulation of allotment gardening (Garden Act) were enforced in 1958.
- State law of 1988 on the regulation of AG in Lower Austria
- Vienna Garden Act of 1996.

**Belgium**
- Zoning plans provide regulations.
- Most AG complexes have internal regulation.

**Cyprus**
- No special governance regime or any kind of institutional framework exists in Cyprus for AG.

**Denmark**
- In 1908 the Allotment Owners’ Association was established to secure homogenous contract conditions with the land being rented from the government and local authorities.
- The national law on Colony Gardens (AG) was approved on June 1, 2001.
- The new legislation ensures that most of Denmark’s AG are given permanent garden status, which means that they can only be closed down if replacement land is made available.
Estonia

- Allotment gardens are not recognised as specific types of land use nor are they defined at national level.
- Laws of allotment gardens from Soviet times seem still to be a norm.

Finland

- Land Use and Building Act define the use of urban spaces.
- Land use plans do not cover allotment gardens for development purposes.
- Allotment gardens are officially recreational areas with general rules by municipality and Allotment Garden Associations.

France

- In France governing laws of allotment gardens depend on the Rural Code that applies to agricultural activities.
- Allotment gardens are run by non-profit associations.
- The land may belong to the association, local authorities or housing societies.
- There is no formally recorded AG in FYR Macedonia

Germany

- There are Federal Law, National law and central legal document (i.e. Federal Building Code and National law on planning and building, zoning plan, binding land-use plan).
- Additional laws on federal level affect AG especially: laws of associations, environmental and nature conservation legislation, sewage and waste law, Laws on sub-levels.
- No laws or Acts on federal and states level exist for Community Gardens.

Greece

- No official land use regulations or any other institutional framework at national/regional level exist.
- There are municipal urban gardens under Social Structures category funded by the Structural Funds and Cohesion Fund in NSRF (2007-2013).
- In Italy, urban AG are offered by local governments encouraging low income senior citizens to produce their own food and increase social interactions (Tei et al., 2010).

Ireland

- The Acquisition of Land (Allotments) Act, 1926, enabled local authorities in urban areas to provide land for allotments with the intention of assisting the urban poor.
Israel
- There is no law or act.
- A national community gardens steering committee runs pilot projects in 5 poor cities.

Latvia
- No act and law on the national level that regulate urban gardening exist.
- The governance of AGs is in the competence of municipal government

Lithuania
- At national level there is Gardeners’ Associations Act.
- In Luxemburg there is no AG law.
- The laws on communal and urban development enable the authorities to create AG zones assigned for gardening, cultivation and recreation.

Malta
- No strategic government or planning policies for allotment gardens are available.
- No national Act or law yet.

Netherlands
- Allotment gardens fall under the general spatial planning law.

Norway
- Allotment gardens are defined in the National Planning & Building Act, section for municipal and zoning plans with assumptions enforced in late 1970s that anything not supported directly within the Act is not allowed.
- The Act is divided into 6 Themes and allotment gardens fall under the Theme 1: Housing and Constructions.
- Of key significance is Theme 5, which includes agricultural land use with no reference to allotment gardens.

Portugal
- In 2008, Lisbon Municipality has developed “preventive measures” integrated on Lisbon Master Plan revision framework, which was being revised at that time.
- In 2012 the New Master Plan of Lisbon was completed and it adopted specific targets that includes “Green Plan” such as Urban Allotments, Green Structure Areas, Water Cycle Improvements.

Serbia
- There was not and still there is not any kind of Act or law related to allotment gardens at national and local levels.
Slovakia
- In 1991, a national law on allotment gardens (Colony Gardens) was passed to adjust the owner’s rights to the land and other agricultural properties.
- A new law also is in place that is about land exploitation and ownership regulations.

Spain
- No legal framework, laws or Acts exist for AG at any level.
- AG are regulated by municipal programs that began in 90s.

Sweden
- Allotment gardens are covered by the Planning and Building Act, second Chapter on the need for Green Spaces.

Switzerland
- Allotment gardens are administrated by municipalities.
- Each has developed its own gardening and construction regulations.
- They are legally secured and located within green, recreational, or leisure zones.

United Kingdom
- In 1908, the Small Holdings and Allotments Act came into force.
- The rights of allotment holders were strengthened through the Allotments Acts of 1922.
- Allotments Act of 1925 established statutory allotments which local authorities could not sell off or covert without Ministerial consent, known as Section 8 Orders.
- Further legislations have affected allotments, the latest of which is the Localism Act 2012.

Discussion
- How allotment garden’s governance regimes in European countries shall be assessed?
- There are certain terminologies used in different countries that need to be defined (National, Federal, Regional, Provincial, Local, ...)
- It is useful to develop “Classification Criteria” based on above definitions that demonstrate types and strength of AG governance regimes.

In overall 3 levels of governance regimes in presented European countries are observed:
- National
- Regional/Provincial
- Local
Allotment gardens’ laws and regulations are enforced and implemented by one or more authorities such as:

- City councils, municipalities, environment agencies,...
- Organizations that influence allotment gardens (Allotment Garden Associations, NGOs,...)

There are different tools that support governing of allotment gardens in different countries:

- National Law
- Federal Law
- Additional Laws (Local):
- Zoning and Land Use Plans
- Building Acts and Regulations
- Rural Code

The presentation of governance regimes in Europe was concluded by debates about definitions of allotment gardens and other forms of urban gardens such as community gardens and how they are defined and understood in different countries. There were also three presentations:

Kamila Stachura (STSM report), *Environmental analysis of land use changes in green infrastructure of city (allotment gardens) - with particular emphasis on allotment gardens: Poznań and Salzburg case study* Adam Mickiewicz University, Poznan/Poland

Simone Tappert: *Future Scenarios of Allotment Gardens in the context of increasing urban densification and urban open space policies in Switzerland, Institute for Social Planning and Urban Development (ISS)*

Bruno Notteboom and Chiara Certomà: *Urban Gardening As A Planning Opportunity In Mid-Size Cities. The Case Of Ghent*
WG3 Ecology Summary Report

WG Chairs: Annette Voigt, Andrzej Mizgajski,

Participants:
- Andrzej Mizgajski (AMU Poznań, Poland)
- Annette Voigt (Salzburg University, Austria)
- Ari Jokinen (University of Tampere, Finland)
- Avigail Heller (Ministry Agriculture & Rural Dev., Israel)
- Béatrice Bechet (Inst. Science & Technology f. Transport, Development & Networks, France)
- Jelena Ristić Trajković (University of Belgrade, Serbia)
- Johannes Langemeyer (UAB, Spain)
- Jürgen Breuste (Salzburg University, Austria)
- Laco Bakay (Nitra, Slovakia)
- Ligita Baležentiene (ASU Kaunas, Lithuania)
- Mart Kulvik (EMU, Tartu, Estonia)
- Monika Latkowska (Warsaw University, Poland)
- Paulo Luz (LNEC, Lisbon, Portugal)
- Teresa Leitão (LNEC, Lisbon, Portugal)
- Uche Chukwura (UWS, Paisley, Scotland, UK)

Issues Discussed:
- Summary of Poznan meeting and overview of WG3 activities in the last month (Annette Voigt, Andrzej Mizgajski).
- Presentation and discussion of case studies from WG 3 members:
  - Ladislav Bakay: Methodology discussion. Survey of abandoned plots and the abundance of invasive species in Nitra
  - Avigail Heller: Picking plants for Allotment Gardens or Community Gardens
  - Monika J. Latkowska: Allotment gardens in Warsaw – methodology and results of the studies
  - Uche O. Chukwura: Evaluating hydrological controls on the migration of potentially toxic elements in soil and waste materials

Abstract: Methodology discussion. Survey of abandoned plots and the abundance of invasive species in Nitra

Ladislav Bakay, Department of planting design and maintenance, Faculty of horticulture and landscape engineering, Slovak Agricultural University, Nitra – Slovakia, lazlo.bakay@gmail.com
From the historical view in the period from 1957-1989 the Czechoslovakian Horticultural Association established several AG’s. In 1989 this association counted 408,000 members. Except the typical AGs we considered to involve also typical vineyards – “allotment vineyards”– especially on the fringe of larger cities. The model city of our case study is Nitra due to the large number of AG’s. After the Velvet Revolution the role of AG’s became less important. People abandoned plots or their function changed from production to recreation. The abandoned plots are ideal places for invasive plants. Monitoring of neophytes and archeophytes on the abandoned AG plots is the first step. The most abundant species will be monitored more closely; their population structure and dynamics will be evaluated, which will be the second step.

Abstract: Picking plants for Allotment Gardens or Community Gardens

Avigail Heller, Ministry of Agriculture and rural development, Head of plant engineering and botanical gardens branch, Israel, avigh@shaham.moag.gov.i

Most of the population in Israel is living in the Mediterranean area. This area is characterized by a short winter and a long dry period. In addition, there are inconsistencies in the climate events that occur in different years. For example: In December 2010, there were several hot and dry days in Israel causing a large fire in the Carmel Mountain. This fire burned approximately 25,000 dunam and killed 44 people. On the other hand, in December 2013 a winter storm covered many mountain areas in heavy snows. Many settlements were disconnected from water and electricity and a lot of plants were damaged.

Furthermore, Israel has water shortage both in Mediterranean areas and in other Phytogeographical regions. There are other areas in which plants have difficulty surviving (near the sea shores for example). Therefore, while picking plants for Allotment Gardens or Community Gardens, one has to consider climate conditions and the specific area in which the garden is established.

Creating Allotment Gardens or Community Gardens in urban areas is a chance to pick plants that will enrich the biodiversity. Using plants, it is possible to create in the gardens conditions for an environment supporting a variety of creatures such as bees, butterflies or birds.

However, while planning or managing the garden, we avoid planting invasive plants or plants that are vulnerable to disease or pests.

Abstract: Allotment gardens in Warsaw – methodology and results of the studies

Dr. Monika J. Latkowska, Ing. Monica P. Stępień, Ing. Aleksandra Rutecka, Warsaw University of Life Sciences, monika_latkowska@sggw.pl

Aim of the studies: Studies were carried out as the 1st stage of the research project ‘Allotment gardens as a part of Warsaw ecological infrastructure’, and were undertaken to obtain information about the garden users, plant cultivation (species and cultivation methods) in selected Warsaw allotment
garden (AGs). The aim of the 2nd stage of the studies was to implement and test the methodology elaborated by WG 3 (questionnaire for the AG users), to gain information about the allotment usage, ecological awareness of the users and their environmentally friendly practices.

Study subject and methods: 1st stage of the studies was carried out in the period of June 2012 - August 2013 in 3 complexes of AGs in Warsaw. Thirty randomly selected plots from each garden complex were surveyed by means of structured interviews with the plot owners and observations to elaborate characteristics of AG users’ group, usage of the plots, plants grown, cultivation practices and care for the environment. The 2nd stage of the studies is not completed yet.

Conclusions: In all AGs studied users over 40 years old were in predomination, but number of years of plot usage differed between AGs. In all plots ornamental and fruit plants as well as vegetables and herbs were grown, but ornamentals dominated over other groups. Fresh plant products were used by all users, they were often also processed. In all AGs cultivations covered slightly bigger area than lawns. As it is obligatory in all AGs, compost was produced on all the plots. Rain water was used mainly in Lotnik & Piaski and Bemowo II, but the number of users did not exceed 50%. In all AGs both chemical and natural products were used for plant protection and fertilization. All users took care of wild animals, mainly by feeding birds.

Abstract: Evaluating hydrological controls on the migration of potentially toxic elements in soil and waste materials

Uche O. Chukwura*1, Andrew S. Hursthouse1, Simon J. Cuthbert1, Teresa E. Leitao2

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A laboratory hydrological control study was conducted at the National Laboratory for Civil Engineering in Lisbon, Portugal to evaluate the migration of potentially toxic elements (copper, zinc, cadmium and lead) in urban allotments and soil materials from location and mining sites in Portugal and Scotland using a standardised soil-column leaching experiment to understand metal leaching behaviour and release to groundwater. Tracers (zinc chloride, copper chloride and cadmium chloride) were used to assess the temporal variability of contaminant discharge from the soils. Deionised water (pH 7.56) with EC 2 s/cm (at 16.3oC) was used in saturating and leaching the materials. Results from IC/ICPMS/ICP/AES analysis of leachates show that the solute mobility was controlled by adsorption possibly due to surface complexes, organic matter and cation exchange capacity for some of the soil materials especially for the contaminated waste (that requires much leaching to reduce its conductivity) which is from an area of long lead – zinc (sulfide ore mining) history in Southern Scotland. Data integration with hydro-
geochemical modelling PHREEQC software with the minteq database simulates surface transport and identified solubility phases: CupricFerrite (CuFe2O4), CuprousFerrite (CuFeO2), Fe(OH)2.7Cl0.3, Ferrihydrite (Fe(OH)3), Geothite (FeOOH), Hematite (Fe2O3), Magnetite (Fe3O4), Mg-Ferrite (MgFe2O4), Pb(OH)2 (C) responsible for release to groundwater. This aids evaluation of related field observed studies conducted on the mining catchment. This explains why major environmental factors (pH, temperature) influence leaching behavioural pattern of heavy metals in both historic sites and urban allotments. The study helps the understanding of the hydrogeochemistry and controls of groundwater and or surface water for allotments and the local community.

Keywords: hydrochemistry, groundwater, allotment soil, leaching, Scotland, Portugal.

References


General Discussion: Potential for cooperation

In search of opportunities for scientific cooperation within Working Group 3 Ecology, every member presented his/her area of interests. It turned out that WG3 members are interested in 5 specific research fields, which have significant potential for cooperation:

- Contamination of the cascade systems: soils - water - plants: Teresa Leitão, Andrew Hursthouse, Béatrice Bechet, Uche Chukwura
- Botanical and geobotanical studies: Laco Bakay, Ligita Baležentiene, Avigail Heller, Ari Jokinen, Monika Latkowska,
- Position of AGs in urban structure: Mart Kulvik, Andrzej Mizgajski
- AGs as ecosystem services providers: Jürgen Breuste, Johannes Langemeyer, Annette Voigt
- AGs users ecological behaviour and practice: Annette Voigt, Jelena Ristić Trajković, Andrzej Mizgajski

The subgroups declared to develop cooperation programs.
WG 4 Urban Design Summary Report

WG Chairs: Silvio Caputo, Sandra Costa

Participants:
- Silvio Caputo (Coventry University, UK)
- Sandra Costa (University of Trás-os-Montes and Alto Douro, Portugal)
- Runrid Fox-Kämper (ILS Research Institute for Regional and Urban Development, Germany)
- Russell Good (Birmingham City University, UK)
- Frederico Meireles Rodrigues (University of Trás-os-Montes and Alto Douro, Portugal)
- Merle Karro-Kalberg (Estonian University of Life Sciences, Estonia)
- Minttu Kervinen (Tampere University of Technology, Finland)
- Verica Medjo (University of Belgrade, Serbia)
- Ina Suklje Erjavec (Urban Planning Institute of the Republic of Slovenia, Slovenia)
- Kostas Tsiambaos (National Technical University of Athens, Greece)
- Antoine Zammit (University of Malta, Faculty for the Built Environment)
- Corinna S. Clewing (Norwegian University of Life Sciences)
- Ivana Blagojevic (Faculty of Agriculture, University of Novi Sad)
- Branko Pavic (University of Belgrade)
- Mária Bihunová (Slovak University of Agriculture)
- Jana Kozamernik (Urban Planning Institute of the Republic of Slovenia)
- Dimitra Theochari (National Technical University of Athens)
- Sandra Treija (Riga Technical University)
- Jasminka Rizovska Atanasovska (University ss. "Cyril and Methodius" Skopje, Faculty of Forestry)

Introduction

Objectives of the WG4 session in Lisbon included:
- To further disseminate within the work group current research from members through presentations of national reports on the situation of allotment gardens in each European country as well as case studies;
- To establish authors for each chapter and develop existing abstracts into chapters’ structures;
- To discuss ways to gather more data enabling the drafting of chapters;
• To discuss further outputs developed by the WG4 members.

The WG4 meeting started with the welcome to the new participants from Malta, Slovenia, Slovakia, Greece and Serbia, followed by the presentation of the agenda of the 2-day work sessions.

What follows is a summary of the presentations and the issue discussion during the session:
• Introduction to the session from the Chairs
• Presentation of national reports and case studies:
  o Germany (Runrid Fox-Kamper),
  o Slovakia (Mária Bihunová),
  o Serbia (Ivana Blagojevic),
  o Greece (Kostas Tsiambos and Demitria Theochari)
• Q&A session after presentations
• Book chapters: Lead authors and contributors, and structure for each chapter
• Preparation for the World Café’ session

Issues Discussed

Due to the limitation of time it was proposed to move to the second day half of the presentations to gain length for more debate. The session then followed the agenda starting with the presentation of the national reports and case studies.

Germany: In Germany, allotments are used both for leisure and food production. The country has two major forms of UAGs: the Schrebergarten (family garden) and the Gemeinschaftsgarten (community garden). Case studies presented were from the City of Aachen. The main challenges allotments are facing in Germany are related to demographic changes (e.g. an aging population, a growing number of immigrants from other countries, and conflicts between diverse ethnic groups) and with the growth of cities (e.g. the need for more allotments conflicting with other land use high land values).

This presentation was followed by a short debate. Issues raised were related to the change of the image/appearance and functionality of the city if supply of allotments would match the current peak in demand - how would these changes impact the community and the city generally? One of the points raised is that at present the provision of allotments may not match the local demand. In some UK cities, for example, there are vacant allotments in some areas and long waiting lists in other areas. At the same time, organisations or groups occupy empty land or spaces because unwilling to wait or not informed about the availability of spaces. Other questions raised concerned the private vs public realm of UGs, vandalism in allotment gardens (it happens and it is a problem) and the use of income from rents.
Slovakia: In Slovakia, there is a tradition of growing food in cities and the provision of allotments is considered in planning policies. Allotments vary greatly in size (64-500m²). Mostly, the elderly use them. Current provision seems to meet demand since the young does not seem interested in urban gardening. Also, reasons supporting this practice are shifting from the need of food availability to the need of for healthier lifestyle (e.g. good food and physical exercise). On the other hand, fast urbanisation is also encroaching on land suitable for gardening and food growing. At present, individual plots can be bought and privatized. Case studies presented were from the region of Nitra.

The ensuing debate focused on the relationship between ownership and the purpose for allotments, which were originally conceived as a way to secure food for low-income groups through the temporary use of public or private land. Today allotments can also provide social benefits to low income groups as well as environmental benefits for all. Some argued that by allowing a change of ownership model (e.g. Austria and Slovakia) purposes underpinning the use of urban land for gardening would be undermined. In other cases such as in Latvia, allotments are being privatized as a response to the lack of a certain type of dwelling/housing (private/familiar housing). Situations can vary among the different countries and even within the country itself.

In the last part of the Thursday session, lead and contributing authors for each chapter were identified.

**Next steps**

Next steps include:

- To press members of the WG4 and of the COST Action at large in order to develop more national reports and case studies;

- To share a Dropbox folder where existing and forthcoming material will be stored;

- To expand the initial structure of the chapters with the goal of circulating a first, albeit incomplete, draft before the next appointment in Riga.

The chairs mentioned that, in their opinion, the ongoing discussion about the adaptability of the existing allotments’ provision in European countries to new needs and requirement of society could generate further outputs such as articles for peer-reviewed journals. Members were invited to circulate proposals and seek collaboration with other members.
Runrid Fox-Kämper, ILS Research Institute for Regional and Urban Development, Aachen; Martin Sondermann, Leibniz University Hannover

Allotment Gardens in Germany – A National Report and Typology

Situation in Germany

There are two major forms of urban gardens in Germany: The classical form of allotment gardens called ‘Kleingarten’ (literally = small garden) or ‘Schrebergarten’ and modern forms inspired by the community gardening movement called ‘Gemeinschaftsgarten’ (community garden) or ‘Interkultureller Garten’ (intercultural gardens).

The German tradition of allotment gardening understood as the classical Kleingarten can be traced back to the 19th century. The orthopedist Dr Daniel Gottlieb Moritz Schreber suggested public playgrounds to improve the health of children (Appel et al. 2011: 24 f.) Following this idea the first gardening association was founded after his death in Leipzig in 1861 with ‘family gardens’ alongside the children’s playground, which have been called ‘Schrebergärten’ later. Especially after World War I allotment garden areas spread all over German cities to provide food for the suffering population. In this time the first allotment garden’s law (Kleingarten- und Kleinpachtlandverordnung) has been passed in 1919 and the foundation of the German Allotment Gardens Association (Reichsverband der Kleingartenvereine in Deutschland) was founded in 1921.

Today about 1.2 million of these garden plots exists encompassing a total area of 50.000 hectares (BMVBS 2008: 1). In addition to the use of these gardens for leisure and recreation, the classical German allotment garden always includes the production of food (fruits, vegetables, herbs and salads), the latter is a necessary condition according to allotment gardening law. Typical users are people living in flats without private gardens. Therefore they can be found throughout the cities and mostly close to densely populated residential areas (BMVBS/BBR 2008: 2ff).

Parallel to this classic form of urban gardening the new movement of community gardening started to evolve in Germany in the 1990s modelled on examples of community gardening emerging in New York on brown fields in the 1970s (Eizenberg 2013: 17-23). There are no official statistics, but it can be estimated that approximately 250 community gardens throughout Germany exist. They are created and operated by communities, mostly organized as associations (eingetragene Vereine). According to their major idea or use they are often called ‘Interkulturelle Gärten’ (intercultural gardens), or ‘Nachbarschaftsgärten’ (neighborhood gardens) and primarily serve social issues in combination with ecological ideas of organic and alternative gardening (Rosol 2006: 7; Appel et al. 2011: 34-39, Müller 2011).

Both forms of urban gardens in Germany are very similar concerning their origin (as social movements) and their aim to operate gardens in communities
(associations) for both recreation and food production (Appel et al. 2011: 24-31). Activists of the modern community gardens do mostly not refer to the classical allotment gardens but to international movements such as the community-garden-movement in New York City (USA), the “Transition Town”-Movement (UK) or to forms of urban agriculture known in Latin American countries such as Cuba (see Table 2). Accordingly modern gardening activists often regard themselves more as political or ecological activists performing ‘alternative ways’ of gardening, living and working (Müller 2011, Appel et al. 2011: 23-39) and reject the traditional forms of allotment gardens as being too conservative and over-regulated.

Indeed the classical Kleingärten are more regulated as they have legal framework based on the Federal Law on Small Gardens (Bundeskleingartengesetz). Due to that they have fewer possibilities to redevelop the gardens as size and forms of uses are fixed in the law. On the other hand they are more established and better protected against other interests in urban development. Therefore most of the traditional allotment gardens have a long tradition as well as a long-term perspective (BMVBS 2008: 133 f.). Modern community gardens on the other side are often established as interim-uses of urban brownfields. Therefore they do have a rather short- to midterm-perspective concerning their existence (Rosol 2006: 291). Further characteristics are summed up in table 1.

<table>
<thead>
<tr>
<th>Form</th>
<th>Kleingarten Allotment Gardens</th>
<th>Gemeinschaftsgarten Community Gardens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Origin</td>
<td>Classical (“small gardens”)</td>
<td>Modern (“community gardens”)</td>
</tr>
<tr>
<td></td>
<td>Based on “Kleingartenbewegung” (small-garden-movement) since 1860s</td>
<td>Based on community gardening movement (USA) and other international movements (e.g. Transition Town) since 1990s</td>
</tr>
<tr>
<td>Objectives</td>
<td>Originally: health and sports Later: subsistence / food production Today: primarily leisure</td>
<td>Social and political (community-building, „right to the city“) Subsistence / food production (post growth, anti-capitalism)</td>
</tr>
<tr>
<td>Legal Framework</td>
<td>Federal law („Bundeskleingartengesetz“); (strict) regulations</td>
<td>No framework; no general regulations</td>
</tr>
<tr>
<td>Organisation</td>
<td>Formalised structures (associations)</td>
<td>No general form of organization (often associations)</td>
</tr>
<tr>
<td>Statistics</td>
<td>Number of areas: 15.600 Number of plots: 1.240.000</td>
<td>Number of gardens: appr. 250</td>
</tr>
</tbody>
</table>

What are the challenges in adapting existing Urban Allotment Gardens to the changing needs?

Cities and regions in Germany are more than in other industrial countries influenced by demographic change with low birth rates, a declining population size combined with increasing expectancy leading to an ageing population (for details
s. table 2). Another phenomenon is the diversification of the population caused not only by a diversification of lifestyles but also by an ethnically diversification due to the growing proportion of inhabitants with an immigrant background (at present one-fifth of the total population with a growing trend). While ageing of population is a phenomenon present in every German region and city with the group aged over 65 expected to rise from about 20 % at present up to about 30 % in 2050, growth and decline of population affect German cities and regions differently. While in some areas population is still growing due to in-migration of young people, more than half of the of Germany’s administrative districts already have to face a considerable decline of population (Berlin Institute 2009). This decline started in East-Germany (on the former territory of the GDR) after the reunification in the 1990s with probably serious impacts on many regions but the trend is now spreading further westwards. Besides many rural regions zones near the former frontier between East and West Germany and the post-industrial areas such as the Saarland and Ruhr region are affected. ‘Winner’ regions are the south of Germany in general, the Rhine-Main-area and regions around major cities. Regions of growth and decline partly are very close together.

Table 2: Population in Germany, North Rhine-Westphalia and Aachen compared

<table>
<thead>
<tr>
<th></th>
<th>Inhabitants total in 2012 in 1000</th>
<th>Inhabitants expected in 2050 in 1000</th>
<th>Persons over 65 in 2011 in %</th>
<th>Expected persons over 65 in 2050 in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>80,5231</td>
<td>69,45</td>
<td>20,12</td>
<td>33,15</td>
</tr>
<tr>
<td>North Rhine-Westphalia</td>
<td>17,5543</td>
<td>15,25</td>
<td>20,43</td>
<td>31,75</td>
</tr>
<tr>
<td>Aachen</td>
<td>2404</td>
<td>n.a.</td>
<td>22,94</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

Demographic trends can also been observed in allotment gardens, where a declining demand, an over-ageing of the tenants as well as a growing influx of people of foreign origin can be observed (BMVBS/BBR 2008: 5-7).

As consequence in some German regions the demand for renting a piece of allotment is higher than the existing stock, while in other regions –especially those with a population decline – some allotment garden associations have to face vacancies of plots. Vacancies or high demand are also question of available plots and relation to potential users. According to (BDG 2013) in East-German federal states where about 20 % percent of German’s population lives more than about 59 % of all German allotment gardens can be found. The density corresponds to this: while in West-German federal states the relation between allotment garden plots and inhabitants is 5.9 per 1.000 inhabitants, in East-Germany there are 36.3 plots per 1.000 inhabitants (ibid). As the average age of plot holders is described as ‘60 or older’ (BMVBS 2013.), vacancy problems will increase in future in those regions that have to face vacancies already at present.

The internationalization of gardeners sometimes leads to group formation and conflicts between different ethnic groups and between plot-neighbors, respectively (Ahmed et al. 2013: 62-65). This corresponds to conflicts arising from different opinion of the way gardens should be used leading to disputes.
amongst tenants or between tenants and honorary board members over rules and regulations such as the fixed percentages of productive and non-productive land and hedge heights.

Especially in growing cities economically more promising kinds of land use jeopardize allotment areas although most of them are protected by law and interventions have to be compensated. Here the major challenge of allotment gardens is their protection from building development. The gardening associations respond to that challenge by improving their publicity and organizing protests through local and national media as well as building new strategic alliances with other associations who need green open spaces in city centers such as sports clubs. Additionally they put some pressure on local politicians and try to get seats in local and district councils (Sondermann 2013: 17-19).

How are emerging new types of UAGs transforming the city and create new needs?

The challenges community gardens are confronted with considerably differ from the allotment gardens. Their major challenges are a lack of funding and institutionalization, the provision of suitable sites for initiatives as well as the maintaining of sites for a long-term. The lack of funding affects the payment of leasing fees and project managers and the acquisition of gardening equipment and materials. The provision of suitable sites is often complicated as it depends on the ownership of the sites, their availability in respect of their status in binding zoning-plans or the interest of investors to develop the site.

Most of the community gardens start as so called interim-uses and have a leasing contract over a rather short period of time. The uncertainty over the long-term perspective is often complicated to deal with and frustrating, respectively (Rosol 2006: 291). One strategy to deal with lack of funding is to professionalize the acquisition of financial support and funding from the public sector, foundations, private people and companies.

The problem of finding and keeping of suitable sites for new gardening projects is addressed by the improvement of public relations and publicity strategies. Additionally, different forms of support from public authorities are given aiming at long-term contracts with the landowner and a legal protection of the sites (Appel et al. 2011: 147; 173-181). Hereby a professional representation on the internet, showcases on the outside of the gardens, the selling of food products and the performance of different kinds of events are seen as appropriate ways to gain more attention from politics and the public (Ahmed et al. 2013: 68-75). In addition to this, some projects started cooperation with professional allotment-gardening associations in order to learn from their experience, to build strategic alliances for urban gardening and sometimes even to use vacant allotments for community gardening (ibid.), although in general the new community garden associations and the classical one dissociate themselves from each other.

Due to the fact that community gardens are mostly used as common grounds without fences around the single plots and the idea of working closely together
often leads to social conflicts amongst the gardeners as they follow different ideas and ways of gardening. Some associations try to solve such problems by talking openly about the conflicts and conducting some forms of mediation. Another strategy is to carry out collaborative activities such as collective planning, composting, producing products (e.g. honey) and cooking (Ahmed et al. 2013: 69; 75; Appel et al. 2011: 146).

### Specific situation in Aachen

Aachen is located in the west of the federal state of North Rhine-Westphalia near to the border to the Netherlands and Belgium with a population of about 240,000 inhabitants. With its famous Aachen University (RWTH Aachen) and its prosperous economy has got comparatively positive development perspective although it is also affected by demographic effects such as the ageing of its population. The Aachen Association of Allotment Gardeners (Stadtverband Aachen der Familiengärtner e.V.) presents interests of 44 allotment garden associations with about 2,500 single plots. Most of the allotment garden area can be found within the urban area and close to residential areas. In the different garden allotment areas both can be found: vacancies of plots in some areas and waiting lists in others. As one reason for a high demand might be an integrated position in the city with good accessibility via public transport.

In addition to this classical form of allotment gardening recently some initiatives were founded with the aim to support modern forms of urban gardening. The movement ‘Meine Ernte’ (my harvest) which started in Austria in the 1980s is a kind of assisted husbandry with planted pieces of farmland being rented to urban dwellers by farmers. Corresponding to this there are some farms around Aachen city that offer such pieces of land. In May 2013 the association ‘Urbane Gemeinschaftsgärten Aachen’ (urban community gardens) was founded and managed to lease two public spaces within the city of Aachen, a brownfield in Richardstraße and an area in the public parc Stadtgarten for growing vegetables, herbs and other crop plants. The initiative emphasizes the participatory character of both community gardens and has managed to get some public attention as both sites are located in an exposed position of the inner city.

### References


• h t t p s : / / w w w . d e s t a t i s . d e / D E / P r e s s e S e r v i c e / P r e s s e / P r e s s e k o n f e r e n z e n / 2 0 0 6 / B e v o e l k e r u n g s e n t w e l k u n g / bevoelkerungsprojektion2050.pdf?__blob=publicationFile


• http://www.urbanallotments.eu/fileadmin/uag/media/Poznan/Poznan_report2.pdf
### URBAN ALLOTMENT GARDEN – THE URBAN CONTEXT, THE ALLOTMENT SITE, AND THE ALLOTMENT’S TYPОLOGY

#### a) Classical Allotment Garden

<table>
<thead>
<tr>
<th>URBAN CONTEXT</th>
<th>ALLOTMENT SITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aachen is located in the west of the federal state of North Rhine-Westphalia near to the border to the Netherlands and Belgium with a population of about 240,000 inhabitants. Within the city limits 44 allotment garden associations with 2,457 single plots can be found, mostly close to residential areas or integrated in other green infrastructure.</td>
<td>The Allotment Garden Association Hanbruch is located near a residential area close to the inner city of Aachen and is connected to a green corridor leading into open landscape. It has 162 parcels in two sub-areas with totally 50,500 sqm (average of single plot: 311 sqm). Both subareas are fenced with lockable gates. The areas – not the single plots - are accessible by car which can be parked on a small parking site in front of the main entrance near the club house or along the public road.</td>
</tr>
</tbody>
</table>

Groundplan of Aachen with marked Allotment Garden Association Hanbruch (in red) Source: Openstreetmap

![Arial view](image)

#### ALLOTMENT TYPE

The single plots are arranged more or less rectangular along unsecured paths. Most of them are framed by low fences and can be entered through a gate. The paths are accessible through gates that are kept open every day from about 10 a.m. to 8 p.m. (shorter opening times in winter) Along the public paths here and there benches are provided. Electric power is provided to each plot, while water can be tapped at diverse water plugs. Every allotment site has got a small house often with a porch in front of it. A club house opens regularly its doors during weekend times and can be rented for family celebrations. One characteristic is the school garden which is provided for a near-by primary school on one of the plots.

#### SPECIAL FEATURES

The area on the whole appears to be well maintained, be it the public area as well as the plots itself. The lockable gates create an atmosphere of privacy although the public paths between the plots have to be accessible to public during daytime by law. The single plots show typical patterns of sectioning: Half of the site is used for growing vegetables, herbs and fruit trees, the other half is subject to recreation with a small house, a (mostly covered) terrace and lawn. The vegetable patches typically can be found along the public path, while the recreation area is in the back half of the site, often hidden behind a hedge. The small house is mostly brick-built and individually shaped according to used colours and materials.
## Allotment’s Profile

<table>
<thead>
<tr>
<th>User and Category of Use</th>
<th>Legal Framework</th>
<th>Current Status/Timeline or Short History</th>
</tr>
</thead>
<tbody>
<tr>
<td>The typical household in Hanbruch Allotment Garden appears to be older couples, followed by younger families. In recent decade more plots have been rented to people with migration background. All groups use plots for both: food production and leisure.</td>
<td>Federal law (Bundeskleingarten-gesetz) with (strict) regulations. Allotment gardens areas on the one hand are public areas that have to guarantee public accessibility, and on the other hand the single plots are rented privately according to strict rules given in the law and further internal rules of the associations. For instance associations have strict specific rules (Garten- und Bauordnung) for their members including kinds of use, maintenance rules, rules for buildings, etc. Allotment Gardens are a subject in urban planning law (Bundesaugesetz). If AG are marked in legally binding land-use plans, this cannot be changed for other kinds of land-use without providing alternatives elsewhere and compensation money.</td>
<td>Like almost all allotment areas in Germany the Hanbruch Garden is protected twice a) by the federal Kleingarten law and b) planning laws. So the status can be regarded as permanent.</td>
</tr>
</tbody>
</table>
SOIL/CLIMATE/SPECIES GROWN/TECHNIQUES OF CULTIVATION | BENEFITS (social-economic-environmental) citywide | local
---|---|---
Vegetable patches cover at least half of the plots, the other half is covered by lawns, unsecured paths, terrace and garden house. Typical plants are fruit trees and bushes, beds for vegetables, potatoes and flowers. A small pond can be seen here and there. | Hanbruch allotment garden offers an opportunity for walkers to start a promenade exploring the allotment area and to proceed into the open landscape. It helps to keep open a green axe into the city and by this to provide fresh air into the built inner city with a high density. | The Hanbruch allotment garden association offers a place to be for urban dwellers living in flats without a piece of garden. Tenants can spend free time outside on fresh air. The association offers a lot of informal and formal opportunities to meet and to create community (events such as breakfast for seniors, celebration of thanksgiving, Christmas, carnival, field-trips etc.). The school garden plots has an educational function.

DISADVANTAGES (social-economic-environmental) citywide | local | COMMENTS
---|---|---
The managing board of Hanbruch association reflects the main challenges of classical garden associations in Germany: five of six members are male and 4 persons in an age of retirement. | At present all plots are in use and well-kept, but it can be observed that many of the tenants are well advanced in years and will give up their plot in foreseeable future.

b) Community Garden

URBAN CONTEXT | ALLOTMENT SITE
---|---
Aachen is located in the west of the federal state of North Rhine-Westphalia near to the border to the Netherlands and Belgium with a population of about 240,000 inhabitants. Besides 44 allotment garden association with 2.457 plots first community garden initiatives were founded in 2013. | The community garden HirschGrün is located in the inner city of Aachen close to the very busy inner ring. It uses a brownfield that was in a poor condition before it was rented to the new founded Urban Community Gardens Initiative Aachen in May 2013. The area is collaboratively maintained by the members of the association who follow the ideas of the Transition Town movement. The site is surrounded by a low fence with one locked gate. It is located close to a nice playground with high trees. A showcase informs about background and aims of the initiative.
**URBAN ALLOTMENT GARDENS**

**Groundplan of Aachen with marked community garden HirschGrünn (red arrow) Source: Openstreetmap**

**Aerial view on the community garden´s site before demolition of buildings**
Source: google

<table>
<thead>
<tr>
<th>ALLOTMENT TYPE</th>
<th>SPECIAL FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>The whole area of community garden is used as a common ground without fences around the single patches (picture 4). The area itself is encircled by a low fence with a locked gate as access (picture 1). Small unsecured paths lead through the area (picture 3). Water is provided through three big containers on one side of the garden (picture 2). Electricity is not available. A construction trailer gives some shelter and allows the stowage of materials (picture 6). An improvisational set of benches and table obviously produced of recycled materials can be used for leisure and meetings.</td>
<td>The recultivation of the former brownfield has just started. Within a year’s time nature has regained a lot of space. Compared to a classic allotment garden area the appearance of the site is more organic and less tidy. The association’s philosophy of a low-tech-approach is perceptible: recycled materials, an organic structure of paths, and the like. A show case explains the approach to passers-by. A summer event attracted over 300 persons (picture 5). The Transition Town approach is underlined by a give box for bartering used books, clothes and so on.</td>
</tr>
</tbody>
</table>

**Detailed plan of community garden HirschGrünn**
Source: openstreetmap

**Sources: Fotos 1-4, 6: RFK, 5 Ophelia Ziermann**
## ALLOTMENT’S PROFILE

<table>
<thead>
<tr>
<th>USER and CATEGORY of USE</th>
<th>LEGAL FRAMEWORK</th>
<th>CURRENT STATUS/TIMELINE or SHORT HISTORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>The community garden is used by a group of mostly young adults (many of them being students, but activists of all classes and ages are taking part) who are interested in exploring urban gardening and a sustainable life-style with a low-tech approach. The main subject is the production of food, but the participatory aspect of the group is very important, too. Neighbors are explicitly invited to share the gardening site.</td>
<td>As described no legal framework for community gardens in Germany exists so far. The initiative founded an association to get a legal status and to be able to rent the site from City of Aachen authorities.</td>
<td>The initiative started in 2012 through protests against a bigger shopping mall planned in the inner city of Aachen. Following the Transition Town movement ideas came up to establish community gardens in Aachen. The association ‘Urbanes Gärtnern in Aachen’ was founded in May 2013 and rented two areas in Aachen, one of them being the Richardstraße. It was called ‘Gemeinschaftsgarten HirschGrün’ to memorize Freddy Hirsch, a Jewish inhabitant of Aachen who managed to save the lives of many Jewish children in concentration camps during World War II. The site was rented out by Aachen authorities for one year; the prolongation of the contract by end of this year caused no problem at all. Nevertheless it is an interim-use of a site, as Aachen has got plans for developing a neighborhood-park in this area.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOIL/CLIMATE/SPECIES GROWN/TECHNIQUES OF CULTIVATION</th>
<th>BENEFITS (social-economic-environmental) citywide</th>
<th>local</th>
</tr>
</thead>
<tbody>
<tr>
<td>Despite the fact that the soil of the brownfield site was of poor quality, first plants have been grown and developed well 2013. The quality of soil had been examined to assure that there are no contaminations before giving the site to the initiative. In 2013 vegetables (zucchinis, tomatoes, salads, paprikas, potatoes), herbs and berries could be harvested. For 2014 a lawn is planned for leisure purposes.</td>
<td>The initiative has got some attention in local media. The waste of food was a big topic in Germany in 2013 and therefore initiatives such as HirschGrün receive a lot of positive resonance.</td>
<td>The garden evokes a lot of communication and (positive) discussion within the neighborhood. Many people who pass by search for contact with the gardeners. The function of give box is described as 'lived integration'.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DISADVANTAGES (social-economic-environmental) citywide</th>
<th>local</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some (more older) neighbor complained that the site is not maintained well enough.</td>
<td>Not any vandalism happened during the first year, perhaps because the garden is visible from all directions.</td>
<td></td>
</tr>
</tbody>
</table>
Mária Bihuňová, Roberta Štěpánková, Slovak University of Agriculture in Nitra

Allotment Gardens in Slovakia

Allotment Gardens (AG) or „Garden Colonies” as they are called in Slovakia - have appeared as a particularity of the cities and urban environment. They are dated back to 60-ties of the 20th century. This phenomenon rised up when people could not travel abroad (socialism era), so they spent a lot of time and holidays in the country side. AG were set up for the cities over 50 000 inhabitants, but several years after, also small cities and villages established allotment gardens.

Situation in Slovakia

The first guidelines for Allotment Gardens in Slovakia were approved by Slovak Association of Gardeners and Fruiteres in 1957. During 1965 – 1968 was establishment of Allotment Gardens extended. Between the years 1979 – 1984 was dated second expansion of new members of Slovakian Federation of Allotment Gardeners. In this period were counted 109 000 new gardeners. After ten years the number of members increased twice – to 220 000, with total area 5 500 hectares of gardens. According to these factors the aesthetic and planting regulations for allotment gardens were elaborated. In 1977 was published second revision of regulations.

The catalogue of the architectonic design of the cottages, suitable for the allotment gardens, depending up the localisation was published. There were 24 types of garden cottages for lowlands, heights and mountain regions. For beginners and those who wanted to have a garden, was established model allotment gardens in the exhibition areal of Agrokplex in Nitra in 1982. There could be seen 12 different types of the gardens, with area of 400 m². Following types were presented: vegetable type, vegetable type with glasshouse, multifunctional garden in the lowlands, multifunctional garden in the heights, fruit type, vineyard type, garden in the suburb in heights, garden in the suburb near the water stream – recreational garden, garden with animal breeding, private garden in lowlands, private garden in heights,... These types are supplemented with bio garden, and examples of bio composting, types of mulching, plant allelopathy, suitable garden equipment.

Political and social changes after 1989 had influence also land owners and gardeners. Before 1989 the land was given to the members of Slovak Association of Gardeners without attention to the previous land owner (the land has belong to the state or cooperative societies). After 1989 the original owners of the land became into the legal conflict with the gardeners, who were cultivated “their” plot of lands. In 1991 was authorized the law N. 229 /1991 adjusting the owner’s rights to the land and other agricultural properties. Nowdays the law N.64 / 1997 about land exploitation in allotment gardens and land owner-
ship regulations is in ordinary.

Slovakian Federation of Allotment Gardeners and Fruiterers has 42 country committees, in 2011 it has 80 648 members. (The number is decreasing: in 1990 – 216 114 members, in 2000 – 120 705 members, in 2005 – 97 244 members and in 2011 only 80 648 members). The Federation offers advices in ecological cultivation and protection of fruit, vegetable and perennials as well as legal advices for free. It provides material and financial support of several activities. It organises diverse exhibitions of fruit, vegetable and plants; wine competitions; educative events as well as thematic visits and excursions.

**Description of the Nitra Region**

Nitra region represents a typical agricultural region in Slovakia, with different landscape types and subtypes of agricultural land including arable land, meadow pastures, orchards, vineyards and forests varying from hilly parts of the Tribeč Mountains to flat parts of Danubian Lowland. The rural agricultural landscape of this region is in the same time a typical representative of historical cultural landscape, with significant parts having important aesthetic and historical values, although not protected as a cultural heritage or nature reserve.

Main urban centre of this region is city of Nitra, located in the Nitra river valley at the foothill of the Zobor Mountain (587 m). With a population around 82 000 inhabitants, it is the fourth largest city in Slovakia. Nitra is regarded one of the oldest cities in Slovakia, a city of extraordinary historic importance connected with Great Moravia. Nowdays is Nitra a modern city with strong relation to agriculture.

During the spatial development of the Nitra – several villages, which were in its neighbour, became a part of the city due to its expansion. That why some horse ranches became a part of the city structure. Outside of the build up areas there are huge block of fields and vineyards or allotment gardens.

Current structure of the agricultural land in the cadastre of the Nitra is decreasing because of the building and soft industrial pressure. Within the city could be seen private gardens, remains of the vineyards, several allotment gardens and “community gardens” and some of the schools apply the environmental educational program named “Green school”, which help them to create herbs or small permaculture garden in the school area.

In the last very few years could be seen activities of young people, who started to create their own space for recreation, social contacts, production and education. They have rent a land from the private owners and now they are cultivated it.
Comparison of the development of the agricultural types in Nitra

<table>
<thead>
<tr>
<th>Year</th>
<th>Meadows and pastures</th>
<th>Orhards, vineyards, and arable land</th>
<th>Woodlands</th>
<th>Water area</th>
<th>Other area</th>
<th>Settled land</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>112,2</td>
<td>3940,1</td>
<td>1011,1</td>
<td>13</td>
<td>408,9</td>
<td>855</td>
<td>6966,3</td>
</tr>
<tr>
<td>2004</td>
<td>126,5</td>
<td>4740,1</td>
<td>537,3</td>
<td>17</td>
<td>211,2</td>
<td>594,2</td>
<td>6770,2</td>
</tr>
</tbody>
</table>

**Allotment Gardens in Nitra**

Allotment gardens in Nitra became part of the city urbanism. We can talk about 3 types of the AG according to the localisation: 1) in the intra-urban, 2) peri-urban area of the city and 3) in the open landscape. They could have different forms of spatial arrangement.

The size of allotment garden varies between 250 and 400 sq metres. Each allotment garden is connected to a used water supply system and electricity is available. The allotments are used as fruit and vegetable gardens, vineyards as well as recreational and flower gardens. There are no regulations stipulating the minimum area of the plot, which have to be actively used for production (fruit, vegetable).

There are only building restrictions. Cottage can have a maximum size of 40 sq metres, there are no limitations regarding the cottage’s height. There are many different types of cottages, ranging from simple garden shelter, up to summer cottages where the gardeners can live during the summer months.

**What are the challenges in adapting existing Urban Allotment Gardens to the changing needs?**

Most of the owners of the gardeners gained the garden in the 60ties and 70ties, they were in the age of 30,....so now they are pensioners. For them the garden has mostly production function, it is a place for planting some vegetable, fruits or cultivate vineyards, but also it is a place for relax and meeting the friends. The second intangible function is social one, which means “being” a part of community - Slovak Association of Gardeners and Fruiterers – which organised different activities for them.

Second group of the owners inherit the garden from the stirps, so their connection with garden work and affinity for gardening could vary between none to serious. Therefore there are some allotment holders, who transform their gardens from the productional into the recreational - garden with the lawn, some flower
beds, fruit shrubs and trees, equipped with the grill / fire place. For them is a garden a place for relax and escaping from the “city”.

Except the traditional Allotment sites, situated outside of the city, there are special kind of plots - productional gardens at the block of flats. They are different size, fenced and accessible only for the tenants of the flats. Usually there is a place for the meeting the other /shelter, summer house/, place for fire, lawn or children playground. This common place is missing in the traditional allotment gardens – there are only strips of plots. The age of the owners of these gardens is more variable.

**What are the impacts of the existing UAGs on the changing city?**

UAGs were established on the soils with lower quality, on the places/terrains with no interests for the spatial development. As the city grew, some of them became inner part of it. City borders were changed by development expansion to the open landscape. In some cases the city “could meet” the village(s) in its surrounding (Nitra is that example), so the allotment gardens appeared between the city and the village. Nowdays the villages are administrative part of the city, city districts.

The mix of allotment gardens with small cottages and family houses with a gardens is located in the peri-urban areas and open landscape. Some of the allotments sites were transform into the “built ground”, so they change their function – from productional and recreational into housing.

How emerging new types of UAGs are transforming the city and make new needs?

There are some activities of the urban agriculture gardening done by young people, which lead to creating places for community gardening, activities, festivals, workshops and educational activities. In Nitra there are no outstanding UAG.

**References**

Illustrations

Picture 1 - 2. Allotment gardens in lowlands – used for vegetable production, orchards and cultivation of vineyards.

Picture 3 - 4. The inner structure of AG in Nitra – some of them are transforming from dominant productional function into recreational one.

Picture 5 - 6. Allotment gardens – “garden colonies” are usually fenced.
Closing Session and World Cafe Friday March 21st

Instead of having a closing session in which every Chair of working groups used to report about their meetings in previous events, at the end of the Lisbon working group meeting and before management committee meeting, World Café was arranged as a new discussion method where all participants divided in four groups and participated in a lively conversation after being briefed by each working group Chair. The length of each debate was 20 minutes so in one hour all groups managed to attend four parts of the World Café having in depth discussions.
Field Trip - Saturday March 22nd

Lisbon Filed Trip started from LNEC premises at 10:00 by participation of 70 working group members. Mr Duarte da Mata, member of the Lisbon City Council guided the tour and explained about the history and activities of each urban allotment complex on site or during drive through. The following allotment sites were visited during three hours of the field trip as indicated on the route map: