URBAN ALLOTMENT GARDENS

COST Action TU1201

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

Nicosia Joint MC and WG Meeting
March 19 - 21, 2015

Event Report

Y. Frederickou Street 7
Pallouriotisa, Nicosia 1036
Cyprus

EUROPEAN SCIENCE FOUNDATION

cost EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY

ILS – Institut für Landes- und Stadtentwicklungsforschung

URBAN ALLOTMENT GARDENS

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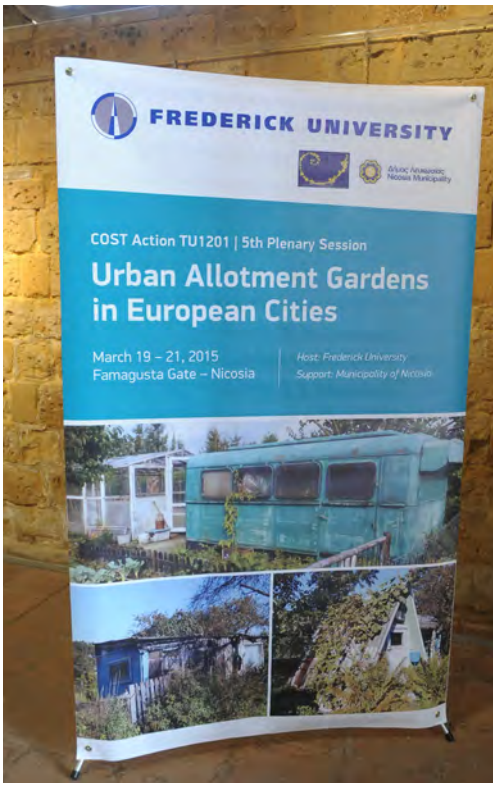
Abbreviations:

AG	Allotment Garden
CG	Core Group
COST	European Cooperation in Science and Technology
MC	Management Committee
STSM	Short-term Scientific Mission
WG	Working Group



Program of Event

Thursday March 19th Opening Session

Welcome Addresses

- Constantinos Yorkadjis, Mayor of Nicosia, Cyprus
- Ioanna Panagiotou, Commissioner for the Environment, Republic of Cyprus
- Professor Panyiotis Touliatos, Head of Architecture Department, Frederick University

Introduction

- Runrid Fox-Kämper, Chair of COST Action Urban Allotment Gardens in European Cities

Keynote

- Notes from the Field: On Problems and Prospects of Urban Allotment Gardens in North and South; *Professor Vikram Bhatt, McGill School of Architecture, McGill University, Montreal, Canada*

National Presentations

- A Collective Garden by Utopia Collectiva; *Stephanie Polycarpou & Constantinos Georgio, Utopia Collectiva and Dr Byron Ioannou, Assistant Professor at Frederic University Nicosia, Cyprus*
- Family Gardens and Shared Gardens: Two Stories Coming Together; *Hervé Bonnavaud, President of the French Federation of Allotment Gardens and Jeanne Pourias, Research Fellow at AgroParisTech, Paris, France*
- Bottom-Up Governance after a Natural Disaster: Temporary Post-Earthquake Green Spaces in Christchurch, New Zealand; *Dr Andreas Wesener, Lecturer at Lincoln University, Christchurch, New Zealand*

Working Group 1 to 4 Parallel Meeting

Friday March 20th

Working Group 1 to 4 Parallel Meeting

World Café and MC Meeting

Saturday March 21st

Field Trip

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Introduction

Dear participants, dear Constantinos Yorkadjis, Mayor of Nicosia, dear Panyiotis Touliatos, Head of Architecture Department; it is always a question for as Chair of the Action how to introduce our events to you. I remember that last September in Riga I shared with you parts of a presentation I was about to give two weeks later in Torino about the role of urban gardening for future cities in Europe. Now, for Nicosia, it came to my mind that we are already in the second half of our Action. And I thought that it would be good to recall what we have done so far and what can be expected to come. But I don´t want to do that with dry enumeration of outcomes. I prefer to guide you through our Action by some pictures that speak for themselves.

Our Action had its start in Dortmund two years ago. The network met for the first time. And a major part of the plenary session was dedicated to WG Chairs who gave an introduction on the focus of their WGs. To get to know each other and the specific country focus we had asked to bring case studies on posters. WG met, discussed and set up the agenda for the next two years. Main focus should be the analysis of the cases studies provided by the members. But we also went into the field. For the case of Dortmund it would have been advisable to bring wellington/rubber boots. You all learned how bad weather in March in Germany can be. But the group photo shows that some of you must have enjoyed it.

After Dortmund we went to Poznan in September. We updated our posters and had fruitful WG sessions. The idea of the book came up, guided by Simon, who has some experience with final book publication of COST Actions. The book was regarded as a tool besides others to keep WG members involved in the Action. We started to discuss the content of the book chapters. In Poznan we also had a great field trip. We learned that Poland has got a long history of allotment gardening, and that these gardens play an important role in the Polish society as nearly one million allotment gardens still do exist. We also learned that plots‘ size are very big and that allotments are designed and maintained very individually by the plot holders so that they have got their own specific character. Obviously, today the allotment gardens in Poznan are more relaxation and leisure spaces instead of plots to produce foods. And we learned that some of the garden houses are quite huge and bigger than single family homes in other European context.

Next step was Lisbon in spring 2014, one year ago. As the last countries, the Netherlands and Malta had joined the Action at that time so that we were 30 countries then. We had our plenary sessions and WG phases as usual. And we tried a new format: the world café to better exchange between WG. This was a bit chaotic but members appreciated it despite some initial problems. Our book chapters got more concrete; we drafted a subchapter structure and abstracts to convince the publisher Earthscan about our idea. Despite this the LNEC building allowed nice coffee breaks outside. Teresa, we all envy you for your wonderful working place. Field trip round Lisbon again was a wonderful

experience. We were guided by Duarte da Mata, a member of Lisbon Municipality, who had presented the Lisbon green master plan in the plenary. We explored urban allotment parks that are integrated in the green master plan concept that was set up to improve the liveability of the city. And we learned how cleverly municipalities manage to combine EU funding and public private partnership to realize measures like this. Again we had some very early stage researchers on board – we are quite a young team.

In 2014 in July we also had our first summer school organised by our Salzburg team. We had more than 65 applications for our 25 places so we were very glad that the SURE network of Jürgen Breuste allowed additional funding. Finally we had 33 participants from 17 countries. As this was our first Training school, topics in its four workshops resembled the focus of our four WGs. And as usual participants liked it the most if they could do some exercises.

The latest plenary, WG and MC event were held in last September in Riga. Riga is a wonderful city which - I am sure - all participant of the event will recommend for visiting. Our Riga team proposed a new format: A national workshop for stakeholders and municipalities on the day before our event started. I think this was a very good experience to involve practitioners more. In our WG most time was spent to discuss preliminary draft of chapters and Simon helped us with some instructions to harmonize the chapter writing. The field trip led to allotment areas of huge dimensions. Many allotment sites here appeared in the beginning of the 20th century, and the more during the Soviet period after the WW II. We saw allotments with houses meant for more than an occasional daytime fully equipped. After the collapse of the Soviet regime, factors such as land use intensification, land privatization, as well as changes in demographical structure, led to a significant decrease of allotment gardens. In Riga, for example, during the last 20 years the number of allotment gardens has decreased more than 3 times. And many of the allotments we visited were in transition too. We also learned something about Latvian music and dance culture, very charming.

In October we had the second training school in 2014 in Ljubljana organized by our team from UIRS Urban Planning Institute of the Republic of Slovenia. It was a joint event together with COST Action UAE and again we had much more applications than places and finally 34 participants from 15 countries. The joint topic was “Urban food production”. From what I heard from tutors and participants it must have been a great experience with a lot of practice, practical workshops and field trips.

And now we are here in Nicosia. A short outlook shows that in July our next training school on the subject of Social aspects of urban gardening will take place in Warsaw. Tutors are selected, the programme is drafted. Our team from Warsaw University will tell you more in the MC meeting. In September we are going to assemble in Birmingham, UK. In one year our team from Thessaloniki, Greece offered to launch the next spring meeting. We will have to discuss if we want to have a training school in our final year. The final conference will take place in September, 2016 in Basel, Switzerland. But this all is future.

Our present event more or less follows the routines of the recent ones. This morning we are going to have a keynote form Canada, followed by national presentations from Cyprus, France and New Zealand. In the afternoon, we are going to have a short plenary session again, as we need to discuss some further proceedings besides writing book together and take some tasks into the WGs, such as the special issue, factsheets for practitioners, and other outcomes. Also, we asked a representative of the Cyprus research funding agency to give us some insights into Horizon2020 funding possibilities for research related to our topics. In the WG one central point will be the review of second drafts of chapters. Tomorrow we are going to proceed with WG, prepare the World Café then. In the afternoon we will have a short closing plenary session followed by MC meeting. And on Saturday we all will enjoy the field trip.

So enjoy these three days of presentations, discussions and exchange.

Runrid Fox-Kämper
Chair of COST Action Urban Allotment Gardens in European Cities

Constantinos Yorkadjis
Mayor of Nicosia

Ioanna Panayiotou
Commissioner for the Environment in the Republic of Cyprus

Professor Panyiotis Touliatos, Head of Architecture Department on behalf of Professor George Demosthenous Rector of Frederick University and Runrid Fox-Kämper, Chair of the COST Action TU1201.

WELCOME ADDRESSES

Following an introduction speech by Ms Fox-Kämper, Chair of the Action, the event received three warm welcome addresses by Mayor of Nicosia Mr Constantinos Yorkadjis, Ms Ioanna Panayiotou, Commissioner for the Environment in the Republic of Cyprus and Professor Panyiotis Touliatos, Head of Architecture Department on behalf of Professor George Demosthenous Rector of Frederick University.

Ioanna Panayiotou, *Commissioner for the Environment in the Republic of Cyprus*

Ladies and Gentlemen,

The creation of urban gardens is not a new concept. Back in time, the Assyrians came up with the idea in an organized approach since 1000BC.

The philosophy behind urban gardens remains the same for centuries and is gettong developed. The inhabitants of cities, urban centres in their attempt to create a better environment for everyday life and in their eagerness to fulfill the need for a human being to be in touch with the earth and greenery, build Urban Gardens in a systematic way.

Taking the above into account, as well as the present difficult times in which satisfying nutritional needs for the financially weak families is the most important priority, my Office took in June 2013, the initiative to promote the idea of the creation of urban vegetable gardens in Cyprus as well, in collaboration with interested Municipalities and Organisations.

In the framework of this attempt, letters were sent to municipalities and communities urging them to create urban gardens as an antidote to the financial crisis but also as a motive for creation giving them examples from Greece where Local Authorities as the nearest authorities to the citizen, demonstrate an attitude of continuously broadening policies of caring which support financially weak citizens.

My office has also published a manual entitled: “Manual of cultivating techniques for a biological urban vegetable garden”.

The above effort has produced only a few number of results as five such gardens were created, of which only three are working today. What is positive though, is that tens of citizens have communicated with my office asking for advice so that they can create their own biological vegetable garden. This action has grown significantly both at an individual and family basis.

Today most families own gardens and/or estates in the villages where they come from which they cultivate and produce food. Due to the crisis we see families getting actively engaged in this domain and planting vegetables and herbs for their own needs and those of relatives.

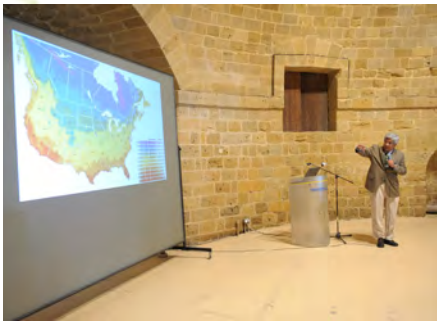
I should mention that during the school years 2012-2013 and 2013-2014 following the initiative of three firms sponsoring composts, irrigation systems and seed plants and with the support of the Ministry of Education and Culture and my Office, 200 vegetable gardens were created in schools.

I should also mention that at the same time period, groups of citizens were created which have made gardens, organize educational sessions, seed exchanges etc. I would like to congratulate these groups for their continuous creative effort.

Surely the creation of a vegetable garden is not only associated with the financial crisis that we all experience but also with the improvement of the quality of life of inhabitants. Βέβαια η ίδρυση λαχανόκηπου δεν συνδέεται μόνο με την οικονομική κρίση που βιώνουμε όλοι μας, αλλά και με τη βελτίωση της ποιότητας ζωής των κατοίκων.

While coexisting, collaborating, creating and sharing is functioning in other domains of the Cypriot society, it has not been absorbed by the conscience of our fellow citizens regarding urban gardens, since apart from the production of food, the rest of the multiple benefits like communal growth, neighbourhood growth, social aid, recreation, exercise, treatment and education, the decrease of criminality, the linking of generations and cultures and the confronting of climate change have not been fully understood.

I personally believe that the number of benefits is so big that we should altogether continue the effort for a successful installation and functioning of such gardens. Today's conference is surely a positive addition to out effort.
I wish everybody a successful continuation of our work and the fulfillment of our common goals.



NOTES FROM THE FIELD
UA INITIATIVES IN SELECTED CANADIAN AND AMERICAN CITIES

Vikram Bhatt, McGill University, School of Architecture, Montreal

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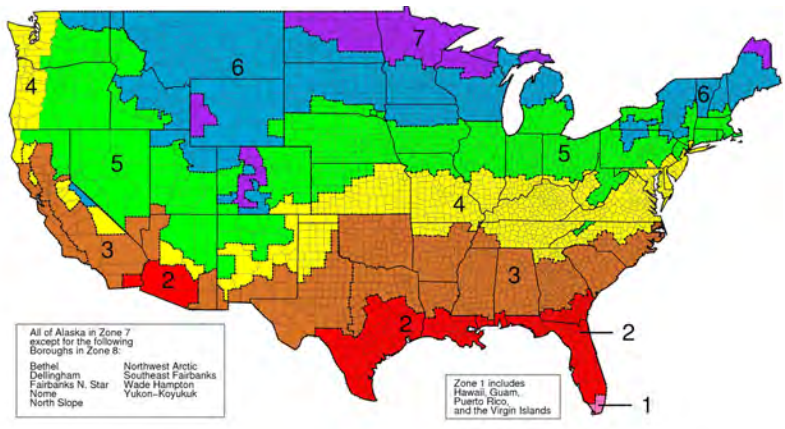
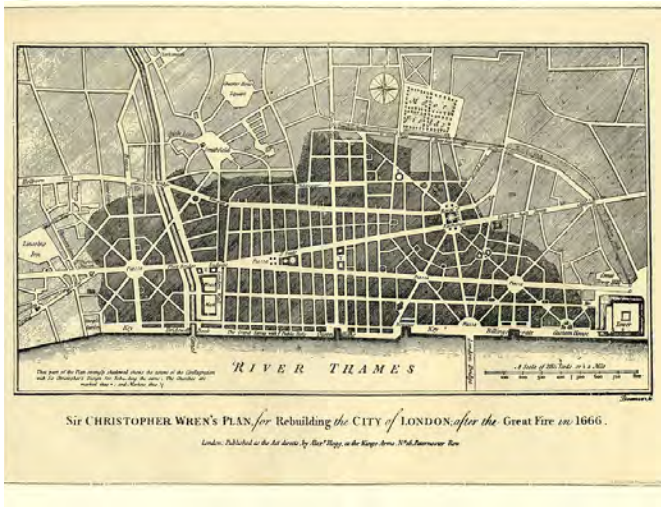
Introduction

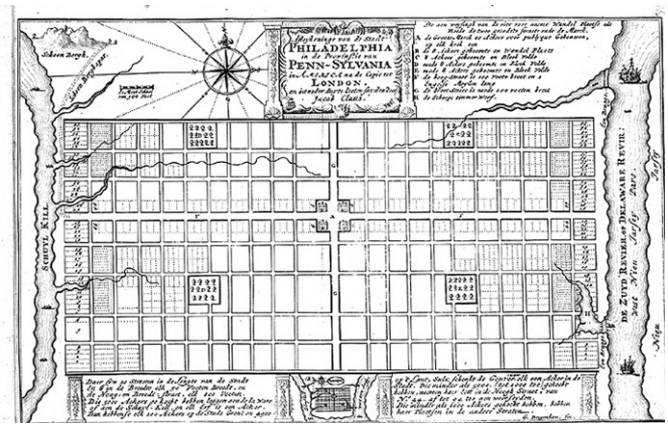
In North American cities the availability of community gardening opportunities and their integration in the municipal programs varies considerably from one urban center to another depending on whether the city is growing or shrinking, old versus new and rapidly expanding one, large versus small places, and so on. Historically, the demand for urban gardens have risen and fallen with the state of economy; in the difficult periods the demand remained high but it declined, almost disappeared, when it was booming. During last three decades, however, this activity, which is broadly referred to as urban agriculture UA, has grown steadily. UA is playing a significant socio-economic and cultural role. From the point of food-security it is integrating new immigrants who are arriving in large numbers to North American cities it also emerging as a lifestyle and leisure activity. Another reason for its growth is the rising awareness about the quality of food we consume and related health links. The upsurge of healthy living related urban agriculture and other actions are becoming common at city levels. A range of UA initiatives in selected Canadian and US cities are reviewed ending with a case study of Montreal.

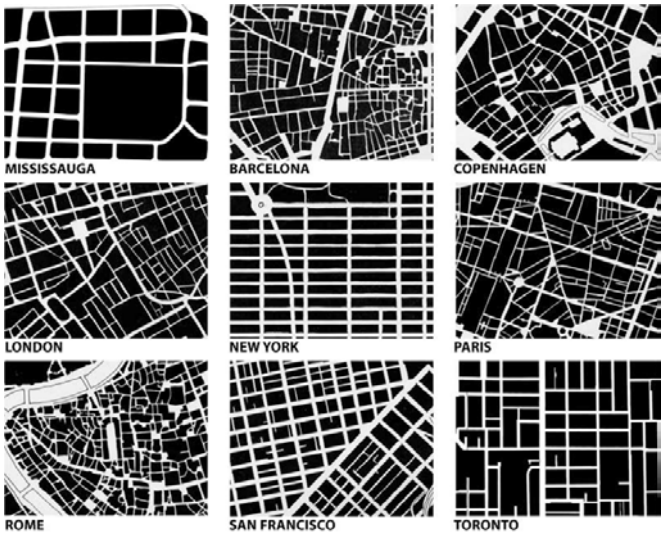
The Geography

Greater part of Canada, second largest nation in the world, lies to the north of the 47th parallel. Although the country is spread well beyond the arctic-circle most of its inhabitants live within a narrow band of land measuring about 500Km wide in cities situated between 47th and 50th parallels (Montreal and Toronto are situated more to the south at the 45th). With the exception of Vancouver that has a moderate oceanic climate most Canadian cities are in the hemi-boreal zone influenced by the continental landmass; winters are long and growing seasons short from mid-May to end-October. Even with such a limited growing season, or perhaps because of it, come spring, everyone wants to see bright flowers and longs for fresh greenery. Cities' beautification programs, parks and gardens' department and citizens alike make great effort to grow. On the other hand, the lower 48 United States are spread over almost all climatic zones: Chicago and Detroit, close to the Canadian border, have short growing season, but so do in cities like Miami and Boca Raton; because of very hot summer months in southern states like Arizona Florida, New Mexico and Texas the planting schedule is reversed. Here the growing season runs from November to April. Cities like Berkeley and San Francisco with Mediterranean









climes are ideal for year round growing. So geography greatly impacts on urban growing.

The Spatial Grid for Living and Growing: Two founding European powers, French and the British strongly influenced the broad landscape of the country and the urban patterns of Canadian and US cities; in the latter, many cities were also shaped by the Spanish. Each colonial power developed their distinct settlement patterns. The early French and English towns, like Quebec City and Boston respectively, were informal and organic in their settlement patterns; but soon, set prototypes emerged: The French adopting the narrow lot sub-divisions (fish-scale grid), along Saint Laurent river in central Canada and by the Mississippi in Louisiana; Spanish employed gridded layouts in Florida, Mexico and California based on the Law of the Indies; and so did the British, along the east coast. In the westwards expansion both in the US and Canada used the quarter-section survey method. Regardless of the gird adopted in the urban plan the tradition of productive gardens in the cities prevailed because, localized food production was the basis of the colonial establishments at domestic, city and regional levels. For example, in Philadelphia, growing was widespread. Founder William Penn's motto was: "Let every house be placed, if person pleases, in the middle of its plat" and "as the breadth way of it, that so there may be ground on each side for gardens or orchards, or fields, that it may be a green country town . . . . and always be wholesome."

Beginning of Community Gardens

During the 19th century industrialization the urban growing patterns changed. Large-scale farming of grains and meat were introduced; city-farmers started growing vegetables in market gardens; transitioned to dairy and other high-value crops; and the expansion of the public markets reduced the need for city dwellers to grow their own food (Hodgson,

et. all. 2011). The 19th century westwards expansion of both countries went hand in hand with the growth of railways and towns. Cities were shaped by their commercial interests. To expand the railway networks manual labor was needed that was filled in by immigrants, including Chinese, who like the European settlers before them, brought their own food habits to the new world; like allotments along railways in Europe in North America also they are to be found.

The economic downturn of 1890's gave birth to the new generation of urban gardens of North America. It was argued that instead of charity it was more useful to provide land to the working classes to grow their own food. In 1893, Pingree, Mayor of Detroit, emerged as the pioneer of this movement. He recognized that the city was badly hit by the depression and put to productive use lands which were horded by developers for speculation. It was called the vacant-lot garden program; in Detroit it was also referred to by the name of the Mayor or also as "Potato Patch Farms." The success of the program inspired other cities including Philadelphia and New York to follow the suite. Vacant-lot cultivation associations sprang up across the country. During the subsequent two World Wars and the Great depression these programs grew and emerged as Victory and community gardens. Conceptually, these gardens were seen and treated by authorities as temporary entities rather than permanent parts of the cities like parks. So form the beginning, vacant-lot gardens, which were followed by the community gardens, are temporary from the point of view of formal authorities; whereas from the point of view of growers, especially as they toil hard to cultivate them, they are more personal and permanent. The tensions surrounding this duality continue until now. Along with the empty-lot and war gardens the School Gardens program also flourished in North America. However most of the urban growing initiatives slowly but surely diminished during the post-war economic and urban boom. The suburban sprawl has resulted into dramatic growth of cities but little room or concern was shown about community growing.

Resurgence

The postwar era established the reign of the automobile in North America. With the growing suburbanization and industrialized farming food growing in cities almost disappeared. Economically, the 70s were trying; the 1973 and 1976 oil embargo was felt all around the world, especially in western industrialized countries dependent on imported fossil fuel. In 1970s, a number of community gardening initiatives sprang up. There was a resurgence of community gardens in Boston, New York, Montreal, Toronto, and so on. All these are growing cities with competing demands on spaces to grow within the city. The pattern and use of gardens in these cities varies from one to another but generally growing areas tight small and efficient. Boston's Berkeley garden is a good case in point. Toronto community garden network itself has different types of gardens: on empty-lots, on corners of public parks lands and open areas within housing estates. In New York City we find them mostly on empty-

URBAN ALLOTMENT GARDENS

lots and they are generally used for leisure pleasure and limited food production collectively. Montreal's program is one of the most extensive one in North America that has more than 80 gardens in different neighborhoods and 12000 families per year participate in it (Office de consultation publique de Montréal, 2012, p. 5). Vancouver launched a new program on the occasion of hosting the World Urban Forum in 2006. To coincide with the 2010 Winter Olympic 2010 new allotment were proposed. They all are realized now. Comparatively, urban gardens of Detroit, a shrinking city, are different. Detroit plots are relatively larger as space is less of an issue. Several corporate and collective enterprises have also launched commercial growing operations here. Across, North America, new programs are emerging. Remarkably, even in wealthy suburban cities like Boca Raton and Delray there is demand for community gardens.

The issue of space for growing in cities remains an important consideration in accommodating UA. To address it, new and innovative design approaches, social strategies and community partnerships are continually being forged to expand this activity. Collective gardens are on the rise. Institutional partnerships are being formed to share and leverage resources like land and in-place infrastructure to accommodate growing operations. Lands are donated; land trusts are being created; institutions are allowing the use of their resources and spaces to community groups for growing purposes. Initiatives such as, a Jewish Community Service Project set up on a parcel of land donated by the nearby Jewish General Hospital or the Edible Campus project on the grounds of McGill University, or the backyard garden on the grounds of a parish church, all three examples from Montreal, are good illustrations of such creative alliances.

Looking Ahead

During the 20th century, community gardens in North American cities swelled or shrank with the changing economic times; they increased during the depression and wars and diminished, almost disappeared, when the economy improved. In the last two decades, in the scientific field, in the policy arena at all government levels, and especially at community level, there is widespread acceptance of the UA. The demand is not only economically driven. There is a genuine change in attitude. At the beginning of 2015, City of New York's proposed plan for new affordable housing, a major local concern and need because of its chronic and severe shortage, but it was challenged by community of gardeners. They petitioned the city as it had selected empty plots on which there were community gardens for affordable housing. Instead of first selecting the empty ones, which there were many, the city had identified 20 odd with community gardens on them. Proposals were sent back to the drawing board! In NY there are about 600 community gardens, they are sacrosanct, and gardener-residents' are so committed and vigil that they would resist any infringement on them. Looks like urban edible gardeners are going to endure. Citizens want it that way.

CYPRUS NATIONAL REPORT

A COLLECTIVE GARDEN BY UTOPIA COLLECTIVA

Stephanie Polycarpou & Constantinos Georgiou - Utopia Collectiva and Byron Ioannou, Assistant Professor at Frederic University Nicosia, Cyprus

Introduction

Utopia Collectiva was formed in Nicosia in January 2011 by a group of young people with similar beliefs and perceptions as to the way of living, nature and society. Wellbeing is the main goal of our lives and we care about the environment and our relation to the community. We believe that education and personal development can bring about change. We respect nature and want to live in harmony. Our aim is to promote and encourage a healthy, collective and sustainable way of living. The actions of the collective revolve around two basic axes.

The first has to do with the shop. A big part of our daily energy goes to the management and maintenance of the shop which is located in the old town of Nicosia. The natural and organic shop was opened in 2005 by Ntinos, who is an organic producer and landscape architect. Since 2011, we have intensified the search and offer of local, organic and natural products. All of these we either produce ourselves or we personally know the manufacturers and the ingredients they use. At the same time, the Utopia shop has space to host various activities and events of the collective.

The second axis is the creation and the completion of these activities. Part of our motivation in participating in the Collectiva is that through the use of this space we can collectively promote our ideas, way of life and practice our professions. The schedule includes weekly and monthly actions such as: yoga lessons, collective vegetarian kitchen, workshops with recycled materials for kids and, days devoted to issues of organic cultivation. We also organize discussions, screenings and presentations about health issues, the environment, and social and political matters, as well as flea markets, musical nights and more. Finally, we host activities and events of other teams, organizations and individuals who share the same basic philosophy with the Collectiva and are in need of space.

The participation of all the members in the activities and shop management is voluntary. There is of course the opportunity of a small income through the production of goods and the organization of events. For us, the most important thing is that we have managed to materialize a model of a collective way of living, something which is new for our country. The satisfaction of seeing this not only maintained but growing is huge.

You can find more information about the Collectiva, its activities and the products on our Facebook page.

The Collective Bahçe

Utopia Collectiva was inspired to create a Community Garden from similar projects abroad that try to tackle the problems of urbanisation through the creation of alternative spaces for quality and healthy food production. Some of the members had experience with this idea in different cities such as Brighton, Berlin, Melbourne and Rome and so we were looking for a way to materialize such a project.

Securing €7,500 of seed funding by the Youth Power Small Grants Round III – Advocacy, enabled the collective to proceed with plans to develop the Community Garden project in three months (April – June 2013). During this time Utopia Collectiva created the first Community Garden in Nicosia named "Collective Bahçe", at the "Linear Volunteers Park" in Kaimakli, (the former railway track between V. Voulgaroktou and Smirnis Street). The word Bahçe means garden in Turkish but it is widely used in Greece as well to describe gardens. We felt it was the most appropriate word to use as the project had a bi-communal character, under the umbrella "Environmental Initiatives" of the Small Grants funding. The park was chosen after consulting with the mayor of Nicosia and the team at the municipality responsible for the parks, since we wanted to make the garden in the area of Nicosia Municipality, close to our basis, the green line and the check points.

The Community Garden is a project open to all residents of Cyprus, and during its implementation it included a number of events aiming to advocate and provide tools towards the development of a sustainable collaborative community, organic agriculture and to promote an alternative, sustainable and healthy lifestyle for young people in the present times of socio-economic uncertainty.

Implementation of the project

The planned activities at the Collective Bahçe were divided into two phases:
The first one which took place in the first month was focused on the Designing and Planting of the Garden. A few of the materials used such as plants, compost soil and wood were offered as support by a few companies. A vegetable and a herd garden were created in the park.

The second phase which took up the final two months was focused on harvesting and utilizing the crops as well as organizing events and activities.
The activities aimed to provide the audience with knowledge and tools to enable them to take control of their daily needs and to build a collaborative community of exchange and mutual respect. The participants got the chance to understand the importance of working together as a community and why self-sufficiency and organic agriculture are vital. The activities that took place either as full day events or as evening happenings were carried out by collaborating

with different NGOs, collectives, professionals and individuals who were invited by Collectiva to bridge the gap between participant and expert.
Many young people from the neighborhood and volunteers from the whole of Cyprus responded to our call and participated with great success in the creation of the vegetable garden and in the activities.
Six main events were organised:

1. First day of planting and welcoming the neighborhood and the volunteers, introducing the garden
2. Self-sufficiency workshops (upcycling, baking bread, drying and preserving food etc)
3. Meeting with the Neighborhood to exchange ideas on the design and future of the Bahçe
4. Environmental Day. Building of bird feeders with the Birdlife organization, composting of frying oils from Akti environmental group, composting with microorganisms with Nature's Products, recycling from the Cans for Kids team and so on.
5. Building with natural materials: creation of a bench with cob in collaboration with the team Between the Lines
6. Closing event with Music and Poetry (with Greek Cypriots and Turkish Cypriots artists)

A blog was set up (http://collectivebahce.wordpress.com/) about the project giving the opportunity together with the Facebook page for communication with all people interested.

The main issues we had during the implementation of the project were:

- the slow process of the funding approval, which left us with very limited time to prepare and plant the garden. We had to use hybrid plants instead of heirloom seeds. For the new planting we are ready to use heirloom seeds.
- another difficulty we had because of the timeframe was that we missed the opportunity to cooperate with schools, since the project took place during the exam period. But many teachers visited the Garden in that period, shared their ideas on creating gardens in their schools, got inspired from our work and a few plan to visit the Garden with their students when it takes its final form.

The Garden today

After the implementation of the funded project the Collective Bahçe was passed in the hands of volunteers and neighbors, who would continue to collaborate in order to maintain and develop the Garden.

This is where we encountered the biggest problem of the project. The experience on the whole showed that even though there is need and response from the society for such initiatives, the manifestation of collective actions is far from their mentality. Especially regarding the involvement of the neighborhood, we have concluded that, although the residents of the area really liked the idea and

participated in the events, it hasn't become clear to them yet that the Garden was created to mainly meet their needs and it belongs to them. We gave out texts, discussed with many during our time there but more effort is definitely needed to get the right message to them. Furthermore, almost every house in the area has its garden, it is not in like other areas or cities, where green spaces are rare to find and the residents themselves initiate this kind of projects.
So, while a lot of people participated in the creation of the vegetable garden and in the activities, very few have committed to its maintenance. In the year after the creation of the Garden, there were not enough volunteers to develop it further, but the few people who continued visiting it managed to maintain it until last summer.

In autumn 2014 we decided as a team that we wanted to include the Garden in our main activities again. We decided to apply the permaculture principles in the re-creation of the Bahçe and make it a space for exchange of knowledge, education and experimentation. And of course to continue the food production for the needs of the volunteers, the collective kitchen we run at Utopia and the neighborhood.

We reached out to people involved and trained in permaculture projects in order to find the best methods and applications to reach this goal and to people interested to have a more personal involvement by having their own allotment.
Today we have a small but committed team involved and the revitalisation of the Garden has already started. After a rainy winter we are finally back in the Garden, making raised and wicking beds, sowing our seeds, planting trees and expanding the work outside the vegetable garden into the rest of the park!

The call for participation is ongoing and we are hoping that the Garden will get its final form soon with more people involved!

Figure 1 - Traditional site in Guines (Pas-de-Calais) a few km from Calais. The plots are large (600 m²). Most of the sheds are made of recycled materials. The gardeners grow vegetables (a lot of potatoes). An important percentage of them is jobless and their plot is essential to feed the family.

Figure 2 - This site, located on top of a multistorey car park, was designed by the FNJFC in 1999. There are only one tap and one tool shed. The gardeners also share the tools. The plots are only 20 m² large. The plots are separated by the tiled alleys.

FRANCE NATIONAL REPORT

FAMILY GARDENS AND SHARED GARDENS: TWO STORIES COMING TOGETHER

Hervé Bonnavaud, Vice President of the Office International du Coin de Terre et des Jardins Familiaux (International Federation of Allotment Gardens) (Part 1)
Jeanne Pourias, Research Fellow at UMR SAD-APT at AgroParisTech (Part 2)

In France, the typology of urban gardens is very diverse. Schematically, two great types of gardens can be distinguished, that have two distinct histories: family gardens, which are the successors of a long French tradition of urban allotment gardening, and shared gardens, which are born from a more recent movement. We present below these two movements; today, these two types of gardens are largely being mixed to create new types of gardens, with innovative design and modes of management.

PART 1 - FRENCH ALLOTMENT GARDENS: AN HISTORICAL TYPE OF GARDEN WHICH RENEWS ITSELF

I – ALLOTMENT GARDENS TO FEED THE POOR WORKING CLASS PEOPLE (1890 - 1950)

In the 19th century, AGs were born in a social context which is totally different from today's. In France these AGs were called « Jardins Ouvriers », implying that they were only for working class people. In Germany they were called « Schreber Gärten» or « arme Leute Gärten», that is gardens for poor people.
As a consequence of the rural exodus and the industrial revolution the new appearing working class lived in very poor conditions and was often starving though they worked very long hours, six days a week and took their children to work in the mines as early as the age of five.

During World War I they developed rapidly: women and old people had to grow food while the young men were on the front.

During World War II, as in many countries (e.g. Victory Gardens), allotment gardens allowed the population to survive when most of the agricultural production was confiscated by the German occupying forces.

II - DECLINE OF ALLOTMENT GARDENS (1950 - 1975)

After the Second World War the situation evolved very rapidly in most countries in Europe. Cities grew very fast to face the baby boom. New towns appeared in a few years' time, towns that grew like mushrooms in the suburbs of the main cities.

That development often led to the disappearance of the old allotment gardens. It is estimated that 85 % of them were destroyed during these three decades: their number fell from 900,000 at the end of the war to 150,000 nowadays.

In the late 1960s the standards of living of the French population rose rapidly. The workers had much better wages and time to go on holiday to the seaside, the mountains, the country… and to practice sports and were less dependent on their plots. The plot holders abandoned their gardens without much struggle.

Figure 3 - On this site there 63 square plots (1.5 x 1.5 x 0.40 m) for 33 persons and families and 2 disabled persons. A single person has 1 square, a couple gets 2 squares and a family with children gets 3. It was created in 2010. The gardeners live at very short distance from the site and come on foot. Most of them are unemployed, sometimes ill (several women with cancer) and single.

Figure 4 - In this difficult and poor district (Aulny sous bois), part of the lawns between the buildings were turned into 50 m2 plots for the inhabitants of these social flats.

The remaining sites were rejected to the outskirts of cities, often on bad lands, along the new motorways, sometimes on polluted land.

Thus the positive evolution of our society caused great damage to allotment gardens.

III – REVIVAL OF ALLOTMENT GARDENS - EMERGENCE OF NEW FORMS OF AGS (1976 - 2015)

In 1971, a minister of the protection of nature and of the environment was appointed for the first time. Undoubtedly the creation of this ministry was the symbol of a significant evolution of our society after the excesses of the previous period. An interest for the environment was born and the state and local authorities started to recognize the benefits of AGs for the urban populations. They became aware of the need to preserve them.

The November 10th 1976 agriculture law redefined AGs and made it compulsory for the local authorities to replace the AGs that had to be destroyed to build public equipment.

The number of AGs ceased to fall and stabilized.

AG sites were then better protected but at the same time we observed an important pressure from their neighbours to destroy old derelict, ugly-looking sites in the new urban landscape. They were no longer accepted.

Local authorities own most of the land on which new AGs are created and to answer their demand the FNJFC decided to modify their design. The environment is now taken into account, so is their insertion into the urban landscape and the quality of life of the plot holders. Recreation grounds are built for children, places were their parents can meet and organize festivities, barbecues, etc.

Large families being then much rarer than earlier, the average size of the plots is thus reduced to 250 m^2. At the same time we observe a change in the social origin and age of the tenants : they tend to be slightly younger and even if the majority is still composed of retired men from the working class, we see the emergence of employees and other social groups.

At the same time land is getting rarer and more expensive and less available for the creation of AGs in spite of the renewed interest for that activity.

IV - THE EMERGENCE OF NEW FORMS OF ALLOTMENT GARDENS

The FNJFC learned from these experiments and thanks to its *Bureau d'études* designed new concepts of AGs taking into account every piece of available land in a given environment and the new demand of urban dwellers.

Allotment Gardens at the foot of blocks of flats (Jardins en pieds d'immeubles)

In 1995, the French Federation decided to create a Study and Design Office to serve the demands of its members and of the local authorities and social housing agencies too. The aim of this new tool being to develop new forms of allotment gardens and equipment adapted to the specific needs of plot holders (tool sheds, tool boxes, compost bins, secure water meters, etc.)

Figure 5 - In 2009 the FNJFC created a new type of raised plot for the disabled. It is a revolving plot that can be used by one or more disabled people at the same time and also by old people. A lower model can be used by young children.

Figure 6 - In 2014 the FNJFc was asked to build allotment gardens on some roof tops in Paris (15e arrondissement).

This new concept of allotment gardens is based on the following observation: contrary to what was previously believed, there is land available in most towns and that land is worth nothing. I mean that it cannot be sold to anybody since it is entirely devoted to green spaces. Moreover, this land costs the housing agencies a lot of money: they have to mow the lawns, trim the trees and bushes, look after and water the flower beds… Their owners are easily convinced of the advantages of turning part of it into gardens for the inhabitants. Besides, these plots, usually between 40 and 50 m² large, produce vegetable for the low income dwellers of the flats.

Allotment Gardens on roof tops (jardins sur les toits terrasses)

In 2001 the FNJFC created the first site of shared gardens (jardins partagés) on the 1000 m2 roof of a multi-storey car park in Boulogne-Billancourt (West of Paris). The plots were 20 m² and were separated by paved alleys. There was only one tool shed and the gardeners - most of them being women from African origin - shared the tools.

This new type of UAGs is now developing rapidly in a mineral environment where land is totally absent.

Square gardens (potagers en carrés)

In 2011 the French Federation of AGs was commissioned by the city of Dijon (Burgundy) to develop a new concept of AGs on a 600 m² piece of land attached to a social center. The mayor wanted to satisfy the demand of at least 30 families that lived in flats at walking distance. Most of the families were in need (unemployed, single women with children...) and had no experience at all of gardening.

The French Federation of AGs designed a new model: square plots 1.5 x 1.5 x 0.40 m filled with compost. 63 squares were built on the site. Each person got one square, a couple was allowed two plots and a family with children was given 3. Thus 33 people or families were able to get an AG. Besides, two raised beds were installed for disabled people in a wheelchair.

Despite the small size of these plots, the output is significant due to the quality of the soil and the people do not need to buy any expensive tools. It is a good way to initiate these new gardeners. We must point out the educational value of these ‘‘miniature’’ AGs.

Conclusion

Nowadays, almost 80 % of the population live in urban areas. This led us to change our views and to design new models, new forms of AGs to answer the growing needs of this new urban population.

The new allotment gardeners are quite different from those in the 1890s, even if the economic crisis generates new demands of people who desperately need a piece of land to survive by growing their own:

- they usually have no experience of gardening
- many of them are women or young couples
- those who have a job do not have much time to spend in the garden

- most of them are interested in organic gardening
- they want a plot in a collective AG in order to meet other people, from different origins.

The size of the plot is not the most important thing for them; they are more interested in the quality of the equipment and the social life. The functions of these new types of AGs are multiple: economical (food production), therapeutic, educational, environmental, social... AGs are a great contribution to the quality of life in large cities.

PART 2 - SHARED GARDENS: CITIZEN PROJECTS THAT CALLED MUNICIPAL STAKEHOLDERS'S ATTENTION

In France, shared gardens emerge in the late 1990s. In 1996, representatives of local organizations which have been seeking to develop new models of urban allotment gardens, meet up and decide to organize a study tour in North America, in search of inspiration. They attend the annual meeting of the American Community Gardens Association and visit several community gardens in Montreal and New York City[1].

Back in France, inspired by these North American examples, they create a national network: "Le Jardin dans tous Ses Etats" (literally: "The garden in all its states") (JTSE) and write its charter to define their common values and the objectives that should guide the creation of a shared garden - which at that time do not have a fixed name: they are in turns called shared gardens, gardens of inhabitants, neighbourhood gardens, community gardens, etc.

The JTSE promotes a garden model strongly oriented towards the social function of gardening: the participation of residents, social and cultural diversity and openness to the neighbourhood are part of the objectives, differing in this from traditional family gardens, which are more oriented towards food production. The JTSE does not recommend one form of organization in particular: like so, shared gardens can offer plots managed collectively or individual plots. The plots are usually relatively small, especially in the heart of cities. Whatever the garden management mode, the JTSE encourages participation of all gardeners in the life of the garden.

From the early 2000s, shared gardens have been spreading in most French cities, but with very different forms and evolutions depending on local political and social contexts. Today, we do not have figures at the national level on the number of shared gardens or the number of people involved in them.

A number of municipalities, especially among the biggest cities of France, have adopted programs or charters to promote and support the creation of shared gardens, most of the time relying on local organizations involved in the creation or management of shared gardens beforehand. This is the case for example in Paris, Lyon, Nantes, Lille, Marseille or Montpellier. We present below the case study of Paris, where local authorities have been taking actively part in the development of shared garden.

Paris

In Paris, the first shared gardens emerged in the early 2000s. They soon generated great enthusiasm among urban dwellers, and a few municipal actors, convinced of the merits of the gardens, pushed for the creation of a municipal program.

The City of Paris' *Programme Main Verte* (literally “Green thumb program”) was adopted by the Conseil de Paris in June 2003. This program was designed to promote the creation of shared gardens and to process the applications of citizens that wished to set up shared gardens or that had already done so informally.

The main aim of the program was to foster social cohesion in neighborhoods. This is reflected, for example, in the gardeners' obligation to open their garden to the public for at least two half days per week, and to organize one public event (cultural, training in gardening, etc.) per year[2].

Urban dwellers willing to open a new garden in their neighborhood are invited to group together in an Association Loi 1901[3]. Then, the requests to open a shared garden are dealt with by the central city hall, therefore on a unique budget, independently of local issues specific to each arrondissement of Paris.

After the signature of a tenancy agreement by the legal representative of the Association, the latter is officially recognized as the legal manager of the plot. This agreement specifies the time during which the Association of gardeners is allowed to occupy the plot, the activities and objectives of the Association and its obligations.

Meanwhile, another document (this time with no legal value but a symbolic value), the Main Verte charter, commits gardeners on several aspects, including the opening of the garden to the public, organization of public events at least once a year, non-use of pesticides and more generally, a "high level of environmental compliance," including sorting and composting wastes and using irrigation water in a sustainable way.

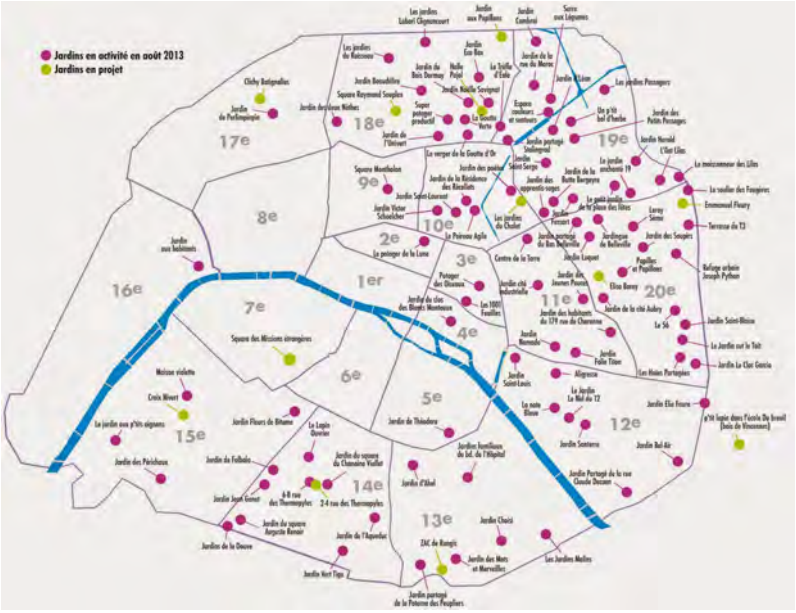


Figure 7 - Map of Parisian shared gardens (Source : Cellule Main Verte, Ville de Paris, 2013)

The number of shared gardens has grown substantially in Paris in recent years. At the end of 2014, there were 124 shared gardens in Paris, spread in almost all districts of Paris, with a clear predominance of the North-Eastern city districts (Figure 7). Some have been created on citizens’ initiatives and then recognized by the City of Paris and integrated in the Main Verte program. Others have been created by the City of Paris itself, for example, when green spaces are renovated, a place is almost always planned for a shared garden[4].

Parisian shared gardens member of the Main Verte program are most of the time located on vacant land that belong to the City or in public

parks. In the first case, they are often meant for temporary use of space, for example before a construction (Figure 8). In the second case, the gardens are more perennial, as they are included in the green space (Figure 9).

In rare cases, shared gardens are located on private land or land owned by public institutions other than the City: in this case, gardeners gain the right to use to land through an agreement that binds the gardeners, the City of Paris and the land owner.

Finally, some shared gardens installed on private land decide not to join the Main Verte program (Figure 10).

Figure 8 - Ecobox garden is located in the 18th arrondissement of Paris, on a vacant parking lot. It is entirely soilless, the plots are made of wooden pallets and most gardeners also grow in various containers. It also offers a greenhouse to make seedlings, a henhouse, a shed and a wooden platform for various events and shows. Designed to be easily moved, the garden was created by the AAA Association in 2002. Since then it has already moved twice.

Figure 9 - Perlimpinpin shared garden was created in 2008, at the same time than the Martin Luther King park, in the 17th arrondissement of Paris. Since 2006, inhabitants of the neighbourhood had constituted an Association and ask to the municipality to include this garden in the plan of the future park.

footnotes:

[1] Laurence Baudelet, Les Jardins Collectifs d'Habitants (Etudes Urbaines Jardins et Espaces Verts, June 2003).

[2] J. Pourias, 'Production Alimentaire et Pratiques Culturales En Agriculture Urbaine. Analyse Agronomique de La Fonction Alimentaire Des Jardins Associatifs Urbains À Paris et Montréal' (doctoral thesis, UQAM - AgroParisTech, 2014).

[3] An Association Loi 1901 is the term used in France for a non-profit-making organisation of two or more people. The name comes for the convention having entered into French law on 1 July 1901.

[4] J. Scapino, 'La Révolution Est Au Jardin. Portée et Significations Des Pratiques Dans Un Jardin Partagé Parisien.' (master thesis, Université Marc Bloch UFR Sciences Sociales Département d'Ethnologie, 2010).

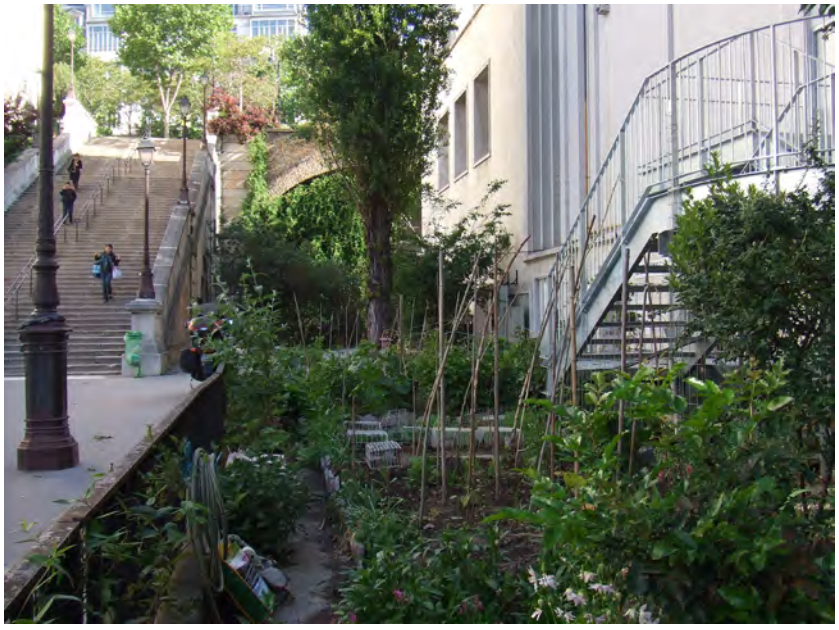


Figure 10 - Picture Anne-Cécile Daniel, 2012. The Jardin aux Habitants is located nearby the Palais de Tokyo, a cultural facility dedicated to modern and contemporary art, functioning both with public resources of the Ministry of Culture and with private resources. It was created in 2001 by the visual artist Robert Milin, who responded to a call for projects launched by the Palais de Tokyo. The ambition of the artist was to let this place be modelled under the hand of its occupants.

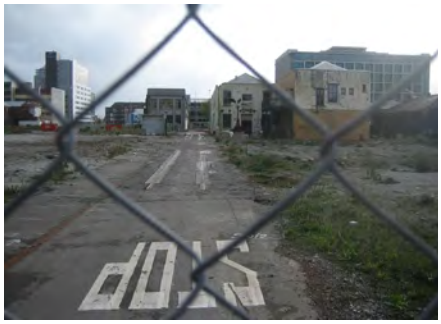


Figure 1 - Vacant post-earthquake space in central Christchurch. Photo: Andreas Wesener, 2013

NEW ZEALAND NATIONAL REPORT

BOTTOM-UP GOVERNANCE AFTER A NATURAL DISASTER: TEMPORARY POST-EARTHQUAKE GREEN SPACES IN CHRISTCHURCH, NEW ZEALAND

Andreas Wesener, Lincoln University, Department of Environment, Society and Design, School of Landscape Architecture – Christchurch – New Zealand

Introduction

Christchurch was struck by a 7.1 magnitude earthquake on September 4th, 2010 and another 6.3 magnitude earthquake on February 22nd, 2011 resulting in 185 fatalities and major damage to urban infrastructure and the built environment. The city has been continuously shaken by thousands of aftershocks causing further damage. In particular the historical built environment has been seriously damaged including symbolic heritage buildings such as the Christchurch Cathedral. Large parts of the city centre and the eastern suburbs along the Avon River were 'red-zoned' and became inaccessible for the public until mid-2013. Residents and businesses had to find new accommodation. Large-scale demolitions of damaged and economically unviable buildings started have continued until the present (March 2015). The feeling of emptiness in the city centre is overwhelming (Figure 1).

Christchurch's early urban recovery process depicts two parallel "dynamics in tension – a bottom-up impulse focused on place and community, and a top-down government-led program of economic recovery" (Swaffield 2013: 23). The 'Share an Idea' process, an unprecedented and award winning plebiscitary approach, initiated by Christchurch City Council in May 2011, gathered more than 100,000 ideas by Christchurch's citizens. The ideas were translated – with the help of external advisors such as the Danish architect and urban designer Jan Gehl – into a draft plan for the rebuild of the city centre. New Zealand's central government took a different approach. After passing the Earthquake Recovery Act (CERA) it took comprehensive control over Christchurch's rebuild process. CERA rejected the council's draft recovery plan, changed it significantly and developed the so called 'Blueprint Plan' for Christchurch's Central Business District (CBD) in a 100-days ad-hoc non-public planning process as part of the Christchurch Central Recovery Plan with the help of private consultants.

Transitional Community-Initiated Open Spaces in Christchurch

Parallel to the 'official' rebuild discourse, temporary uses have emerged on post-earthquake sites. Various community organisations have been developing temporary projects using vacant lots as activity spaces. The two most popular ones, 'Greening the Rubble' (GtR) and 'Gap Filler' (GF), started immediately after the September 2010 earthquake and have been experimenting with bottom-up approaches. GtR has focussed on 'green' landscape projects such as temporary public parks and gardens; GF has developed creative and experimental projects often involving local residents (Figure 2).

Creative temporary or transitional use of vacant urban spaces is seldom foreseen in traditional urban planning and has historically been linked to economic or political disturbances when regular urban development is disturbed and new

Figure 2 - Gap Filler's Pallet Pavillion (demolished 2014). Photo: Andreas Wesener, 2013

land uses do not occur for an indeterminate period of time (Andres 2013: 759). However, some temporary spaces have been turned into 'permanent' ones guided by the calculation and manipulation of power relationships (Andres 2013: 771). The example of the 'Système Friche Thèâtre' in Marseille which gained reputation beyond regional boundaries shows that temporary occupants were able to sustain a powerful position "based on the local knowledge of these actors and their ability to demonstrate the relevancy of their place-shaping actions and place-making strategies" (Andres 2013: 772).

Christchurch, like most cities, has had a relatively small stock of vacant spaces throughout much of its history. In the late twentieth century car-parking was the dominant and default interim use. The term 'transitional community-initiated open spaces' (CIOS) describes temporarily used vacant urban sites produced by bottom-up initiatives In Christchurch after the earthquakes. 'Transitional' relates to the flexible and dynamic nature of temporary projects and expresses particular hopes and expectations for future urban development linked to "key transitional processes that shape community resilience and how communities cope with environmental and social change at the local level […]" (Wilson 2012: 78). Compared to other temporary uses of vacant urban space, the cause of Christchurch's vacant spaces – a major natural disaster – modifies their conceptual and perceptual basis in at least four key aspects:

a) Although not making part of the 'official' long-term vision of Christchurch's future urban development, CIOS received official endorsement
b) Initiators of transitional urban spaces in Christchurch do not necessarily pursue distinct alternative economic, social, political, or cultural agendas which are in conflict with 'official' ones
c) The temporary status of CIOS has principally not been contested. It has been highlighted as an explicit expression of their creative nature (Bowring & Swaffield 2013: 100)
d) In contrast to other cities who endorsed temporary urban spaces only after their role as possible economic drivers had been established, CIOS have been financially supported by public funding right from the start, for example through the 'Transitional City Projects Fund' (CCC 2014)

Resilience concepts have been considered more suitable than notions of sustainability in situations of "sudden catastrophic" as well as "slow-onset disturbances" (Wilson 2012: 11). Community resilience, encouraged by positive attitudes and actions of individual community members, sufficient community resources in form of economic, social and environmental capitals, community participation and action, and adequate institutional support, has been conceptualised as an indicator of social sustainability (Magis 2010). Based on my analysis of CIOS, related publications on transitional uses of urban spaces in Christchurch, and literature on disaster recovery, resilience and sustainability, I argue that CIOS have been contributing to community resilience in at least four ways:

a) by creating opportunities for positive emotions and experiences
b) by encouraging experimentation and innovation
c) by creating and strengthening social capital
d) by fostering community empowerment

Case Studies: Two Temporary Post-Earthquake Urban Gardens in Christchurch

Figure 3 - 191 Fitzgerald Avenue, a temporary post-earthquake community garden on a vacant earthquake site in the city centre of Christchurch. Photo: Roy Montgomery

191 Fitzgerald Avenue is a temporary post-earthquake community garden on a vacant earthquake site in the city centre of Christchurch, New Zealand (Figure 3). The allotment comprises an area of approximately 556m2 made up of two adjoining parcels of land. Prior to the Canterbury Earthquakes of 2010-2012 each parcel of land contained a small cottage. Both were demolished as a consequence of the earthquakes leaving vacant residential sections. The land and several adjoining properties are owned by a local business entrepreneur who is also long-time local resident. There were several NGOs and community groups involved in the initial start-up, notably Greening the Rubble, the residents association Te Whare Roimata and Deaf Aotearoa (the national organisation for hearing-impaired people). Inner city schools also contributed labour such Christchurch East Primary School and Catholic Cathedral College as did Conservation Volunteers, a national NGO, and staff from the nearby branch of Australia New Zealand Bank. The timing of this was important as there were almost no community-based or small private rebuild activities taking place at this time. It gave people a sense of purpose and practical empowerment in the larger context of major. There is a license to occupy agreement between Greening the Rubble and the owner. Greening the Rubble provided guidance for design and organised construction labour amongst local businesses and school and community groups. Day-to-day maintenance is provided by local residents and Te Whare Roimata. The allotment is intended as a community garden for the growing of vegetables. It consists mainly of slightly raised planting beds, the majority of which are timber-sided. There are three brick planting beds. Water supply is from a neighbouring domestic property. The citywide benefit comes from the fact that despite all of the major demolition work within the central city since 2011 and which is still ongoing there are very few rebuilt sites. Hence the community garden functions as a symbolic sign of life and re-occupation especially through its brand association with Greening the Rubble. Rebuild and response coach tours and site visits have included this allotment on their itineraries.

Figures 4 - Agropolis – a transitional urban farm in Christchurch's city centre. Photo: Andreas Wesener, 2015

Figure 5 - 'Building the shed'. Photo: Tanya Mariel Iniguez, 2014

Founded in 2013 as a collaborative project, Agropolis (Figures 4) is a scalable transitional urban farm in Christchurch's city centre with the goal to grow a collective enterprise around local food production and associated social services. It is openly accessible and involves composting organic waste from nearby restaurants, ground preparation, sowing and planting, harvesting and distribution of the garden produce. Agropolis hopes "to provide a 'garden to plate' experience via a mobile kitchen" (Agropolis 2013). The project raises challenging questions about the city's food resilience, food production and distribution in relation to urban planning and design. Since 2014 Agropolis is governed by the Canterbury Soil and Health Association. It is maintained by the community of people who use the site.

Conclusions

Bottom-up governance approaches in the form of a collaborative production of temporary green spaces has strengthened community resilience in post-earthquake Christchurch. The process of creating these spaces has been at least as important as the final products. These have only limited anticipated life spans raising concerns about their long-term values: Will existing spaces continue to be perceived as innovative projects as time passes by? Do they have the potential to become permanent spaces? Could they become catalysts for alternative and more sustainable concepts of urban development? Will there be conflicts in the future – with land owners or authorities? Or will they simply disappear at some point? As the Christchurch rebuild moves on, community organisations need to get prepared to answer these questions.

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WG 1 POLICY AND URBAN DEVELOPMENT SUMMARY REPORT

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Agenda

Thursday, March, 19th

- Introduction and welcome
- Review of the second draft of the book chapters (2-4)
- Presentation 1: Martin Sondermann: WG1 | Discussion on Manuals: Urban Gardening in urban planning practice
- Presentation 2: Sofia Nikolaidou, Summary of her STSM in Switzerland: Emerging forms of Urban Gardening in Geneva
- Presentation 3: Francesco Orsini: Urban Green Train – Urban horticulture and food production in Bologna (Italy)
- Discussions about the development of the factsheets and future collaboration in WG1
- Preparation of material for World Café

Issues Discussed

Following the relevant book chapters' review (Chapters 1, 2 & 3), members initiated a fruitful debate about the Action's factsheets that its idea was incepted in previous event in Riga/Latvia and it was in a dormant state because of the writing process of the Action's book. Also, as part of the WG1's agenda, three presentations were made by WG1 members. First, Martin Sondermann described the contents of an ideal manual about Urban Gardening and how it will be used by urban planners and other interest groups. The aim was to reveal the importance of a set of planning tools that are necessary for the implementation and maintenance of urban gardens through urban development and planning practices. His presentation ignited a useful discussion about differences between a factsheet and a manual that should respond to certain problems and challenges and at the same time, convey a clear message and specific theme with practical and logical recommendations for both planners (top-down approach) and practitioners (bottom-up approach). The second presentation was a Short-term Scientific Mission report by Sofia Nikolaïdou that her research was funded by the present COST Action. Her work *New Gardening Initiatives In Geneva: Planning Challenges on the Eve of Urban Densification* is presented in this report. The third presentation was a summary of a long presentation that was made in WG3 by Francisco Orsini about Urban horticulture and food production in Bologna (Italy).

Following the first presentation, WG1 divided into small groups in which members were focusing on problems and recommendations that need to be included in a factsheet or in a manual for urban gardening practice. Then, a brainstorming about the type of the produce that we initially called it factsheet helped to develop interesting topics under problems and recommendations in response to certain questions. The flow of ideas is recorded as follows:

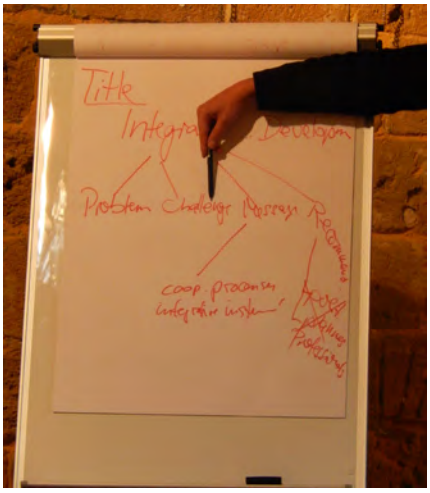
- **Name of the produce:** Advice Note? Policy Brief? Factsheet?
- **Theme:** what is the theme of the produce? urban gardens? green space? integrated urban garden development? Etc.
- **Problem:** what kind of problem is the produce going to address?
- **Challenge:** what are the challenges to address? What are relevant and important problems?
- **Message:** what message/s the produce shall convey
- **Recommendation:** what kind of recommendation is necessary to be included?

Problem 1:

- Loss of local green spaces to development
- Publicly accessible urban lands becoming private and inaccessible
- Interactive spaces (local + close to where they live) to non-local places (spaces that do not allow access to people and people cannot use them).
- NGOs cannot solve the problem as they are working in isolation in most cases

Problem 2:

Why are allotment sites more prone to development and more of a target to



developers or seen as more dispensable by local authorities than parks?

- Because of the value (price) of the ground is known but not its benefit?
- Because of where they are located? E.g. in marginal or city centre areas?
- Because the gardeners want to control them (conflict with authorities)?
- Because they look terrible to some people?

Challenge:

How can allotments be rebranded away from small private plots towards performing a better socio-environmental role within a community?

- Rebalancing the range of functions and opportunities in order to raise the awareness of the total price of plots to policy makers and planners and thus to help to protect the existing areas and for establishing new allotment sites.

Message 1: Advice Note, How to…? How should we…? Bottom-uppers!

- Build a coalition with different groups and advocacy organisations
- Use social media to widen support
- Get your councillor on your side
- Mobilize your neighbours
- Make links with local businesses
- Work with local schools and clubs
- Identify areas
- Set up garden association

Message 2: Policy Brief, Why should we…? Top-downers

- Protect and maintain garden sites
- Quality of life, health, wellbeing
- Social capital building
- Birdnesting rules
- Fund production
- Education
- Low-cost maintenance
- Mitigating heat-island effect
- “10 evidence base reasons for developing and protecting allotment gardens”

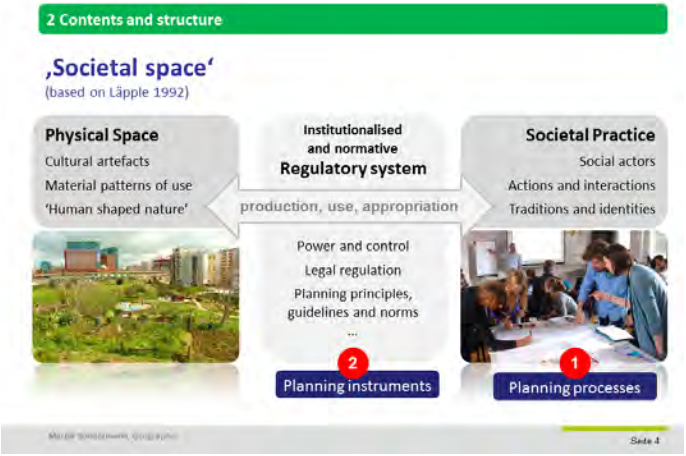
Recommendation 1

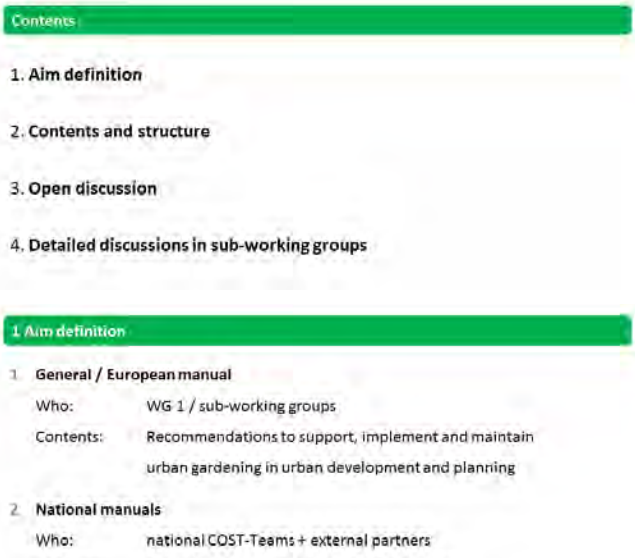
- Practice what you preach
- Listen to what the “top-downer” wants
- Set up your organisation to ensure that the “10 reasons” are visible to politicians
- Institutionalize your organisation to maintain activity in dialogue with the municipalities
- Carrying out your own training to people/members is how to participate and to know your way of amending the system
- Demonstrate how you help the municipality to meet its sustainability targets
- Raise money awareness
- Use people who know their way ahead

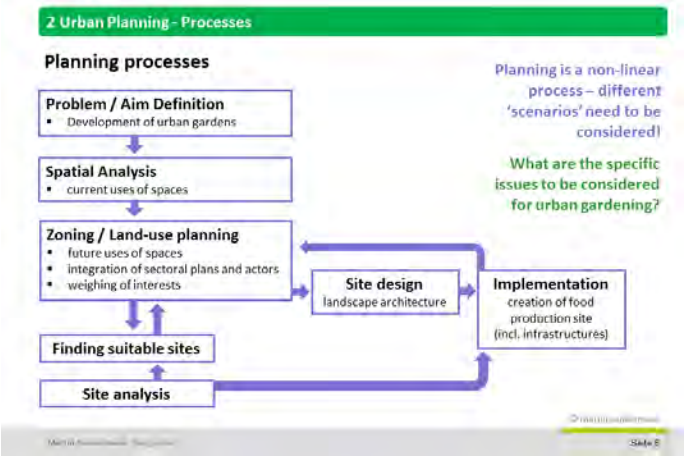
Recommendation 2

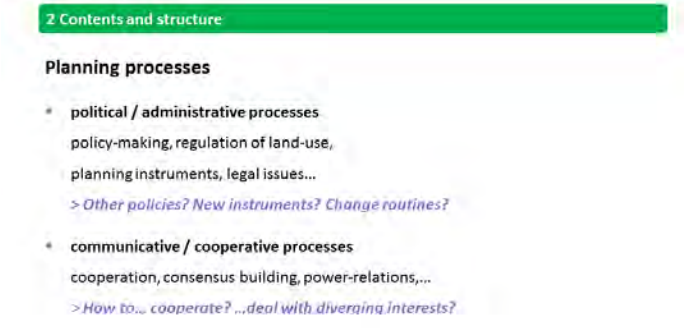
- Take opportunities to find out about the motivation of the allotment gardens in your area

- Identify and serving in a range of them e.g. maintenance, health, social care by joined attending
- Identify allotment sites and safeguard them in the urban plan – recognise them legally
- Be willing to enter long-term contracts
- Set up a joint advising committee together with garden representatives
- Involve the gardeners as a clear stakeholder group in planning
- Reduce bureaucracy in the system







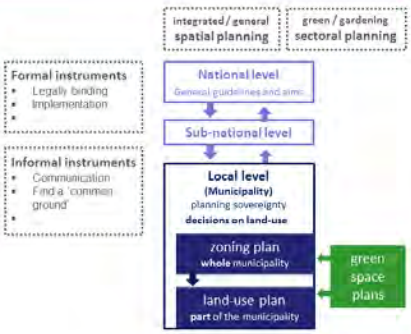


URBAN ALLOTMENT GARDENS

2 Contents and structure

Planning instruments

1) **integrated / sectoral**
   focus: integrated
2) **formal / informal**
3) **spatial level**
   focus: local
4) **contents**
   focus: integration of urban gardening into processes of urban development
5) ...



2 Contents and structure

Structure of 'European manual'

1. **Urban Gardening in European Cities**
   - short overview forms of gardening in spatial context
   - issues for urban planning / development
2. **Planning processes**
3. **Planning instruments**
4. **Group-specific recommendations for action**
   - politicians / policy-makers; public administration; gardening activists

Example-boxes ‚good practices'

2 Contents and structure

Planning instruments

Examples – general level –

- **Integrated urban development** models and concepts ("Sustainable European city")
- **Connecting** urban garding with other planning strategies: 'adaptation to climate change', 'liveable city', 'healthy city'
- **Funding** programmes (European, national, local)
- ...

Example: *Strategy „Urban landscape Berlin"*

- informal, sectoral instrument
- promotes urban gardening:

„**Productive Landscape** combines agriculture, allotments, and sub-sistence farming with the DIY culture of intermediate users, spatial pioneers, and start-ups"

4 Detailed discussions in sub-working groups

Sub-working groups

1. **Planning processes**
2. **Planning instruments**
3. **(Group-specific recommendations for action)**

Tasks:

- Discussion about contents and structure in detail
- (Optional: collect examples for ‚good practices')
- Prepare a time / workplan
- Short presentation of results in WG1

2 Contents and structure

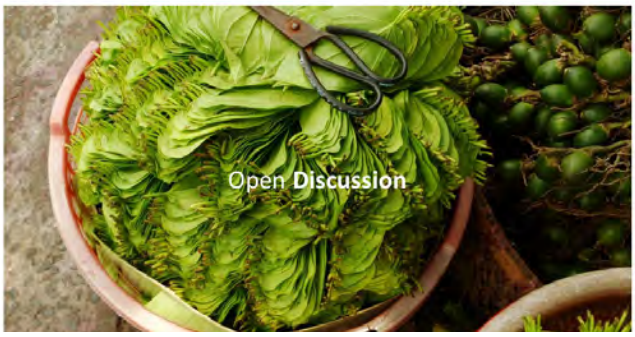
Planning instruments

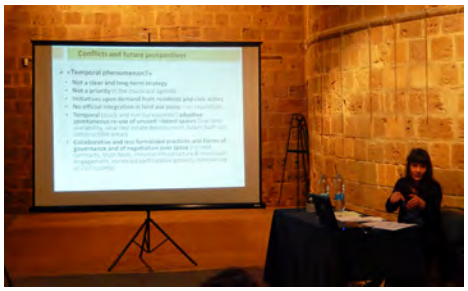
Examples – specific level –

Which aspects are important in terms of urban development?
WG1-Focus!

- **Characteristics of properties / sites**
  - size, form of the property; sun exposure
  - sealing, pollution, soil quality
  - water and energy-infrastructure
  - etc.
- **Accessibility**
  - direct / indirect access
  - proximity to residential areas / public transport,
  - visibility (social control)
  - etc.
- **Legal conditions**
  - legal status of property (land-use plan / ownership)
  - period of availability
  - etc.
- **... other Dimensions ...**
  - –

5 Discussion





NEW GARDENING INITIATIVES IN GENEVA: PLANNING CHALLENGES ON THE EVE OF URBAN DENSIFICATION[1]

Sofia Nikolaïdou, Panteion University of Social and Political Sciences, Athens, Greece

Introduction

In a context of urbanization and lack of open spaces in central areas, traditional forms of family gardens are highly threatened. In the midst of the most acute housing crisis, one of the top priorities for Geneva is the construction of new housing areas through urban expansion combined with 'qualitative densification' of existing built-up areas. As an already densely inhabited city further densification of existing built-up areas is a big challenge regarding the relatively low portion of stocked and green spaces. Thereby, family gardens that were traditionally spacious are either forced out of core-city or decrease in surface in order to have more space for development of new residential areas (urban densification). Hence, they are seen as one possible form - but not anymore as the only and unquestioned form - to use open space. Especially size and location of allotment gardens as well as the consideration of new forms of urban gardening (UG) are part of the debate on open space policies in urban areas.

Under these circumstances, new forms of small-scale urban gardening practices emerge as alternative gardening solutions inside the dense urban cores, labeled as 'jardins potagers', 'plantages', 'potagers urbains'. The terms, mainly inspired by the 'jardins partagés' in France and the 'plantages' in Lausanne, includes a wide variety of aspects and functions: municipal social initiatives, educational and didactic components and may also encompass professional aspects of urban farming. Apart from growing food for personal consumption they also aim at promoting local neighborhood relations, conviviality and self-sufficiency.

Either as top-down or bottom-up initiative, they arise as a new multifunctional way of management and revitalization of vacant open spaces in the neighborhoods while giving the right for re-use of public space to citizens. They appear as new flexible forms of urban gardening, for they respond to the long waiting lists for the classical allotment sites (family gardens) as well to the scarcity of open space. Therefore their general characteristics could be summarized as follows: a) small plots

[1] This text is an extended abstract based on the STSM Report that was prepared for the COST Action TU1201 and modified according to my presentation in Nicosia. The 3-month STSM was conducted in Basel (August-November, 2014), in the University of Applied Sciences Northwestern Switzerland (Host Supervisor Prof. Dr. Matthias Drilling).

Urban gardening in park Beaulieu, Genève

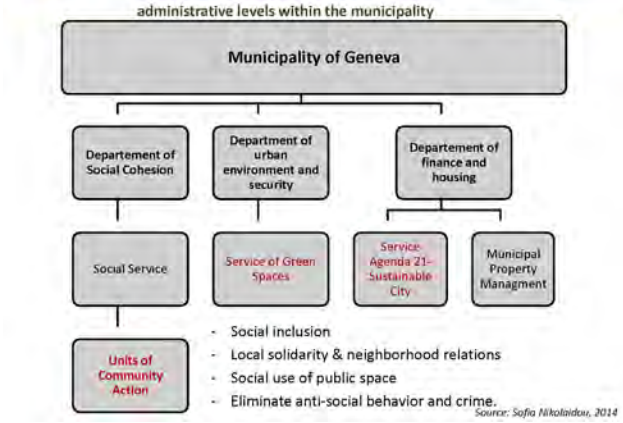
Bottom-up vs top-down initiatives

Source: Google Maps, Sofia Nikolaidou, 2014

Source: Google Maps, Sofia Nikolaidou, 2014

Beaulieu gardens of the former horticltural center
Management : Municipal Service of green spaces :
Allocated in 2009 , first to *Artichauds* in order to produce plants for CSA and then to the *Collective* that re-claimed unused space through a proposal for the re-appropriation of the site, mainly through activities linked to agriculture.

Public actors involved in the creation of vegetable gardens



Source: Sofia Nikolaidou, 2014

in inner areas (6-10m2), b) on public or private land (vacant or unused plots, or existing green/open spaces: lawn front yards, parks etc), c) addressed to all people from the surrounding areas (5-10′ by foot), d) allocated without any rent or with small symbolic participation fee, e) one or two years of contracts, generally non-renewable, d) long waiting lists, selection in order of preference. They are based on new forms of horizontal collaborations, partnerships and governance patterns between public, private and civil society actors that are open to more population groups and the surrounding neighborhoods as well as other user groups (schools, associations etc.).

Research questions and method

This research explores how these newer practices of urban gardening respond to urban pressures, social and natural dimensions of public-green space through new modes of green space governance.

Thereby, the research questions are:

- What are the changing patterns of urban gardening in Geneva and how do they influence the production and re-appropriation of open/green space?
- How are these initiatives linked to current planning practices and urban open space policies in Geneva?
- What are the shifts in the roles of public and civic participation in the negotiation of open space and local decision-making processes?

In order to answer these questions, collected data was based on the analysis of available qualitative inputs and a series of interviews. A systematic literature review of several administrative documents such as legal acts and spatial planning documents or documents published by or circulated among the particular gardening initiatives were analyzed in order to understand the general context in Geneva. Empirical research was conducted during my STSM period in the city of Geneva. In total, 9 interviews (and various informal conversations) were conducted with 8 representatives of municipal services and civil actors in the field. Though several gardens were visited, in order to get an in-depth understanding, it was decided to focus on one case-study the 'Jardins du Centre horticole Beaulieu'. This case was chosen as an illustrative example that represents and encompasses two current trends in urban gardening in Geneva: municipal and bottom-up initiatives.


The UAC gardens


The meeting space/kitchen


Abeilles citadines


Artichauds:gardens for 'cuillettes'


Greenhouses ('Artichauds')


Les galinettes urbaines

Negotiation of space and policy implications: creating temporary spaces for participation?

Even though the *'jardins potagers'* are not at the centre of the municipal policy agenda, the city supports the concept of urban gardening and there is some kind of political recognition. Though not clearly specified, such a term is introduced at the cantonal and municipal discourse through the strategic development plans and the policy agenda (Strategic Cantonal Plan 2030, Plan Directeur Communal 2020). Thereby, we can distinguish two main pathways of public action priorities with a particular relevance to new urban gardening trends: a) The first is via the promotion of the social dimension of public space policy. Perceived as an element of the larger concept of social space, the 'potagers urbains' are considered as part of the general development of collective and re-appropriated public spaces that aim to foster proximity, social cohesion and conviviality while diversifying the uses of unused space in the neighborhood (Quincerot and Weil, 2009:94). b) The second is by linking it with nature and biodiversity. In order to support the city's goal to be a 'green city, the contemporary concept of "Nature in the city" (Canton de Genève 2013: affiche A12, Quincerot and Weil, 2009:185f) is being developed in a wider territorial context and new forms of territories and networks of open spaces can bring agriculture and urban development together (Daune and Mongé, 2011). Among other aspects it is referred as a tool for developing a network of green open public spaces (Quincerot and Weil, 2009:157), through green wedges which penetrate urban core areas (pénétrantes de verdure). Especially their multifunctional role, as corridors for preservation of nature, agriculture and recreation with a diversified manner, can retain the protection and improvement of natural environment in a context of high density that will be increased in the inner-city area.

However, even though these aspects are intended to be integrated in the Neighborhood Land Use Plans still there is not such existing experience. In practice 'jardins potagers' are not really integrated in the land use plans and usually become spaces for negotiation and less formalized and temporary planning practices. The main argument of the municipality relies on the fact that they preferably seem to adapt to the existing demand of citizens embracing a participatory approach in the process of re-appropriation of unused land. Officials from different municipal departments admit that the land often tends to be used on a temporary basis and projects are often created on constructible land. Therefore, the city examines each possible case and demands separately, following 'opportunistic' and short term strategies to recover unused land. UG is conceived as a low-cost form of reactivating and maintain unused space with a low risk of failure that could also be seen as an ad hoc 'upcycling process of space' (reuse the space by adding new value).

Moreover, we see that in a context of space scarcity, where access to land is the most important factor, negotiation of space for UG enhances local partnerships and new collaborations often through informal processes in terms of negotiations and governance.

Such collaborative forms of UG may involve public actors from different services of the administration at the municipal level as well as non-state actors such as non-profit associations, grassroots movements and other representatives of the civil society or private actors. In some cases there are no contracts and deals are based on new relations of trust between users and owners, new ways of land management without cost for the municipal services (trust deals with private owners, NGO's, associations). This creates a certain point of flexibility while they are often collectively designed and maintained. At the same time they are open to the general public while fulfilling important social and environmental functions.

The City of Geneva usually takes action in structuring public involvement in urban gardening projects through its different units and services of the municipal administration: a) Units for Community Action that are mainly in charge of municipal gardens (UAC - *Unité d'Action Communautaire, Département de la Cohésion Sociale*) b) Service of Green Spaces (SEVE - *Service des espaces verts, Département de l'environnement urbain et de la sécurité*) c) *Service Agenda* 21-Sustainable City (*Ville Durable*) d) *Municipal Property* management (*Gérance immobilière municipal*) of the Department of Finance and Housing (*Département des finances et du logement*). Among these different units and services of the municipal administration, a variety of motivations and also different levels of involvement and engagement can be observed.

At the same time the city wants to increase citizen participation in urban development projects and policymaking. In the case of urban gardening initiatives, participation has a double meaning: on the one hand initiatives can be assisted by local groups (associations, collectives, consultants) while negotiation over open space in Geneva requires the city to partner with them. On the other hand future gardeners can participate actively in the design, implementation and development of the garden plots. Mostly in the French speaking part of Switzerland (particularly in Lausanne and Geneva) non-profit organizations such as '*Equiterre*' are becoming major channels of development of participative urban gardening projects. 'Equiterre' is usually engaged by the municipalities in order to advise and support them for the development and active promotion of urban gardening projects.

The case of 'jardins potagers de Beaulieu': emerging public and civic partnerships and hybrid forms of green space governance

The Beaulieu project is situated in the former horticultural center of the Municipal Service of Green Spaces (Service des Espaces Verts – SEVE). The center was relocated into another area since 2008 (Vessy) and some of its abandoned greenhouses and hotbeds were transformed for urban gardening, optimizing the possibilities to install various urban gardening projects within the city. Located in a central and densely populated residential district (between the districts of Cropettes and Grand Pré), the site has a total surface of approximately 9,300 m2 and is part of a greater park that extends over 65,300m2 of land (Ville de Genève, 1993).

MAP 1. Detailed map of Beaulieu Gardens : actors and organization of the site

Source: Sofia Nikolaidou, 2014

The 'gardens of Beaulieu' combine two different types of UG initiatives involving multiple users and actors both from municipality and civil society. More specifically, individual beds and greenhouses of Beaulieu are allocated to citizens that participate in a *Municipal garden initiative*, as well as to several associations and external users such as schools that take part in the *Collective Beaulieu*, all sharing the space of the former horticultural centre (see map1):

- *Municipal gardens under the responsibility of the Units for Community Action - UAC, developed in the frame of neighborhood oriented social policies* (e.g. social inclusion, proximity, local solidarity & neighborhood relations, social use of public space, elimination of anti-social behavior and crime). This type of garden, also called 'citizen's gardens' ('potagers citoyens'), is open to all the inhabitants of the sector who are interested to apply for a plot. These gardens were situated in the middle of the park just outside the horticultural center (since 2006) but since 2013 they are relocated inside the site and have over doubled their space. All users have their own plot (49 parcels of 6m2) and receive the necessary water, tools and support to start and maintain their garden. Plots are allocated only to neighborhood residents, living in a close distance, with a non-renewable contract of 2 years. There is no rent to pay, only a reimbursable participation fee of 70 CHF in case of damages that may occur in the garden. There is no fencing and the plots can be used either by an individual or a family or can be even shared by more than one person. The UAC is responsible for the animation and surveillance of the site.

- *Bottom-up initiatives that combine educational, food-activist and market-oriented activities towards Community Supported Agriculture* (CSA) *and short food chain networks*. These initiatives are currently represented by the Collective Beaulieu and two schools. At first, the non-profit association of 'Artichauts' asked for permission to occupy some of the old greenhouses in the site in order to grow plants and a part of the area was allocated to them since 2009. Shortly thereafter '*Artichauds*' in cooperation with 7 more associations created *Collective Beaulieu* and part of the formerly empty and unused space has been allocated (without rent) to them. Their main goals differ in comparison to the municipal UAC gardens for they combine food provision with social functions, recreation and didactic activities. Therefore, they use practices linked with the emerging short chain distribution systems combining a number of ways to get involved with gardening including fresh bio vegetable, beekeeping, and community poultry. Activities in this part of the site vary: organic plants/ seedlings produced for cooperatives working with CSA networks, open vegetable pickings and on-site sales to residents and passersby, production and provision of old and local varieties of seeds, honey production and sales, community henhouse managed by a local association, research on the process of natural fermentation of certain dye plants etc. It is important to highlight the educational aspects enhanced by the participation of schools that enhance public awareness, knowledge and participation on nature conservation within the neighborhood and may meet multiple learning, community and environmental goals (Dubbeling et al., 2009, Fritche et al., 2011).

This urban gardening project represents a viable example of experimenting urban gardening in its various aspects and diverse functions. It encompasses a wide range of activities and fulfils social and economic functions of urban gardening. Additionally, it depicts new forms of collaborations and partnerships involving horizontal collaboration between public, political-administrative actors and civil society. A multitude of public and private stakeholders rely on each other in order to activate resources and develop this urban gardening project on unused public land. A combination of formal and informal practices in terms of land access and negotiation of urban open space is taking place and influences new urban planning and green space governance. The management of the space allocated to the Collective Beaulieu is done collectively by all the users depending on their needs while municipal gardens are under the responsibility of the UAC. Both plot areas are open 24-hours for free public access even though they are formed and governed differently in each case.

These actors have different perceptions of proximity and motivations regarding urban gardening as well as different organizational and governance models. On the one hand the municipality seeks proximity with citizens and promotes social contact and cohesion. On the other hand associations in Beaulieu are linked with proximity agriculture networks, community supported agriculture farms, cooperatives and customers. All things considered, these different perspectives lead to a more variable context of uses and functions and increased diversification among actors and users. Current experience shows that they can be successfully related, without significant conflicts and able to share a more or less collective vision. Thereby, Beaulieu is a place with multiple and diverse user groups with compatible and complementary uses that coexist. Though driven from different conceptions of locality and proximity both initiatives are reclaiming urban food production through re-appropriation of urban public space. This can influence policies at the local and national level and may be central to shifting new urban gardening and urban agriculture paradigms in central urban areas.

Concluding remarks

This research shows that current trends in urban gardening initiatives reflect a shift in the terms used and concepts regarding new forms of urban gardening that put aside traditional allotment gardens. As consequence of the evolving social conditions and urban restructuring processes (densification) changing and more adaptive forms of urban gardening emerge in Geneva core city. These initiatives grow from the city's broader efforts to improve sustainability and social inclusion in neighborhoods that link urban gardening projects with sustainable urban development and green space governance. They are mainly linked with an effort to integrate nature and biodiversity into city planning and development of a network of green public spaces. At the same time they intend to meet the social needs of the citizens and of local food production in an effort to reduce social inequalities, increase social interaction and solidarity feeling or stimulate pedagogical functions through the use (re-use) of public spaces at the local neighborhood level.

However, the main findings show that weaknesses can be found mainly in terms of perennity of the projects and integration in planning practices. Although the city is supportive of these initiatives and opens to broad collaborations with bottom-up actors, there is not a clear and long term strategy to promote urban gardening through concrete policies or explicit regulations. Apart from some strategic orientations, the city of Geneva does not incorporate urban gardening projects into their zoning plans. Thus, this seems to be the appropriate form that depends on urban density and adapts to a given situation of low land availability, slow real-estate development and it is a quick way to re-activate public space.

Either as top-down, bottom-up or mixed initiatives, regulated or less formalized, these new forms of urban gardening in Geneva depict new forms of participation and horizontal cooperation between civil society and political-administrative actors in terms of new urban governance. Taking Beaulieu as example, it is a vivid paradigm of an innovative and alternative area of experimentation that creates hybrid forms of urban gardening and green space governance. New socio-economic functions and transactions take place under emerging collaborative governance structures and changing planning practices. It arises as a new multifunctional way of management and revitalization of vacant open space while giving the right for re-use of public space to citizens through a consensus-oriented approach in urban planning and governance.

In one way these gardens represent a new form of citizen's participation with a less active engagement of the public sector through more informal negotiation processes. However, the municipalities aim at strengthening citizens' involvement and responsibility, while maintaining a certain degree of municipal control in the decision-making process. Therefore, though the space is not anymore fully managed by the municipality it is still controlled by a range of municipal services. In this way, the Municipality opens up the possibility for interim temporary uses and participation of citizens and grass-root involvement “quick and non-bureaucratically“(Kulke et al., 2011: 222), builds a consensus and a win-win situation for all stakeholders but still regulates/controls the [temporal] use of vacant spaces.

Even in the absence of prolonged planning procedures these changing forms of urban gardening initiatives can influence possible future landscapes and synergies and might be a promising area for cooperation on the local and the policy level. They are merging social and environmental aspirations of several users and stakeholders with new forms of 'green or innovative temporary use' of the land. Cooperation among several interested groups and collective re-invention of public urban space can enlarge the accessibility to multiple users and actors, to alternative uses, activities and perspectives. In this way, collective practices that stimulate the use of public and private space are encouraged in order to enhance urban environmental management and to facilitate a more permanent and sustainable use of vacant lots.

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WORKING GROUP 2 SOCIOLOGY SUMMARY REPORT

Chairs: Mary Benson, Susan Noori, and Johan Barstad (not present)

Participants:

Mary Benson, Maynooth University, Department of Sociology, Ireland

Hervé Bonnavaud, French Federation of Allotment Gardens (FNJFC), France

Tim Delshammar, Swedish University of Agricultural Sciences, Sweden

Beata Gawryszewska, Warsaw University of Life Sciences, Poland

Francis Flohr, AVVN (AIC voor Tuin & Nature), Utrecht, Netherland

Bent Egberg Mikkelsen, Aalborg University, Denmark

Milica Milojevic, University of Belgrade, Serbia

Susan Noori, Birmingham City University, UK

Tarmo Pikner, Centre for Landscape and Culture, Estonia

Jeanne Pourias, AgroParisTech INRA, France

Krista Willman, University of Tampere, Finland

Agenda (adapted):

Thursday, March 19th

- Introduction by Chairs
- Presentation 2: Nicola Thomas presentation of new funding for a 2 year project on Garden communities and their contribution to neighbourhood development
- Presentation 1: Esther Veen presentation of STSM study in Oslo (summary)
- Discussion

Review of book chapters

- Chapter 11 – Reviews by Nazila Keshavarz and Tim Delshammar
- Chapter 12 – Reviews by Nazila Keshavarz and Mary Benson
- Chapter 13 – Reviews by Nazila Keshavarz and Mary Benson

Friday March 20th

- Reflections of plenary session
- Further outputs such as factsheets
- Future collaborations
- How to proceed in following meetings
- Preparation of World Café

Thursday March 19th

The session started with a welcome by the chair, Mary Benson. She gave an overview of the agenda for the two days of WG2 meeting. MB then conveyed the apology received by the author of the first presentation, Esther Veen who had been unable to attend the meeting. A summary of the EV presentation is included in this section of report. The second presentation on the agenda was delivered by Nicola Thomas.

ALLOTMENT GARDEN COMMUNITIES AND THEIR CONTRIBUTION TO NEIGHBOURHOOD DEVELOPMENT

Nicola Thomas, Institut Sozialplanung und Stadtentwicklung Hochschule Basel, Switzerland

This new research project is funded by the Swiss National confederation, will run until February 2017 and is conducted by Patrick Oehler, Nicola Thomas and Timo Huber. The research project is embedded at the University of Applied Arts Northwestern Switzerland, School for Social Work, Institute of Social Planning and Urban Development, in Basel, where Nicola is working as a researcher.
The research aims to:

- Analyse how AG communities develop, how they are stabilised and how they can incorporate tradition and change in a way that allows for the community to remain functioning
- Explore whether AG are places of local democracies, where democratic knowledge of how to deal with difference and conflict is learnt and put into practice
- Explore the further value of AG for its wider neighbourhood context

The relationship between Allotment Gardens and the phenomenon of community is rarely studied. In Allotment Garden areas, differentiated and complex communal lives involving specific social practices develop, that in many cases have spanned across generations, and which can be understood as constituting a specific way of everyday life. Recently however allotment gardens in Switzerland are being re-discovered by a new, younger generation of users, who bring in new social practices and ideas of community to the allotment garden areas, initiating transformations within the community as well as potentially changing the role of allotment garden areas for the wider neighbourhood.

By conducting in-depth explorative and ethnographic research of two transforming allotment gardens in the cities of Basel and Bern, the research project will analyse how allotment garden communities are being (re-) produced in the studied gardens and how the communities incorporate changes in meaning and function of the gardens brought in by new users. It will also look into the wider context of the neighbourhood and ask which (potential) contribution allotment garden communities play for the surrounding neighbourhood development.

Discussion

Following the presentation, a discussion took place between participants on the concept of community; what is community? Is the community fenced or not, formalized or not, a shared common place or not? What are different layers of community? Is sense of community the same as sense of place?

Friday March 20th

The second day of the meeting started with an overview of the discussions of the previous day and if any issue needs to be addressed. In relation to the title of Chapter 13, the author of the chapter suggested the opening title ‘Trust me’

as social cohesion, social capital, and networking is built on the basis of trust. All participants were in favour of the new title and it was agreed that he will discuss the new title with other authors for final approval.

Factsheets

The session moved on to discussions about allotment garden fact sheets. The participants discussed the best way to approach the situation and agreed that they should be produced for specific target audience, i.e. schools, NGOs, gardeners, designers, community organisations, researchers, and housing association. The group split into smaller groups; each small group picked a few identified targets; discussed how they can structure their fact sheets for their target audience; and presented the results as in the table below.

Mary Benson and Tim Deshammar will act as the Factsheets coordinators; all WG2 members are urged to send their materials to mary.benson@nuim.ie and tim.delshammar@slu.se

SCHOOLS How to teach …….. with school garden? • Sustainable development • biodiversity • math and languages • stimulate creativity • build community • contribute to food security • plan, facilitate and design school garden	NGOs – COMMUNITY ORGANISATION • social participation • personal development • confidence building • local regeneration/local food/local economy • intergenerational knowledge exchange • cultural exchange • post trauma healing • skills building/ employment
STAKEHOLDERS-GARDENERS-DESIGNERS Strengthening your garden in a neighbourhood • series of examples or case studies: type of gardens • how to deal with threats, e.g. growing cities • advices **Designing gardens for social interactions & social miscily** • design of garden site • concentration on future users	RESEARCHERS Case studies, Methods, Procedures of evaluation • methodologies for researching AG from a social perspective • Examples of previous research • typologies/defining terms • social cohesion • benefits/impacts • place-making • social media • community • different types of methods for different audiences

Publications

Possible themes and interested authors for articles for the LAND special issue were discussed as follow:

- Allotment Gardens as Urban Commons (Krista Willman, Tarmo Pikner, and Ari WG3)
- A possible Chinese case (Tim Delshammar, Gao Tien, and Qiu Ling,)

- Lifelong Learning; Educational Gardens (Bent Egberg Mikkelsen, …….?)
- Gender (Susan Noori, Beata Gawryszewska, and a possible Ukrainian case)
- Pop up Cities (Mary Benson, Beata Gawryszewska, Susan Noori)

In addition, the group discussed about future collaborations for articles in international journals such as Gender, Culture and Space; City and Community; Visual Studies; Cities; Environment and Planning (A and D); and Urban Forestry and Urban Greening.

Forthcoming Conference

'Agriculture in an Urbanising Society', 2nd International Conference, 14 – 17 September 2015, Roma Tre University, Rome http://www.agricultureinanurbanizingsociety.com

Other plans

Further discussions about the structure of the fact sheets and first drafts will be part of the agenda of the next meeting in September 2015, in Birmingham.

A digital visual album of allotment gardens, initiated in the previous meeting in Riga, was discussed again and Krista Willman will act as the Visual Coordinator. All members are urged to send their materials (image, quote, and description) to: Krista.Willman@uta.fi

ALLOTMENTS IN OSLO: SOCIAL RELATIONS, DIETS AND WALLETS RESULTS OF A SHORT TERM SCIENTIFIC MISSION

Esther Veen, PhD Student, Wageningen University, Wageningen, Netherlands

1) Short introduction of myself

I am a PhD student at Wageningen University, at the chair group Rural Sociology. I have recently submitted my thesis and am hoping to defend it on the 15th of June. The title of my thesis is: Community gardening in urban areas: A critical reflection on the extent to which they strengthen social cohesion and provide alternative food. For this research I studied seven Dutch community gardens, of which two allotments. I used participant observations, semi-structured interviews and questionnaires.

I also work as an applied researcher at Wageningen University and Research Centre, at the Business Unit Applied Plant Research, and in the team Urban-Rural Relations. Here I engage in various research projects, mostly concerning multifunctional agriculture and urban agriculture.

2) The STSM project

In order to give more insights in the benefits and value of allotment gardens for society - which is expected to assist them in successfully arguing for their survival – my STSM research had the following research question: What are gardeners' main reasons for having an allotment, how does the harvest influence their diets and wallets and to what extent do people develop relationships with other gardeners? This STSM was hosted by Sebastian Eiter from Skog og Landskap, and Ellen Marie Forsberg from Fylkesmannen i Oslo og Akershus.

3) Allotments in Oslo

In Norway there are two types of what is called allotments in English; 'kolonihager' on the one hand and 'parsellhager' on the other hand. A Norwegian dictionary defines kolonihage as a 'collection of small garden plots, 150-300m2, outside the owner's domicile, usually on rented, most often municipal land. Those who rent the plots tend to put up small cabins' (https://snl.no/kolonihager, translated). Kolonihager are run jointly by the tenants, and there is a shared responsibility for common areas and public buildings. Each parcel tenant operates his own plot, places his own cabin and looks after his own plants (http://no.wikipedia.org/wiki/Kolonihage). Parsellhager are similar, but people are not allowed to build sheds or cabins on them. While not taken up in the official definitions, there seems to be another distinction; kolonihager seem comparable to what the Dutch call 'dwelling gardens' (recreational gardens) whereas parsellhager seem comparable to the Dutch 'utility gardens' (vegetable gardens). Thus, where in English we speak of allotments, in Norwegian both parsellhager and kolonihager are included, even if they are two different things. This research is about parsellhager only.

There are several parsellhager (+/- 20) in Oslo, with at least 1.000 plots. A plot is about 50 m2. There are long waiting lists: when a new allotment was opened in 2012 there were 3.790 applications. Most pressing problems for allotments are zoning, urban development pressure and lack or organization.

4) Methods

I selected two case studies - Geitmyra and Nedre Stovner (see map: Geitmyra on the left and Nedre Stovner on the right) and used:

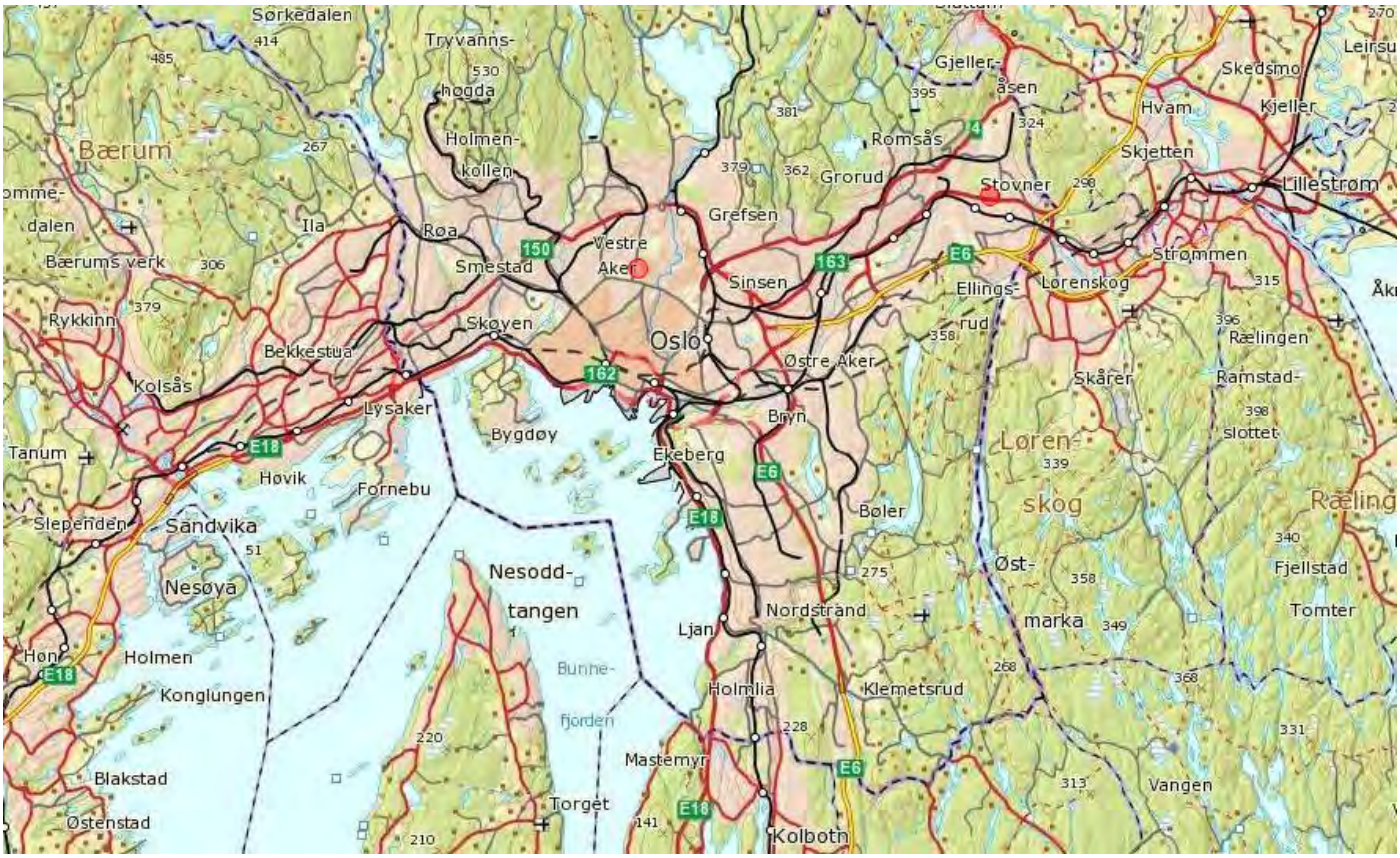
- Questionnaires (36+13 r)
- Interviews (6+5 r)
- Visits (several)

Finding respondents was more difficult at Nedre Stovner. I did not manage to get a broad overview of Geitmyra; several groups use the garden, but I only researched one of them. Therefore the respondents can be seen as together representing the width of allotment gardeners in Oslo and I treat them as one data set.

5) Results

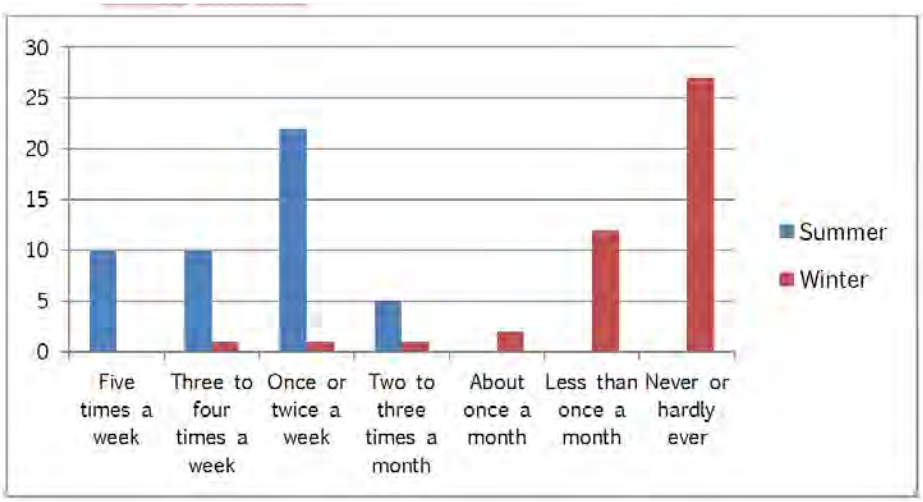
5.1 Characteristics of gardeners

- 73% is Norwegian (Geitmyra 83%, Nedre Stovner 46%)
- Most respondents between 45-54
- 63% is female
- Half of respondents live with spouse and children
- Education, Geitmyra 92% university, Nedre Stovner largest group only primary school
- Respondents spread around the allotment, mostly not more than two kilometres away.



5.2 Visiting the garden

Whereas 64% of Nedre Stovner respondents visit the garden at least five times a week (in Summer), this is only true for 8% of Geitmyra respondents. Most Geitmyra respondents visit the garden once or twice a week (57%); only 18% of Nedre Stovner visit this number of times. Nedre Stovner is closed in winter.

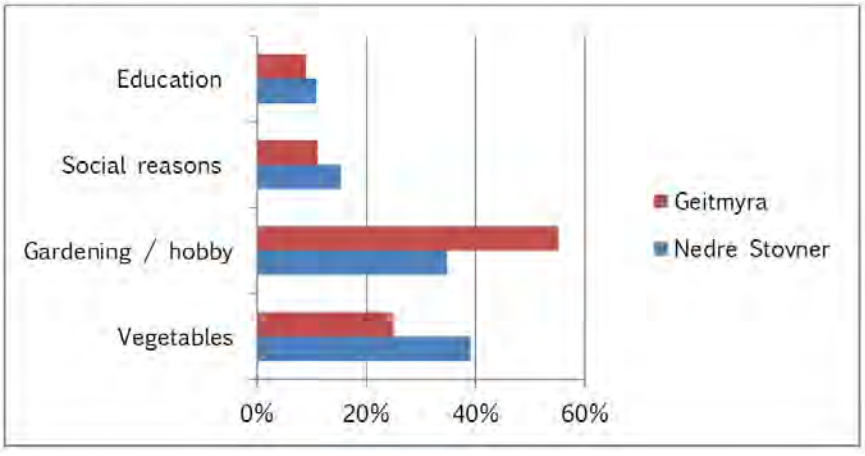


5.3 Motivations of respondents

The most important motivation is that people like gardening. Geitmyra respondents are more interested in the hobby aspect, Nedre Stovner respondents in the food aspect. Geitmyra respondents stated more often that the garden is a nice place to go. There is always a combination of motivations.

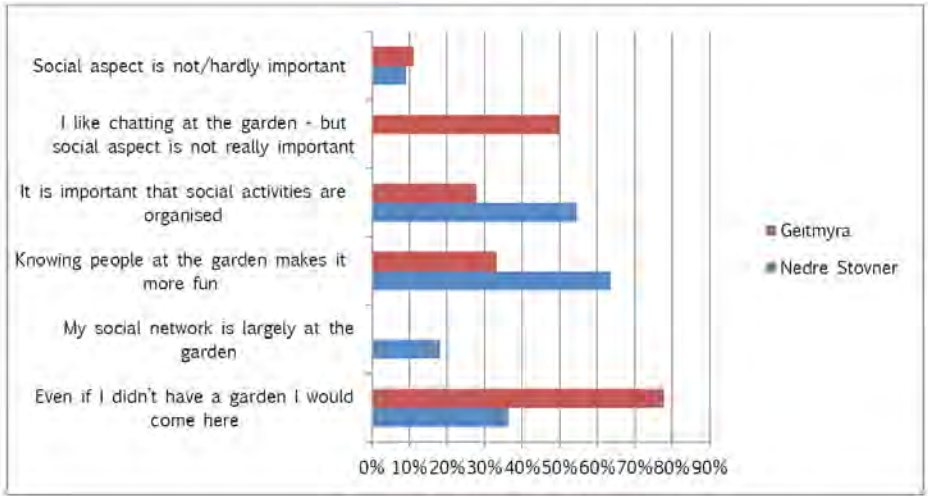
5.4 Contacts at the garden

None of the respondents stated that they don't know any other respondents, although a quarter of them did not know anyone before becoming involved in the garden. Most Geitmyra respondents know 5 to 9 other gardeners, whereas most of them knew no others or only one or two. Interestingly, all gardeners that stated to know more than 25 people, garden at Nedre Stovner, while these gardeners were underrepresented in the 10-14 and 15-25 groups. Moreover, all respondents state that they chat with others when at the garden; just over half of respondents do that every time they are at the garden, just under half of them do that sometimes.



Most respondents know a few others through the garden that they meet outside of the garden as well. Garden is also a place to maintain contacts; share a plot with friends; getting to know others at the garden one knew vaguely; getting together with friends at the garden, as a recreational space. Some contacts stay at the garden only. Hence: allotments offer an opportunity to meet new people who become acquaintances and sometimes get promoted to being friends, whereas they are also places that help people maintain and enjoy existing relationships.

50% of Geitmyra's respondents stated that even though they enjoy chatting to others at the garden, this is not really important to them. This answer was ticked by none of the Nedre Stovner respondents. Two of the respondents from Nedre Stovner even stated that their social network is largely at the garden; for some people the allotment and its social contacts are very important. It seems, therefore, that the social aspect is more important for the type of respondents I met at Nedre Stovner than for the type of respondents I met at Geitmyra.



It is important to keep in mind that besides positive contacts, whether strong or superficial, there may also be negative contacts. There are different groups present at the gardens, both at Geitmyra and at Nedre Stovner. Geitmyra is located in a gentrified area, where people with different backgrounds live. These backgrounds are reflected at the garden; they may not always mingle to the fullest and it may lead to frictions. There is a lot of mutual help between respondents.

5.5 Eating from the garden

Respondents mainly eat from their garden in summer. For allotment holders with a non-western cultural background – many of the Nedre Stovner respondents - growing one's own food is much more important. This doesn't mean, however, that growing vegetables is not important for the Geitmyra respondents. When asked to what extent growing vegetables was a reason to start with the garden, most respondents from both gardens argued that it was, and that they wouldn't have a garden just to grow flowers for example.

	Summer		Winter	
	Geitmyra	Nedre Stovner	Geitmyra	Nedre Stovner
In Winter/Summer almost all the vegetables I eat come from my garden	9%	58%	0%	9%
Several times a week	60%	33%	15%	27%
About once a week	17%	0%	21%	18%
Two or three times a month	6%	8%	9%	9%
About once a month	15%	0%	15%	9%
Less than once a month	18%	0%	18%	9%
Never or hardly ever	24%	0%	24%	18%

6) Conclusions

My research has shown that gardeners are found in many segments of Oslo's society; there are gardeners in gentrifying neighbourhoods, well-educated young families that want to spend time in a beautiful garden, teaching their children about food and sharing a coffee with friends. There are also gardeners who came to Norway as refugees, growing vegetables from back home while enjoying the fresh air and coming together with several families to drink tea or barbecue.

6.1 The harvest

Growing vegetables is inextricably linked to the allotment gardening experience. Although the degree to which people eat from their gardens varies – for some this may not be more than a few times a year, for others it is most of what they eat – for many respondents having an allotment would not be the same without the vegetables.

6.2 The contacts

The same can be said for the social relations at the garden. The value of these relations, the extent to which gardeners make friends, and what share of people's social life is to be found at the garden all vary. But all gardeners meet and talk to others, rely on other gardeners for help and advice, and appreciate the fact that they are part of a gardening community.

6.3 Two main groups

I recognise two main groups. On the hand one there are the gardeners who use the garden mostly as a recreational space; the gardens function as extensions of the homes, as some sort of semi-private space. These gardeners enjoy the new contacts they get, but a large part of their gardening contacts are interchangeable. These respondents enjoy growing vegetables, but it is more about the activity of gardening than about its results. Vegetables grown are 'extras' to the meal rather than a large part of people's diets.

For another group of gardeners the vegetables play a larger role in their diets; a large part of what they eat has been grown on their allotment. And while the garden is where they meet their friends and invite their families, they do this more

often than the first group; they are at the garden nearly every day, and most of their social life is at the gardens. Having an allotment is very important for them. For this group the garden is thus also a recreational place, but the importance of this place is much larger, as their choice of recreational places is smaller.

For both groups it seems, however that the focus of the garden is not on the vegetables but on the 'life project'. Gardening is a hobby, to some more serious than to others. Nevertheless, the value of growing one's own vegetables should not be underestimated, as there is something magical to it.

The differences that I showed do not depend on the location of the garden, but on the respective type of gardener. However, the gardens reflect the neighbourhoods in which they are located and thus the distribution of these types of gardeners is dependent on the location of the gardens.

WORKING GROUP 3 ECOLOGY SUMMARY REPORT

Chairs: Andrzej Mizgajski, Annette Voigt

Participants:

Andrew Hursthouse, University of the West of Scotland, Paisley, UK

Andrew Speak, University of Manchester, UK

Andrzej Mizgajski, Adam Mickiewicz University Poznan, Poland

Annette Voigt, University of Salzburg, Austria

Ari Jokinen, University of Tampere, Finland

Avigail Heller, Ministry of Agriculture and Rural Development, Israel

Béatrice Bechet, French Institute of Science & Technology for TDN, France

Cristian Suau, University of Strathclyse, UK

Francesco Orsini, Dept. Agricultural Scienes, University of Bologna, Italy

Jelena Ristic Trajkovic, University of Belgrade, Serbia

Ligita Balezentiene, Aleksandras Stulginskis University, Lithuania

Mart Külvik, Estonian University of Life Sciences, Estonia

Monika Latkowska, Warsaw University of Life Sciences, Poland

Paulo Filipe Luz, Institut Nacional de Investigacao Agraria e Veterinaria (INIAV), Portugal

Teresa Leitão, National Laboratory for Civil Engineering (LNEC), Portugal

Agenda

- Review of Chapters 5,6, and 7
- WG General session
- Short introduction; adoption of the agenda
- Summary of the WG3 meeting in Riga

Presentations

Following Participants of the WG3 Meeting reported about results of their research activities. Vital discussion after each presentation showed that the selection of the topics was very appropriate:

- Béatrice Bechet: Urban soils quality and health risks - Study of trace metals anomalies in an urban allotment in Nantes (France)
- Francesco Orsini: Environmental and economic assessment of multiple cultivation techniques and crops in open-air community rooftop farming in Bologna (Italy)
- Andrew Speak: Ecosystem services in AGs and their reflection in biodiversity. Case studies of Poznań and Manchester
- Avigail Heller: Urban agriculture in Israel

General discussion

- Reflections of plenary session

(Topics: Horizon 2020, Funding Opportunities, future collaborations)
• WG 3: Short report on recently finished or ongoing projects as well as project ideas of WG3 members such as papers, presentations...

- Further collaboration in WG 3
- Factsheets
- Next steps and how to proceed (in following meetings)

Discussion about cooperation in WG 3

Each participant reported synthetically on recently finished or/and ongoing projects (research, STSM etc.) and on new project ideas

Conclusions

The reported projects focus on the following research fields:

- Features of soil, water and crops (contamination),
- Gardeners environmental behaviour and attitudes,
- Identification and valuating of ES and spontaneous plant diversity,
- Quantity and quality of food.

The STSM have been a very efficient way of research cooperation between WG3 members and their institutions

WG3 was involved in 5 STSM in 2014, for 2015 the next 2 STSM have been approved. The researchers interests focus on wide spread topics:

- Ecosystem services
- Soil contamination and transfer of pollutants
- Guerrilla Gardening in UK/AU
- Motivation for community gardening in UK/AU.

Papers on following topics are on different stages of preparation:

- soil-water-food quality,
- questionnaire on environmental behaviour and their impacts,
- position in urban ecological structure /GI,
- influence of land use change,
- how ecology contributes to place-making?
- already good collaborations between WG 3 members: over all in respect to environmental behaviour and soil conditions/contamination,
- Good connection and results (also due to STSM),
- In addition, there are linkages and common projects with members of other WGs (also due to STSM).

Factsheets

Ecological Factsheets should be one of the deliveries our COST Action Participants discussed in this regards some key questions:

- To whom are they addressed?
- What is a fact?
- Potential context?
- We agreed on:
- Lead authors of the three ecology handbook chapters propose topics for factsheets
- Not to propose facts, but to provoke thinking by asking important questions in respect to: What I have to think about for my urban garden?

How to continue our work/further meetings

Participants agreed that ecological topics are strongly connected with several subjects of other WGs. In this regard the use of existing network for establishing transdisciplinary research cooperation would be very welcome. Some research questions with a significant potential for transdisciplinary cooperation have been formulated:

- Knowledge, attitudes and behaviour ↔ ecological conditions
- Urban design and planning ↔ ecological conditions
- Policy rules ↔ ecological conditions

World Cafe

Volunteers from our WG (Annette & Andrew, Teresa & Andrzej and Beatrice & Mart) presented shortly our activities to other WGs

- Three main activities were described:
  1) a short summary of the ongoing of the 3 chapters of the book
  2) a description of the main ideas concerning the „fact sheets“
  3) a description of the next predicted activities, which mainly concern papers.
- The discussion was centered in the „facts sheets“ where the WG 3 group presented the idea of producing them based on a sort of questionnaire or “raising questions” that could help people thinking about their own ecological behavior.

This was very welcome and WG1 actually had similar procedure.

URBAN ALLOTMENT GARDENS

1

Urban soils quality and health risks - Mapping of trace metals anomalies in Eglantiers AG in Nantes

L. Jean Soro, C. Le Guern, B. Béchet, T. Lebeau, MF Ringeard

COST Action AGs Cyprus March19th

2

Urban AGs in Nantes

30 AGs
+1000 plots
Ville de Nantes
18 associations
(local management)

3

Eglantiers allotment garden

- North of NANTES, along a main transportation infrastructure
- Neighbourhood of Bout des Landes Bruyères AGs
  - ➢ Diagnosis of soil quality : contamination Hc, Pb, As
- Area = ~ 23 215 m²
- 95 plots

4

Eglantiers allotment garden

First investigation (local authority + consulting office)

- Bad valuation of soil quality (trace metals)
- Prohibition on cultivating specific vegetables on the whole garden

Additional request of local authority (Ville de Nantes)

- Analysing As and Pb (+ Cu and Zn) over the whole garden
- Determining the origin of As and Pb contamination
- Analysing the accumulation in vegetables

5

Methodology

Garden mapping

- A mesh random sampling strategy on the topsoil (0-20cm) of the 95 plots
- An in-situ quantification of trace elements using a portable X-ray fluorescence spectrometer
- A differential georeferencing (DGPS)

Vegetable translocation

- A sampling of leafy and root vegetables in fifteen plots selected for their high lead concentrations in the soil
- The accumulation of lead in vegetables was measured by atomic absorption after digestion with aqua regia

6

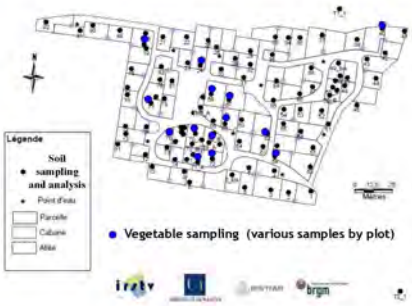
Investigations

Topsoil analysis

URBAN ALLOTMENT GARDENS

Methodology

Soil and vegetables sampling



- Vegetable sampling (various samples by plot)

7

Results

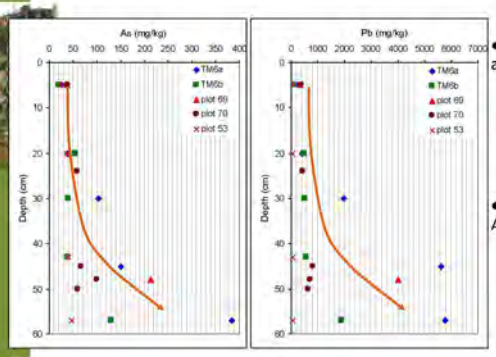
As and Pb anomalies in topsoil

- western part of AG: plots with high As / Pb levels
- eastern part: of AG : plots with low As / Pb levels

8

Results

Evolution of As and Pb levels with depth

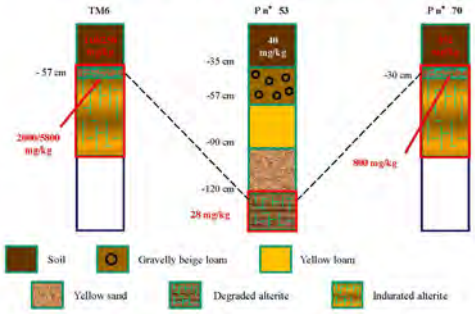


- Increase of As and Pb levels
  - TM6a, TM6b, plot 69, 70
    - western part
- No increase of As and Pb levels
  - plot 53
    - eastern part

9

Results

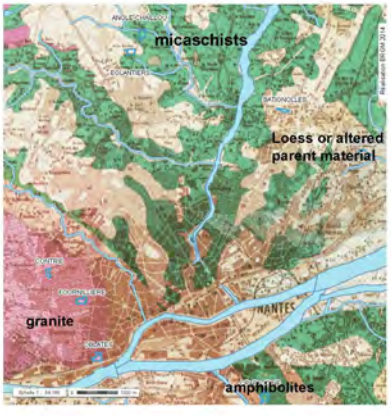
Evolution of Pb levels with depth



Natural background
As and Pb enrichment in parent material (micaschists)

10

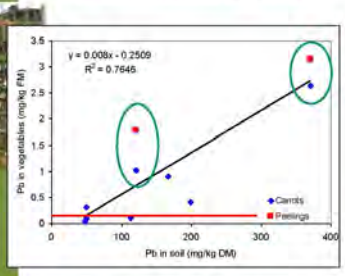
Geological map



11

Results

Pb accumulation in vegetables



Commission Regulation (EC) n° 1881/2006 (19/12/2006)
Maximum Pb levels :
- vegetables (0,1 mg/kg FM)
- except Brassicaceae, leafy vegetables, herbs, muschrooms (0,3 mg/kg FM)

- ↗ of Pb levels in vegetables correlated with the levels of Pb in topsoil
- significant impact of peelings

12

Results

New decisions for Eglantiers AG soil management

- pre-diagnosis : prohibition of specific vegetables cultivation on the whole garden (roots vegetables)

- mapping of the trace metals in topsoil

➢preservation of the cultivation on half of the garden surface

Conclusion

Soil and vegetables analysis

As and Pb anomalies in soil surface

- high As / Pb levels
- Increase of As and Pb when the substratum is close to the surface

➡ **local natural anomalies (vein with very high levels of As and Pb)**

Pb in vegetables

- Pb accumulation

Optimization of soil management thanks to an applied research methodology

- decrease of costs (analysis, soil management)
- support local authorities to define management plan

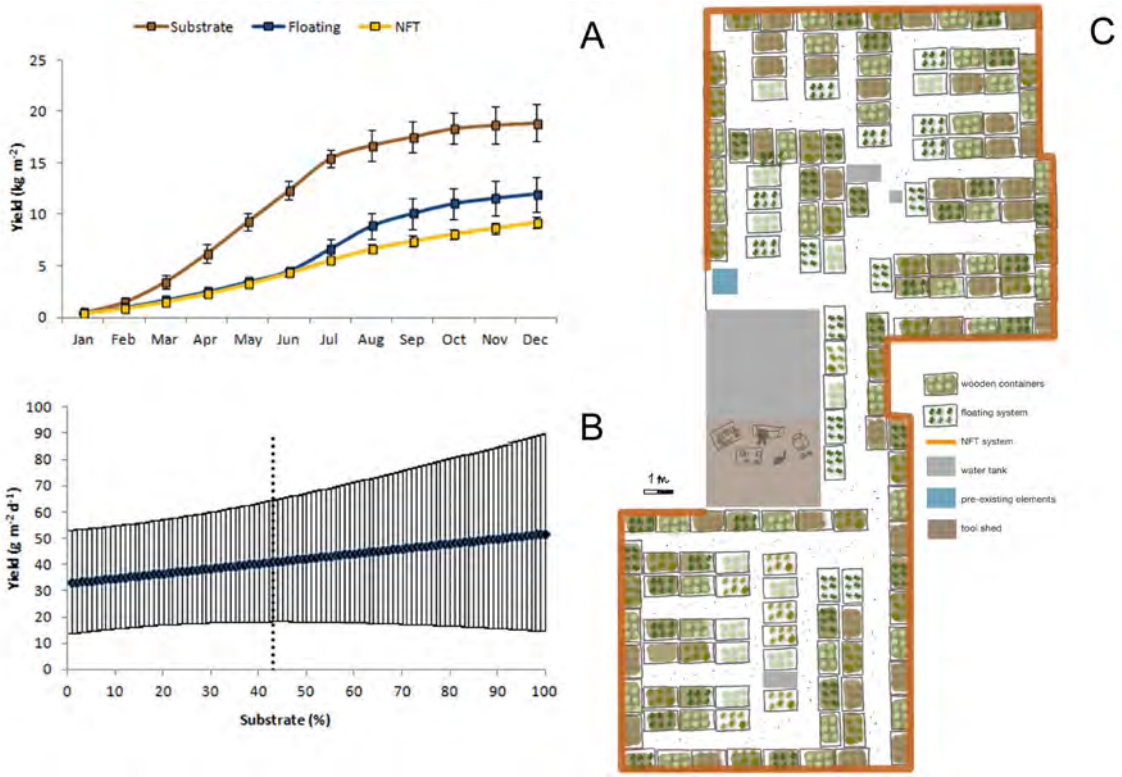
Reference : Jean-Soro et al., Origin of trace elements in an urban garden in Nantes, J.Soils Sed, 2014

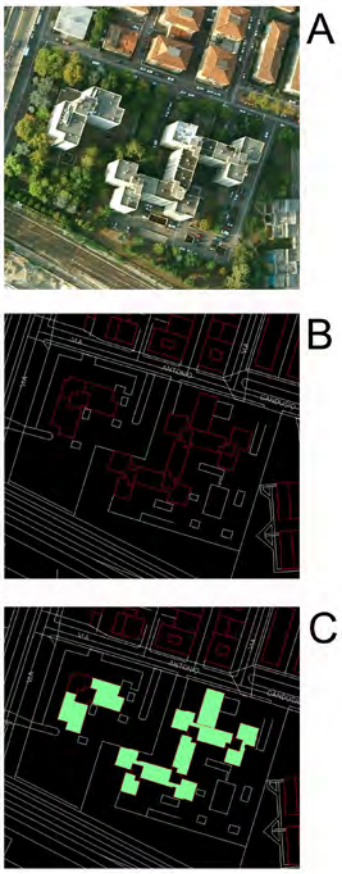
URBAN HORTICULTURE AND FOOD PRODUCTION IN BOLOGNA (ITALY)

Francesco Orsini, Department of Agricultural Scienes, University of Bologna, Italy

The contribution of urban farming to city food supply has been estimated in a number of cities across the world. However, its full recognition has been hindered by a lack of good quality, reliable data, given that comprehensive research has scarcely addressed this topic (Orsini et al., 2013). The city of Bologna (Italy) has always been at the forefront of urban agriculture in Italy. The city, whose medieval architecture still host a number of inner voids, such as parks and gardens that were formerly generated as "hortus conclusus", was among the first ones that regulated urban allotment gardens in the Eighties. Todays, the presence of allotment gardens is still one of the most relevant in Italy (more than 3'000 plots in the city areas plus other 2700 plots in the province). The commitment of the local municipality and University (where the first Italian Research Centre on Urban Horticulture and Biodiversity was recently established) has recently led to the implementation of the first rooftop farming municipal programme in social housing buildings in Italy. These community gardens are promoted for their multifunctional role, which spans from food production, to a range of social and ecosystem services.

Indeed, whenever localizing food production within the urban environment, the public concerns on safety aspects arises. Due to the intense human activities, urban atmosphere may be loaded with several pollution agents, among which heavy metal





may represent a crucial risk factor. Consistently, in a recent study, it has been addressed the comparative analysis of heavy metal surface deposition and tissue accumulation in vegetables simultaneously grown in rural and urban environments and according to their distance to main pollution sources and the growing system used (Vittori Antisari et al., in press). Results showed that in the city, crops near the road were polluted by heavy metals, with up to 160 and 210 mg Kg -1 DW in lettuce and basil, respectively. However, whenever the garden was protected from the road by a tree fence or a distance of about 60 m, observed concentrations were similar to those experienced in rural grown products. Furthermore, the adoption of soilless growing systems enabled a reduction of heavy metal accumulation in plant tissue, of up to -71% for rosemary leaves.

Further studies also addressed the quantification of food potential productivity: in the whole city, it was estimated that if the 82 ha of available rooftops would host simplified soilless gardens, a potential yield of 12’500 t year−1 could be obtained, covering more than three quarters of the city vegetable requirements (Orsini et al., 2014). The study was based on experimental trials on a pilot rooftop garden (over 200 m2, hosting three simplified soilless systems and 8 vegetable crops over three years of experimentation), and then extended to the city flat

rooftops identified by aerial images and determined making use of a computer-aided design (CAD) software. In the same case study, other potential benefits were estimated, including the creation of green corridors for biodiversity (up to 94 km of green corridors and a density of 0.67 km km-2). Additional studies on the same pilot garden enabled to identify the overall environmental and financial sustainability of the proposed growing systems (Sanyé-Mengual et al., unpublished data). According to the survey, cultivation technique, crop yield and crop period strongly affected the environmental and economic outputs. For leafy vegetables, most environmentally-friendly options were the floating technique in summer crops (65-85% lower) and substrate production in winter (85-95% lower), whereas a simplified nutrient film technique was the least recommended option. In substrate production, eggplants and tomatoes were the fruit vegetables that showed best environmental performances. For all types of production, irrigation turned out to be the most environmentally impacting element, therein suggesting to implement rainwater harvesting systems or integrate greywater regenerating units. On the other hand, the utilization of re-usable elements and the relative use intensity of the garden improved the sustainability performance.

The financial viability of the production of leafy vegetables was maximised in the floating system (0.67 € kg-1), whereas among tested fruit vegetables grown on substrate, best performances were associated with eggplant (0.13 € kg-1) and tomato (0.16 € kg-1). Consistently, rooftop farming production resulted to be an environmentally-friendly option for further develop urban local food security.

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ECOSYSTEM SERVICES PROVISION BY ALLOTMENT GARDENS IN MANCHESTER AND POZNAN

Andrew Speak, University of Manchester, Manchester, UK

Report of Short Term Scientific Mission - COST Action TU1201

Introduction

In Poland, allotments were named 'worker's gardens' in communist times and plot sizes are large, with swiss-style chalets on the majority. In the UK, allotment tenancy reached its peak during wartime in the 1940s thanks to the 'Dig for Victory' campaign, and plot sizes are relatively small with a shed and greenhouse being common. This study looks at some of these differences between Polish and British allotments in more detail.

Figure 1 – Allotment plot in 'Budowliani' Poznan (left) and 'Green Lane' Manchester (right) clearly showing the differences in vegetation types and structure.

More specifically the study investigates ecosystem service (ES) provision by allotment gardens i.e. provisioning services such as food and water; regulating services such as flood and disease control; cultural services such as spiritual, recreational, and cultural benefits; and supporting services, such as nutrient cycling, that maintain the conditions for life on Earth (MA 2005). Ecosystem services are increasingly being recognised for their importance in government policy and practice. Added importance is gained from the fact that urban areas have their own inherent, localised problems such as pollution and urban heat islands, so urban green space is often touted as a panacea that can be placed where it is needed most. The aim of the study is to quantify ES provision by allotment gardens in Poznan and Manchester and compare, both between countries, and to another urban land use type - parks. In addition, the study benefits from an investigation into the spontaneous floral diversity of allotment gardens.

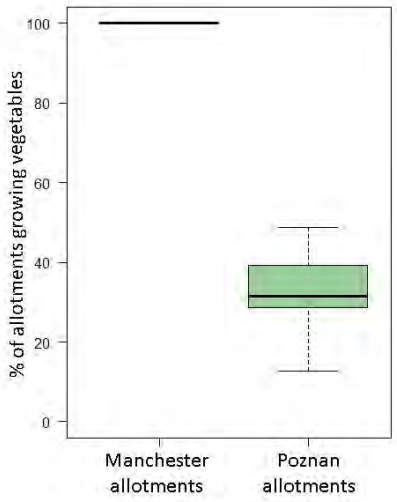

Figure 2 – Proportion of allotment plots which grow vegetables

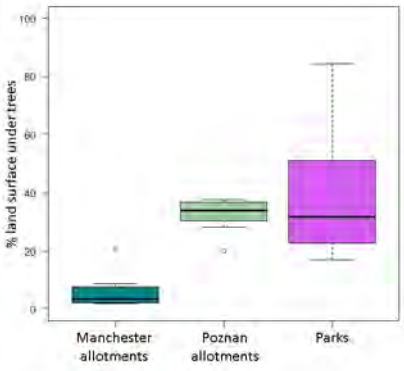

Figure 3 – Proportion of land surface area under tree canopies

Methodology

The researcher visited Poznan in June 2014. Site visits were undertaken on 12 allotment complexes with the assistance of Professor Janina Borysiak, an expert in geobotany from Adam Mickiewicz University. Two parks were also visited in Poznan. Site visits to 9 Manchester allotment complexes and 8 parks were undertaken in the weeks either side of this trip. Georeferenced aerial photographs were used within ArcGIS software to calculate allotment and average plot areas. Site walkovers allowed the following data to be collected: Number, heights and species of trees, proportion of cultivated ground, list of vegetables grown, number of plots growing fruit, area of land used by buildings and paving. For Manchester allotments spontaneous vascular plant species growing in the paths and verges, on abandoned plots and between vegetable rows, were identified. Botanical surveys were also carried out for Manchester parks, with care taken to note whether the plant species were growing ubiquitously or only in the verges and un-mowed areas.

Results

Provisioning ecosystem services - One of the main differences between allotment gardens in the study is how they are used for food production. All the allotment plots in Manchester are used for growing vegetables of some kind (Figure 2), whereas in Poznan only a third of plots, on average, were observed to have land allocated for vegetables and this usually consisted of a vegetable bed with a mean average size of 30 m2. Poznan allotments contain much more fruit trees and grape vines, however. Further provisioning ES come from livestock on some Manchester allotments (chickens and beehives). Some allotment holders make herbal teas from herbs such as Lemon Balm (Melissa officinalis) which counts as natural medicine ES.

Regulating ecosystem services

The area under tree canopy is greatest for parks, with Poznan allotments showing similar average values (Figure 3). Manchester allotments had much less land under tree canopy. Parks also had the tallest trees.

Over half the trees encountered on Poznan allotments are evergreen. These mostly comprised tall hedges separating the plots made of cypress trees. Trees provide important regulating ES for urban areas such as regulation of local climate and air quality and reducing noise. By allowing rainwater to infiltrate the ground, allotments also provide a flood prevention ES. Pollination is another important regulation ES provided by the wide variety of plant species encountered.

Cultural ecosystem services – Allotments provide a space for relaxation, exercise and socialising. They can also be sites of education as seen on some Manchester allotments where plots are used to teach gardening skills to different community groups such as school children. Allotments are also important for preserving and promoting organic and traditional gardening methods with consequent benefits for local soil quality and biodiversity.

The species richness of spontaneous vascular flora is much higher on allotments

Figure 5 – At least a hundred individuals of several bee species were observed on a patch of Phaceila tanacetifolia on 'Levenshulme' allotments, Manchester

Figure 4 – Outdoor classroom used by a local school in Manchester

Ecology

(Table 1) with parks having roughly 63% of the species richness, including when adjusted for land area. Allotment flora belong to a greater range of families than the park flora. The number of tree species was slightly greater in parks. The species found were in general highly characteristic of urban ruderal plant communities. The higher species richness on allotments is a result of the differences in land management practices between parks and allotments. Parks are mowed frequently and there are a limited number of species which can survive this regular treatment. The mowing represents a selection pressure and prevents the establishment of a wide range of spontaneous vegetation. Most of the species richness in parks was consequently found in the verges and under benches, which escape mowing pressure.

	Allotments	Parks
Overall species richness	87	55
Plant families represented	34	18
Species unique to the land use	47	16
Plant families unique to the land use	16	1
Average site richness per hectare	48	25
Tree species richness	28	33
Tree families represented	14	13
Tree species unique to the land use	12	18
Tree families unique to the land use	5	4

Table 1 – Summary of the ecological survey data

None of the spontaneous species found on the allotments were of any specific ecological interest or classified as endangered or vulnerable on the UK vascular plants red data list (Cheffings and Farrell, 2005). Some of the species are, however, classed as nuisance invasive species, namely Himalayan balsam (Impatiens glandulifera) and Japanese knotweed (Fallopia japonica), which were found on a couple of allotment complexes.

There was some evidence on a couple of allotments of species planted on the allotments spreading to the paths and verges, such as the herbs oregano (Origanum vulgare) and rocket (Rucola sp.). Allotments may therefore act as launch sites for plants with traits that make them suitable for colonising urban habitats beyond the boundaries of the allotments.

Large numbers of native species were found in parks and allotments. Abandoned areas of allotment gardens are unintentional hotspots of biodiversity and were more common in Manchester. Overall, the ecological aspects of allotment gardens provide many ES such as wild food, nutrient regulation, intrinsic value of biodiversity and photosynthesis.

In terms of ecosystem services, some of the spontaneous species found are classed as very good for pollinator insects, such as rosebay willowherb (Epilobium angustifolium) and members of the Geranium genus. This is not to mention the wide range of vegetables and ornamental flowers grown on allotments. As mentioned above allotment holders are increasingly aware of the

benefits of attracting pollinator insects via companion planting of species such as Phacelia tanacetifolia (Figure 5). In a study in Stockholm (Ahrné et al. 2009) local flower abundance on urban allotments was found to be an important factor in determining bee abundance and species composition compared to more peri-urban sites.

Conclusion

This study has looked extensively at the ecosystem services, or benefits mankind receives from nature, which allotments provide. Services related to pollination, food provision, biodiversity and recreation rank very highly on allotment gardens. Differences were noted between the two cities studied, notably a lower amount of trees on Manchester allotments due to a cultural preference for vegetable growing. Allotment gardens certainly confer a wider range of ecosystem service benefits than parks, however, parks have much taller trees for local climate modification, and can be used for recreation by a greater number of urban residents.

While the study concentrated on biophysical impacts of allotment gardens, the importance of socio-psychological benefits must not be overlooked. These include: social cohesion brought about by bringing together people of different backgrounds with a common shared interest of gardening; education about nature and food production; and health benefits brought about by moderate physical activity, especially for elderly people.

The results of this study suggest that due to the high number of ecosystem services provided by allotment gardens, there may be a need for more formal recognition of their benefits in local government policy. Allotment tenants are essentially local stewards of urban green space and thus serve an important role in biodiversity protection and climate change adaptation, which are commonly-cited sustainability goals of local government. Green areas managed by local user groups may play an increasingly critical role in the future functioning and resilience of urban ecosystems (Colding et al. 2006).

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WORKING GROUP 4 URBAN DESIGN SUMMARY REPORT

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Summary Report and Agenda

Introduction

The agenda for the WG4 meeting in Nicosia included the following items:

- To present and debate the latest draft of the three chapters developed within WG4;
- To receive and discuss feedback on the chapters review in order to improve internal consistency for each chapter and harmonise the three chapters
- To present and debate national reports and case studies developed by members of the Action
- To discuss future collaboration and further outputs.

A new member – Irbe Karule – from Riga City Council, Latvia, joined the group.

Issues Discussed

Thursday, March 19th

A lead author of each of the three WG4 chapters gave a short presentation on the aim, objectives and issues discussed in his/her chapter. This was followed by a discussion and feedback from the other members and authors.

Chapters Review

Aiming to improve internal consistency, reduce overlaps between chapters, and improve clarification in terms of length, case studies and terms used, one of the reviewers for chapters 8, 9 and 10 attended the session and gave feedback on the major issues. This was followed by a short question and answering debate.

Friday, March 20th

The day started with presentations of case studies from Malta, UK (London and Glasgow) and Abu Dhabi.

Cristian Suau from the University of Strathclyde (Glasgow) presented: Nomadic Allotments in Borough Market and MOBILELAND.
Cristian Suau presented two projects of gardens designed and constructed using waste material. Nomadic Allotments in London, Borough Market was developed together with the Welsh School of Architecture. The project consists in a series of units made out of timber pallets (i.e. screens, planters, benches, etc) that were placed in open spaces attached to the market with the aim of transforming them and engaging visitors of the market.

MOBILELAND, in Glasgow, takes a design approach similar to the first project to occupy vacant land and involve local communities in the regeneration of the areas. Student of the University of Strathclyde were involved in the project, which has a temporary character.

Presentation of Antoine Zammit on Allotment Gardens in Malta – The entire area of the island is largely urbanised. In the past, Malta's economy had a strong agricultural component, with many families producing and selling directly crops. This has changed with the introduction of a central vegetable market attracting most of the customers. Centralised control and weak levels of local governance make it difficult for local needs to emerge and be integrated in the political agenda. Until now planning policies have also privileged urbanisation as opposed to the preservation of green areas, although this is changing. At present provision of UAGs is not contemplated within planning policies. However, responding to supranational trends and local needs, a governmental initiative was recently launched, offering 57 garden plots of 50m2 with attendance to a training program obligatory. Although plots were oversubscribed, the scheme was stopped because of malpractice (i.e. excessive water usage and theft). Bottom-up initiatives are also starting. At present, the 'Kitchen Garden' has transformed the President's garden into a public recreation space while still producing local fruits and vegetables; the ‚GardMed' programme has increased awareness about a number of public and private gardens; the ‚Veg Box' has transformed a private garden into a thriving farmland where pesticide-free produce is sold to the public at large; and local NGO ‚Why Not?' aims to provide mini-plots to the local community through a pilot scheme that has just been launched.

Presentation of Dimitra Theochari on allotments in Masdar City (Abu Dhabi) – Dimitra presented the landscape strategy within (not outside) Masdar City. This is structured in six types of green, namely: Permaculture gardens; Educational community gardens on raised beds; School gardens; Allotment gardens; Institutional research gardens (experimenting new agricultural technologies and techniques; and Agropark. This strategy will significantly improve the environmental conditions of the place while offering spaces for community building.

Presentations were followed by a brief debate:

What is it like the process of engaging people in the creation of allotments? How does the participatory process work? Who leads it? Who should be involved; and what does it mean to create a new leadership?

There was also a great amount of discussion on the meaning of bottom-up and top down initiatives, how it relates with design and the designer, and finally how can professionals support bottom-up approaches in this type of open spaces.

Discussion on future work to be developed within WG4 - factsheets:

There was a discussion around the significance, aims and the audience of the factsheets. Doubts were raised about the usefulness of factsheets since information is already available on practical books or policy and academic studies (depending on the area of interest).
Innovative formats were suggested:

- Pack of cards
- Use of keywords and images
- Sharp questions and eye catching images
- Posing rather than answering questions

Thematic areas (within the area of interest of WG4) for factsheets were also discussed. For example:
Roles of urban designer for UAG: as facilitator, adviser, moderator, creator, management

Temporary use of land and ownership:

- How to activate a vacant urban site?
- How to engage communities?

What aspects do you need to consider if:

- you want to grow food in the city
- you plan an UAG
- you need to choose materials

We decided to try and formulate questions which could arise from the chapters:

- (How) to integrate UAGs within GI
- Does the garden have to be beautiful?
- Do UAGs need to have a visual identity?
- Can UAGs be temporary?

- New ways to grown food in cities
- Can you imagine new forms?
- Why is it important to involve an urban designer?
- How public is my UAG?
- How accessible?
- Designing for all, inclusive design… what aspects should be considered when designing an inclusive UAG?
- How much does it cost?

It was suggested that questions starting with "how" should perhaps be avoided. Instead they could be asked in order to provoke thoughts on the subject and not necessarily give answers.

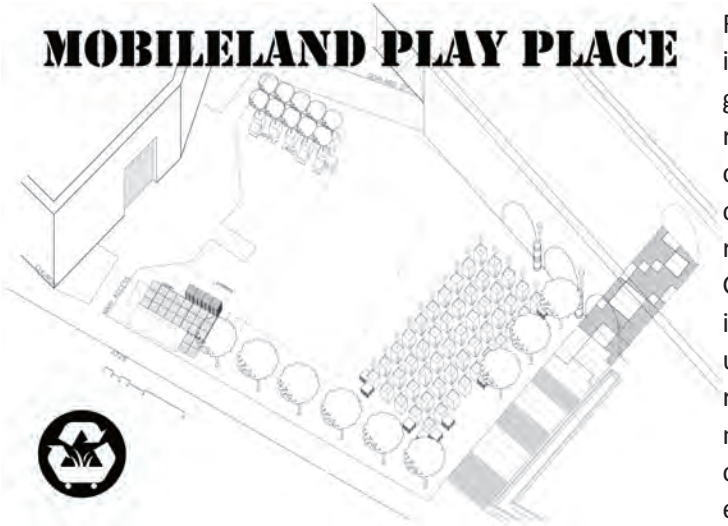
MOBILELAND & NOMADIC ALLOTMENTS: ON ECOLOGICAL AND TEMPORARY URBAN GARDENS IN THE UK

Cristian Suau , University of Strathclyde, Glasgow, UK

The phenomenon of shrinking cities worldwide has generated many derelict voids. Given the current volatile economic and speculative climate, the proliferation of urban gaps is a characteristic of our townscape and this trend is likely to continue and increase in future. If left to fall into neglectfulness and urban inertia, these spaces will have a detrimental effect on local neighbourhoods in terms of social health, wellbeing, local economies and environmental quality. However, during the last 20 years, due to recuperation of obsolete urban areas and increasing lose of green infrastructure, a revival of interest in community gardens and the implementation of alternative land uses has occurred.

The culturally multifaceted and complex nature of these community gardens makes it a relevant issue to be studied within different regional, national and European urban contexts. Generally the socio--cultural, technologic and economic functions of temporary allotment gardens offer an improved quality of life; remaking; ludic events; enjoyable hobby for relaxation and the deployment of smart agrarian technologies. For instance, collective allotment gardens provide places to play and to learn about nature and technologies as well as to do something useful for your personal development and people encounters and affordable techniques for food production, planting and harvesting in cities. The implementation of temporary uses for allotment gardens offers a variety of opportunities to deliver social, environmental and economic benefits. They can perform as a catalyst for community actions; produce an improvement in the aesthetics and rebranding of a stigmatised area; contribute to the green infrastructure of the city; and provide safe public places for local dwellers.

Nonetheless there exist some significant obstacles to developing temporary uses for community gardens. These often relate to the stigma that public spaces that become temporary will be difficult to return to development and original owners. There are also concerns that the inappropriate development or management of these initiatives will attract further problems to the beneficiary community.



For instance, in Scotland a radical landscape recovery initiative named ‘Stalled Spaces’: https://www.glasgow.gov.uk/stalledspaces has have been implemented to reactivate abandoned sites through temporary uses of vacant or under--utilised public and private plots in order to deliver a range of agile actions enabling physical renewal and fostering community empowerment in Glasgow and beyond. By working with local communities, industry, universities and other stakeholders, temporary uses and innovative technologies are developed to reanimate open spaces. These bottom-up initiatives make effective use of sites by contributing to the quality of life for neighbourhoods and addressing many wider environmental, ecological and landscape goals through community led placemaking.

URBAN ALLOTMENT GARDENS

THE CITY AS A CLASSROOM

Through selected case studies and practice-based research (areas of urban development and codes, ecology, urban design and landscape), the aim of the Mobile Gardens research project will be on qualitative and quantitative studies both in terms of policy and actions to analyse, map and test technological challenges, capacities and visions in areas of urban design, urban ecology and landscape architecture.

The main target is to study urban allotment gardens types, temporary uses and their impacts for urban sustainable developments by implementing in--situ interventions (hands--on construction and gardening). The relevance and potential of the Mobile Gardens for urban developments so far has not been studied from a national, European and overseas contexts. This proposal will contribute to a better understanding of framework conditions for site--specific actions in different urban gaps by involving young researchers through well--organised networking practice.

This report explores radical environmental, ecological and technological landscape solution by testing agile micro--recovery strategies in situ. The chosen cases are: Nomadic Allotments (2010) and MOBILELAND (2015).

Precedents on Remaking

The logics of reusing and recycling of manufacturing waste appear as a visionary game of research, which acquire a strategic role in the design of the built environment, the reconversion of productive and economical models and the reshaping of new living forms. Since 2004 I have investigated fast fabrication systems applied for emergency dwellings or community gardens in deprived or remote environments. The results are two prototypes: Tyrespace© and PHS© (Pallet Housing System). They are mainly affordable solutions, which give response to mankind in natural disasters and urban emergency (i.e.: solutions for migration or low--incomes dwellers) in slums or the like. The designs are based on the application of manufactured waste, such as disused timber boards and rubber. Depending on the specific properties of each material or component, quality of constructional systems and the weatherproofing applied in each chosen prototype, different parameters of transitoriness and lifespan can be achieved. Some materials are more ephemeral than others, nonetheless structural. Each fabrication process reuses waste as structural frames with low--tech building methods:

1. **Tyrespace©** is a prototype based on the reuse of tyres. Geometrically it consists of a compact polygonal layout where walls and roofing are structured mainly by combining and strapping car and motorbike tyres. Several climatic simulations, has thoroughly been analysed and detailed based on constraints of the modular structure. The outcomes are elastic frames --'webs' or semi--domes that lightly touch the ground-- with potential applications in sheds, bridges and games.

2. **The PHS©** (Pallet Housing System) is an innovative housing frame. It constitutes an ecological response by reusing timber--shipping boards applied to compact dwellings. It can easily be assembled or disassembled. Neither cranes nor scaffolds are used to connect

walls with floors or roofs because the bare pallet board operates like an adjustable ladder itself. There are two types: cubic and triangular (A-frame) solutions. The modules are assembled and embraced mainly by boards, tensile components or metal connectors.

These components are available in the shipping and packaging manufacturing. The PHS© has been climatically tested by employing passive techniques such as orientation, building shape, and colours, available local materials, and shading devices. They have similar base modulation: 80cms x 120cm. In terms of spatial distribution, the PHS© provides a central kitchen/bath core with sleeping room.

All these case tests are handmade fabrication systems. These geometries and modules are the result of the specific structuring potential. Summarizing, junk--frames formulate a rapid implementation of variable and interchangeable structures with interior adjustable buffers and panels capable to contain different types of occupancy and climatic variation.

Each structure fosters the notion of a do-it-yourself 'kit' and demonstrates a strong spatial playability and adaptability, in line with the need for decarbonisation of the built environment.

Nomadic Allotments©: www.nomadicallotments.co.uk

The Nomadic Allotments project was delivered in collaboration between Borough Market and students from the Welsh School of Architecture, Cardiff University and led by Rachael Davidson and Cristian Suau. The chosen venue was Jubilee Market at Borough Market.

The Nomadic Allotments' structures were constructed from reclaimed materials such as Euro--pallets and packaging waste. They offered a variety of growing, eating and seating areas for market--goers, local visitors and residents alike.

The mini--allotments were launched in July 2010 as part of the London Festival of Architecture 2010 providing the focus for Borough Market's pop--up Food Exchange. Following the Festival local residents accessed to invaluable growing space in an area that currently lacks of green space. The allotments also acted as an educational platform for local schools.

THE CITY AS A CLASSROOM

What can we play instead by reusing industrial waste? Volunteers learnt on agile fabrication, reuse of junk materials and urban gardening techniques. We obtained an international prize as the best 'Recycling Project' at the London Festival of Architecture 2010 and widely published by Architects' Journal (AJ), The Guardian, BBC, Domus and University media. The lesson of these series of workshops lies on the notion of eco-- fabrication applied in undergraduate architectural education. The culture of each workshop offered new learning tools for 'smart' design decisions by repurposing industrial waste. This initiative shows how to edifice ‚bridges' between praxis and research, based on flows of retrospective criticism and

prospective visionary urban environments. Regarding the increasing levels of industrial waste released by our carbon-based culture, there is still a certain lack of inventiveness in how we might deal with these materials by 'upcycling' and reusing them in the building or landscape sectors.

MOBILELAND©: http://mobilelandglasgow.wordpress.com

MOBILELAND garden is a Scottish eco-design initiative supported by the Glasgow City Council Stalled Spaces (GCC), University of Strathclyde, Barras Art and Design (BAaD) and the Glasgow Project Office (GPO). It consists of a free lawn situated at Gorbals (Greek Thomson church) that accommodate educational, architectural and ecological activities.

MOBILELAND is an adaptable compact landscape scheme, which has the potential to enhance other public spaces and empower community groups. Its design is based on the principles of reduce, re-use and recycle. In a short-term period, it has generated a unique play place by establishing an outdoor civic arena with ludic and recreational areas and open art events. It is member of the COST EU network called 'Urban Allotments': www.urbanallotments.eu

MOBILELAND is a portable and modular garden system. Structures are entirely made from reclaimed materials such as containers, timber pallet boards, tyres, metals and any reused material. Available in different designs and sizes depending on primary usage, they can be moved to any Stalled Spaces in Glasgow depending on seasons, events and growing needs. All modules could be located anywhere where green space is required.

Since the opening in October 2014 both design team and volunteers has answered the brief with playability and originality as they are easy to install and affordable. It houses rooms for herbs, fruits and vegetables and also provides seating, resting and recreational areas.

In addition, MOBILELAND is also a seminar-workshop led by Dr Suau and the VIP programme at Strathclyde. It offers experiential learning and practice-led related research outside the classroom. It engages students and tutors in critical thinking, problem solving and decision making of everyday life. This learning process also implies the progressive consolidation of environmental ideas, ecological fundaments and landscape abilities through systemic thinking, teamwork and collaborative design ownership: www.strath.ac.uk/viprojects/vipprojects/mobileland

Finale

Can we play new landscape architecture with less? Spatial experimentation in architecture and landscape require agile recovery strategies. Games provide new opportunities to subvert rules and turn conventions upside down.

What games should we play instead? This study explores the potential playability of elementary designs capable to conceive and fabricate new frameworks by economic and environmental constraints. In doing so, they transform the sense of design process into a participatory ludic fabrication (beyond utilitarian aims), which is self-ruled by unpredictable new spatial configurations. Hence the power of playing with minimum resources in design allows challenging the concepts of compactness; lightness and speed of fabrication applied in the activation of the public realm. Both designers and occupants became play-makers.

URBAN ALLOTMENT GARDENS

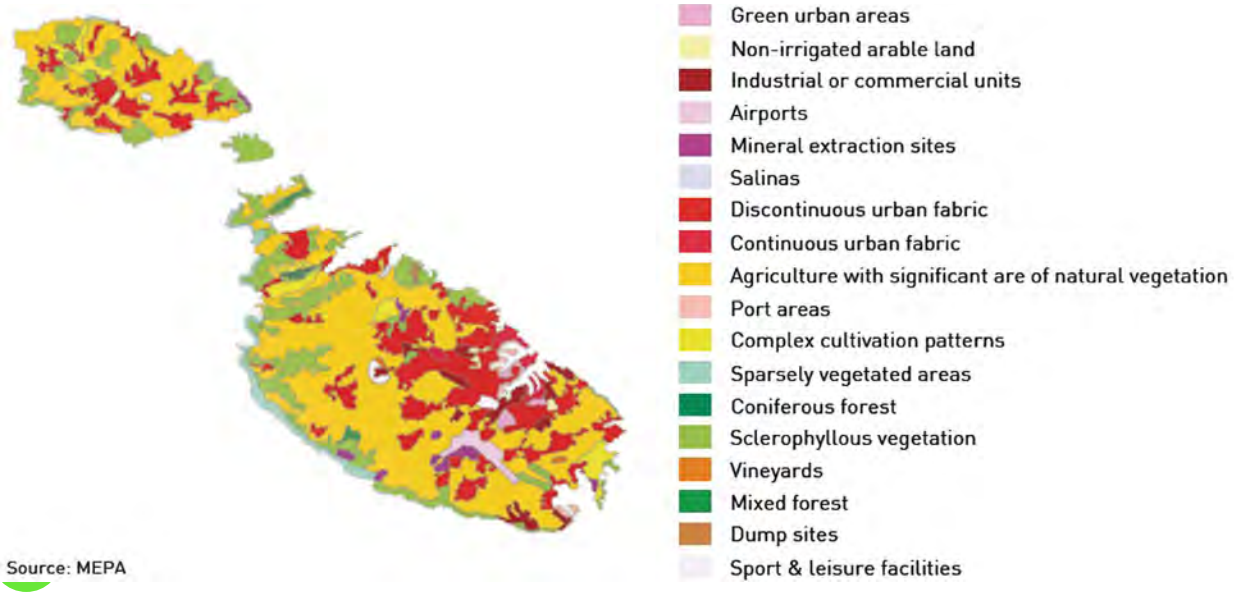
MALTA NATIONAL REPORT

Antoine Zammit, Department of Spatial Planning and Infrastructure, Faculty for the Built Environment, University of Malta

Contents

MALTA | OVERVIEW

- total land area of around 312 square kilometres
- **agriculture is the predominant land cover** (51% of the land area), **followed by urban areas** (22.3%) and natural vegetation (19.1%) (MEPA and NSO 2010)
- primarily an urbanised society, with **94% of the population** living in urban areas in 2007



Source: MEPA

- an estimated population of 413,609 by the end of 2008, translating into a **density of 1,309 persons per sqkm** – the EU Member State with the highest population density
- Malta defined by experts as entirely urban area, "no meaningful planning distinction between urban and rural areas" (Antikainen, p452)
- urban areas (and urban activities) in Malta are substantial enough to influence the surrounding agriculture. For this reason, the European Union's Common Agricultural Policy has defined Malta's **countryside as entirely peri-urban** rather than *rural*
- Due to scale of island and widespread urbanisation therein, authors argue that **'urban' issues are effectively 'national' issues** present in national policies (van Kempen et al., 2005b; Cassar, 2005)
- **Hot, dry, summers** (daytime temperatures usually above 30ºC and quite often also above 35ºC)
- Mild winters, save for occasional strong gale force winds blowing either from the northwest (Majjistral, most common) or from the northeast (Grigal)

- **Annual rainfall in Malta is rather low** – approximately 600mm (24 inches) and the length of the dry season in summer is longer than in southern Italy. Malta has a very sunny climate with an average of five to six hours of sunshine a day in midwinter and over twelve hours a day in mid-summer
- **High humidity levels** make summer nights unbearable (especially August and September) and unpleasant winters

AGRICULTURE

Zabbar
Source: Kris Micallef, Mis-Sema 'l Isfel

Family farms – 97% of utilised agricultural area in all Malta (2010)

In 2010, each family farm cultivated an average of 0.9ha of utilised agricultural area (lowest EU average) EU (2015). *Eurostat: Agricultural, forestry and fishery statistics, 2014 ed.* In 2013, total **utilised agricultural area (UAA)**, i.e. all the land used by the holding for agricultural production, whether rented or family owned = 11,689ha.

Majority of agricultural holdings (9,427, or 75.6%) each had a UAA of less than 1ha. NSO (2014). Farm Structure Survey 2013

Agricultural **labour force** = 19,066 persons, of which 17,693 persons (92.8%) were part-time, while 1,372 persons (7.2%) were full-time, decreasing numbers. NSO (2014). *Farm Structure Survey 2013*

Arable land (land worked regularly, generally under a system of crop rotation e.g. potatoes, including area under greenhouses)= 76.7% of total UAA

Permanent crops (crops that occupy the land for long periods and need not be replanted after each harvest) = 10.8%

Kitchen gardens (devoted to cultivation of agricultural products mainly intended for consumption by holder and his/her household) = 12.5%

1,264 hectares of UAA comprised plantations, of which 54.0 per cent was dedicated to vineyard cultivation. NSO (2014).*Farm Structure Survey 2013*

URBAN ALLOTMENT GARDENS

A TRADITION OF FARMING PRACTICES

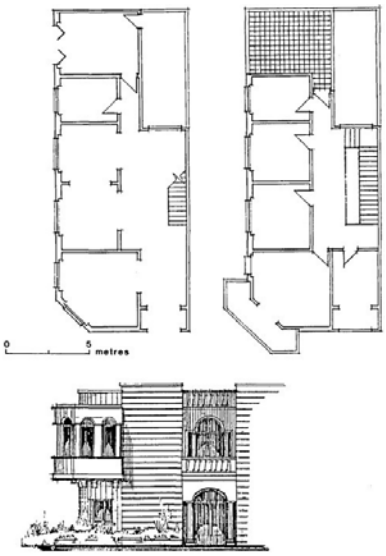
- a long-standing tradition of individual farming practices across the Island
- fruit and vegetable street vendors, a proportion of which are the actual farmers selling their produce directly to their customers within the local streets and public open spaces.
- practice has **diminished**, both due to the reduction in the number of full-time farmers and due to the establishment of a **centralised vegetable market** (so-called 'pitkalija')

- here, farmers deposit their produce that is subsequently sold by auction to licensed hawkers, green grocers or supermarkets through middlemen ('pitkali'). Indeed, most individual street vendors are also farmers selling both their own produce as well as other products purchased from the 'pitkalija'.
- recently, **farmers' markets** have been established in order to enable farmers to fetch better prices for their produce, provide greater choice to consumers and revive farming traditions.

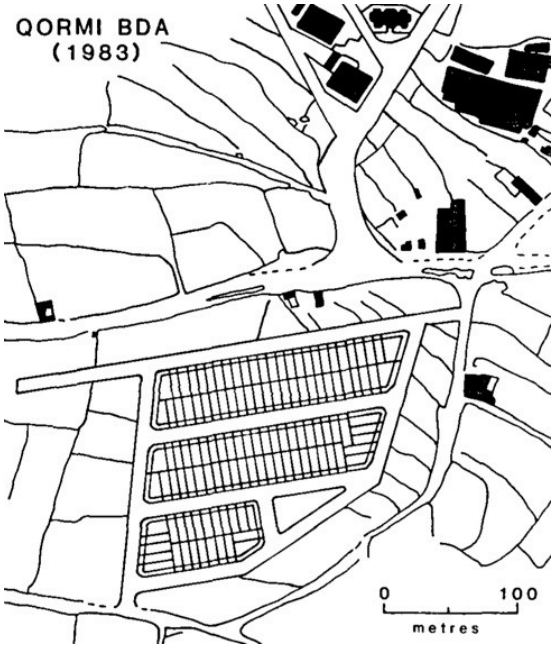
LAND OWNERSHIP

- **central government** is the chief land owner, although significant portion of land is owned by the **Church**
- significant element of private ownership (key families)
- a **fragmented kaleidoscope** in terms of private land ownership, and a legacy of large extended families
- this results in a fragmented approach to the Maltese territory, where development is envisaged on a **plot-by-plot basis**, as opposed to a more strategic view of the urban conurbation

URBAN BLOCK STRUCTURE DEVELOPMENT



Architectural plan for a house in Ghajnsielem HOS Source: Lockhart, 1987, p37



Plan of BDA for Qormi, 1983

Source: Lockhart, 1987, p41

"[i]n order to understand the role of governance in Malta one has to understand first the functioning of a small society with limited resources, which involves an intricate system of networks and personalities"

Wassenhoven et al. (2006), p84

KEY GOVERNANCE ISSUES

- a history of central power and political control, giving risen to issues of **patronage and clientelism**
- characterised by the leading presence of the **central state**, a corresponding **weak level of local governance and a non-existent regional tier** (Farinós Dasí et al. 2006)
- Local Councils (LC) – established by the 1993 Local Councils Act (Aquilina 1999), however few powers devolved to them; largely administrative arms of central government (Chapman and Cassar 2004), providing 'public services' for the state (Gauci 2002); limited resources provided to LCs
- LCs do **not** have responsibilities for land use planning and policy implementation; no land ownership
- **no participatory planning culture** – difficult to involve communities and neighbourhoods

A weak vertical governance structure, although the presence of co-operation and partnerships at a horizontal level may be observed (Wassenhoven et al.; largely subcontracted work to private sector for 'Redevelopment and Regeneration National projects' and projects through Public- Private Partnerships)

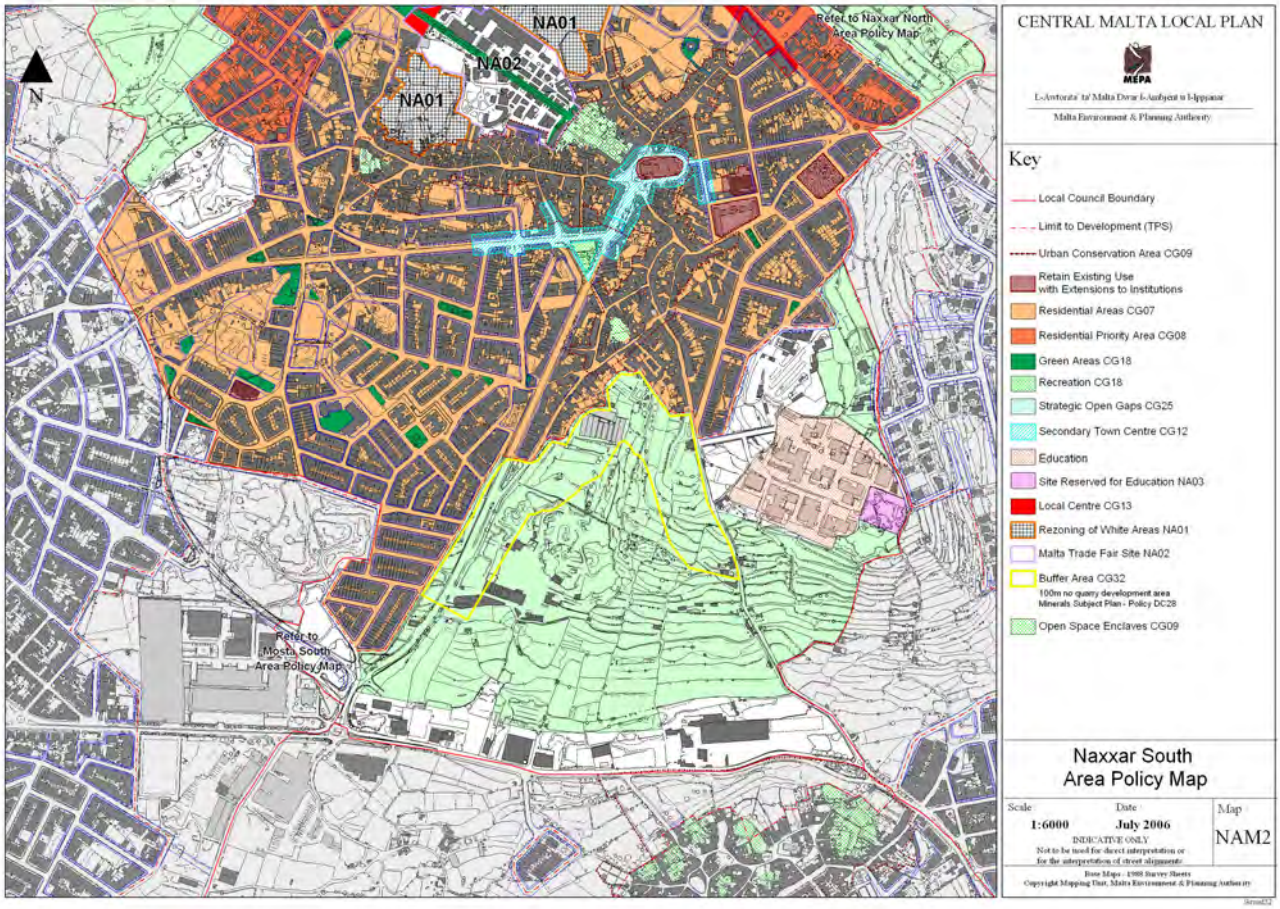
PLANNING TIMELINE | 1945 – 2015

- **1945 – 1962** post-war building boom, planning system based on schematic Key Plans
- **1962** planning area // Planning Area Permits Board (PAPB)
- **1965 – 1966** Italconsult, Patterson, UN-teams
- **1969** new Planning Act drafted by Sir Desmond Heap // approved but never enacted
- **1967 – 1970** Sieczkowski prepares Outline Development Plan for Malta, referred to by PAPB
- **1960s – 1980s** rampant, speculative development, mass tourism accommodation, social and subsidised housing
- **1987** start of Nationalist Administration
- **1988** Temporary Provisions Schemes (TPS) introduced
- **1990** Structure Plan for the Maltese Islands formulated
- **1992** Development Planning Act (DPA) // establishment of Planning Authority (PA)
- **1993 – 2006** formulation and issue of Local Plans, Rationalisation of the Development Zone Boundaries
- **2001** PA + Environment Protection Department (EPD) merge // Malta Environment and Planning Authority (MEPA)
- **2015** Strategic Plan for the Environment and Development (SPED) and new Local Plans (draft), MEPA split

PLANNING SYSTEM

- largely modelled on the **British Town and Country Planning Act**, "although it is increasingly developing distinctive approaches"(Chapman and Cassar, p462) and currently displaying clear signs of a plan-led approach
- a ***plan-led discretionary system*** (Carmona and Sieh 2004, Cassar 2009e).Its salient feature nonetheless remains the exercise of **discretion** with the regard given to material considerations in decision-making (Gauci 2002), central role of **Minister** who has final say in policies
- The European Spatial Planning Observation Network (ESPON) defines Malta's 'planning style' as being **predominantly concerned with 'land-use planning' and following the 'urbanism tradition'**, similarly to other Southern European and Mediterranean countries (Farinós Dasi et al. 2006)
- a **two-tier policy structure**, composed of the Structure Plan and subsidiary (Local) plans, together with supplementary planning guidance (SPG), specific policies and design guidance; both a forward-planning function and a regulatory function in terms of development control (Cassar 1999), which in turn reflects the Authority's dual composition.

Local Plan illustration

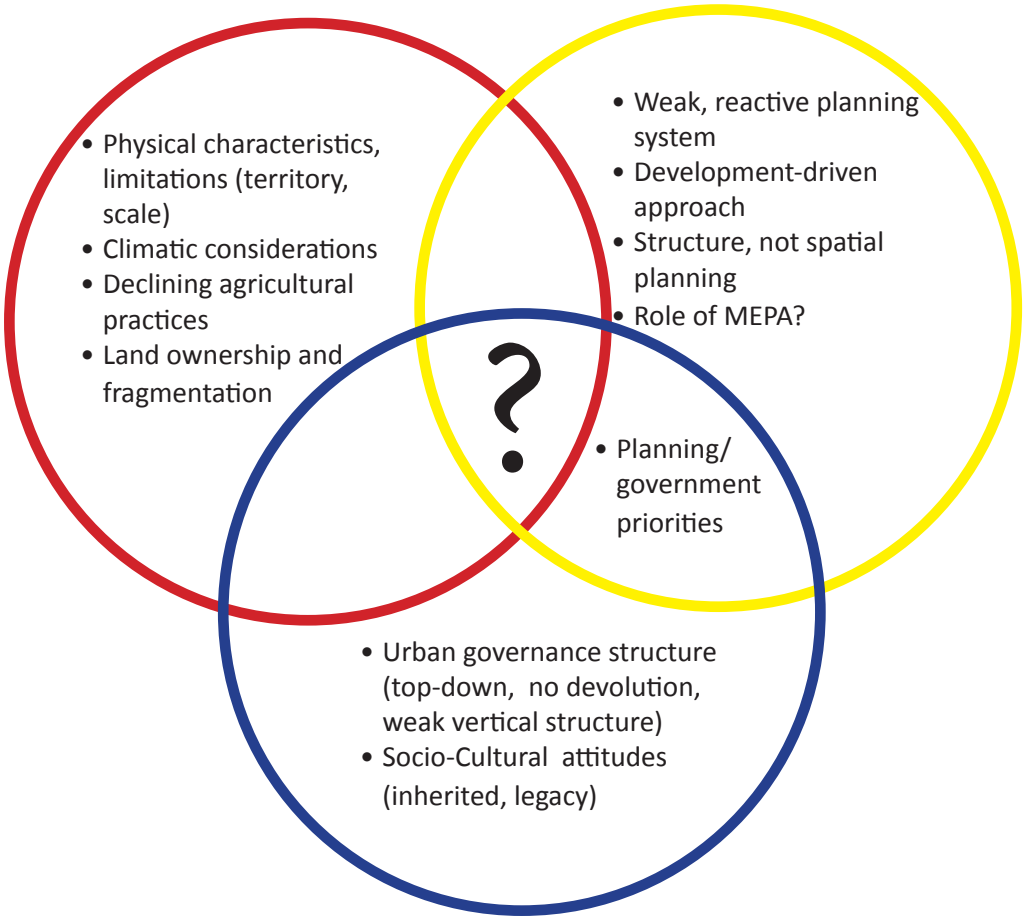


SPECULATIVE GROWTH PRACTICES

Previous ODZ in 'Tai-Mirakli' area, Attard included in the Rationalisation.
Source: nttp://www.timesofmalta.com

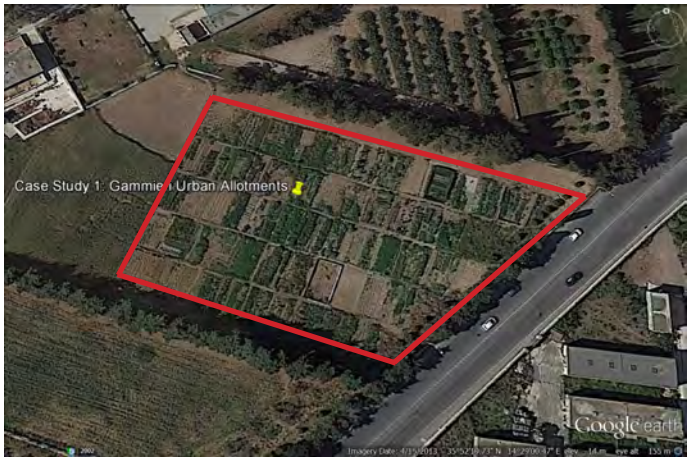
UNDERSTANDING URBAN ALLOTMENT GARDENS IN MALTA

- to date, no laws, formal policies or regulations at either the national or local levels dealing with urban allotment gardens
- the possible root of the problem is multifarious and multi- faceted.



URBAN ALLOTMENT GARDENS

CASE STUDY 1: MIDD IDEJK FIL-BIEDJA (2011) ('TRY YOUR HAND AT FARMING')



- pilot project/scheme **launched by central Government** in 2011
- directed at encouraging individuals, particularly the younger generation and urban dwellers, to take up organic farming
- 57 plots (50sqm) were set up within the National Agricultural Research and Development Centre's Farm (managed by the Agricultural Services & Rural Development Division) located in Ghammieri, off the locality of Marsa

Sunday, May 27, 2012, 05:04 by **Bertrand Borg**

Malta's blossoming green fingers

People are growing their own vegetables in a new scheme

These allotments form part of a pilot project kicked off last year by the Rural Affairs Ministry. Photos: Matthew Mirabelli. Right: People of all ages can benefit from learning how to grow their own food.

Sunday, October 28, 2012, 00:30 by **Roberto DeBono**

We need more farmers

It would be good to see allotments sprouting all over Malta, close to people's homes.

Farming has tremendous health benefits, both to individuals and society at large. If we want to become a healthier and more economically competitive country, Malta needs to create more opportunities for farming.

These opportunities do not necessarily have to be in full-time farming, but, maybe even more importantly, in part-time farming. What follows is the

> *"Midd Idejk has been a success in creating a space for those with green fingers to try their hands at farming*

URBAN ALLOTMENT GARDENS

- the plots occupied previously derelict land
- plots were **oversubscribed**, reflecting the interest in the local population
- plots were granted on a 'first come first served' basis, at a **nominal fee** of Eur100 p.a., and managed directly by the Ministry (at the time the Ministry for Rural Affairs)
- fee p**rimarily served irrigation needs** (drip irrigation system in place), a**rea maintenance** purposes, l**ockers** for tools provided
- majority of plots were used for food production, although a few gardens too
- only **seasonal crops** were allowed, no 'permanent' planting
- no physical division was provided however the **users** sought to delineate their areas in a rudimentary fashion
- **training programmes** were offered related to different thematics in relation to urban farming, attendance to these lectures was obligatory (min. no. established)
- the scheme ran for **two years**, following which it was terminated by the new administration
- original intent was to use this as a pilot project to stimulate other areas in the surrounding localities

Main reasons given for the scheme's termination:

- "due to the gross negligence of some plot holders, in terms of water consumption and farming malpractices" (e.g. over- irrigation, crops and flowers mixed together, unattended plots and weed growth)
- plot irrigation requirements conflicted with rest of the farm needs (disruption)
- "some incidents of theft were reported" (from individual UAGs)

CASE STUDY 2: KITCHEN GARDEN (2011)

- the gardens belanging to the **President's San Anton Palace** and that have provided the palace with vegetables since the occupancy of the Order of St John, were extensively **rehabilitated and opened to the public** as a **leisure and recreational space**, while still retaining the **food production** element therein

URBAN ALLOTMENT GARDENS

CASE STUDY 3: THE VEG BOX (2014)

THE VEG BOX

- the **private gardens of Villa Bologna** (located a stone's throw away from the Kitchen Garden) have developed into a micro enterprise focused on pesticide-free produce (grown in a simpler, less industrialised way) sold to the public at large
- the Veg Box is also filling an important void in terms of **educating** the general public in terms of farming practices and organises regular country walks and site visits
- development of an **'edible education' project** with a number of schools

CASE STUDY 4: GARDMED (2007-2013)

- The **GARDMED project** is financed through the Italia-Malta 2007-2013 Operational Programme, with the aim to "conserve the natural and cultural patrimony as well as highlight and promote garden assets through the establishment of a network of Mediterranean gardens currently incorporating gardens from Malta and Sicily".
- A number of gardens have participated, including both public gardens (such as the historical Argotti Botanical Gardens and the President's Kitchen Garden) and privately owned and managed gardens (notably the grounds of stately homes such as Villa Bologna and Palazzo Parisio).

CASE STUDIES… A SILENT REVIVAL

The four case studies presented above are interesting in a number of diverse manners

- Case study 1: top-down, central government-led approach
- Case study 2: top-down, key actor-led (President), transformation into public area
- Case study 3: individual, private enterprise, organic farming as an economic venture and a further means of income
- Case study 4: private-public initiative, wider educational role

CURRENT BOTTOM-UP INITIATIVES

- local urban design consultancy, studjurban, has won a design competition for a derelict space in the northern locality of Mellieha, which it aims to transform into Malta's first public allotment garden that is located within a thriving urban area and that would be part-managed by the Local Council administration, providing for **20 plots of varying sizes**
- A local NGO, Why Not?, has launched a number of initiatives including a tree planting campaign and the recent **Community Garden Project** on **private land** in Mgarr (previously not possible due to lack of sufficient irrigation).

- The **previously uncultivated area** has been divided into **8 miniplots of 50sqm each**, at a nominal fee to cover irrigation and the purchase of tools.
- The organization is currently working to produce a **framework** within which the project may be managed, without impinging negatively on the spirit of community that is naturally evolving, and the organisation of a number of **information sessions and workshops**, particularly dealing with **mulching** so as to be more effective with regard to irrigation.
- To date, most initiatives have been i**ndividual, fragmented, sparse, ad hoc** – no one has, as yet, taken 'ownership' of UAGs.
- Central government is not interested following the problems that ensued in the Midd Idejk fil-Biedja scheme
- Weak local government level

URBAN ALLOTMENT GARDENS

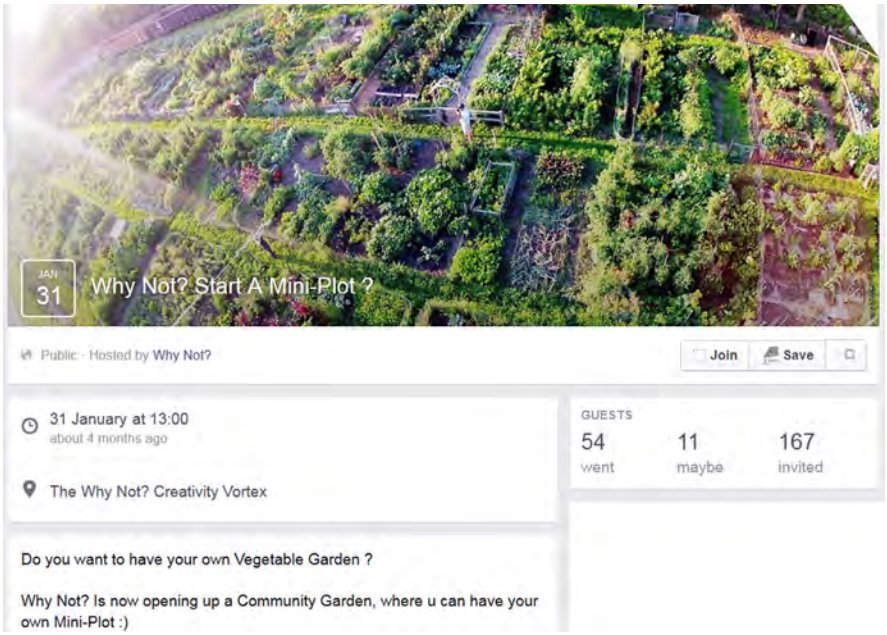
- Development-oriented MEPA (and central government), weak environmental arm
- A greater opportunity for the private sector to fill this void? Role for NGOs? Role for Church as a substantial land owner?
- Steering role for Department of Spatial Planning and Infrastructure (DSPI, University of Malta)?

CONCLUDING REMARKS

Upcoming challenges in the near future include:

1. DSPI is currently discussing various possibilities with the Malta Environment and Planning Authority (MEPA), in terms of developing a national green spatial strategy, in line with the Strategic Plan for the Environment and Development (SPED) and the upcoming Local Plans. This could potentially include the utilization of public, uncultivated land banks and their eventual transformation into gardens and managed plots, through the collaborative efforts of MEPA, Local Councils, the University of Malta and (currently being developed), NGOs and private individuals.
2. Separation of MEPA into two distinct entities; will a separate Environment Authority augur well for the implementation of UAGs?

What is still required, however, is a serious commitment towards spatial planning and a more effective planning system, which looks to the future in a comprehensive manner. As the major landowner, central government has a key role to play and should lead by example, possibly through MEPA/ Environmental Authority. Nevertheless, changes to the planning structure should be complemented by a rethinking of governance structures with adequate and appropriate levels of local authority and participatory planning processes in place.



Why Not?
Make Change Happen!

συλλογικός μπαξές

Έλλοβος 2013

FIELD TRIP SATURDAY MARCH 21, 2015

Field trip was organised in two parts:

1. A local trip to the Kaimakli neighbourhood in Nicosia where a community garden "Collective Bahçe" was established in 2011 by a local NGO. There are certain challenges and misperception about the idea of community garden in Nicosia especially about its maintenance and its place within a neighbourhood that houses have their own private yard/balcony gardens. As explained by the local guides, the notion of teamwork is not strong within the community for urban gardening. The situation was explained by two gardening advocates during the event and it is presented under Cyprus national report on page 14.

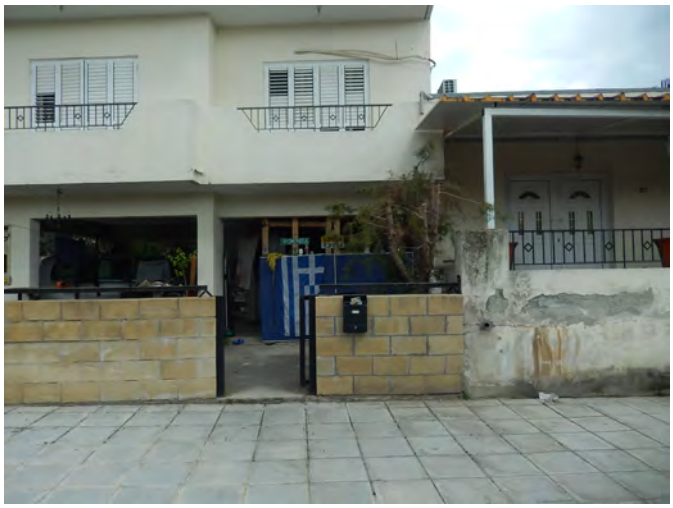
2. A short trip to Limassol, a port city to the southwest of Nicosia and south of Cyprus Island, where a group of young volunteers in 2011 has established Ellovos Community Garden, on the city's outskirt in Kato Polemidia neighbourhood. Here, also the same problem as described above was prominent in respect to the lack of interest among the neighbourhood to cherish gardening as a shared practice for its numerous benefits. As understood, the community garden was mainly managed by the NGOs and the action groups rather than by the community members within the nearby neighbourhoods. The concept of community gardening as we observe in most Western European cities is immature in this part of the world because of its very new character and lack of experience among action groups and city planners/policy-makers in setting up successful community gardens.

There was an informal vegetable plot alongside an ally in Kaimakli neighbourhood in Nicosia, close to the Collective Bahçe.

Collective Bahçe in Kaimakli neighbourhood in Nicosia

Photos of field trip by Nazila Keshavarz

URBAN
ALLOTMENT
GARDENS



Ellovos Community Garden at Kato Polemidia neighbourhood in Limassol

THE GARDENS THEY ARE A-CHANGIN'

Words by Simon Bell, music (with apologies) by Bob Dylan

Oh, come all you gardeners wherever you roam
And admit while we've been here the carrots have grown
The apples have ripened, the flowers have bloomed
And all that you've been cultivatin'
So now it is time that the bushes were pruned
The gardens they are a-changin'

Oh, councillor please will you give us the lands
We want to make gardens with our own hands
To eat what we've grown and to teach others too
Both the young and the people who're agein'
So give us a chance and we'll prove it to you
The gardens they are a-changin'

The people who live in the housing estates
Need gardens as much as the folks behind gates
A place to relax and to grow something too
And to think of the money they're savin'
Allotments are old but can also be new
The gardens they are a-changin'

Our lives are so busy we need to relax
Tho' gardening's hard on our muscles and backs
Fresh air and good exercise helps you renew
And to deal with the stressin' and strainin'
After eating your produce you won't feel so blue
The gardens they are a-changin'

So come you researchers from every land
And in our Cost Action we'll work hand in hand
Ecology, planning, design and the rest,
The problems we face are wide-rangin'
We promise the EU that we'll do our best
The gardens they are a-changin'