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# COST Action Urban Agriculture Europe: Comparative study on urban agriculture. Germany, Spain and Estonia.

## Short Term Scientific Mission Report

Aachen, Germany 17-27/03/2014



# COST Action Urban Agriculture Europe

## Comparative study on urban agriculture. Germany, Spain and Estonia.

Aachen, 17-27/03/2014

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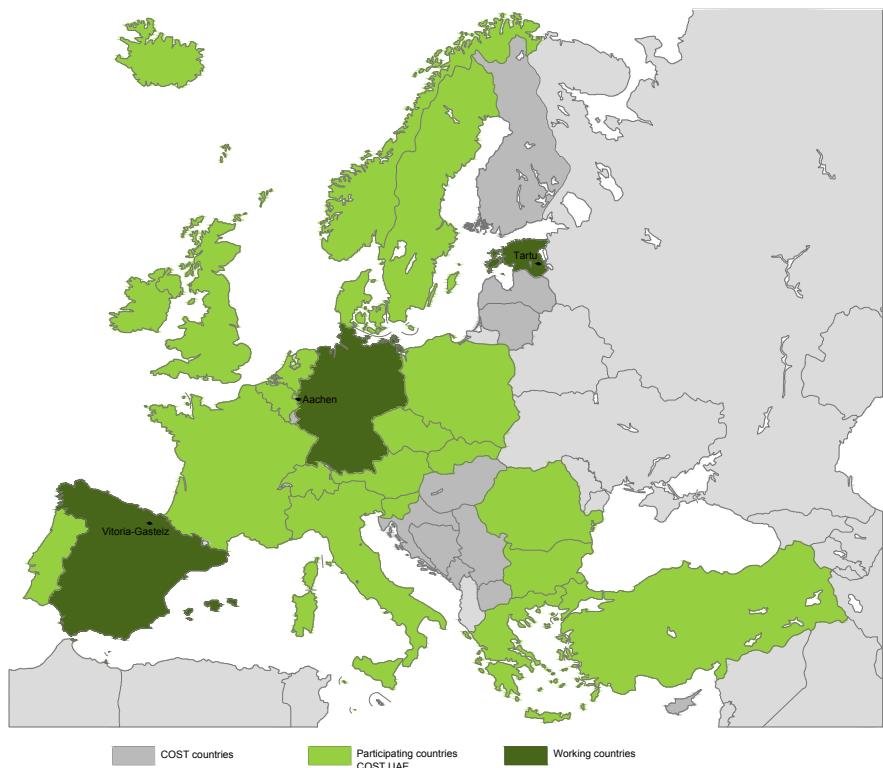
## Purpose of the Short Term Scientific Mission

The purpose of the present paper is to report on the short term scientific mission within COST action Urban Agriculture Europe which took place in Aachen from 17th to 27th of March 2014.

The findings of this STSM are going to be part of the author's Master thesis that will be presented in June 2014.

The aim of the STSM in Aachen was to study and find out similarities and differences related to the development of urban agriculture in Vitoria-Gasteiz (Spain), Aachen (Germany) and Tartu (Estonia), taking into account that these countries have had, in some way, similar historical periods. For this reason, many case studies have been taken into account in each of the cities.

The idea of this STSM was to have the possibility to assess several examples, not only in a theoretical way, but also analyzing the needs and wishes of the users.



## Description of the work carried out during the Short Term Scientific Mission

The research for the STSM started before my stay in Aachen from the 17th to the 27th of March. I did some research in Vitoria-Gasteiz and Tartu before going to Germany but the methodology has been the same for all of these cities. I have been working on different aspects of urban agriculture with the aim of comparing the 3 cities on different scales.

First of all, I have focused my attention on the literature reviews with major emphasis on historical background, urban planning and data related to the chosen case studies. This consisted of reviewing bibliographical sources in university libraries and other scientific databases. This has been accompanied by multiple interviews with experts of several disciplines, such as landscape architects, urban planners, chairmen of allotment gardens, people dealing with allotments and planning from the municipalities and farm owners. All these interviews have shed light on many aspects of the management of the different allotment gardens and from different points of view.

Then I carried out questionnaires (see annex 1), with open and closed questions among the users of the allotments to obtain a view of the social aspect of having such a garden. These surveys were done in situ in each of the allotments. I chose 2 allotments in each of the cities with the idea of comparing them. The survey has been done in the case of Aachen with the help of Katarzyna Bruszecka and in Tartu with Siim Luigas because of the difficulties with the language.

I have also undertaken an analysis of both the space and functions of allotment gardens taking into account two scales, the allotment and the plot, trying to compare the existing models.

# Description of the main results obtained

## Historical background

To understand how urban agriculture is working nowadays it is essential to know how it started and why. For this reason it is necessary to present the following overview of the countries and cities.

The moments of greatest growth of urban agriculture are linked to economic crises, when people had to resort to ensuring their self-sufficiency.

In the case of Tartu, **Estonia**, the Soviet Period (Socialism) was the starting point. The term dacha may mean 600m<sup>2</sup> plots with a hut or a luxury private house. The word dacha comes from the Russian word “давать” (to give), which was used for a summerhouse or minor house given by the tsar. After the revolution dachas were collectivized. Nevertheless, the association of dacha with private life, recreation and celebration was kept. The term garden cooperative was defined by the standard statute of 1956 and means cooperative created for state agency staff to get additional food supply (berries, vegetables, fruits and animal farming), to use their leisure time more rationally, improve their health and support agricultural development. Their function also changed, its use as a permanent living space became a usual practice. Today garden cooperatives are known as garden associations. (Rudomina, 2011)

The WWII had catastrophic effects on food supply and people were starving again. To improve the situation of the government a resolution was issued in 1949 that was aimed at the contribution of lands owned by the state and organising individual or shared plots to labour horticultural production (resolution 24.02.1949 nr 807 “О коллективном и индивидуальном огородничестве и садоводстве рабочих служащих”). The implementation of this resolution allowed people to get a plot from the organisation, they worked of the garden and grow vegetables. The individual obtained the right of unlimited use of garden only if they continued working in the same organisation during the next five years. The size of the plot was related to the placement and could vary from 600m<sup>2</sup> to 1200m<sup>2</sup>, closer to city border they were usually 600m<sup>2</sup>. (Rudomina, 2011)

In 1955, there was a proposal to transform gardening and vegetable producing associations into garden cooperatives. The garden cooperatives were organised upon request from workers. In 1956, a standard statute was issued that regulated the establishment, operation and liquidation of garden cooperatives (standard statute of garden cooperatives, 1956).

In Estonia the first 50 ha of lands for individual plots were assigned in 1949 in Mähel and the first garden cooperatives were founded in 1965. (Rudomina, 2011)

In those times, urban agriculture was a livelihood while it also played a patriotic function, fostering collaboration across society in maintaining the economy.

In the case of Vitoria-Gasteiz and **Spain**, it is important to take into account that after the Civil War, there was a situation when hunger was often acute.

With the war most of the cultivated land, which had achieved noteworthy production in Republican times, was abandoned and production was dwindling alarmingly. With this decline of food, hunger settled in Spanish homes and rationing only guaranteed the general supply in theory.

Although the Civil War had no major direct impact on agriculture, the fact is that it fell into a deep crisis, linked more to the economic policies of the new regime.

The poor, that were almost all, planted their scarce land with any crop, always directed to supplying their own families. In many cases the lands were their own house gardens.

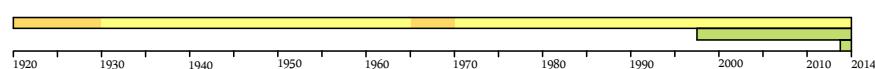
The history of urban agriculture in **Germany** is closely related to periods of hunger and food insecurity of the 19th century. Population migrated from the countryside to the city looking for a job, due to famine and poor social conditions in the countryside. For this purpose the competent authorities of those times gave land to people for cultivation.

In the case of Aachen it was not at this point when urban agriculture began its development, but after WWI. The socio-economic situation of that period was miserable with regard to nutrition. At that moment many cities were isolated and no products came from rural areas to the city markets.

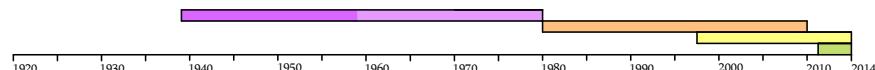
As a consequence, household production was essential for survival. The importance of allotment gardening was so obvious in that period, that in 1919, the first legislation related to allotment gardens was enforced. It was the so-called "Small Garden and Small Rent Land Law".

In the case of Aachen the WWII did not have so many consequences in terms of food production. The reason for this could be that the infrastructure had been established previously and also since the city centre was totally destroyed all the efforts were concentrated on rebuilding it.

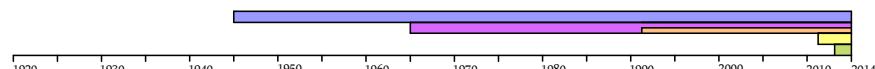
Aachen



Vitoria-Gasteiz



Tartu



Although the development started in a very different way, we can also observe a growing convergence. This means that the countries that were most behind in terms of urban agriculture tend to approach the countries with more prolonged and developed systems and there is the hope that there will be an assimilation of these countries in a not too distant future.



## Case studies

### 1. Soldatengasse allotment gardens

Soldatengasse allotment gardens were founded in 1905 and rebuilt in the 60s by the allotment gardeners themselves. They are the oldest allotment gardens in Aachen. In this case, the owner of the land is not the City of Aachen but the ownership is private.

People are not obliged to grow products in an ecological way. However there is an expert who can help members with ecological production. More and more people start to apply this way of producing their crops.

There is a board and every 3 years there is an election so that everyone can be a board member if they wish.

At this moment there are 25 plots and each of the plots is between 250 and 300m<sup>2</sup>. The type of use on the plot is determined by law (Bundeskleingartengesetz). Commercial purposes are not allowed and at least 1/3 of the plot has to be used for growing fruit, crops and vegetables. There are also some internal rules that can be changed if people write to the board 10 days in advance of the next meeting so that their proposals can be discussed. In those rules it is stipulated that composting is necessary, loud music is forbidden, from 1 to 3 pm is resting time, the use of bikes in the whole area is not allowed, etc.

There are some requirements to have a plot in Soldatengasse. First of all you need to live in Stadtregion Aachen, have German citizenship or an unlimited residence permit (unbefristete Aufenthaltstricht). There is a waiting list so everyone can add their names on it and when there is a garden free the first on the list may acquire it.

The common spaces and activities are shared equally among all members. They have different fees for insurance, electricity, rent, membership...that in total amount to 300 euro/year.



*Location, infrastructures, structure and atmosphere in Soldatengasse allotment gardens, the oldest ones in Aachen.*

*Ortophoto taken from ©2014 Spot Image, DigitalGlobe, Google*

*View of the gardens in Soldatengasse in March. Low hedges made from rose bushes make an attractive and pleasant atmosphere.*

## 2. Groß Tivoli allotment gardens

The Groß Tivoli allotment gardens were established in 1922. They have been relocated in the year 2009 and established in Pferdelandpark because on the original site the Alemania Aachen football stadium was constructed. The current location was previously an agricultural area, even a protected one, so no other destination than agriculture e.g. allotment gardens are allowed there.

There is a board that consists of 9 members and every 3 years there is an election so that everyone can be a board member if they want to.

Currently there are 39 plots but on the former location there were 123. All the area is about 2,4 ha and each of the plots is between 250 and 350m<sup>2</sup>. The type of use on the plot is determined by law (Bundeskleingartengesetz). It is said that it may not be used for commercial purposes and that at least a third of the plot has to be used for growing fruit, crops and vegetables.

Some community rules (Gemeinschaftsregeln) have to be observed as well. In these rules it is stipulated that there is an obligation to contribute in communal tasks such as the maintenance of shared-use spaces that amount to 3-4 hours a year, every week all the allotment gardeners have to do something in their gardens, take part in the festivals, between 1 and 3 pm there is a rest time, also during the holidays, hedges cannot be higher than 1,5m etc.

The motivation of the members lies mainly in recreation and leisure, and food production plays a secondary role. There is a waiting list, but the chairman decides who suits better for the allotments. Usually they try to give the chance to families with children and not so much to younger or older single people.

The funding of the allotments is based on membership fees, land rental (200-300 euro/year) and the income that proceeds from the clubhouse.



*View of the gardens in Gross Tivoli in March. Sense of private gardens because of the height of the hedges. Open to the public but not inside the plots.*



*Location, infrastructures, structure and atmosphere in Gross Tivoli allotment gardens, the latest in Aachen.*

*Ortophoto taken from TIM-Online database*



### 3. Kastanienweg allotment gardens

Kastanienweg allotment gardens were founded in 1976 but in 1981 were established as an association.

There is a board that consists of 5 members and every 3 years there is an election so that everyone can be a board member if they want to.

The whole area comprises 13.385 m<sup>2</sup>. There are 31 plots and each of the plots has between 250 and 300m<sup>2</sup>. The type of use on the plot is determined by law (Bundeskleingartengesetz). It is determined that they cannot be used for commercial purposes and that at least a third of the plot has to be used for growing fruit, crops and vegetables.

All the people may have access to a garden but they have to register through a phone call.

In Kastanienweg each gardener can decide what to grow but it is forbidden to use chemical products.

The internal rules state that there is an obligation of doing 6 hours of communal work per year but the gardeners who do not comply with this rule will have to pay a compensation, the hedge has to be 1,6 m high, the fruit trees may only have a maximum height (fairly small), it is forbidden to use concrete to pave the garden, there is no obligation to take part in the events but it is expected, etc.

Each gardener has to pay around 250-300 euro per year and this includes everything. The motivation that drives members to have a garden is mainly leisure.



*Location, infrastructures, structure and atmosphere in Kastanienweg allotment gardens.*

*Ortophoto taken from TIM-online database*

*View of the gardens in Kastanienweg in March. Good feeling despite having all the fences different from each other.*

#### 4. Hof Bonnie Aachen

The farm is managed by the 3rd generation of the Bonnie family and comprises a total of 32 hectares. The Court follows the principle of integrated production and specializes in vegetables and cattle breeding and thus has its own beef production.

The farm shop offers a rich assortment. The products are purchased mainly from its own cultivation or from reliable suppliers. The range includes fruit and vegetables as well as bread, pasta and dairy products and seasonal offers. There is also an area where customers can cut regional and seasonal flowers themselves.

There is an area reserved on the farm for Meine Ernte ("My harvest"). People without their own garden can rent a plot on which they can grow their own products.

What is being offered in these gardens is: a colourful pre-seeded vegetable garden for a whole season from early May to late October with more than 20 different vegetables and flowers, a basic range of all the necessary garden tools and water, regular and professional advice and support by the farmer and online, all the important information you need to know about how to cultivate the garden.

The different types of vegetables are planted in individual longitudinal rows on the surface.

Then the gardens are divided crossing the longitudinal pattern, so that every garden contains the same varieties. The size of the garden will then decide how many different vegetables you dispose of.

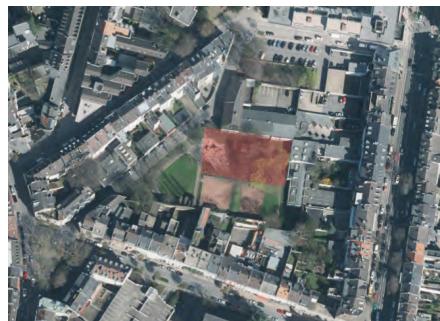
Depending on household size and the need for vegetables they have to meet, they offer different garden sizes. The small vegetable gardens are about 45 m<sup>2</sup>, may be suitable for singles and couples and they cost 179 euro/season. The family vegetable gardens are about 85 m<sup>2</sup>, may be suitable for families and friends (3-4 people) and they cost 329 euro/season.



*View of the shop in Hof Bonnie family farm. Sense of nature but near the city. Many products in the shop, but not all of them were from the farm or region. They had pineapples and other exotic fruits that cannot be cultivated in Germany.*

*Location, infrastructures, structure and atmosphere in Hof Bonnie farm.*

*Ortophoto taken from TIM-online database*



## 5. Essbares Aachen community garden

Essbares Aachen community garden was established in 2013 with the aim to create a space for people to come together and to be active in their own city.

There are 2 different spaces for gardening; Hirschgrün and Vielfeld, the former is the first to be located in the city centre and the latter in a park in the north-eastern part of the city.

This community garden is totally free of charge and all the people who want to, can join the different activities. There are 3 active members, who are the ones that organize the meetings, the internet posts, about 20-30 people who are usually taking care of the gardens and going to all the events and finally people who go randomly to some of the organized events that in some cases have arrived at several thousand people.

All the decisions that have to be taken are made by all the people in a democratic process. Of course, all new ideas are very welcome.

The owner of the land is the City of Aachen. There have been plans to design a public park in Hirschgrün but the City of Aachen is thinking of incorporating this community into the park, they are currently holding discussions in which the opinions of all groups involved are taken into account. Some of the neighbours have problems because the place is abandoned.

All the vegetables are grown in an ecological way and there is no possibility of selling them, it is just for self consumption.

This community garden is part of the Transition Town Aachen initiative which at this moment is in its first stage, but which fortunately in some more time will be running well. It is a movement that has taken place in many countries. The objective is to organise different kind of events and make people come together with a common purpose.



*Location, infrastructures, structure and atmosphere in Essbares Aachen community garden.*

*Ortophoto taken from TIM-online database*

*View of the plot in Hirschgrün (city centre) in March. The activities had not started so it is quite abandoned. Hopefully in April-May they start working.*

## 6. Basaldea project

The City of Vitoria-Gasteiz has made some municipal land near the Zadorra River, near the village of Abetxuko available for a project known by the name of Basaldea to create the “BASALDEA agro-incubator”.

The area for gardens occupies 6 plots. The total area is 21.32 ha. The actual cultivated area amounts to 19.00 ha, accounting for the surface used for irrigation issues, roads and common facilities.

This project is being developed in 4 different stages. The first stage started in 2011 and the entire project should be operating in an appropriate manner by 2019.

The Basaldea project is a set of actions, that seek the impulse of local organic farming by:

- Vocational training of young people in the field of agriculture, as well as support and resources needed to start professionally in organic horticulture.
- Creating a hotbed of agricultural enterprises that should serve to encourage young agricultural entrepreneurs.
- The implementation of a distribution channel and marketing of organic products.
- The awareness of the added value of organic products and the consumption of local produce.
- Creating an ecological culture of local product consumption as well as enhancing information, communication on this subject and creating environments.



*Ortophoto from Basaldea project.*

*Taken from ©2014 Spot Image,DigitalGlobe, Google*



## 7. Olarizu gardens

Olarizu gardens were founded in 1998, as a result of the adaptation of an area occupied by farms, abandoned fields and uncontrolled dumps. It is now owned by the municipality of Vitoria-Gasteiz and is open to the public. The Centre for Environmental Studies (CEA) is responsible for its design and management and it is now used to promote environment-related education, awareness and leisure activities. This area is part of the green belt that surrounds Vitoria-Gasteiz.

There are several facilities at this site such as, the **bioclimatic building**, built with a view to taking full advantage of natural resources (sun, climate, relief, and soil). It was designed to cater for the needs of the users of the gardens and features lockers, changing rooms, toilets and an agro-forestry tool and machinery storage area. It also has a small information office and a weather station. The **forest nursery**, which is a facility dedicated to the production, maintenance and acclimatization of various species of plants that are native to Vitoria-Gasteiz and the province of Álava. There are more than 100 species of trees and bushes.

The **allotments area** features a common training garden, individual vegetable gardens and irrigation ponds. This area is dedicated to a green agricultural programme aimed at people over 55 who are not working and consists of a theoretical-practical course on organic horticulture and the subsequent assignment of plots for cultivation. This initiative has, on the one hand, a leisure and social integration element and, on the other hand, it promotes environmentally friendly and healthy agricultural techniques.

The **fruit crop area** includes a wide range of species which are grown using ecological methods. The **pond** and **glass greenhouse** constitutes a landmark. In this place there are collections of seasonal plants. The **rock garden**. Most of the plants are colourful and/or aromatic and attract honey-making insects that are highly beneficial for pollinating the vegetable gardens. The **arboretum** on these grounds constitutes a representation of the native forests of Álava.



*Location, infrastructures, structure and atmosphere in Olarizu gardens.*

*Ortophoto taken from ©2014 Spot Image,DigitalGlobe, Google*

*View of the Olarizu allotment gardens in August. Very few people due to the warm weather and the holidays*

## 8. Urarte allotment gardens

Urarte allotment gardens were established in 1998. They are located on the right bank of the Zadorra, near the village of Abetxuko. These allotments are part of the green belt that surrounds Vitoria-Gasteiz.

This initiative is a well-organized alternative to the orchards that were extended illegally and uncontrollably along the river and caused significant ecological impacts on the river ecosystem because of water abstraction, discharges, elimination of vegetation on the river bank and others.

The objective is to provide citizens and groups of citizens an area where they can develop their leisure time learning and enjoying the practice of organic horticulture in the best possible social and environmental conditions.

The area covers about 5 ha and consists of vegetable gardens consisting of individual plots measuring 75 m<sup>2</sup>, one collective garden measuring 600 m<sup>2</sup> for the practical teaching of organic horticulture, a large space of 600 m<sup>2</sup> divided into plots intended for certain groups, irrigation ponds distributed all around the site and various indoor facilities with tables, chairs ... In addition, there is a service building where products and tools are stored as well as lockers and changing rooms, a classroom-workshop and an information office.



The plot is owned by the City of Vitoria-Gasteiz. Its use is granted for one year, renewable up to a maximum of 5 years. The use of the plot has to be horticultural and/or floral, the introduction of tree species or permanent structures is not allowed.

One of the requirements to apply for a garden, is to take part in a course on ecological gardening that has a duration of 60 hours.



*View of the Urarte allotment gardens in August. As in Olarizu allotments, few people but everything growing in the right way.*

*Location, infrastructures, structure and atmosphere in Urarte allotment gardens gardens.*

*Ortophoto taken from ©2014 Spot Image,DigitalGlobe, Google*



## 9. Hiinalinn gardens

In the Hiinalinn neighborhood (with the meaning of Chinatown) we can find illegal gardens owned mainly by Russian speaking people. Among Estonians they are called "Hiinalinna aaimaad" (Hiinalinn gardens). Some of those plots, surrounded by fences, actually at least half of them also have little houses next to the gardening plot, inside the delimited area. Those can be named "дача" (summerhouse, cottage) or "домик" (little house) in Russian. Most of the users came over 40 years ago and established their gardens at that site, which was part of a Soviet military area.

In general, people use the grown products for self supply but there are also some cases where they are selling some flowers and vegetables in "little market places". It is true that most of the people use these gardens because it is their way of life, but more and more people they are using them just for leisure. Instead of a place where you have to pay and have to comply with the rules, having an established plot, you can have a place without all those limitations.



*Location, infrastructures, structure and atmosphere in Hiinalinn gardens.*

*Ortophoto taken from ©2014 Spot Image,DigitalGlobe, Google*

*View of the Hiinalinn gardens at the end of the summer. Everything overgrown. Huge fences that do not allow a look inside.*

## 10. Maheaed allotment gardens

Before its actual use of allotment gardening, the Tartu Maheaed community garden area was an empty wasteland. In 2011 the municipality gave the land, of 0,9 ha, in a temporary lease to NGO Tartu Maheaed that divided the land into smaller plots with a size between 25 and 100 m<sup>2</sup> and gave it to local people for gardening. Users of the plots have the obligation to use organic growing methods.

All the people are welcome to be a member, but specially those who have a connection to the land and to growing vegetables organically and also all those who share the same vision and like to participate in the social activities. The membership fee is different for working people than for pupils, students, pensioners and unemployed, the former paying 10 euro/year and the latter 5 euro/year.

Since 2011 Tartu Maheaed has done a great job in finding potential areas in Tartu for urban gardening. This gardens located in Lehe street were the first allotment garden established by the NGO.

In this case there are no shared spaces, so no maintenance is needed. One of the rules is that all the people have to attend the general meeting. Generally speaking they do not have too many rules, compared to other places. They have 7 board members that have an obligation to be present at most of the meetings.

In 2013 Tartu Maheaed reached another contract with the municipality and was given another 1 hectare of land in the outskirts of Tartu for local people to garden. The NGO has also organized educational events (lecture series about organic food production) and community gatherings in the Lehe street garden.



*View of the Maheaed allotment gardens at the end of the summer. Few people, the season seems to have ended.*

*Location, infrastructures, structure and atmosphere in Maheaed allotment gardens.*

*Ortophoto taken from ©2014 Spot Image,DigitalGlobe, Google*

## Social overview

In the surveys I have conducted there were both open and closed questions in order to know the opinions of the users. I have chosen 2 gardens in each city. In Aachen, Soldatengasse and Kastanienweg. In Vitoria-Gasteiz, Urarte and Olarizu. In Tartu, Maheae and Hiinalinn.

On the one hand there were questions about personal data (age, profession ...). In addition, there were also questions about the preferences when having a garden, what it meant to them, what was of major or minor importance, what they would like to improve, positive and negative points of having a plot.

I have found that there are both similarities and differences between countries and cases.

Both in Vitoria-Gasteiz, Aachen and Hiinalinn in Tartu most of the people are elderly and retired. This is not the case of Maheae in Tartu where there are people from very different age groups. Opinions about the benefits they have for them to have a garden are not the same. Retired people have greater need to increase and develop social relations and the younger people to combat the stress involved in their daily lives. Furthermore , it is clear that both in Vitoria and Aachen the most important issue is socializing while in Tartu it is not. It is true that in Tartu they do not have common infrastructures to prepare joint activities. For Hiinalinn orchards, an important factor are the economic benefits that proceed from them.

Negative points and proposed improvements vary in different places.

In Aachen, some people do not agree with the strict rules and proposed to remove or change some of them. Also in many cases they want a larger number of young people in the gardens.

In Vitoria-Gasteiz, the main proposals and critiques are, of not having to leave the gardens after 5 years, because after all the effort, the benefit is going to be for the next person acquiring the plot. They also ask for a control, so that people from outside the allotments cannot come to steal the products. In addition, they want the people who were responsible for providing help and advice on organic cultivation, to continue with their assistance as they used to. They concluded saying that they know how to grow crops because they have been doing it for many years, but the organic cultivation is something new to them and they have the wish to do it well.

In Tartu (Maheae) the answers to these questions have been more limited, but it can be said that the proposals are, improving paths and roads both within the area and the access to the site. They ask for new lightning that will work well. They want to move the gardens to a place that is nearer to the city centre so that they can go more often. In Tartu (Hiinalinn), the issue that worries most users is to be expelled from the allotment, due to the illegal origin of the settlement.

So it is possible to say that the proposals and complaints are different in each of the cities, as could be expected, taking into account that the conditions of the gardens and the people's way of life are also different.

In Tartu people are more often thinking of improvements in infrastructure. On the contrary, in Aachen and Vitoria-Gasteiz, the infrastructure seems to be resolved and people focus more on organizational issues on the part of the administration.

## Patterns: Structure, distribution and function

The structure of the gardens varies from place to place, not only depending on the country concerned but also because of the function they have.

In this case I have drawn the patterns of some representative gardens in each of the cities to compare them.

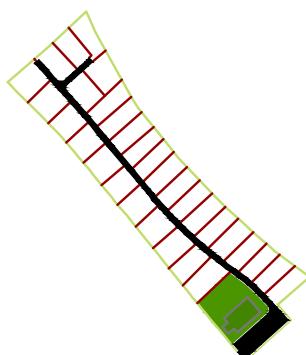
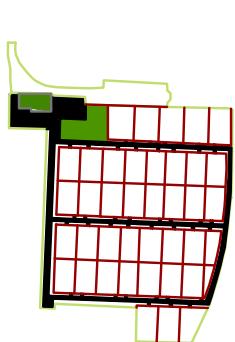
First of all the size and shape of the gardens are noticeable. In the case of the illegal gardens of Tartu they are spread out without any established structure of paths or plots. There are many empty spaces between plots, in many cases they are former gardens that have been abandoned. In the case of Aachen and Vitoria-Gasteiz we can observe many common things such as the paths which are structured so that people can access their plot from the path. Not so, the case of Tartu where they are not clearly established. It is obvious that the investment in these different cases is not the same. The number of paths varies depending on the plot sizes. In Vitoria-Gasteiz there are main, secondary and even tertiary paths and this is because there are much smaller plots than in Aachen.

If we analyze the functions of the plots we can find that in Vitoria-Gasteiz and in Maheaaed in Tartu the only purpose is production. In the case of Aachen the space is divided into vegetable gardening, leisure and infrastructure. So this is why in Aachen the plots should have a bigger size than in other places.

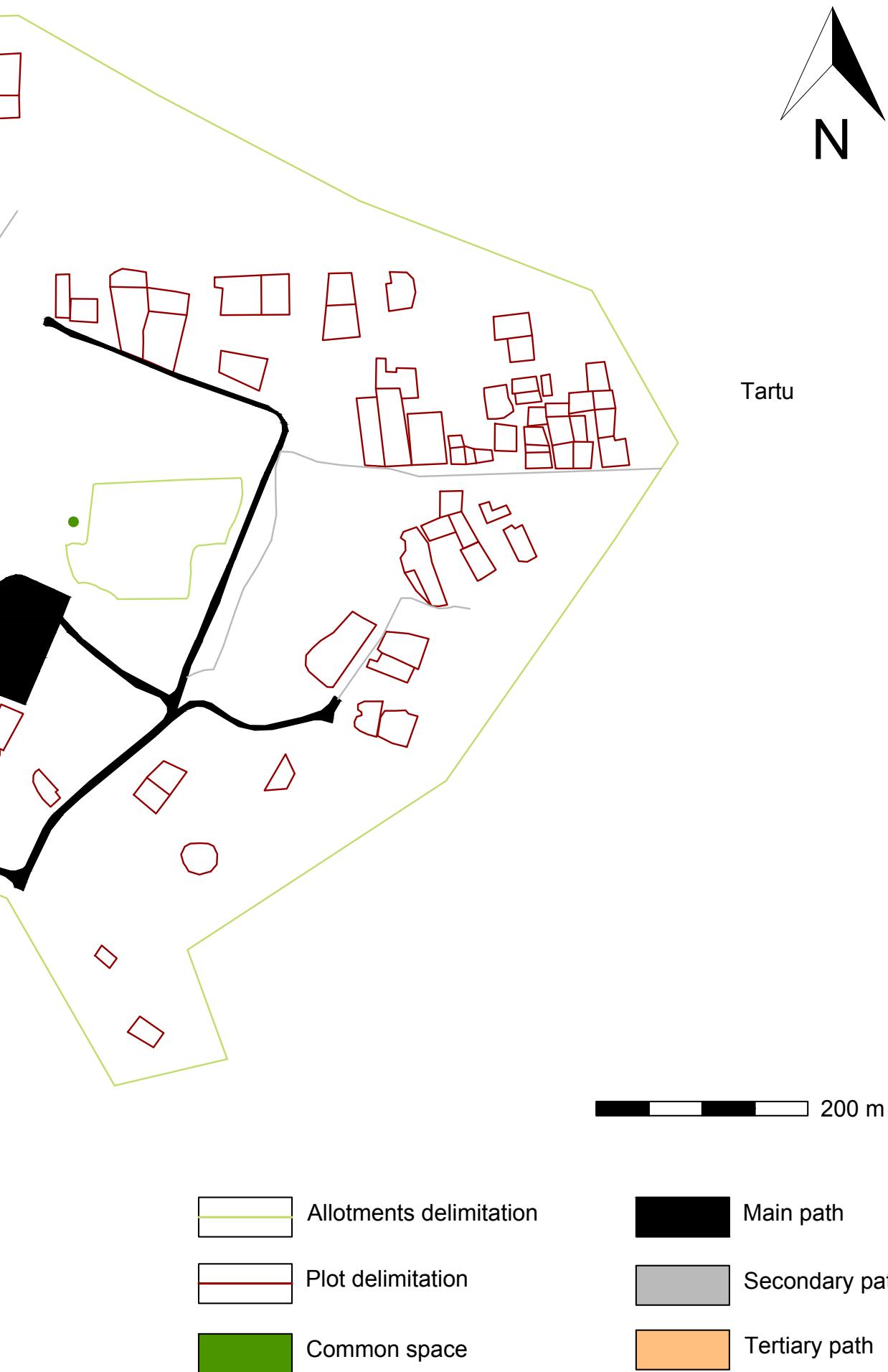
Taking a look at the distribution of the plots in Aachen we can find that people used to have a space near the building, which is often surrounded by a hedge or similar, which is their private space for leisure for the family. Then, they have the other spaces looking out on the path to show their gardens with flowers, trees and vegetables to other neighbours.



Vitoria-Gasteiz



Aachen



## Discussion

It is incredible to see the multiple differences and similarities in terms of urban agriculture among the cities I have been studying and even more so if we consider the cultural differences (not only the historical but also the social ones) and the different influences they may have had.

The different structure of each of the allotments and their functions are very much related to the past that each of these countries has gone through and how they have tried to manage the situations over these periods. Thus is the case of Aachen where the allotment gardens have been regulated for a very long time. In Tartu however the allotments have emerged as a fairly recent phenomenon and in Vitoria-Gasteiz they occupy an intermediate position. In Vitoria-Gasteiz the allotment garden structure present in Aachen would be impossible under the current Basque urban planning law, as the whole regulatory system would have to be changed, in order to allow small constructions.

It has become very clear that the social scope or purpose is the one that connects all other aspects. The changes that took place in the past and that are occurring in the present day are truly felt by the people involved. When a decision of whatever nature is made erroneously the users are affected. For this reason it is essential to talk to them, enquire after their opinions and wishes and try to come to agreements that both the local administration and the gardeners can be satisfied with.

There is great similarity between Estonia and the former situation of Spain in terms of the illegal situation of the plots of land. The former only needs a little dedication and little funding to change the situation. This has been achieved in Vitoria-Gasteiz by the local government (a change of illegal gardens for other regulated and controlled ones), a process that could be an inspiration for the Tartu local council and the gardeners. However, it is clear that the investment will not be the same, since the use of the gardens will cover different periods of time, due to the seasonal weather changes.

An analysis in greater detail in the near future would be desirable. Not only the information about urban planning of each of the cities involved but also real data about the countries' economies should be provided. This may clarify how these towns have developed and may shed light on the reasons the specific location of the allotment gardens. Although we have already established that urban allotment gardens have emerged during periods of crisis, we will have to take the present economic situation into account when planning, restoring and innovating.

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## Interviews and contacts

- Dr. Christoph Ruckert, Umweltvorsorge- und Grünplanung, Stadt Aachen Fachbereich Umwelt 24/03/2014

- Dr. Ing. Daniela Karow-Kluge, Landscape architect, RWTH Aachen 18/03/2014

- Christian Graff, Chairman in Soldatengasse allotment gardens 18/03/2014

- Hubert Coonen, Chairman in Gross Tivoli allotment gardens 19/03/2014

- Chairman of Kastanienweg allotment gardens 21/03/2014

- Oliver Pesch, active member of the Essbares Aachen. 19/03/2014

- Karsten Ley, Urban planner, RWTH Aachen 21/03/2014

## Websites

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## Annex 1. Example of questionnaire

Name of the gardens:

Number of the plot:

1- Age:

2- Profession:

a. Pensioner

b. Unemployed

c. Student

d. Worker

- Employed person

- Self employed

3- Having this garden, what does it mean to you?

a. Hobby

b. Economic support

c. Others \_\_\_\_\_

4- What crops are you growing?

5- Have you previously worked in a garden or similar?

a. Yes

i. Where

ii. When

b. No

6- Have you been offered any type of course before you got the garden? If so was it useful?

a. Yes

b. No

7- How long have you worked this garden?

8- How often do you come to the garden?

a. Less than 1 a week b. 1-3 times a week c. More than 3 times week

9- How do you arrive to the gardens?

a. Walking b. Bicycling c. Public transport d. By car

10- From 1 to 10 could you assess the importance of this garden to you in relation to the fact of having (assess all the points):

a. Social relationships

b. Economic support

c. A property

d. Physical exercise

e. Better health

f. Remove stress

g. Necessity of being alone for some time

11- Is there any negative point in having a garden like this? Which one(s)?

12- Briefly, what improvements would you propose if there is any?

13- Do you have any additional comment?

# Agreement of the host institution for the Short Term Scientific Mission



**RWTH Aachen University, Fakultät für Architektur Lehrstuhl für Landschaftsarchitektur**  
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Ana Fennema Galpasoro

Estonian University of Lifescience

fenneming\_a@hotmail.com

Aachen, 13.11.2013

## host insitution approval

Dear Ana Fennema Galpasoro,

the Chair of Landscape Architecture at RWTH Aachen University would be happy to host you as a guest researcher in spring 2014.

The STSM to be carried out on the development of Urban Agriculture as reaction to crisis situations lies within the research interests of the Chair of Landscape Architecture and could be a valuable contribution to COST Action TD 1106 and/or TD 1204

With best regards,

Axel Timpe **Lehrstuhl für Landschaftsarchitektur**  
Rhein.-Westf. Techn. Hochschule  
**D-52056 Aachen**

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# Confirmation by the Host Institution of the successful execution of the Short Term Scientific Mission



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Ana Fennema Galpasoro  
Estonian University of Lifescience  
fenneming\_a@hotmail.com

Aachen, 22.04.2014

## host institution confirmation

To whom it may concern,

I confirm that Ana Fennema Galpasoro has successfully completed her Short term Scientific Mission at the Chair of Landscape Architecture of RWTH Aachen University.

With best regards,

A handwritten signature in black ink that appears to read "A. Timpe".

Axel Timpe

Dipl.-Ing. Axel Timpe  
Freier Landschaftsarchitekt AKBW, Wissenschaftlicher Mitarbeiter am Lehrstuhl für Landschaftsarchitektur  
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The funds provided by COST - less than 1% of the total value of the projects - support the COST cooperation networks (COST Actions) through which, with EUR 30 million per year, more than 30.000 European scientists are involved in research having a total value which exceeds EUR 2 billion per year. This is the financial worth of the European added value which COST achieves.

A “bottom up approach” (the initiative of launching a COST Action comes from the European scientists themselves), “à la carte participation” (only countries interested in the Action participate), “equality of access” (participation is open also to the scientific communities of countries not belonging to the European Union) and “flexible structure” (easy implementation and light management of the research initiatives) are the main characteristics of COST.

As precursor of advanced multidisciplinary research COST has a very important role for the realisation of the European Research Area (ERA) anticipating and complementing the activities of the Framework Programmes, constituting a “bridge” towards the scientific communities of emerging countries, increasing the mobility of researchers across Europe and fostering the establishment of “Networks of Excellence” in many key scientific domains such as: Biomedicine and Molecular Biosciences; Food and Agriculture; Forests, their Products and Services; Materials, Physical and Nanosciences; Chemistry and Molecular Sciences and Technologies; Earth System Science and Environmental Management; Information and Communication Technologies; Transport and Urban Development; Individuals, Societies, Cultures and Health. It covers basic and more applied research and also addresses issues of pre-normative nature or of societal importance.