Frank Lohrberg, Axel Timpe (eds.)

COST Action Urban Agriculture Europe: Documentation 1st Working Group Meeting

Aachen 9-12/7/2012

COST-Action Urban Agriculture Europe

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Introduction

COST Action Urban Agriculture Europe:

starting the working process

The COST Action 1106 on Urban Agriculture Europe (UAE) held its first working group meeting in Aachen, 9th 12th of July 2012.

The Chair of Landscape Architecture was pleased to host Action members from 18 countries at RWTH Aachen University and to start the working process by developing a common ground.

Christopher Bryant inspired all of us with his speech about the "Discovery of Urban Agriculture". We should bear in mind his long term experiences with urban farms in the Paris region. Back in the 1970ies his professor argued that the urban farms he was working on within his dissertation would vanish soon. But he could revisit most of these farms recently. The city has changed and the farms did as well, but Urban Agriculture can be considered even more vital in the Paris region today.

A vital and diverse urban agriculture could be discovered by the participants on a field trip that ended up the first day´s program. The Bonnie family showed us their farm and told us about the challenges urban farmers are facing. We all were impressed of the smart and integrated strategies this stakeholder has developed.

The field trip as well as the keynote speeches and the students' exhibition in the conference lobby offered further examples of UA covering a broad range from the urban gardening to the urban farming level – or as Working Group 2 elaborated from "Urbanites in Agriculture" to "Agriculture in Urbania".

It turned out that UA has a lot of benefits for the city and that it could not only be developed top-down. *"Policies and jurisdictions for Urban Agriculture"*, as Christopher Bryant said, *"have to be capable to deal with people on the ground, because this is where the society is made."*

Based on the key note speeches and the field trip the 2nd day of the meeting was used to define the working program of each working group. Gathering in smaller groups allowed us to exchange our experiences more intensely and to identify the next working packages. These finding outs were summarized in the closing session in order to sketch the aspired progress of the whole action.

Let me add a hearty thank-you to all speakers especially Christopher Bryant and the Working Group chairs. My special thanks go to my colleagues Axel Timpe and Sigrid Tillmanns who planned and organized the whole meeting. I hope the Aachen workshops provided a good start for the COST Action.

To ensure our working progress and to give new Action members the possibility to tie in with our discussions this report summarizes the main issues of the meeting. Thanks again to Axel Timpe and his assistant Julia Haun for offering us this informative and illustrative paper.

Frank Lohrberg

Action Chair COST Urban Agriculture Europe

**Prof. Dr. Frank Lohrberg
RWTH Aachen University**

Programm of the Aachen Meeting

Monday 9th July 2012

MC Meeting and Get together of Early Arrivers

Management Committee Meeting
Guided Tour: historic centre of Aachen and RWTH student's garden

Tuesday 10th July 2012

Welcome Addresses and Introduction
Prof. Dr. Ernst Schmachtenberg, Rector of RWTH Aachen University
Prof. Dr. Frank Lohrberg, Action Chair COST UAE

Keynote Speeches:

The discovery of Urban Agriculture
Prof. Christopher R. Bryant, University of Montreal

Urban Agriculture definitions and Common Agrarian Policy
Prof. Henrik Vejre, University of Copenhagen

Urban Agriculture Governance and local policies
Prof. Mary Corcoran, National University of Irland

Enterpreneurial models of Urban Agriculture
Prof. Wolf Lorleberg, University of Applied Sciences South- Westfalia

Spatial Visions of Urban Agriculture
Prof. Luis Maldonado, Barcelona Tech

First Meeting in Working Groups
Presentation of the participants and their interst in working in the group

Afternoon excursion Aachener Soers:
Agriculture, Landscape and urban development in Aachen
visit of farms, allotment gardens and landscape projects

Wednesday 11th July 2012

Working in Working Groups
Working Group 1: Urban Agriculture definitions and Common Agrarian Policy
Working Group 2: Urban Agriculture Governance and local policies
Working Group 3: Enterpreneurial models of Urban Agriculture
Working Group 4: Spatial Visions of Urban Agriculture

Closing Plenary Session
Report from Working Groups
Objectives for Action Workplan
Next Events

Wednesday 11th July 2012

Optional field trip to Greenport Venlo horticultural industry cluster

Keynotes: The discovery of Urban Agriculture

Prof. Christopher R. Bryant

With his PhD thesis "Urbanisation and Agricultural Change since 1945: a Case Study from the Paris Region" completed in 1970, Christopher R. Bryant was one of the first researchers exploring the field of Urban Agriculture in its broadest sense.

The subject being considered almost as marginal in the late 1960s in many countries, it has become one of the focii of Bryant's work as a University teacher and researcher ever since. Christopher Bryant has been a full professor at the Department of Geography at the University of Montreal from 1990 until the present, teaching courses in spatial organization, regional planning, urbanization, sustainable development and city-countryside relationships.

Urban Agriculture has been a major subject among the more than 200 publications by Christopher Bryant and of his cooperation with several French universities.

Christopher Bryant is one of 4 global correspondents of COST Action Urban Agriculture Europe. Together with Prof. Makoto Yokohari (Japan), Prof. Jorge Pena-Diaz (Cuba) and Dr. Bernard Keraita (Ghana) he will follow the working process of the Action and enrich it with perspectives from other parts of the world.

With his keynote speech "The Discovery of Urban Agriculture" he was invited to give some important reflections to help the first Working Group Meeting in its discussions by looking back at the past 40 years of Urban Agriculture and giving ideas on its future role.

Prof. Christopher R. Bryant
Université de Montreal

The Discovery of Urban Agriculture

The discovery of Urban Agriculture was both: a personal as a scientific process. Having married a French woman in the 1960s it seemed a good idea to combine PhD research with spending some time in France. The subject of Urban Agriculture in the Paris region was however regarded as somewhat marginal by several of the initial contacts in the Paris region: agriculture near the city was considered to be in a transitional, ephemeral state. Farmers that had been resisting the urban development until then would be disappearing from the cities and their proximity soon. Urban Agriculture was in fact in a transition phase, but in a different sense. Today, the farmers visited during the PhD research in the Paris region are not only mostly still there (they or their sons and daughters) but they have been considerably transforming and increasing their business in concert with changing urban demands.

For research in France, it took about 15 years before Urban Agriculture was recognized as an interesting and important subject. The appreciation of Urban Agriculture in society, politics and research has been constantly rising since the 1980s, but in many countries, including many European countries, the notion of Urban Agriculture is still not fully appreciated.

When looking at the discovery of Urban Agriculture, its present importance and its future, we can do this from three perspectives: definitional issues of Urban Agriculture; Urban Agriculture and its distant substantive origins; our preoccupations with Urban Agriculture today and its actual reality on the ground.

Definitional issues of Urban Agriculture

In attempting to define the term Urban Agriculture, we immediately encounter one of the main problems of the subject for research. In view of the wide range of activities and subjects it covers, a definition that can be regarded as universally acceptable is hard to find. The heterogeneity of agriculture and the fuzziness of the term 'Urban' make the definition difficult but are at the same time the core qualities of Urban Agriculture.

ONTARIO'S GREENBELT 2.0
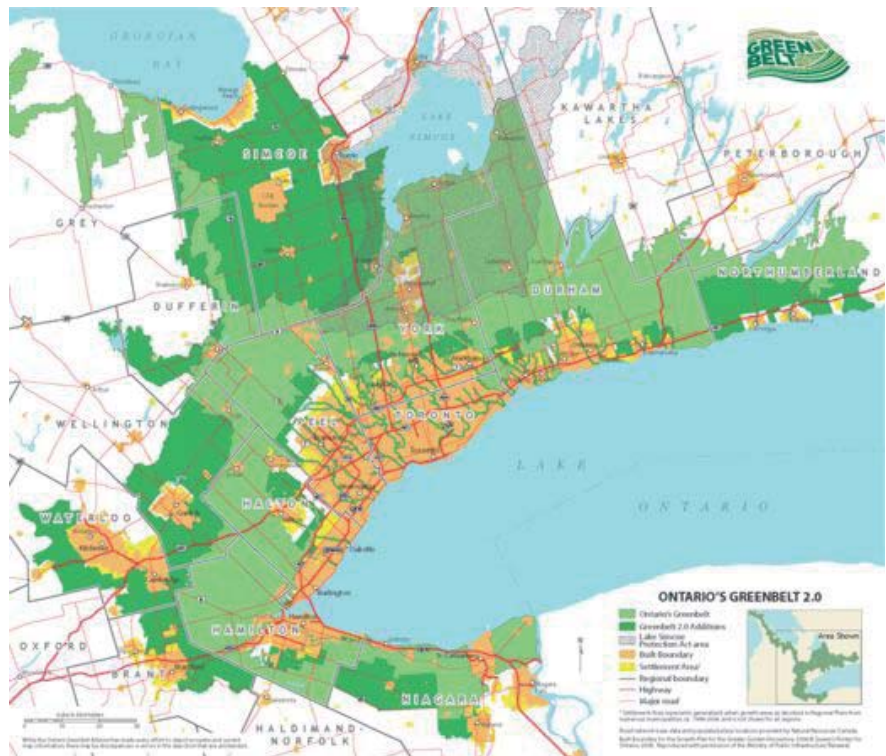
The Ontario Green Belt is the largest green belt in the world and is largely in private land ownership.

To combine urban and peri-urban agriculture under one research topic Urban Agriculture, as has been done with the COST Action, seems to be a good choice today. Administrative boundaries or other clear distinctions between urban or peri-urban forms or situations of agriculture can no longer be easily made. Administrative borders have been highly variable during the last few decades. The 'regional city' that spreads its functions (working, living, leisure activities, public services …) is a fact and includes agriculture in many forms.

It incorporates agriculture in green belts and metropolitan areas. The Ottawa Green Belt south of Ottawa is the largest green belt in public ownership in the world; naturally, it is almost normal to think that the protection of agricultural land should have been one of its main objectives. However, even with public ownership of the land, it can be shown that government is often not a very effective landowner when it comes to maintaining and supporting agricultural activities, because frequently its institutions do not know how to handle the land management on the ground and are not very effective in dealing with the people. Nevertheless the Ottawa green belt is still more or less intact and the existence of regional farming is an appreciated phenomenon today. The Toronto Greenbelt is the largest Green Belt in the world, and is largely in private land ownership, which brings with it its own challenges.

Any definition of Urban Agriculture that could be made would not be satisfying if it doesn't deal with the heterogeneity of activities and the multiplicity of interests in Urban Agriculture that can be found in real life. To understand this heterogeneity of agriculture in urban and peri-urban, this agriculture must be looked at from different vantage points:

- the socio-economic systems of food production
- the resource base & the consumers (& their motivations)
- the farmers/managers motivations, & their interests

Brampton, situated next to Mississauga, one of the the fastest growing municipalities in Ontario, has developed a network of local production sold on farms and a farmers market.

Urban Agriculture can be evolving within all these perspectives and can take on very different forms that include:

- Community gardens
- Collective gardens
- Roof top gardens & production
- Private gardens
- Community Supported Agriculture (CSA)
- Self-consumption (family needs) & barter
- Organic farming
- Different socio-economic systems of production
- farms serving local markets
- farms serving regional, national &/or international markets

In particular, the farmers' and managers' motivations can include very different objectives in running an Urban Agriculture operation. Community Supported Agriculture in the city or its surroundings may have social and environmental preoccupations as well as profit or income-generating goals. Capitalistic farming systems may exist on traditional farms in peri-urban areas, but as well in newly established farming systems in the city, e.g. rooftop farms. Producers' or farmers' engage in Urban Agriculture with multiple interests that have to be considered and understood for dealing with Urban Agriculture in research and policies.

Examples cited from Canada and France show the multiplicity of forms of Urban Agriculture that exist. For instance, Brampton, a medium-sized city situated next to Mississauga, that for long was the fastest growing municipality in Ontario, has a whole network of farm production units and sales outlets of different types within the urban area. As another example, Mont St. Hilaire near Montreal a number of non-farming families established themselves as apple farmers several decades ago. These initiatives have now become an important part of the place's identity as well as a generator of income and revenue for the municipality. Some cultural events centred on apple production have been organized form time to time that, together with the attraction of seeing the apple blossoms in the spring and the purchase of apples and apple products in the early fall have attracted people to come from the whole metropolitan area of Montreal including people from many different cultural origins to visit Mt. St. Hilaire.

At Mont St. Hilaire near Montreal a small number of non-farmers entered into apple production several decades ago, and this gave rise to a tradition of apple cultivation that is today an important part of the place's identity as well as an important economic factor because of its power of attracting visitors from the whole of the metropolitan area of Montreal.

Urban Agriculture and its Origins

The source of Urban Agriculture cannot be reduced to a single origin.

Today it should be investigated from different points of view including all its participants, such as the farmers and producers, members of the political sphere (consisting of local, regional and national politicians), as well as planners, consumers and researchers. As well, research on Urban Agriculture should be aware of which effects and systems within Urban Agriculture it is researching:

- Food production (current & future) & the recognition of the importance of UA?
- The consumers & markets of UA?
- The other multiple functions associated with UA territories (environmental, social, tourism/recreation …)?

A research strategy on Urban Agriculture should include all these perspectives and the linkages between them.

The substantive origins of Urban Agriculture

Urban Agriculture has existed as long as there have been cities; its activities have however not been always defined as Urban Agriculture.

Many producers in the city proper have always grown food for their own needs or for barter as was also the case in many rural areas. Already before the advances in transportation technologies of the 19th century, farmers from peri-urban areas without close proximity to the city transported their products to urban markets as was the case for farmers in the west of Paris who travelled several hours by horse and cart to sell their produce. Such farmers had recognized the importance of the urban market early on without calling themselves urban farmers.

The changes in transportation technology brought substantial changes to many near-urban food producers, such as competition, decline for some producers and adaptation for others. There has always been a multiplicity of forces and processes that account for these changes in farming and production.
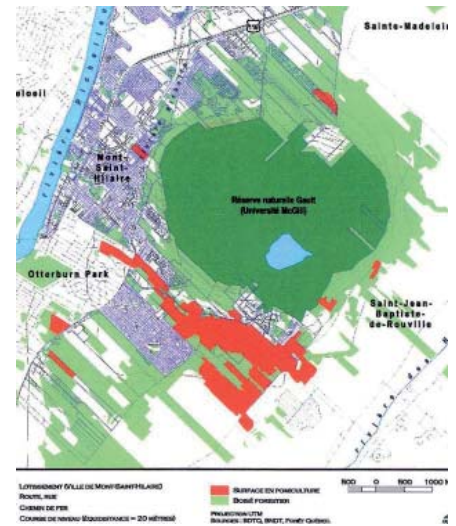
Origins of our present preoccupation with Urban Agriculture

Despite all the inconsistencies of the definition and the multifaceted nature of its origins, the preoccupation about Urban Agriculture has been gaining momentum rapidly in recent years.

The rising appreciation of Urban Agriculture by society has been generated by several issues:

Food security has been a concern for a long time but did not just reflect production locations nearby or in cities. Since the 1990s, awareness has been gaining ground that Urban Agriculture can contribute to food security in urban areas especially for the poorer segments of the population. The importance of Local food production has been recognized more and more and has led to the creation of collective farms, community gardens, Community supported Agriculture, rooftop gardens and many more types of food production. Upon the initiative of its citizens (29 000 signatures were involved) in December 2011, the City of Montreal has recently started a public consultation process on Urban Agriculture. Even at the provincial and national levels, some ministries of agriculture now begun to recognize the importance of urban fringe agriculture that was often considered as being of marginal importance in the not too distant past.

Urban Agriculture has today been identified as a **resource base** for food production that has a role to play even compared to nationwide food productions. Already in the 1960s, it was recognised that 55 % of the total value of agricultural production in a large country like Canada was located within a radius of 50 kilometres around cities of more than 50 000 inhabitants (and over 80 kilometres for cities and agglomerations over 100,000 in population). But for a long time, many governments more or less ignored this agriculture for being close to the city. However, with the issue of conserving land for agriculture for future generations and of reducing the costs of importing food from other countries or even continents this perspective had to be changed.

The need of creating good possibilities of **income for producers** has for a long time not been recognised adequately in agricultural land conservation programmes. The producers are the people that count in agricultural land conservation. If they are not able to generate an income that is adequate (and especially if it is not at least equal to that of their urban neighbours), many of them in the past have eventually abandoned their farm activity and land.

The **importance of the individual farmer** has frequently been neglected when dealing with Urban Agriculture, especially by spatial planners. Any concept on agriculture and its spatial development has to deal with the people that are working on the ground and take into account their individual problems and preoccupations. Dealing with Urban agriculture cannot be done by top-down interventions or policies but has to be co-constructed with the individuals and players that must work with the policy.

Urban Agriculture is also increasingly recognized for the multiple functions that it supports and that benefit urban society. These multiple functions include the conservation of cultural heritage landscapes, the conservation of the agricultural land resources, the conservation of water resources, leisure and tourist activities that can use the farming landscapes as resources, educational functions (e.g. farm visits by school children, running workshops of 'good' eating and food preparation practices), facilitating social integration (e.g. of immigrants of different cultural and ethnic origins). And, of course, the production of food products for the families involved as well as for the urban consumer.

Thus, Urban Agriculture has today to be considered as making a critically important contribution to sustainable development and it covers all components of sustainability: economy, society and environment.

Conclusions

Urban Agriculture has experienced a remarkable increase in the recognition of its importance in the last 50 years and even more so in the last 10 years. It is no longer a marginal issue dealt with by some specialists but is discussed and recognized by a wide range of segments of society.

Critical to research and policies that intend to deal with Urban Agriculture is to recognise the importance of the individual: the producers, their families, their businesses and the multiplicity of their motivations. Policies and jurisdictions for Urban Agriculture have to be capable of dealing with people on the ground, because this is where the society is constructed.

Impression of a Barcelona market

Working Group 1: Urban Agriculture definitions and Common Agrarian Policy

1.Keynote speech Prof. Henrik Vejre

This paper is a discussion paper aiming at structuring the discussion in WG 1. It raises a number of issues pertaining to the formal definition of urban agriculture and related concepts. It is not meant to be encompassing in nature, rather a point of departure for a discussion in the WG aiming at refining the definitions.

Prof. Henrik Vejre
University of Copenhagen

Defining the concept; urban versus rural

An initial question is of course where and when we may talk about urban farming/urban agriculture. An important first step is to discuss how we consider urban in contrast to the rural. Hence we may commence with some considerations of what is meant by urban in contrast to the rural per se.

In its origin the urban lifestyle is seen as opposing the rural, a paradigm already discussed by the ancient romans. The urban system deals with trade (often based on privileges and monopolies) and industrial production, education, the presence of legal systems and administration. In opposition the rural systems is basically associated with as the supply of food, energy and fibres. This supply is both for the subsistence of the rural community itself, and for the urban communities.

The classic urbanite defined him or herself as the opposite to the rural - the farmer. These two segments differ basically in education, economy, culture, though deeply interdependent. And the relationship has obviously changed over time – today this relationship is completely blurred by global trade, industrialization and specialization of the agricultural sector. Literally, the modern farmer produces to the world market, while shopping food in the local supermarket, with kids and spouse working or studying in the city.

Still, however, while using the term urban in relationship to farming must imply some contrast – the rural, whatever that may be today in the local or regional context.

Urban agriculture in history

From the earliest records of urban life we know that that some kind of farming activities has been part of the urban life. The presence of some kind of farming in the urban area, and in the immediate surroundings of the cities has been a common trait through history. In the pre-industrial cities the urbanites possessed domestic animals and managed small farm or garden lots.

Rural and Urban? Urban agriculture: exist as an opposition to rural agriculture

With the societies developing into the industrial area we experienced the well-known migration from rural areas to the fastly gowing cities. In Europe in the 19th century hordes of underemployed farm workers fled to the cities. In many cases they brought their rural identity and lifestyle with them, and the expanding urban areas began to reflect this. In European cities concepts such as garden cities, allotment gardens emerged, providing opportunities for the migrants to produce part of their food themselves. Cooperatives around industrial compounds also included orchards and vegetable gardens for the supply of food to the workers. Around the new industrial metropolises the farming sector diversified with a lot of the land concentrating on supplying the urban population with food. It is safe to say that the phenomenon pertaining to urban farming activities we observe today built on a long history, thought the motivation, farming model may have developed during the last decades.

In the following a number of approaches to urban agriculture are elaborated upon – not meant to be encompassing or definite, but again a point of departure for discussions.

Urban agriculture – a spatial approach

The spatial approach means that the definition of urban agriculture pertains to the location in space, in relation to the urban area. We may find farms and farming operations in virtually all urban contexts from the built up downtown areas to the open space of peri-urban areas. The gradual transition from urban to rural of course presents us with a definition problem – when does the urban shadow fade from the land, and where do we find the "deep rural". So the question is what is urban, and when does the rural space begin, and what is the limitations of the urban areas.

This may be illustrated with a transect, which represent a continuum from the urban to the deep rural. Genuine urban areas with built up areas may host rooftop production, old industrial areas may house vegetable production, guerilla gardens, whereas open space in the urban fringe may provide opportunities for real agriculture, albeit embedded in an urban fabric, totally oriented towards the immediate urban consumption needs. But also rural areas within the urban shadow may possess urban agriculture. In a definition context we may post various forms of urban agriculture along the spatial transect, hence subdividing the concept.

Urban agriculture – a functional approach

A functional approach to the definition of urban agriculture would take point of departure in the activities taking place. This would imply that urban agriculture includes farming operations in its widest sense taking place in any urban setting as mentioned above. This is regardless of the production aim, regardless of the entrepreneurial model, regardless of size and location (as long as it takes place in anything but deep rural areas).

UA takes place in and around urban areas.
Regardless of production aim, Regardless of market orientation, Regardless of externalities

Urban agriculture – an externality approach

The externalities of agriculture is a well-defined and well respected concept when describing the multifunctional character of farms and farming. Externalities comprise both positive (e.g. cultural landscapes, jobs, wildlife habitats, tourism) and negative (e.g. pollution, habitat destruction). When characterizing farm functionality or multifunctionality, most farms provide a basket of various goods and services, of which some may be contemplated more urban oriented than others. Urban agriculture could be defined as operations on farms where the functional profile particularly are aimed at urbanites. This would imply that urban farms have a functional profile where provision of services such as social activities, education, recreational opportunities, treatment of urban waste, are in focus, whereas farms providing deep rural cultural landscapes or wildlife habitats in rural areas cannot be considered urban. We will in this case face a number of challenges and order-cases. Farms operating farm tourism business far away from the city, but catering for urbanites – should that be considered an urban farm or not?

Urban agriculture - the market approach

A major division seem to appear between farms operating at the world market and farms oriented towards local (urban) markets with more direct-marketing approaches. A number of market approaches will be found in between, but nevertheless, urban agriculture may well include a market component, requiring that at least partly the market orientation is towards the local residents rather than the food chains of the mainstream food industry. A question is whether this definition should exclusively be reserved farms marketing in the nearest city/the local market.

Urban agriculture – considerations regarding origin

The spatial approach may also contemplate the way the were created or emerged:

Remnant areas are areas swallowed by, or remained in the city. Introduced are agricultural areas emerging in the city in shapes and forms that were not there originally. Agricultural areas may be planned directly or indirectly to be in the city or in the perimeter. Finally agriculture may be urban just because it is within the same administrative body as the urban area.

Urban agriculture provides urban related externalities:
leisure/recreation, education, waste treatment, welfare, food security, climate regulation

Synthesis

Hence, urban farming are operations taking place in or around the city, with a significant direct urban market orientation, with functional profile directed urban needs, regardless of origin.

Urban agriculture provide to a wide extent products to the local urban communities. Is not oriented towards the world market. Is not oriented towards other urban areas.

2. Work in progress

Gerassimos ARAPIS, Rolf BORN, Runrid FOX-KÄMPER, Hubert GULINK, Ulrich HÄPKE, Veronica HERNANDEZ JIMENEZ, Frank LOHRBERG, Filomena MIGUENS, Dona PICKARD, Lionella SCAZZOSI,

Chaired by:
Marian SIMON ROJO, Henrik VEJRE

3. results and tasks

Agenda items:

1. UA definition
2. Future steps and responsabilities

1. UA definition. Discussion thread

Specific preliminary contributions: Basic paper from Henrik Vejre, Lionella Scazzosi's ppt with compilation of UA definitions in institutional documents and text from Hubert Gulinck (to be attached)

Different components of UA were discussed:

1.1 Spatial components.

In terms of location UA takes place within the city and in its area of influence, although there was no agreement on what exactly this „area of influence" implies. More relevant is the understanding of the importance of the proximity to the city as a source of benefis and problems. UA implies **response and adaptation** to this urban-related location.

In terms of surface size, we consider that UA comprises broad ranges and there is no minimum size to call it UA (contrary to CAP).

1.2 Functional components, including purposes and externalities.

We understand UA as soil + substrate biological production (not only food, which is the main focus of CAP).

Our hypothesis and what we understand as a key contributions from the COST Action is to analyse UA in terms of response and adaptation to the conditions derived from its urban-periurban location. It has the potential to improve local conditions concerning:

- soil protection (soil heritage, soil of high value because of its fertility)
- water protection
- climate protection
- nutrient efficient use
- waste efficient use
- biodiversity
- social integration
- health
- education
- leisure
- cultural heritage/ local knowledge

The positive impact of UA on those items has to be demostrated and it will provideus with scientific based arguments to address different policies.

Agrocivism

1.3 Relations to the market

We consider both formal and informal sectors. Although not exclusive, its location implies an important potential of local market and innovation.

1.4 Stakeholders

We consider UA developed by professional and non professional farmers and we conclude that other actors have to be considered (--> WG2)

2. Future steps and responsabilities

2.1 Steps

In the short term we aim to deliver a
- Declaration. Position paper
- Definition draft
- List of policies which might be addressed by the COST Action

In the middle term, we aim to deliver:
- Dictionary of basic terms used in the COST action (based on the suggested wiki)
- Contributions to the UA Atlas (including the identification of items from 1.2. to be considered in the template)
- Scientific explanation of UA potentials (see 1.2)

2.2. Research questions
1. Prove "usefulness", 2. Identify constrains (CAP and other) / challenges 3. Address Policies. 4. Identify best practices for the different potentials
Goal: Come to a common comprehensive view.
UA useful for :

- Food security (quantity and quality)
- Agronomy (innovation / knowledge-based new activities)
- Ecology
    - Water protection
    - Soil conservation
    - Nutrient efficient use
    - Waste efficient use
    - Biodiversity
    - Climate
    - CO2 storage
-Economy
-Society
    - Social integration
    - Health
    - Education
    - Cultural heritage + traditional knowledge
    - Leisure

Research needs: Quality control of the products (soil, production, water…) and others that we have to identify

2.3. Tasks

TASK	PERSON IN CHARGE
T1.1 UA Institutional Definitions survey review. Synthesis	Lionella Scazzosi et al
T1.2 First draft definition. What UA is and what it could be useful for. Position paper concerning CAP	Ready for Barcelona. Agreement of all WG
T1.2 Barcelona Declaration	Henrik Vejre
T1.3 Understanding European/regional/local relations concerning decision levels. Competences	Veronica Hernandez
T1.4 List of policies related to the potentials of UA	Frank Lohrberg
T1.5 Survey CAP appliance to UA	Dona Pickard
Collection of legal instruments for cooperation between farmers/stakeholders (region or other level)	Ask WG2

The Declaration was meant as a „Barcelona Declaration" in order to adress the opportunities of UA and the CAP implications to a broader public. A position paper is helpful to circulate in autumn in order to inform the whole COST action about WG1's draft definitons.

2.4. Time schedule
First version of the documents (T1.1-T1.5): September 2012
Internal revision: Octubre 2012
First draft to be reviewed/commented by the rest of WG: November 2012
Revised version: December 2012
Official presentation?: Barcelona meeting

Working Group 2: Urban Agriculture governance and local policies

1. Keynote speech Prof. Mary Corcoran

Introduction

What do Michelle Obama, First Lady of the United States, Rowan Williams, Archbishop of Cantebury, Glen Hansard, award winning songwriter and Oscar winner and Queen Elizabeth II of Britain have in common? They are all proponents of urban agriculture to one degree or another. Obama heads up a national campaign to counter obesity, Archbishop Williams sees value in re-connecting ourselves in to the soil; when Glen Hansard moved to New York he rented an allotment as well as an apartment to keep himself 'grounded' and the Queen has moved with the times by growing potatoes on the palace lawn. All this is by way of saying that at the level of public culture and the popular consciousness there is a distinct shift in attitudes. We are becoming increasingly more aware about the quality of the food we eat, its provenance and traceability, its quality and the place of nature in our everyday lives. This COST Action offers us an opportunity to bring a European perspective to bear on urban agriculture precisely at a time when it has begun to recapture the public imagination.

Prof. Mary Corcoran, National University of Ireland, Maynooth

"Urban Agriculture is spreading across vacant and marginal land worldwide, embraced by government and civil society as source of food, ecosystem services and jobs, particularly in times of economic crisis."
N. McClintock (2010)

Locating urban agriculture

Urban agriculture according to Mougeot:

"Is an industry located within (intraurban) or on the fringe (periurban) of a town, a city or a metropolis, which grows or raises, processes and distributes a diversity of food and non-food products, (re)-using largely human and material resource, produces and services found in and around that urban area, and in turn supplying human and material resources, produce and services largely to that urban area" (2000, p. 10).

Urban agriculture is often juxtaposed to the global agri-food industry, which has brought with it industrialization, intensification and commodification of food production. Joanna Blythman, author of Bad Food Britain, argues that *"if we want our food to be truly safe, we must recognize that this can only be delivered by a radically different model of food and agriculture, one that is based on the largely untapped potential of small scale, much more regional production and distribution,"* (The Guardian, 5 June 2011).

Friedmann (2010) has argued that there has been an *'ecological turn'* within the food regime, which seeks to re-embed food systems in overlapping ecosystems, human settlements and cultures. She observes that in a highly urbanized and multicultural region such as Southern Ontario (Canada) a vibrant *'food shed'* has emerged in which a community of food practice links land use, social justice, and cultural creativity. In a similar vein, McClintock argues that UA can be understood as an attempt to overcome the metabolic rift- ecological (environmental degradation), social (commodification) and individual (alienation) that is at the core of capitalism in general, and the modern agri-food system in particular. According to McClintock it is an ethos of agricultural sustainability that informs UA practice. UA is viewed as *'restitutive'* agriculture because of its attempts to mend the metabolic rift. Furthermore, as a protective counter- movement, UA attempts to mitigate social rift by de-commodifying land, labour and food itself. Finally, alienation or individual rift can be addressed by re-engaging the individual in a non exploitative relations with his or her labour and nature.

Community garden, North Inner city, Dublin

Jackson's Prosperity without Growth, suggests a two pronged approach to redefining the relationship between growth, consumption and sustainability:

(1) Develop a new type of macro economics premised on the achievement of stability which places economic growth within ecological limits and reduces reliance on ever expanding consumer growth
(2) Shift the social logic of consumerism by providing real, credible alternatives through which people can act more sustainably, (cit. in Davies et al., 2010: p. 67)

Such a viewpoint takes as a point of departure not an economic or geographic determinism, but *'the view that nature co-evolves with, is partially constituted through and inseparable from, society'* (Sheppard, 2011 p. 52). Sheppard critiques the dominant model in economics which is predicated on rational actors adhering to foundational economic laws oriented toward a teleological end. He argues instead for an alternative developmental imaginary which attends to:

(1) the co-constitution of society,
(2) dialectical approach to theorising the agents and territories of a capitalist space economy and
(3) economic aspects of the social world are interwoven with identity, politics, culture etc (2011, p. 62).

In many respects, this is a call to reconnect with nature something that was an intrinsic part of the urban landscape for hundred of years.

A potted history of the allotment

For instance, there is a long European history of allotment gardening borne out of citizens' efforts to bring nature into the city (Meller, 2005). In the nineteenth century, working class communities and new immigrants to European cities survived by growing their own food. Plots had been provided for the poor in England since the eighteenth century mainly by the landed gentry and clergy (King, 2006). Agitation in favour of the granting of allotments can be traced to 1765 when *'cow and cot*

Skerries allotments, North County Dublin

schemes' were advocated for resettling the displaced poor, (Crouch and Ward, 1997: 46). The Enclosure Acts deprived the rural peasantry of access to land that was previously held in common. In the United Kingdom, the landed gentry were opposed to any attempts by parliament (the state) to regulate the provision of allotments. They preferred such provisioning to remain within the charitable realm.

Civil society groups were instrumental in setting up allotment garden movements in the nineteenth and twentieth centuries in Europe, (Meller, 2005). Allotments flourished during war-time periods. Urban agriculture reached a high point during the Second World War when citizens in Germany and in Britain were urged to cultivate all available land in order to increase the food supply. Social change in the latter part of the twentieth century, in particular the improvement of work conditions, the decline in poverty and the rise in the consumption and leisure industries transformed the function of allotments from self provisioning to a recreational pursuit, (Crouch and Ward, 1997). Just as family run, locally based agriculture went into decline, so too did allotment gardening. Allotments in the United Kingdom and Ireland came increasingly to be viewed as anachronistic, the provenance of a hardy band of retired males.

Bringing nature back in

The literature on urban agriculture nowadays predominantly focuses on its contribution to sustainability in cities of the developing world (Mougeot, 2005, 2006). Cuba is recognized as a leading proponent of alternative agriculture. According to Premat (2005) urban agriculture became particularly important in Cuba during the post-Soviet economic crisis one consequence of which was greater food insecurity. Urban agricultural initiatives intensified in the post 1989 period. The success of Cuban organic agriculture heralds not just the application of new agricultural technology but the transformation of social and spatial relations on the land, (Clausen, 2007). Creative mechanisms for promoting urban agriculture have flourished throughout Latin America. In 2001, for instance, in the wake of a severe economic crisis, one innovative strategy pursued in the city of Rosario, Argentina was to turn over public land and offer tax breaks to owners of vacant lots to let poor residents grow organic produce on their properties. The local authority also supplied tools, seeds and other

'Plastic house' Community garden, North City, Dublin

supports to the amateur growers, (Butler, 2006). Although the numbers engaged in urban farming declined as the city began to recover economically, urban agriculture has transformed the formerly vacant lots and dumps into green and productive spaces. The attraction of urban agriculture, however, extends beyond densely populated cities of the global south.

The recent economic crisis of capitalism has brought into sharp relief an emergent trend toward UA in developed countries. According to McClintock in recent years' the popularity of UA in the global North has surged and the discourse surrounding it has shifted from one of recreation and leisure to one of urban sustainability and economic resilience, (McClintock, 2010, p. 192). Evidence from the Greendex survey of 17,000 consumers conducted in 17 countries over 2008-2010 indicates an overall increase in environmentally friendly behaviour year on year. Environmentally friendly behaviour includes people's transportation patterns, household energy and resource use, consumption of food and everyday consumer goods, and what consumers are doing to minimize the impact of these activities on the environment, (www.environment.nationalgeographic.com). The survey also found that a significant obstacle to individual behaviour change is if government and industries do not also take action.

An UA trend has been underway for sometime in rustbelt cities such as Detroit, Michigan where a charitable organization, Urban Farming, has been pioneering a programme of transforming waste ground into vegetable gardens that can help feed the local population. Recent research suggests that optimal usage of publicly owned vacant lots of land in Detroit could feasibly produce significant quantities of fresh produce for the local population, (Colasanti and Hamm, 2010).

In New York City, community gardens which date to the economic crisis of the 1970s are viewed as an instance of counter hegemonic space that can arrest the decline of the commons implicit in the neo-liberal political project, (Eizenberg, 2011). In Berlin, 15 per cent of the city's land is used for urban agriculture. All 80,000 of Berlin's allotment gardens are in use with many people on a waiting list (Butler,

Community garden on vacant lot, South Inner City, Dublin

2006). There are approximately 200, 000 allotments in Britain. In 2009 a survey conducted by the National Society of Allotment and Leisure Gardeners found there were 59 people waiting for every 100, up from 49 per 100 in 2009, (Quarmby and Green, 2010). *"In some areas of the country, an NSALG member observed "you're more likely to get a burial plot before you get an allotment"*. Even in highly urbanized, high rise Hong Kong *'a small but growing number of urbanites are choosing to live off the land, a rare choice in a city where agriculture makes up less than 0.1% of the economy,* (Tsui, FT, June 16-17, 2012).

This trend is apparent also in the reference region profiles circulated to us. Resurgence in the city of Dublin in the inner city (community gardens) and on the perimeter (allotments).

What these disparate urbanites derive utility value in terms of production of food for consumption, there are also ancillary benefits that indirectly are derived from UA- the promotion of social capital, enhancement of community solidarity, the redefinition of public space, rehabilitative for marginal groups such as the homeless, prisoners, travelers and the inculcation of an alternative developmental imaginary built around the principle of sustainability. These issues have all been raised in the Reference Regions profiles of COST Action UAE, (intercultural garden in the Ruhr Metropolis, ecological allotments with older people in Vitoria-Gasteiz).

Governance

This 'ecological turn' creates new challenges for governance structures and local policies. Broadly speaking, governance is the sum of ways that affairs are managed in particular contexts (Latham, 1999 cited in Davies et al, 2010 p. 61). The state, the market and civil society have key roles to play in conceiving, developing and articulating policy. But we must be mindful that it is government that *"plays a vital role in shaping the cultural context within which individual choice is negotiated through its influence on technology, infrastructure, market design, institutional structures, the media and the moral framing of social goods"* (Jackson and Michaelis, 2003, p. 60 cited in Pape et al. 2011, p. 26).

Social practices in general and urban agricultural practices in particular are likely to be shaped not just by formal state policies but by a range of *"complex interactions between non-state actors and institutions from the private sector, civil society as well as the actions of societal groups and individuals"*, (Davies et al. 2010, p. 60). The freedom of manoeuvre that localities have, varies across the different cities, and depends very much on the institutional frames of reference, which constrain and enable options at different scalar levels (Kazepov, 2005, p. 26). We see this in the reference region profiles: for instance, UA has a very different manifestation and is supported differently by the local state in Barcelona, Madrid and Vitoria-Gasteiz. As is articulated by the Rhur Metropolis we need to work toward a form of governance that can balance urban development- urban agriculture and urban quality of life.

Allotments as Social Enterprise

But we also need to be cognizant of the constraints that exist in the context of the modern European urban regime. This is more acute in some contexts than in others but all must be seen in the context of the wider societal trends that have included key changes in the national state's economic activities:

(a) a shift from nationally determined, locally relayed, welfare oriented measures of economic and social redistribution to (supra) nationally facilitated, locally determined, wide-ranging supply-side interventions in the local and regional economy;

(b) a shift in economic governance mechanisms from the typical post-war bifurcation of market and state to new forms of network based policy coordination which cross-cut previous "private public boundaries and involve "key" economic players from local and regional as well as national, and increasingly, international economies; and

(c) an associated shift from an allegedly Fordist, Keynesian, welfarist policy paradigm to one stressing flexibility, innovation, and entrepreneurship, (Jessop, 1997, p. 35).

The degree of freedom of action of the urban regime is determined to a great extent not just by the local economic context, but also the socio-cultural context, and in particular, the relative strength or weakness of civil society. In my own country, for instance, local government is structurally weak and civil society relatively underdeveloped compared to its European counterparts.

But across Europe as a whole, we are witnessing a greater fluidity of urban policies, and the creation of a field of experimentation through which agencies and actors can discover what can succeed and what fails. This trans-national learning – a rare opportunity to share knowledge across borders – is a key element of the COST Action UAE initiative.

Community Garden, South Inner City, Dublin

Policy landscape

While each participating partner in this COST Action may share a common interest in and commitment to UA, how it is imagined, supported and implemented will owe much to contextual factors such as institutional structures, political culture and the relative power of (potentially) competing sets of actors within the urban system, (Corcoran, 2006). The impact of state planning and policy on urban agriculture is likely to be strengthened in terms of effectiveness if the responsibility for it is embedded in a single unit within government, or that a single unit has designated responsibility to integrate the various policy dimensions pertaining to UA. In practice, given the multiple policy domains in which UA is implicated, responsibilities may be dispersed rather than integrated. For instance, in Ireland there is no national policy on urban agriculture, it is a function devolved to local authorities who have an uneven track record in this area. Government agencies such as An Bord Bia which has a remit to develop and promote Irish food makes little or no reference to urban agriculture. Neither does Teagasc, the national agricultural research institution. So an important question is how do we ensure that UA has visibility or a policy home at that national and supra-national level?

A further problem is when policy lags behind practice, or when there is simply no institutional will there to support initiatives. Dahlberg (1994) noted that food policy councils (to ensure a more coordinated approach to food, health and agricultural issues) were established by some North American cities with variable success. He found that a strong supportive mayor, good links with staff in local government and competent FPC organizers all influence the degree of formal institutionalization that FPCs could achieve, (citied in Feenstra, 1997: p31). Feenstra goes on to argue that an explicit food policy articulated within local government makes the idea of a regional food system a more tangible reality for citizens and invites democratic participation, (1997: 34). Leadership, collaboration and a commitment to the politics of civic renewal are necessary to realize a local food system. Developing and extending UA will be predicated on individual motivation, societal reinforcement and enabling governance mechanisms.

Similarly, it has been argued that policy *'instrument mixes that combine information, incentives, social influences and institutional supports have been shown to be effective, in particular in cases where policy making remains inclusive and responds to social and political circumstances* (Gardner and Stern 1996; Stern 1999 cited in Pape et al. 2011, p. 29).The focus ought to be on increasing the capabilities of consumers, for instance, in terms of generating the capacity to produce and consume food stuffs through UA. Several of our participating cities such as Malmo and Geneva are well advanced in this regard. How can good or best practices be mainstreamed?

Information gathering

In addition to gathering and analyzing policy documents, interviewing policy makers, and consulting with civil society sector advocates a useful strategy would be to include in our analysis *'case study designs that focus on the social, cultural, material and political conditions'* prevailing in a particular locality and that are capable of being monitored to gauge *'the effectiveness of policy interventions using documentary and observational data'*, (Davies, 2010: p. 69). The collection of information within WG 2 will help us to address gaps in knowledge in relation to

(1) the role and significance of urban agriculture in different city contexts across the EU focusing on legislative measures, economic instruments and communicative strategies, (cf. Pape et al. 2011).
(2) Identification of specific policy goals and objectives
(3) Identification of policy styles as proactive/planned or reactive/ad hoc (cf Pape et al. 2011 p. 36)
(4) Policy coherence and variation across the designated urban areas
(5) Disjunctures between policy provision and practice in relation to UA
(6) Potential for scaling up urban agriculture in terms of support programmes, policies and governance models (see.wwwurbansummit.com)
(7) The role of civil society UA advocates in influencing the policy and public agenda
(8) The role of the private economy in UA provision.
(9) Public engagement with and responses to UA opportunities

Urban agriculture in Ireland from West coast to East coast

Policy objectives

It is useful for us to consider what impact we should hope to achieve through participation in WG2. Ideally we are trying to move the issue of UA up the policy agenda. To achieve that ambitious aim we need to:

- Promote greater reflexivity and intersectionality at policy level
- Bring stakeholders, entrepreneurs and policy makers into dialogue
- Link urban agriculture to sustainability agenda at all levels across civil society
- Review information provision
- Assess incentive and disincentives in relation to UA
- Identify 'good' practice rather than 'best' practice
- Advocate for more research in this area (Horizon 2020)

Finally, we could also consider whether there might be opportunities to develop a research proposal on the theme of Urban Agriculture and its potential to contribute to sustainaible lifestyles and the greening of the European economy. UA is implicitly referenced in the final FP7 Call which has just been issued across Europe.

SSH.2013.2.1-1 Obstacles and prospects for sustainable lifestyles and green economy in Europe

Technology is an important part of the transition to a more sustainable society but is not the only element that needs to change. To meet these global challenges also requires an economic paradigm shift and a switch in lifestyles. The move towards sustainable lifestyles and green economy requires a complete understanding of the nexus between institutional, technological, political, economic and societal factors to envisage a new paradigm. Assessing sustainability for the coming forty years and defining long term goals is crucial in order to determine the actions to be taken today. Large uncertainties exist (cf. future technologies, transformed infrastructure, changing demographics and behaviour patterns of the future population). Therefore, key research areas involve addressing demand side, reevaluating current growth models, finding ways to account for the major uncertainties, and examining in what ways such new paradigms and new consumer behaviours can help prescribe policy today.

References:

Blythman, Joanna.2006 Bad Food Britain. London. Fourth Estate.

Butler, Don. "A growing opportunity: urban agriculture takes root in empty lots and abandoned spaces" The Ottawa Citizen, June 18, 2006

Clausen, Rebecca. 2007. "Healing the rift" in Monthly Review, Vol. 59, Issue 1 (May)

Colasanti, K.J.A. and M.W. Hamm.(2010) Assessing the local food supply capacity of Detroit, Michigan in the Journal of Agriculture, Food Systems and Community Development, Vol. 1, Issue 2. accessed online www.agdevjournal.com, March 31, 2011

Crouch, David and Colin Ward. 1997. The Allotment: its landscape and culture. Five Leaves Publications, Nottingham

Dahlberg, K. 1994. Food policy councils: the exerprience of five cities and one county. Unpublished discussion paper, Dept of Political Science, Western Michigan University, Kalamazoo.

Davies, Anna et al. (2010) Sustainable consumption and governance: reflecting on a research agenda for Ireland Irish Geography, Vol. 43, No. 1, March pps 59-79

Eizenberg, Efrat.2011. "Actually Existing Commons: three Moments of Space of Community Gardens in New York City" in Antipode, Vol. 00, No. 0 pp 1-22

Feenstra, G. W. (1997) Local food systems and sustainable communities in   American Journal of Alternative Agriculture, Vol. 12 No. 1 pps. 28-35

Friedmann, Harriet. 2010. Chaing Food Systems Two Futures Abstract of paper deliverded at BSA Food Study Group Food Society and Public Health, London, 5-6 July.

Gardner, G. T., & Stern, P. C. (1996). Environmental problems and human behavior. Needham Heights: Allyn and Bacon

Jackson, T. (2009) Prosperity without growth London: Sustainable Development Commission.

Jackson, T. and L. Michaelis. 2003 Sustainable consumption and production, economic regeneration: policies for sustainable consumption. London: Sustainable Development Commission.

JESSOP. BOB, 1997. " The entrepreneurial city" in N. Jewson and S. McGregor (eds) Transforming Cities. Contested govern-ance and new spatial divisions. London: Routledge, pp.28-41.

KAZEPOV, YURI, 2005. "Cities of Europe. Changing Contexts, local arrangements and the challenge to social cohesion" in Kazepov, Y. et al. (eds) Cities of Europe. Changing contexts, local arrangements and the challenge to urban cohesion. Blackwell Publishing, pp. 1-42.

King, Brian. 2006. "A short history of allotments in England and Wales" http://www.b.king.dsl.pipex.com/ShortHistoryOfAl-lotments.pdf (accessed May 30, 2011)

Latham, R. 1999. Politics in a floating wolrd : toward a critique of global governance' in M. Hewson and T. Sinclair (eds) Ap-proaches to global governance theory. New York: State University of New York Press, 23-53

McClintock, N. 2010. Why farm the city? Theorizing urban agriculture through a lens of metabolic rift in Cambridge Journal of Regions, Economy and Society, 3, (2) pps. 191-207

Meller, Helen. 2005. Citizens in pursuit of nature: gardens, allotments and private spaces in European Cities 1850-2000. Ashgate: Aldershot.

Mougeot, L.J. A. (2000) Urban Agriculture: definition, presence, potential and risks in Bakker. N. et al. (eds) Growing Cities, growing food: urban agriculture on the policy agenda. A reader on Urban agriculture. Feldafing, Germany: German Foundation for International Development (DSE).

Mougeot, Luc. J. A 2006. In focus: growing better cities. Urban agriculture for sustainable development. Canada, IDRC.

Mougeot, Luc. J. A. 2005. Agropolis: the social political and environmental dimensions of urban agriculture. Earthscan/IDRC.

Pape, J. et al. (2011) Developing policies and instruments for sustainable household consumption: Irish experiences and futures' in Journal of consumer Policy, 34 ps 25-42.

Premat, A. 2005. " Moving between the plan and the ground: shifting perspectives on urban agriculture in Havana, Cuba" pps. 153-186 in Mouget, Luc J.A. (ed) Agropolis: the social and environmental dimensions of urban agriculture. Earths-can/IDRC

Quamby K. and T. Green (2010) Growing Pains, Prospect Magazine, July

Sheppard E, 2011 'Geography, nature and the question of development' in Dialogues in Human Geography, 1 pp. 46-75

Stern, P. C. (1999). Information, incentives, and proenvironmental consumer behavior. Journal of Consumer Policy, 22, 461–478

Tsui, E. High Rise to low rice. Financial Times, Sat/Sun 16-17 June, 2012

2. Work in progress

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Chaired by:
Mary CORCORAN

3. results and tasks

Urban agriculture working definition

- extended definition (including farming, rural-urban interface) and limited definition (urbanites engagement with agriculture)
- Continuum from urbanites engaging in agriculture to agriculture in urbania. We plan to develop a framework for analysis that will evolve around this continuum.
- We will take a local focus in the first instance.

Continuum approach

Urban Agriculture

Urbanites in Agriculture ←――――――――――→ Agriculture in Urbania

- *social cohesion*   - *production*
- *education*   - *ecology*
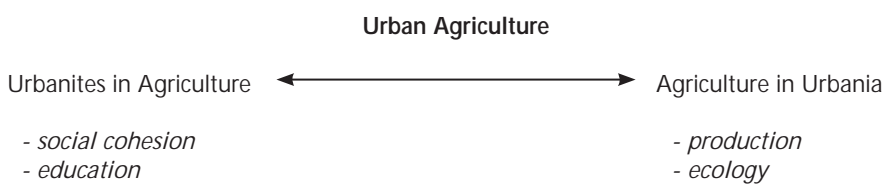
- Specify points on this continuum after some preparatory work; categorize case studies on the basis of agreed variables and visual methodology
- Categorise urban policies along the same dimension

Policy analysis

- Municipal level of analysis. (locally elected representation). In some countries the level may be more relevant above or below the municipality but in the initial review we will take the municipal as the bench mark.
- How does UA intersect with other policies at municipality level- education, social cohesion

Governance

- Governance is the relationship between the local administration and other actors or constituencies. We want to allow for open interpretation of this concept in the context of our WG.
- We want to identify types of policies and governance structures that can be found in the reference regions?
- Who and what are the key governance actors in this reference region? Identify the 'eldsjel' in the reference regions.
- Are there good examples of governance which link 'top down' or 'bottom up' approaches?

Tasks

- Each member responsible for collating information on their reference region
- Upper limit of 3,000 words. Photos and diagrams welcome, by October 15, 2012.
- The chair compiles a preliminary report which is a collation of individual inputs by October 31, 2012, and seeks clarification or makes suggestions for further development.
- Every member reads compilation and revises own input in light of reading and makes further suggestions on the report.
- We may generate common headings at this stage.
- Second version finalised by November 30, 2012.
- To be circulated to other Working Groups for comment, feedback in December 2012.
- This document to form basis of next meeting, Spring 2013.

Working Group 3: Entrepreneurial models of Urban Agriculture

1. Keynote speech Prof. Wolf Lorleberg

**Prof. Wolf Lorleberg
University of applied sciences South-Westphalia**

Introduction

Urban Agriculture is a phenomenon that can be observed everywhere in the Ruhr area Soest is located near to. In cities like Essen, in the centre of the metropolitan area Urban Agriculture can be found in the neighbourhood of the urban dwelling.

When looking at Urban Agriculture worldwide a large diversity of objectives, stakeholders and approaches can be identified. The objective of COST Action Urban Agriculture Europe and of Working Group 3 should be to find out if we can find forms of Urban Agriculture that can be called specifically European by looking at the practices in the participating countries.

This search should start off with a broad understanding of Urban Agriculture and its benefits. Urban Agriculture on a worldwide basis contributes to food security and the creation of small farm incomes, as well for existing traditional farms as for newly founded farming that can develop from subsistence to market production. Fig. 1 shows South-African small-holder farms that are undergoing this development.

The importance of these benefits of Urban Agriculture may be considered less important in Europe but recently is gaining importance in European countries facing economic crisis.

In developed countries Urban Agriculture stands as well for social benefits: Improving life quality in urban areas, enabling neighbourhood and social integration and being a promoter of intercultural communities are effects frequently sought in Urban Agriculture projects. This approach to Urban Agriculture has a long history in Europe as can show the examples of old community gardens created for and by

Fig1: South-African small-holder farms (photo: W.Lorleberg)

Fig 2: old community gardens created for and by mining workers in the Ruhr area (photo:W.Lorleberg)

Fig 3:cereal fields in neighbourhood of Zeche Zollverein in Essen (photo: B.Pölling)

Fig. 4: ostrich production

Fig. 5: farm golf

mining workers in the Ruhr area, that were used for self-subsistence but as well for leisure and a place for well-being. This tradition is still alive and has been renewed by new forms of urban gardening projects in recent years.

A third important group of benefits generated by Urban Agriculture can be found in the creation and management of human-made landscapes. Agro-biodiversity, recreation areas and open spaces in urban setting can be maintained and supported through the activities of Urban Agriculture. These landscapes are providing experiences that contrast the urban life. Fig. 3 may give an impression of this showing cereal fields in the immediate neighbourhood of the UNESCO World Heritage site Zeche Zollverein in Essen (Ruhr).

But when talking of all these benefits one thing has to be borne in mind: Urban Agriculture entrepreneurs are the most important group to create them.

Above all, Urban Agriculture is the business of professional farmers and horticulturists who generate considerable value added, create jobs and only in a third place are contributing to society by the externalities of their work.

These professionals are facing serious challenges when working in urban areas: ongoing land consumption increases concurrence for arable land, land prices and leases are rising as well as the production costs. Furthermore the acceptance of modern farming methods often is low in urban areas. In Germany e.g. recent developments like the concurrence of food vs. biofuel production are amplifying these problems.

Besides being a challenge the urban situation can as well be an opportunity for farming professionals to develop new successful entrepreneurial models that cover a large diversity of products and services. Breeding of exotic animals (ostrich production Fig. 4) and farm golf (Fig. 5) are only two examples that can be found in the Ruhr area. All participation countries and reference regions will have their own examples of innovative entrepreneurial models that can be found on the field.

Tasks, objectives and deliveries of Working Group 3

To know and to share the different entrepreneurial models that have developed in Urban Agriculture throughout Europe is a main objective of COST Action Urban Agriculture Europe. COST UAE aims

- to stimulate new professional practices in all participating countries
- to help stakeholders improving their business models
- to support advisory services in agriculture
- and to envision new cooperation between the private and public sectors in entrepreneurial models

Working Group 3 has to give an important contribution to these objectives. Its main working tasks will be

- Collecting, analysing and evaluating entrepreneurial and other models/ approaches of Urban Agriculture in Europe (e.g. educational models, social orientated models like community gardens, collective gardens, new allotment models…)
- Describing income potentials, ecological and social contributions
- Determining success factors for different models/approaches
- and finally publishing a catalogue of entrepreneurial models presenting their characteristics, success factors and income potentials.

The results of this work will contribute to the European Atlas of Urban Agriculture and be accessible to a broad public in the Web-Atlas that presents facts sheets and case studies elaborated by Working Group 3.

Working Steps

The Working Group will decide how to proceed during the first Working Group meeting. As a **first step** the presentations of the national WG members will give an overview of the entrepreneurial models and other approaches to Urban Agriculture. A characterization or classification of these models will have to be done in interaction with Working Group 1.

In a **second step** the WG will have to discuss how information on additional case studies can be collected and which date should be included. The following aspects are only a first selection of what has to be considered: geographical data, technical (enterprise) data (area, working force, production units….), agro-ecological conditions, market conditions, unique Selling proposition (USP), Success factors, … .

As a result of these discussions a standardized questionnaire for data collection and a standardized fact sheet for the description and evaluation of the case studies should be developed. The evaluation should consider success factors, income potential, social contributions (e.g. jobs), ecological contributions (i.e. „non-paid" contributions) of the described models.

Once these foundations have been laid the Working Group can start the realization of case studies. In addition to the contributions from the WG members other COST events like Short Term Scientific Missions or Training Schools can as well contribute to the collection of case studies.

2. Work in progress

Oskar ALFRANCA BURRIEL, Gunilla ANDERSSON, Chris BRYANT, Christine HERKSTRÖTER, Galina KOLEVA, Bozena MATYSIAK, Markus MERGENTHALER, Bernd PÖLLING, Andreas SPORNBERGER, Jan-Willem VAN DER SCHANS, Thomas VAN ELSEN, Helene WEISSINGER, Biancamaria TORQUATI,

Chaired by:
Wolf LORLEBERG, Pedro MENDES MOREIRA,

3. results and tasks

I. Preliminary remarks about the role of WG 3 in COST UAE
(source: Memorandum of Understanding MoU)

Urban agriculture has extensive public interest, but it is not a sector of the public economy: the most important stakeholders of urban agriculture are the farmers that run businesses, often family owned, in urban and peri-urban areas. Existing research has proven that the entrepreneurial models of UA differ in many ways from those in rural areas. This is partly due to issues urban farmers have to cope with but also to opportunities they can use in offering far more than classic food products to the market (like environmental and public services, pedagogic and leisure activities, special products etc.). WG 3 will analyse and evaluate the entrepreneurial models that have developed in the partner countries through an inventory of case-studies and establish a catalogue presenting their characteristics, success factors and income potentials amongst other aspects, to allow knowledge transfer among the partner countries that create innovation (MoU p.15)

In short, WG 3 will concentrate within a bottom-up-approach on the economic, ecologic and social aspects of entrepreneurial models of UA professionals. Their market opportunities and their income potential will be assessed. Using a catalogue of entrepreneurial models of UA in Europe the WG will define the success factors for innovative agricultural businesses in urban areas (MoU p.12).

The tasks and objectives according to the MoU are:

- Inventory of case-studies on entrepreneurial models in Urban Agriculture
- Analysis, classification and evaluation of entrepreneurial models
- Publication of catalogue of entrepreneurial models presenting their characteristics, success factors and income potentials (120312 COST MC01 presentation RWTH).

The overall objective of the catalogue of entrepreneurial models is to stimulate new professional practices in all participating countries, improve own business models of stakeholders, support advisory services and envision new cooperation between the private and public sectors (PPPs; MoU p.10).

It is important to underline, even if the title of WG 3 is focusing on "entrepreneurials and professionals", that the group is open to a wide range of urban agriculture initiatives and will include also models, which are not aiming at first on economic benefits.

II. Preparation of the 1st workshop meeting
To start the action in the group, four weeks before the Aachen meeting an initial letter was sent by the chair to the members and further interested persons of the working group with a proposal for working steps and subjects for discussion (see annex). Further a keynote speech of the chair and first presentations of UA-cases in different countries were prepared (see list of references).

III. Presentations, discussed subjects and first results
After the personal presentation of persons, guests, institutions and their specific interests and activities in urban agriculture the work started with working step 1 "Getting an overview of UA entrepreneurial and other models" with first case studies from partner countries.

For Bulgaria Galina Koleva and Dona Pickard (University of Sofia) reported the case of the eco-farm "The Fir-Tree", which focusses on the preservation of old animal races and events for urban volunteers, who are recruited from higher income classes.

From Portugal the research group of Pedro Mendes-Moreira, D. Santos, F. Miguens and M. Malta (University of Coimbra) showed some cases of urban agriculture as an instrument of improving supply and social integration of urban citizens, which are affected by the economical crises. A great contribution can be realized by

urban agriculture in biodiversity conservation, so as traditions and empirical knowledge – serving in this was as a collective memory of the society.

Luis Maldonado, Luis Seguí and Oscar Alfranca from Spain (University of Catalonia) informed about agriculture in a specific protected area like the agricultural parc Baix Llobregat (Catalonia), which is now under threat of new urban investment plans. The strategy of producers in the area is focussed on professionalized "premium" production of old legume and fruit varieties for the Barcelona market.

From Italy Lionella Scazzosi, Paola Branduini, Biancamaria Torquati and Giulia Giacchè (Universities of Milano and Perugia) reported results of two research projects, which surveyed farming in urban and perirurban areas of Umbria and the Lombardy. The rich data will contribute to the categorization / classification of different land use systems, cultural landscapes and socio-economic types of farms.

The cases of urban agriculture in Vienna (Austria) were presented by Helene Weissinger and Andreas Spornberger (University of Vienna), which showed a considerable dynamic and increasing demand for community gardens, food-buying cooperations and other forms of Community Supported Agriculture (CSA).

Urban and periurban agriculture realized by professional farmers were reported by Kristine Herkströter, Wolf Lorleberg and Marcus Mergenthaler (University of Applied Sciences South-Westfalia) with examples for the German federal state of North Rhine-Westfalia and by Rolf Born, Andrea Claus-Krupp and Bernd Pölling (Chamber of agriculture North Rhine-Westfalia) especially for the industrial region "Metropolis Ruhr". Their examples showed, that UA entrepreneurs have to face serious challenges like ongoing concurrence for land, increasing production costs and low acceptance of modern production methods, but are also able to develop new successful business models with positive social and ecological externalities.

Social Farming in the framework of multi-functionality and increasing demand for social integration of disabled persons and basic education for children was presented by Thomas van Elsen (University of Kassel). His experiences show, that organic farms are due to their diverse structure and more handwork especially suited for this approach, and engaged actors often show despite financial conditions a high intrinsic motivation.

Gunilla Andersson (City of Malmö) reported from Sweden the approach "Odla I stan" (grow in the city), a working cooperative, which is specialized in urban social growing and urban beekeeping in small scale and caring for different urban farming projects in the city area. She showed also the case of a guerilla guardening group, which is on the way to transform to a small business for urban garden planning and design.

Innovative new business models of city-orientated multi-functional farming were shown by Jan Willem van der Schans (University of Wageningen), which include event and conference facilities by professional farmers, investments of citizen groups in legume fields and aquaculture units in city areas or so called place making – where horticulturists are paid by real estate development companies for gardening in areas, which are planned for family house construction. Urban agriculture can play in general an important role in "brown site redevelopment" or new utilization of industrial fallows.

After the presentation of first case studies the group entered in discussion about a possible classification / categorization of different models (working step 2) – which could be a base for the planned catalogue of UA models. It was decided first to look for distinctive basic components of UA production units in a very general way, which considers the whole diversity of UA activities (also mainly ecologically or socially motivated models) and which allows to set up later a typology of urban agriculture approaches.

A first base of a framework was offered by Christopher Bryant (University of Montreal). He suggested to distinguish following main elements:

- Management / entrepreneur
- Labour
- Motivation
- Markets
- Capital
- Products & services produced
- Organisation of the unit
- External environment

Further – and integrated in the above mentioned main elements – geographical data, informations about agro-ecological conditions, way / technology of production, marketing channels, unique selling propositions (USP), success factors, income potentials, social and ecological contributions (i.e. non-paid contributions) should be considered. For focusing the economic dimensions, Jan Willem van der Schans suggested to describe / define also the value proposition (including a "mission statement") and the basic business approach of each analyzed UA case. The discussion, how ecological and social contributions of UA approaches can be evaluated, offered some first ideas for possible indicators and for questions to the UA actors.

Based on the framework it is now planned to develop an interview guideline (may be further a standardized questionnaire; working step 3) for field visits of UA case studies within the next COST activities. An initial proposal will be set up by the chair and send around to all WG members, which then can comment and complete it. The interview guideline/questionnaire should be ready for the next COST Action Meeting and should be tested in first project visits, whether it is functional or not. Further the members will communicate who, how and where they will take part in next activities and realize first case studies in the field.

References:

The reference presentations were held in the working session of WG 3 and have been made accessible to all COST UAE participants by download.

Andersson, G. (2012): Odla I stan – Grow in the city. Presentation on 1st Working group meeting of COST Urban Agriculture Europe, Aachen, 11th of July 2012.

Born, R., Claus-Krupp, A., Pölling, B. (2012): Urban agriculture models: Examples from "Metropolis Ruhr". Presentation on 1st Working group meeting of COST Urban Agriculture Europe, Aachen, 11th of July 2012.

Bryant, C. (2012): The discovery of Urban Agriculture. Presentation on 1st Working group meeting of COST Urban Agriculture Europe, Aachen, 10th of July 2012.

Bryant, C. (2012): Components of production units of potential use to urban agriculture. Presentation on 1st Working group meeting of COST Urban Agriculture Europe, Aachen, 11th of July 2012.

Herkströter, K., Lorleberg, W., Mergenthaler, M. (2012): Entrepreneurial models of Urban agriculture. Presentation on 1st Working group meeting of COST Urban Agriculture Europe, Aachen, 11th of July 2012.

Koleva, G., Pickard, D. (2012): Urban Agriculture Eco-Farm "The Fir Tree" – Peri-urban Sofia. Presentation on 1st Working group meeting of COST Urban Agriculture Europe, Aachen, 11th of July 2012.

Lorleberg, W. (2012): COST-Action Urban Agriculture Europe (UAE) Working Group 3: Professionals and entrepreneurial models of Urban agriculture. Presentation on 1st Working group meeting of COST Urban Agriculture Europe, Aachen, 10th of July 2012

Lorleberg, W. (2012): Working group 3: Professionals and entrepreneurial models: First results. Presentation on 1st Working group meeting of COST Urban Agriculture Europe, Aachen, 11th of July 2012.

Maldonado, L., Segui, L., Alfranca, O. (2012): Professional and Entrepreneurial models of Urban Agriculture. Presentation on 1st Working group meeting of COST Urban Agriculture Europe, Aachen, 11th of July 2012.

Mendes-Moreira, P., Santos, D., Miguens, F., Malta M. (2012): Urban Agriculture in Portugal. Presentation on 1st Working group meeting of COST Urban Agriculture Europe, Aachen, 11th of July 2012.

Scazzosi, L., Branduini, P., Torquati, B., Giacchè, G. (2012): Contribution and experiences from Italy: Umbria and Lombardy. Presentation on 1st Working group meeting of COST Urban Agriculture Europe, Aachen, 11th of July 2012.

van der Schans, J. W. (2012): Entrepreneurial models in urban agriculture. Presentation on 1st Working group meeting of COST Urban Agriculture Europe, Aachen, 11th of July 2012.

van Elsen, T. (2012): Social farming – advantages, drawbacks and future perspectives in Germany. Presentation on 1st Working group meeting of COST Urban Agriculture Europe, Aachen, 11th of July 2012.

Weissinger, H., Spornberger, A. (2012): Agriculture in Vienna: Farmers' and consumers' initiatives. Presentation on 1st Working group meeting of COST Urban Agriculture Europe, Aachen, 11th of July 2012.

Working Group 4: Spatial Visions of Urban Agriculture

1. Keynote speech Prof. Luis Maldonado

There will be three themes running to the presentation that are relevant to what I want to speak about.

     I. changes in cities and nature;
     II. our previous steps in relation to the European Landscape Convention, the approved MoU and to other Working Groups
     III. a short comment on representation.

I've finally decided not to use images or "spatial visions" of Urban Agriculture to hold my words. All of us have sent last month a lot of images representing our own idea of Urban Agriculture. I will not close the discussion alone. All what I'll explain refers to or can be enlightened with all them.

**Prof. Luis Maldonado,
Universitat Politècnica de Catalunya**

I.

First, I want to remember and to share something that, more than new, uses to be forgotten. I'm sorry if it's obvious for most of you but I think it's a good introduction to the work we start today.

Back to Barcelona and thinking about how to face the beginning of our group I missed to have mentioned at Brussels that what we are looking for, let's say to put Urban Agriculture again on stake in our cities, planning or development agenda is not new. Only recently, in terms of human history, agriculture has been isolated from town.

More or less, thirty two thousand years ago somebody painted these horses at the bottom of a cave.

Image 1: Horses at Megaloceros gallery, Chauvet Cave, southern France (Circa 32000 B.C.),

(Ministry of Culture and Communication of France, Regional Bureau of Cultural Affairs, Rhone-Alps. Regional Department of Archaeology).

We don't know what happened, what kind of brain or hands were able to do that. *"They were (almost) animals drawing other animals, their relatives."*, (Azúa 2010, p.29-38). For the first time somebody placed himself "out" of nature and tried to explain something. We call it art but we don't know what it was. Maybe it was art, maybe religion or a sort of knowledge to be passed on (e.g. what kind of animals do they have to hunt). All we are heirs of this mind. Western or, better saying, European culture is specially related to this heritage: the study and the understanding of everything placing ourselves out of nature, out of the world. All science was based on this moment.

But today our vision and our way of placing ourselves in the world had changed over. All you have seen it. There is no better image to express our present position in/between nature than the celebrated first color vision of the earth alone in space.

Image 2: "Earthrise"
NASA, Apollo VIII (William Anders 24/XII/1968)

Out of the world, this image, that fully belongs to us because no human in past centuries had ever seen it before, allowed us to understand how alone and how weak we are. The Green Paradigm and the sustainable discourse of ecological health, social justice and balanced economic prosperity began here. *"Today –Prigogine said-science allows us to feel at home in the bosom of nature"* (Prigogine, Ilya in: Bonell 1999, p.122). We all are, again, *"just nature"* (Bonell 1999, p.13).

Cities are among most amazing human creations but today, after the urban sprawl of the last thirty years, have become a patient. In an increasingly urban world most of them -the place of culture- are today *"dissected in different committees of specialists who elaborate its life-support systems"* (Hillman 2006, p.18.), an unbodied and absent-minded stress of nature. Calvino described them as *"a sole Trude which does not begin and does not end – only the name of the airport changes."* (Calvino, Italo, in Hillman 2006 p.18).In City and Soul, Hillman explains how *"some part of the human soul continually imagines a better, truer life 'back in nature"* (Hillman 2006, p.21). But in the remains of our protected nature *"we are visitors only welcome as guests, if at all."* (Graben Competition, Berlin, 1994).

Our citizens use to identify nature with agriculture. We are profoundly mistaken. Agriculture, from Latin ager–culture –literally: to take care of the land- is still depending on natural processes but as natural as our cities. Surprisingly, agriculture has replaced the city as the place of memory. Agriculture's seasonal movements and works bring us to waves and tides, to the memory of the missed nature. We only need to admit that human nature is urban. And then, that cities and agriculture belong to the same, both are human, both are our nature.

In his book The Idea of a Town, Joseph Rykwert explains how linked were, originally, the myths and the rites that ensured a proper foundation of a new town with all those who belong to the act of farming the land. At the prologue, while seeking for a new definition for the city, he quotes Thucydides to remember the words of the famous general Nicias who, while standing on the beach back to the walls of Syracuse said to the citizens of Athens before the battle:

" *You are yourselves the town, wherever you choose to settle, (...) it is men that make the city, not the walls and ships without them.* " (Thucydides in: Rykwert 1988).

Seemingly contraries, when we join urban and agriculture, we go back to the essence of a balanced settlement of the world.

II.

The mentioned sustainable principles are on the basis of the European Landscape Convention (Florence, 2000) who aims to promote landscape protection, management and planning by means -among others- of awareness, training and education, identification and assessment. Landscape is defined as a key element and a basic component of European natural and cultural heritage. But the convention makes no difference. Everything is or affects landscape understood as a kind of top hierarchy eyewitness of natural and human processes. Speaking about his method to face landscape work in such a complex situation Ian McHarg compared science with a shattered egg. *"All the fragments lie scattered on the ground. Every field of knowledge studies a piece and tries to restore the previous situation but Information fragmented is of no use to anybody"* (McHarg 2007, p.31). *"Most crucial is not how much we know of some one thing, but rather that we know enough about many things."* (Folch, Ramón: *"We ask them to group together all these independent spectral views of the universe into one whole system"* at, Lynn Margulis, James Corner, and Brian Hawthorne ed, McHarg, p.89).

One of the achievements of the approved Memory of Understanding for COST Action Urban Agriculture Europe is how it easily focuses on Urban Agriculture, moving on a new point of view for a common place to work. The scope of the Action is, anyway, so wide.

This necessity leads us to another question. How should we represent all this?

III.

Maybe the most challenge for the group is to show –to give a vision- of the action work. Nothing of all what was explained today make sense if we are not able to clearly explain it with images. Images are today our main common language. We have a lot of experience -500 years- explaining space but how can we explain time? How to explain processes, connections, perception or possible changes, back and forward... All new technologies developed in past fifteen years give us an enormous capacity to generate images but how can we envision information?

All of us know too, this beautiful picture.
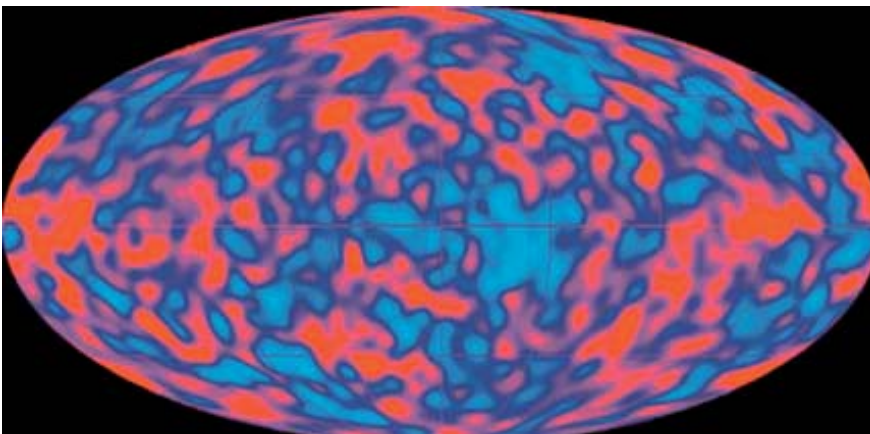
Image 3: Big Bang microwave background radiation 300.000 years later,
George Smoot (COBE Satellite, 1992)

And nobody believes the Big Bang three hundred thousand years later to be pink or pale blue.

But it works.

At Earth-Mapping Casey explains that *"Cartography has become increasingly rigorous and demanding to the point that the pictographic and topographic elements that were such important features of earlier maps (e.g. in late portolan charts and in sixteenth –and seventeenth- century Duch world maps) have been virtually eliminated. Even the purely decorative components of maps, so widely employed in the most diverse cultural settings, have ceded place to strictly utilitarian symbols that have to do with measurements of space rather than with the landscape of a place: sober signs for distance and scale have replaced images of colossi and cities, gods and mountains."* (Casey 2005, p.xiii).

While speaking about representation and present means as Geographic Information Systems (GIS) and describing it as just points, lines and polygons my mind drifted away to this image. I've begun with an old image and I'll finish with another one.
This picture and symbol map is the earliest work of this kind yet known. In it, two kinds of elements that were not inscribed at the same time call for two different kinds of viewing. On one hand, we can identify dots, points and polygons representing paths as seen from above and square fields closed with fences or walls with possibly trees and supply wells or springs inside. On the other, we can clearly make out some stairs and houses seen in profile and finally animals and sticky representations of people, even of children playing.

Even of children playing…

We use to identify the first and the last images, the old ones I've shown, with art; and the second and the third with science but, why not thinking about the old ones as "science" and about the others as "art"? Why not? If we want to offer new spatial visions and approaches on Urban Agriculture we'll need to produce images able to integrate all people interested and not only those who, as me, were trained on space.
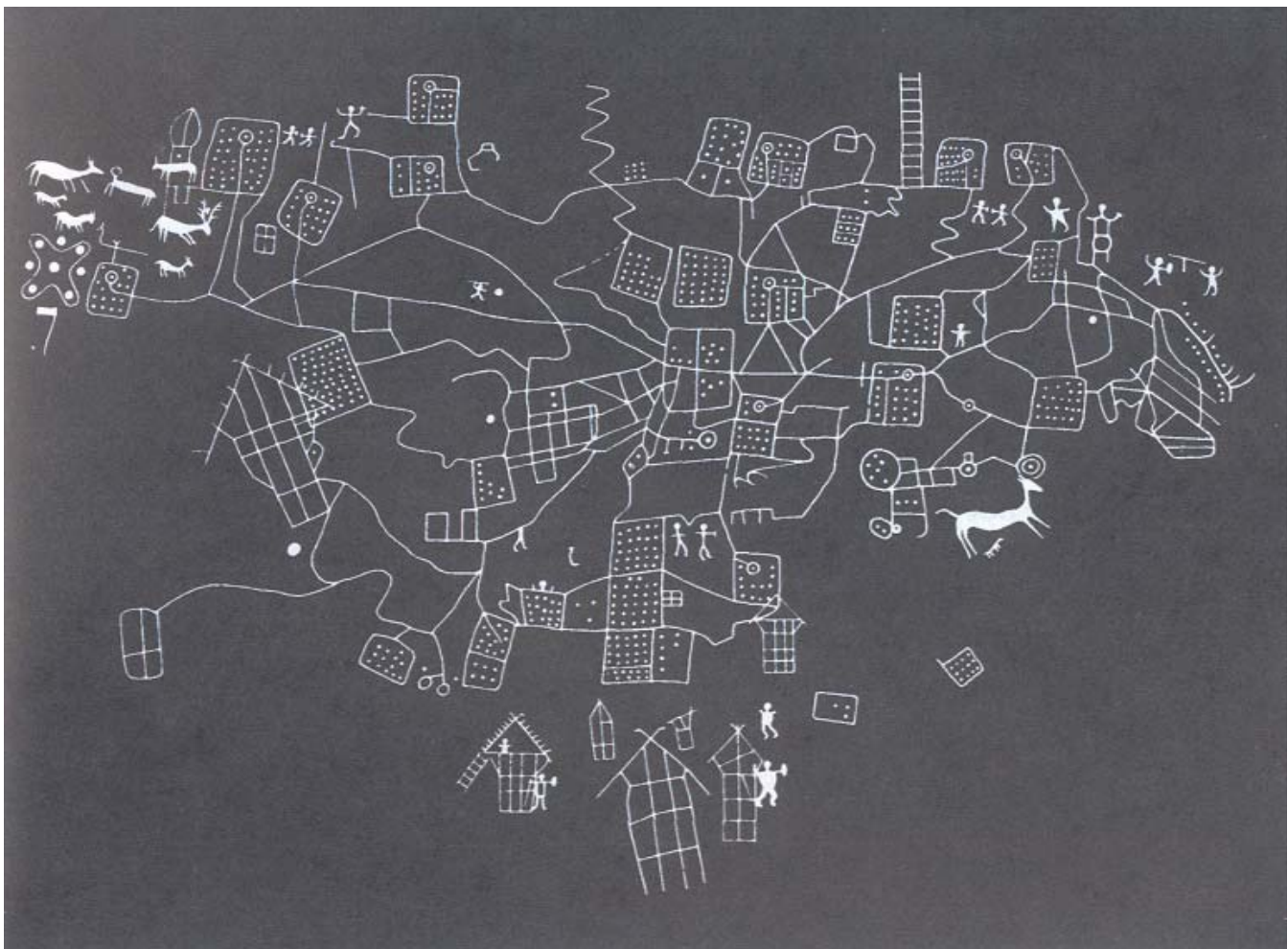
Image 4: Bedolina petroglyph, Capo di Ponte, Valcamonica, nothern Italy (Circa 1500 B.C.)

(Edward S. Casey: Representing Place. Landscape Painting & Maps, Minneapolis (MN), University of Minnesota Press, 2002, p.133.Fig. 7.4.)

References

AZÚA, FÉLIX DE, Autobiografía sin vida, Barcelona, Mondadori, 2010.

BONELL, CARMEN, La divina proporción. Las formas geométricas (1994), Barcelona, Ediciones UPC, 1999.

CASEY, EDWARD S., Representing Place. Landscape Painting & Maps, Minneapolis (MN), University of Minnesota Press, 2002.

CASEY, EDWARD S., Earth-Mapping: artists reshaping landscape, Minneapolis (MN), University of Minnesota Press, 2005.

HILLMAN, JAMES, City & Soul, Uniform Edition of the Writings of James Hillman, Vol.2, Putnam (CO), Spring Publications, 2006.

MARGULIS, LYNN; CORNER, JAMES; and HAWTHORNE, BRIAN ed., Ian McHarg: Conversations with Students: Dwelling in Nature, New York (NY), Princeton Architectural Press, 2007.

RYKWERT, JOSEPH, The Idea of a Town: The Anthropology of Urban Form in Rome, Italy, and The Ancient World, Cambridge (MS), The MIT Press, 1988.

2. Work in progress: Images of working process

Luke BEESLEY, Paola BRANDUINI, Dong-Min CHANG, Charlotte CHOWNEY, Agata CIECZEWSKA, Ciera CROWELL, Laurent DAUNE, Nuria FONT, Georgi GEOR-GIEV, Michael HARDMAN, Sylvie PARADIS, Martina PETRALLI, Xavier RECASENS, Daniela SANTOS, Siri SVENDGARD-STOKKE, Barbara SZULCZEWSKA, Axel TIMPE, Esther VEEN,

Chaired by:
Lilly LICKA, Luis MALDONADO

3. results and tasks

1 Previous work

To start the action of the group at the 1st workshop meeting at Aachen every member and other people interested received a letter by the chair of the action focusing the tasks according to the approved MoU. It included a call for presentations to enhance and exchange knowledge about UA with a special focus on UA-landscape, its functions and physical appearance. The letter proposed also a list of topics to be discussed.

2. Agenda

The topics to be discussed based on the presented projects were:

- Which aspects can be extracted from the examples, aiming at the tool-box, at a common analysis, gathering and explanation of projects around UA through the means of research by design.
- Which alternatives to the tool-box could be developed as an adequate means for the COST purposes.
- How to proceed with the suggested working methods as training schools, design workshops on possible reference regions or for other study cases
- Contribution of WG 4 to the European Atlas on Urban Agriculture and Interactions with other COST WGs
- Timetable and workplan for the next WG meeting or other means.

3. Presentation of research / planning projects and design studies:

The reference presentations were held in the working session and have been made accessible to all COST UAE participants by download.

'Urban Soil Manufacture'.
Luke Beesley (The James Hutton Institute, United Kingdom)

'Contributions and experiences from Italy: Milan and Perugia'.
Paola Branduini (Politecnico di Milano, Italy)

'Urban Agriculture: Our institutions interest…'.
Charlotte Chowney, Laurent Daune (HEPIA: Haute école du paysage, d'ingenierie et d'architecture de Genève, Switzerland)

'Building and Designing Portuguese Urban Agriculture'.
Daniela Santos (Instituto Politécnico de Coimbra – Escuela Superior Agrária de Coimbra (ESAC), Portugal)

'Guerrilla UA in the English Midlands: The Story of Three 'Troops'.
Michael Hardman (Birmingham School of the Built Environment, United Kingdom)

'Agriculture on Public Spaces', a research proposal; 'Productive Land for Housing Estates', a thesis; 'Glimps on Suburbia: Vision Rheintal Austria' a design commission.
Lilli Licka (ILA-BOKU GVienna, Institute of Landscape Architecture, Austria)

Agriculture as a Visible System along the Mediterranean Corridor at the Metropolitan Region of Barcelona'.
Luis Maldonado, Xavier Recasens (Universitat Politècnica de Catalunya, Spain)

'Carmona, Andalusia (Spain)'
Núria Font (Universidad de Sevilla, Spain)

'Urban agriculture: Urban & Landscape Planning in France'
Sylvie Paradis, Isabelle Duvernoy (Ecole d'Ingénieurs de Purpan/INRA (Institut National de la Recherche Agronomique), France)

Martina Petralli (Università degli Studi di Firenze, Italy).

'Relevant projects at NFLI – with a particular focus on the proposed reference region of Jæren, SW-Norway'.
Siri Svendgård-Stokke (Norwegian Forest and Landscape Institute, Norway)

'Urban and Periurban Agriculture in Warsaw and Warsaw Metropolitan Area'.
Barbara Szulczewska, Agata Cieszewska (Warsaw University of Life Sciences, Poland)

'Urban Agriculture in Wageningen'.
Esther Veen (Wageningen University, The Netherlands):

Submitted on line:
'Periurban Agricultural Areas'.
Fiorella Russo (Universidad de Granada, Spain)

'The Belvedere – An Agricultural Park at Cologne'.
Axel Timpe (RWTH Aachen University, Germany)

The first meeting of the WG4 allowed for all presentations in a very tight schedule. This gave the members a glimpse at viewpoints, interests and knowledge from various kinds of research to design works, places, local situations. However, due to the lack of time and the wide range of projects, there is still a need to deepen the exchange on the members' expertise. To start three round tables were organized to allow the for the main questions to be formed.

4 Working groups
Three groups were formed to discuss the action oriented handling of urban landscapes, which include agriculture. The presentations were used as a basis for discussion. The working group members were rotating so every experience could contribute to every question.
The main questions naming the different tables and their leaders (and writers of the minutes) were:

- What has to / can be changed? by Esther Veen
- How should / can landscape be planned? by Sylvie Paradis
- How to make the landscape work? by Charlotte Chowney

4.1 What has to / can be changed? (By Esther Veen)
Concluding answer: 'The understanding of how a city is planned has to be redefined, depending on influences and perceptions'.

Two main things need to change:

- Processes
- Perceptions

Note: Perception and communication are already changing

Perceptions
Perceptions on the multifunctionality and values of urban agriculture:
- Ecological
- Economic
- social + wellbeing
--> Measurable indicators are needed
--> Also, we need discussion

Perceptions will change through:
- Better education and awareness (also for policy makers)
 --> but are we changing *needs*?
- Better accessibility to urban agriculture:
  - Fenced / literal / physical
  - Mindset-> exclusion
  - Mental accessibility -> coming back to perception
  - Public access -> privatisation of public land -> designing for accessibility ->processes
  - Communication

Processes
Processes that need changing:
- The sectoral fragmentation of planning
- Planning needs to be more open to farmers' needs
- Sharing tools and instruments
- Planning / policy needs to protect but also to start (make possible) agriculture
- There needs to be a specific kind of flexibility in regulations
  -->but also: reliability in decisions and stability in contract
- Farmers and citizens need to be involved
  --> recall: we need communication
- The 'misuse' of environmental politics needs to be addressed
  --> flexibility (in laws, regulation, time)
- Involving more people in decision making and planning
  --> more communication and discussions

To conclude, we saw two main things that need change (perceptions and processes), but there are also many cross-overs between them, like accessibility and communication (knowledge sharing, exchange, and also involving more people).
Other remarks:
- Looking at different scales
- It is important to take in the specific context. In certain contexts, certain things may not need change.

4.2 How should / can landscape be planned? (By Sylvie Paradis)

First, we should not forget the elements of definition from the European Landscape Convention with the role of local society (for defining the interest and values of their landscape). Therefore, the governance should take in consideration perceptions and values of the different stakeholders, even if it's not easy or doesn't seem to be a priority for them. This should be done also by taking care of the historical and actual perceptions of landscape. The difficulty is to adjust public to imply, to define / precise which stakeholders are concerned depending of the project, the scale (social and spatial), the issues, or even conflicts, and also how and when they should be involved or not. The knowledge of local users should be considered as a driving force to lead regional policies and change the way of managing planning.

In parallel of this social-cultural dimension, the material characteristics of landscape as to be defined (different components, as natural resources) before planning, pointing out the interrelations between the different dynamics in presence (necessary backward and forward looking) to explain and identify changes, and precise the projects and impacts in future. The difficulty is to work with a variety of UA landscapes and adapt management and project (to social and material aspects of landscape): how to categorize? how to articulate with planning? In fact, we must be aware of a variety of instruments, laws and of ways of managing landscape (bottom-up, top-down, transversal…) and adapt constantly. Evaluation methods can help but they are to combine with other factors (example: spontaneous movements).

More specifically in link with UA needs and multifunctionality of landscape, question of land property (ownership) and diversity of markets (and scale) appear to be important. There is a compromise to find between individual (i.e. motivation of farmers), local and regional needs.

Some key factors of negotiation for a better landscape planning are proposed:

- Benefits (amenities) are / should be for all kind of stakeholders, even for farmers. They must be in lighted and used as arguments in planning.
- UA is no longer to be defined in planning by opposing rural and urban concerns. Both are/should be closely linked and federated.
- To lead to sustainable models of UA, we should precise technical and economic reality expected for farmers, with them, but also with other stakeholders that should be concerned (consumers, neighbors, etc.).

4.3 How to make the landscape work? (By Charlotte Chowney)

Discussion and brainstorming around the question of spatial visions of Urban Agriculture.

What mainly came out of the discussion was essentially the difficulty to overcome the means of having an adequate definition. Not only for the term of Urban Agriculture but also for the other constituents of the question (like spatial vision). These etymological questions were asked to be left aside for they are WG1's main action.

-For whom must a landscape work?

-What is a "successful" landscape?

Two interesting statements were quickly put down: The first: that a successful landscape communicates the identities of a specific place. The second: that a successful landscape creates a framework for different functions. We then followed on to evaluate what functions were being referred to.

Landscapes and economics:
- The discussion around economic aspects unveiled the importance of the presence of an actual agricultural production as well as a forestry component, recreation and water management. This last idea of water management also came across in the possible ecological function with questions of biodiversity, soil management and interest in short chain distribution.
- Productivity comes into mind alongside these aspects as it depends of the scale and the type of produce that is marketed. Productivity is also a key aspect. For if there was no productivity or economic factors, there would be no agriculture, only gardening. Spatial aspects of this are still to be imagined as are the necessary recreational areas and the issue of public accessibility.

Perception of landscapes and the importance of cultural representations:
- A landscape depends on, and participates in shaping singular cultural aspects. Indeed, culture, technique, knowledge, history and immaterial heritage influence our ways of perceiving shapes and functions, in the same way as these functions and shapes influence our representations and perceptions.
- The social component brought up topics such as: wellbeing, physical activity, education, local identity, meeting points that act as communication links, and social integration.
- The understanding of all/everybody's benefits appears in the appropriation by either productivity means or recreational needs. A certain connection felt to ground allotments may also be present. In this idea, landscape truly acts as a media.
- Another key point of this discussion was the link to the imbedded characteristics of each country. Therefore depending on self-sufficiency, the questions of quality versus quantity (with a need of a "basic" amount) arise. Even more so, an area of distribution like a nearby market inevitably impacts the quantity factor.

Multifunctionality:
- Balancing diverse functions such as environmental function and aspect, economic landscape, or even integration of diversity, all bring to mind the importance of considering multifunctionality for a landscape to be successful. There is a clear need for the spaces in question to include: productivity, leisure, accessibility, environment, and education so that they can work!

Different scales of landscapes:

- We discussed the aspects of scale versus efficiency as well as the need to integrate multi-levels, multi-governance and multi-actors. The scales to consider are namely those in regard to territories, economics and governance. For the spatial limits, it would be those of fringes and inner-fringes.
- Comparatively, the definitions of a "leisure landscape", an "agricultural landscape" and a "natural landscape" can help understand the proportions that were evoked.

In conclusion, even though a main characteristic of landscapes is adaptability above all the question remains around how to preserve natural landscape and make it work with production at the same time. Which would be the processes? And to what level must participation integrate different interests, actors and levels.

A few ideas to move forward and maintain the spatial view of the WG4:
- Talk in terms of units of space or unit areas.
- Interface, limits, interweaving, overlapping.
- Represent and show the different functions
- Talk about representations (history, transformations, dynamics, traces and paths, structures) to help understand where our thoughts are coming from.

5. Conclusions of the workgroups

Despite the great variety of personal starting points, the session made possible to identify which aspects of our work seem, in a glance, important to be developed and a first list of questions about what would link the work we must define with the others groups involved in the action. But there was no time for a common discussion or to translate it into spatial references as was outlined at the session program.

The summaries of the different working groups by the table leaders develop the following points of the agenda:

- aspects to extract from samples heading for a common analysis, gathering and explanations of projects around UA;
- interaction with other WGs;

But the contribution of WG4 to the European Atlas on UA was not discussed. As there was not spatial translation no form or method of work was discussed.

6. How to continue in WG4

6.1. The leaders of the working groups at Aachen will write a report with the main questions, topics.

6.2 The minutes will be distributed to the members in order for them to answer the questions posed (see top 2 of these minutes). The focus should further on be put on the spatial aspects, since they are not dealt with by the other groups.

6.3 Discussion on line with all the members of the group to be finished by November 30, 2012.

6.4 The structured and guided form must be finalized by December 15, 2012 to allow everybody, with no problems of time, to test the model and to compile and after share the existing information or work before the next meeting in spring where the form must be finally discussed to be then offered for testing and readapted by the other action groups.

An ordered and guided form of compiling the existing work, design, research, questions and situations seen at Aachen should be a basis for:

- exhibition and analysis of existing samples of UA;
- exhibition and analysis of proposals –theoretical, designed or planned- on UA;
- options concerning the tool-box as an adequate means for Cost purposes;

Focus will be laid on space definitions, appearance and perception, related to all kind of scales –from regional planning to designed public or private space- and local situations.

It's important to differentiate between existing UA examples to which we assign values to be protected, reinforced, assessed but that were never proposed, planned or designed; and existing proposals –theoretical, planned or designed- because they deal with related but completely different lines of work.

To discuss and define a compilation-question form implies necessarily to draft a method or a way to proceed and to choose what we want to work during the first two years of the action.

The form must allow a future specific WG4 call for information or samples to:

- other WG's;
- other possible collaborators, partners and institutions;
- stakeholders, associations .

This will lastly allow us to discuss the drafted form with members of the other groups or at least with the steering committee. The discussion will be addressed to answer to:

- How to integrate the work of the different groups in a single model;
- How to present and to represent in a common way the action work.

This could function as a draft of the proposed Atlas on UA (present or existing) looking for new visions (future) on UA

Aachen region case studies

Knowledge and innovation in the domain of Urban Agriculture are created mainly on the ground, depending on the interplay of different stakeholders including producers, consumers, planners citizens and many others. In addition to this Urban Agriculture is a place specific activity. It not only depends on local climate, soil and other natural conditions, but as well on local culture and traditions. Stakeholders create ideas and innovations that fit to their specific context, but may contain elements that can be transferred and adapted to other places, regions or even countries.

A bottom-up research perspective is therefore fundamental to COST Action Urban Agriculture Europe. The experiences collected from reference regions visited during the Action will ground and complement the work on definitions and theory of Urban Agriculture carried out in the Working group sessions.

Dipl.-Ing. Axel Timpe
RWTH Aachen University

The Working Group meeting at Aachen was the first opportunity for the whole COST UAE group to get in touch with stakeholders who deal with Urban Agriculture on the ground. Several experiences from the City of Aachen and its bigger region have been collected, documented and partly visited on a field trip. This was possible due the help of the City of Aachen, urban farmers and gardeners from Aachen and the work of 16 RWTH Master students and 2 UROP students supervised at the Chair of Landscape Architecture.

The field trip lead the COST group to the Aachener Soers, a landscape near the city centre that can be understood as the "agricultural exception" in the urban development of Aachen.

To gain deeper insight in the visited area Master students of Urban Planning and Geography have analysed the landscape and the agricultural activities in three thematic groups.

The work on the **landscape history** of the area illustrates how topography influenced its spatial development in comparison to other parts of Aachen situated only a few hundred metres away. It also shows the transformation the structure of agriculture in the Soers has undergone during the last 150 years.

The **planning strategy "Pferdelandpark"** developed by the City of Aachen and the neighbour-cities of Herzogenrath and Kerkrade analysed by the second group shows the intention to protect the agricultural landscape against urbanisation through making it accessible.
This strategy was explained as well during the field trip by landscape architect Christoph Ruckert, responsible for strategic greenspace planning at the City of Aachen. He introduced the project and its guideline "people will only protect what they know and appreciate" and explained the linear and punctual interventions making the landscape a park.

A third group of students researched **business models of agriculture** in the Soers by interviewing farmers. The selection of farms shows very different models of adaption to the urban influence concerning the products, services, market access, consumer profiles and other characteristic of a farm. The group has also depicted the spatial and economic structure of the visited farms in combined diagrams.
Three of the studied cases could be visited on the COST field trip. The Bonnie and the Paulinenwäldchen farms, which are run as urban, partly organic farms of very different sizes and the "Groß Tivoli" allotments.

A wider view on the region of Aachen including the near Netherlands and the metropolitan city of Cologne could be provided by students from the RWTH UROP International programme that provides research opportunities at Aachen to undergraduate students from North-America. Brianne Lovstrom and Ciera Crowell have been contributing with their American perspective on European case studies during their two months summer research internship at the Chair of Landscape Architecture. This can help to identify the special character of Urban Agriculture in Europe in comparison to other developed countries like Canada and the United States.

Brianne (University of Alberta, Canada) has identified the motivations of urban gardeners in Cologne in comparison to Edmonton, Canada. Both cities have a very active urban gardening scene that relies on similar values and functions aimed at but some differences in project profiles could be identified showing a stronger preoccupation for societal and placemaking issues in Cologne compared to the Edmonton cases turned towards (special forms of) food production as a primordial objective.

The comparison of projects on both sides of the Dutch/German border made by Ciera has not identified strong differences that could be attributed to national differences. The character of the very divers projects visited is mainly relying on their context and scale of intervention ranging from the neighbourhood to the city and regional level.

Field trip and preliminary field research have proven the importance of the bottom-up approach for COST Urban Agriculture Europe. Direct contact to the farmers and their work has been nourishing the discussions of the Working Groups. The analytic work on the case studies carried out together with students can show the way for further work of COST UAE that will be based on the online platform of the Action.

Axel Timpe

local organiser COST UAE Working Group Meeting Aachen

Excursion 10/7/12: sites visited and topics discussed
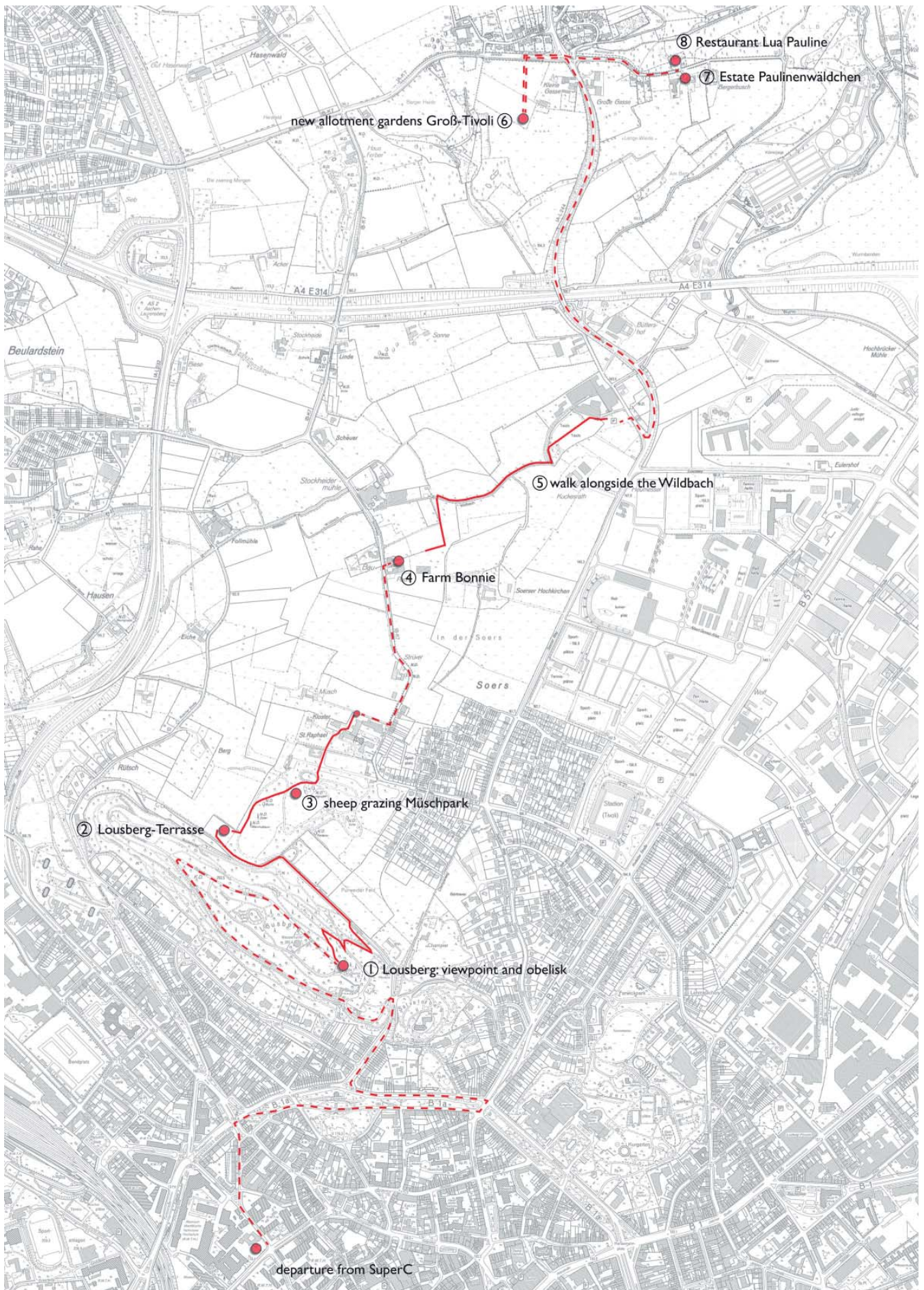
① **Lousberg: viewpoint/ obelisk**
- lookout on the city of Aachen and the Soers agricultural landscape
- overview of the afternoon excursion programm by Axel Timpe
- introduction of the Soers landscape and the Pferdelandpark planning concept by Christoph Ruckert, City of Aachen, strategic greenspace planning

The Obelisk created for land measurements when Aachen was part of the french empire is a landmark on the top of the Lousberg hill that separates the inner city of Aachen from the landscape called Soers. This topographic barrier protected the Soers from intense settlement.

② **Lousberg Terrace**
- first stop of the landscape discovery trail "Weißer Weg"
- example for the stations concept of Pferdelandpark: landscape architectural interventions in the agricultural landscape
- discussion of protection strategies for agricultural land and cooperation between City and farmers with Christoph Ruckert

Christoph Ruckert explaining the Pferde-landpark concept

The newly created terrace on the slopes of the Lousberg hill opens the the view of the visitors to the agricultural landscapes of the Aachen region. Hammocs make it a very popular place.(photo: A. Timpe)
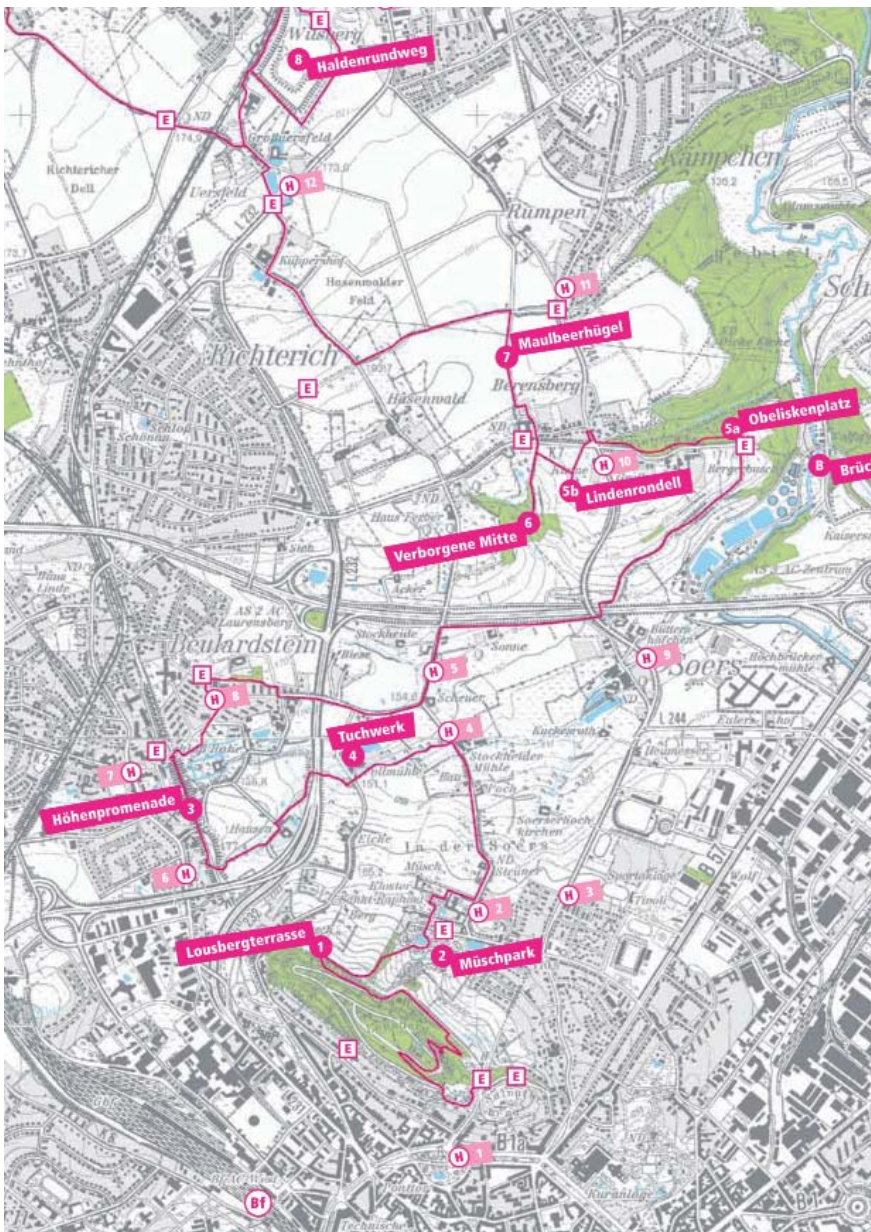
[TIPP 5] Bitte nicht Betreten!

In der Stadt hat jeder einen Zaun um seinen Garten – eine Selbstverständlichkeit. Es ist der eindeutige Hinweis auf Eigentum und der Wunsch, dass der Garten nicht betreten werden soll. Auf dem Land sind lediglich die Weiden eingezäunt, auch zu Ihrem Schutz. Wiesen und Felder sind aber ebenfalls im Privatbesitz. Genau wie der Gartenbesitzer in der Stadt möchte der Landwirt nicht, dass sie seinen Besitz betreten. Stellen Sie sich mal eine Landschaft vor, bei der jedes Grundstück eingezäunt ist. Es geht auch ohne Zäune – aber nur mit Respekt!

[TIPP 6] Müll gehört nicht in Wiesen und Äcker!

In der Stadt finden Sie an jeder Ecke einen Mülleimer. Zugegeben, diese werden Sie an der Wegkreuzung auf dem Land zwischen den Feldern meistens nicht finden. Das heißt aber nicht, dass die Felder Mülleimer sind. Bitte entsorgen Sie Abfälle ordnungsgemäß. Außerdem haben vor allem Glasscherben und Aluminiumsplitter (Getränkedosen!) verheerende Folgen, wenn sie im Futtertrog landen!

[TIPP 3] „Hol das Stöckchen!"

Ihr Hund will sich bewegen und dabei spielen? Ein Stock ist schnell mal in ein Feld geworfen. Aber sie sollten darauf achten, dass der Hund diesen immer findet - keine einfache Sache in einem hoch bewachsenen Feld. Auf Wiesen oder Getreidefeldern zurückgelassene Stöcke und Äste verursachen jedoch große Schäden am Mähwerk! Es ist für Landwirte keine angenehme Aufgabe, vor dem Mähen die Wiesen erst von den zahlreichen Hindernissen, das heißt den „verlorenen" Stöcken, zu befreien.

[TIPP 4] „Es war doch bloß einer!"

Der Gemüseladen um die Ecke legt seine Ware auf der Straße aus. Da greift niemand zu. Aber schnell mal den Maiskolben vom Feld geholt, den Apfel vom fremden Baum – das ist doch ein Kavaliersdelikt? Nein! Auch auf Feldern darf sich niemand selbst bedienen. Respektieren Sie das Eigentum der Landwirte, denn Feldfrüchte wachsen nicht „von alleine", sondern brauchen viel Pflege! Nutzen Sie stattdessen das Angebot in den bestehenden Hofläden.

The hiking map (detail) of Pferdelandpark edited by the Cities of Aachen Herzogenrath and Kerkrade shows the "White Path", the different designed stations and accessibility by public transport. Detailes information on the landscape, the restaurants and farm-shops in Pferdelandpark can be found on its reverse side.

A special leaflet informs citizens on good behaviour towards agriculture.

(Cities of Aachen, Herzogenrath and Kerkrade)

③ sheep grazing Müschpark

- explanations on the management strategies for peri-urban landscapes in the City of Aachen by Christoph Ruckert
- the lawns of the Müschpark, a historic landscape garden on the Lousberg slopes, are partly maintained by sheep grazing
- the City of Aachen contracted a sheperd providing the care of the lawns with his sheep
- general maintenance of the Lousberg forest park is done by socio-professional reintegration work
- Maintaining the Müschpark by sheep grazing fits very well into the history of this landscape garden that was created as part of a ornamented farm in the 19th century

Sheep grazing at Müschpark hidden by umbrellas

(4) Farm Bonnie

- presentation of the family run farm by Mr. and Mrs. Bonnie (for details on the farm enterprise see students description on pages 60/61)
- example of a relatively small (37 ha) farm specialising in direct marketing
- "meineErnte" ("my harvest"): renting of small vegetable plots to urban dwellers
- direct marketing of vegetables from Controlled Integrated Production in the farm shop and throgh customer-contracts
- direct marketing of meat in the farm shop
- discussion of the farm economy, the characteristics of the urban situation and the cooperation with the Cty and other users

*Mrs. Bonnie explaining vegetable pro-
duction and marketing at her farm.*

*"Pick your own flowers" and "my harvest" proposed at the Bonnie farm generate
additional income and attract people to the farm shop.*

(5) Walk alongside the Wildbach

- explanation of the effects of the World Equestrian Festival CHIO on agriculture by Mr. Bonnie
- combined use of agricultural land for production (cow grazing) and a sports event that needs special soil an vegetation qualities and atracts up to 45000 visitors to the fields for a few days every year

walking alongside the Wildbach (photo: F. Lohrberg)

⑥ new allotment gardens Groß-Tivoli

- presentation of the allotments by the chairman of the gardeners association Hubert Coonen (for details on the new allotment gardens Groß-Tivoli see students description on pages 66/67)
- the Tivoli allotments were initially situated much cloder to the city and were were relocated due to the construction of the new Tivoli site (sports facilities including a soccer stadium for 33000 spectators)
- example contemporary design of traditional German garden allotment
- insights to the gardeners associative life, attitudes and cultivation practices

View on one of the allotments: unified architecture, combination of productive (compulsory) and pleasure gardening (optional).

Introduction of the gardens history in the associations club house (protected from the rain)

Hubert Coonen, chairman of the gardeners association

⑦ Estate Gut Paulinenwäldchen

- introduction to the activities of the large organic farm (127 ha) and the educational activities evolving around it by Heidi Brassel from the farm's friends' association (for details on the estate Gut Paulinenwädchen see students description on pages 68/69)
- cattle farming, vegetable growing
- direct marketing in farm shop and by delivery to customers ("vegetable Box")
- for details on farm enterprise see students description on pages ...

Heidi Brassel and interpreter Matti Wirth

Shed in the farmhouse garden used for educational work with group of children that come to the farm for a single visit or on a regular basis (photo: M. Malta)

⑧ Restaurant Lua Pauline

- common dinner at the restaurant
- introduction of the restaurant's concept "international cuisine made from regional organic products" and the necessary effort to find quality suppliers by Chef Alex Bos
- long term objective: to run a farm and a restaurant cooking the products grown on the farm

Dinner at the Lua Pauline summer pavillon (photo: A. Timpe)

Historic landscape development of Aachener Soers

Urban development of Aachen

1850

urban area

Introduction

The following pages give an impression about the development of the region of Aachen. Particulary the area of the Soers is reviewed. Pictogramms help in this case to comparise the de¬velopment between 1850 and 2010. The illustration sophisti-cated among sattlements, farms, industrial areas, green zones and agricultural uses. The second illustration shows transects of the Soers. The time segments of: 1850, 1850 1900, 1900 - 1950, 1950 - 1980 and now are analyzed. The significant chang-ings are shown in the transects.

Summary of the study

Looking retrospectivly into the history of the spatial development of Soers, we have come to the view, that during the whole dinamic development of the industrial era this part of the city of Aachen didn't expirience any great spatial cataclysms. In order to show the hardly recognizable development of Soers, we also took a look over the spatial development of a district placed nearby, just about 200 meters on the East-Northern industrial Area.Comparing both districts during the same develop-ment phases, we realized, what the reason for this stark difference had been: the space situation and the transport connectivity.The Lousberg separates the Soers fully from the Aachens downtown, over its whole southern border. Throughout the decades the spatial development of the Soers had been limited by this fact and was not able to expirience the large development steps, which the Northern Industry area of Aachen did. At first the connection by railway to the River Ruhr, after that, the automobile era of the 20th Century.The actual situation of the Soers should not be regarded as negative: nowadays it offers great potentials for the development of urban gardening and cultural tourism.The significant farms and manufactories have remained till today and offer a look inside.

Aachens citizens, who may like to create their own vegetable garden or just want to buy some natural food products are able to find offers in the area.

The Soers - a rural isle in the urban spatial construction of the City of Aachen. Exactly this fact should be used as a catalyst for its future development within the meaning of the actual social attitudes.

1850 - 1900

1900 - 1950

Landscape development Aachen: 1850 to 2012

1950 - 1980

2012

Spatial development - Piktograms

During the first wave of industrialisation in the middle of the 19th century the spatial needs of the City of Aachen increased rapidly. The urban areas grew in the east and in the north, predominantly as a result of the newly created factorys and other industrial facilities. During the time around the turn of the centuries (19./20.) large residential quarters arised in the same areas, also in the south-eastern part of the Soers. It was the only time, when the Soers expirienced a massive growth of urban residential space. As it could be seen on the last three pitogrammes, the urban space in the Soers didn't grow as much as awaited

Settlement

- settlement in center of Aachen

- development axis´

- developed in large-scale

- big settlement shapes orietated on the axis

Farms

- punctual concentration along the Wurm

- evolved to bigger shapes

- industrial needs changed

- fit in open settlement spaces

Industrial Area

- 1850 anthropogenic influ ence concentrated in the proximity of the housing estates

- In the center of the lower half (the nucleus of Aachen)

- nowadays only protected areas are natural green

Agricultural use

- 1850 agriculture was car-ried for one's personal use

- agriculture has lost its importance in the region

- Soers is the last island of agriculture in this populated region

Development of Soers - transect "Urban-Agricultural Soers"

Transect 2012
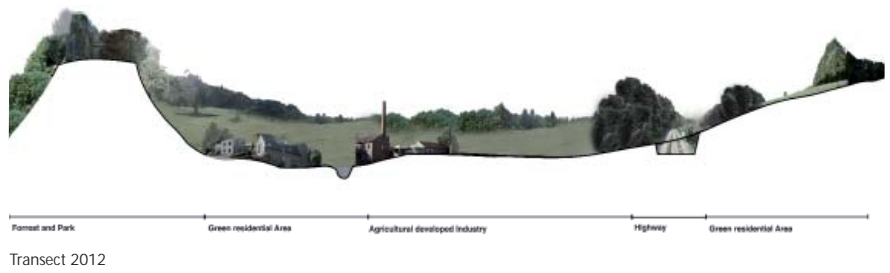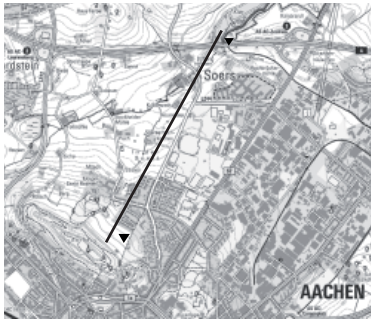
Period 1950 - 1980

During this period the city on the western edge of Krefelder Straße changed rapidly. Mostly large buildings and sportsfacilities were built, which could only be reached by car. The agricultural usage of the grounds decreased and the agricultural used areas were used as plots for the new huge buildings and building complexes.
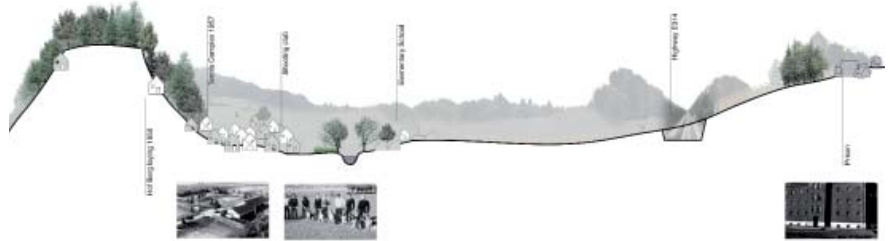
Period 1900 - 1950

The transect until 1950 is affected by a settlement expansion above the River "Wurm". This urban settlement is concentrated near the St. Raphael abbey, which use changed on one hand to a military hospital and home for the elderly and on the other hand extended with a cottage. Besides the construction of highway E314 started.

Period 1850 - 1900

In the period of the second half of the 19th Century, some production facilities were built for the clothing industry and other productions. Mostly old buildings were redeveloped and used for a new purpose, according to new developments on the world production markets. The residential buildings in the area almost did not experience any development at that time. The agricultural usage of the ground increased.
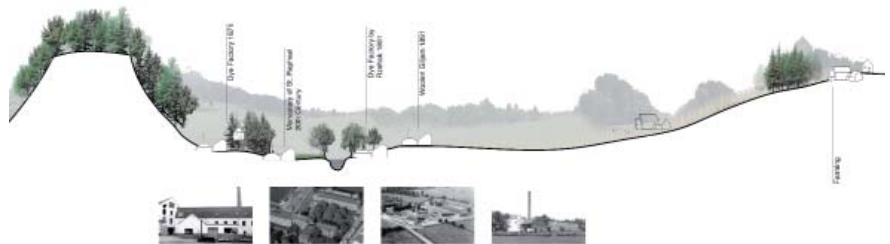
Transect 1850

Around 1850 the anthropogenic influence of the eastern part of the Soers is lower than in the western part. It is sparsely populated because of the influence of the brooks and their varying tide levels. This argument can be confirmed by the fact that farming takes place at a higher location (in the north) - out of the reach of water.
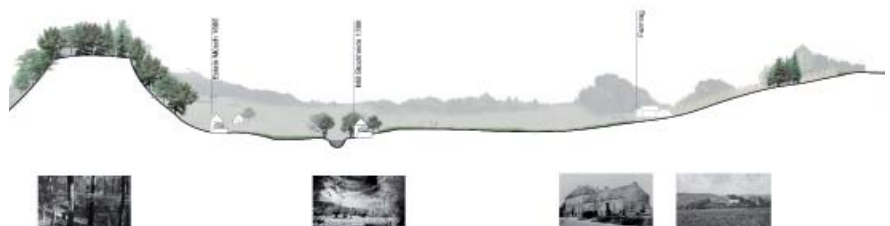
Development of Soers - transect "Urban-infrastructural Soers"

Transect 2012
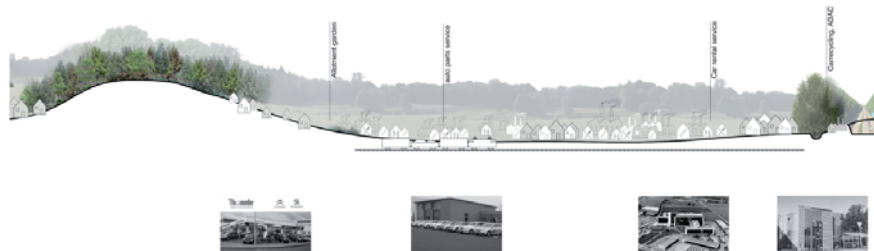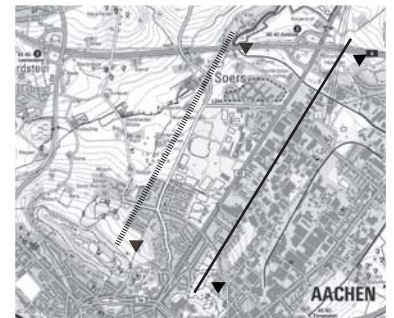
Period 1950 - 1980

During this period the city changed on the western edge of the Krefelder Straße rapidly. In addition to the industry the usage enlarged to services like stocking, renting or recylcing automobiles or parts of it. A conversion from the manufacturing trade to industrial services is apparent. Mostly large buildings and sports facilities were built, which could only be reached by car. The agricultural usage of the ground decreased and the agricultural used areas were used as plots for the new huge buildings and building complexes

Period 1900 - 1950

In the transect until 1950 it is evident, that the industry expanded, for instance the first car manufacture „Fafnir" or a local branch from „ThyssenKrupp". Old mills have been converted to factories and for this reason workman´s houses were necessary. But in between there are still some fallow lands, which charecterise the area, traditionally used for agriculture.
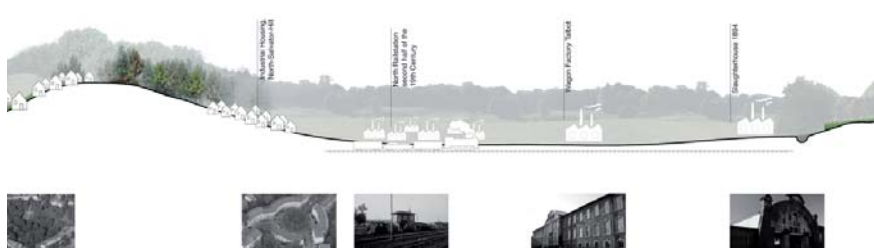
Period 1850 - 1900

The rail transport shaped very strong the urban development in the north of Aachen in the end of the 19th and the beginning of the 20th century. It enabled new production facilities, as well as new residential areas. The new production lines nedded more and more work capacities. Those workers needed also new housings, which had to be built near the production sites (in the south part of Aachens northern Industry area). The industry took a lot of the agricultural areas for its use very fast.

Transect 1850

At 1850 this part of the Soers has a low density of settlement but the area, especially the pasture, is largely cultivated. Farmers not only plough their fields but also use the meadowland for large farm animals. Due to the restricted transport facility at this time the farmers localized their meadowland and fields close to their residential building. This resulted in a landscape that is divided into small sections.

Urban Agriculture Entrepreneurs at Aachener Soers

INTRODUCTION

The task was to find out how urban agriculture developed and in which different forms it appears in the Soers, which is a region close to the city center of Aachen where urban agriculture is still practiced. Owners and employees of four farms and one allotment were interviewed to develop a profile for each one to compare their business ideas, motivations, attitudes and problems. The profiles also document how the places where the actors work look like and how the people work. After generating the profiles, the four farms are compared in different categories which show the high variability but also some similarities between them. In the end the farms are also compared to the average farm in Germany.
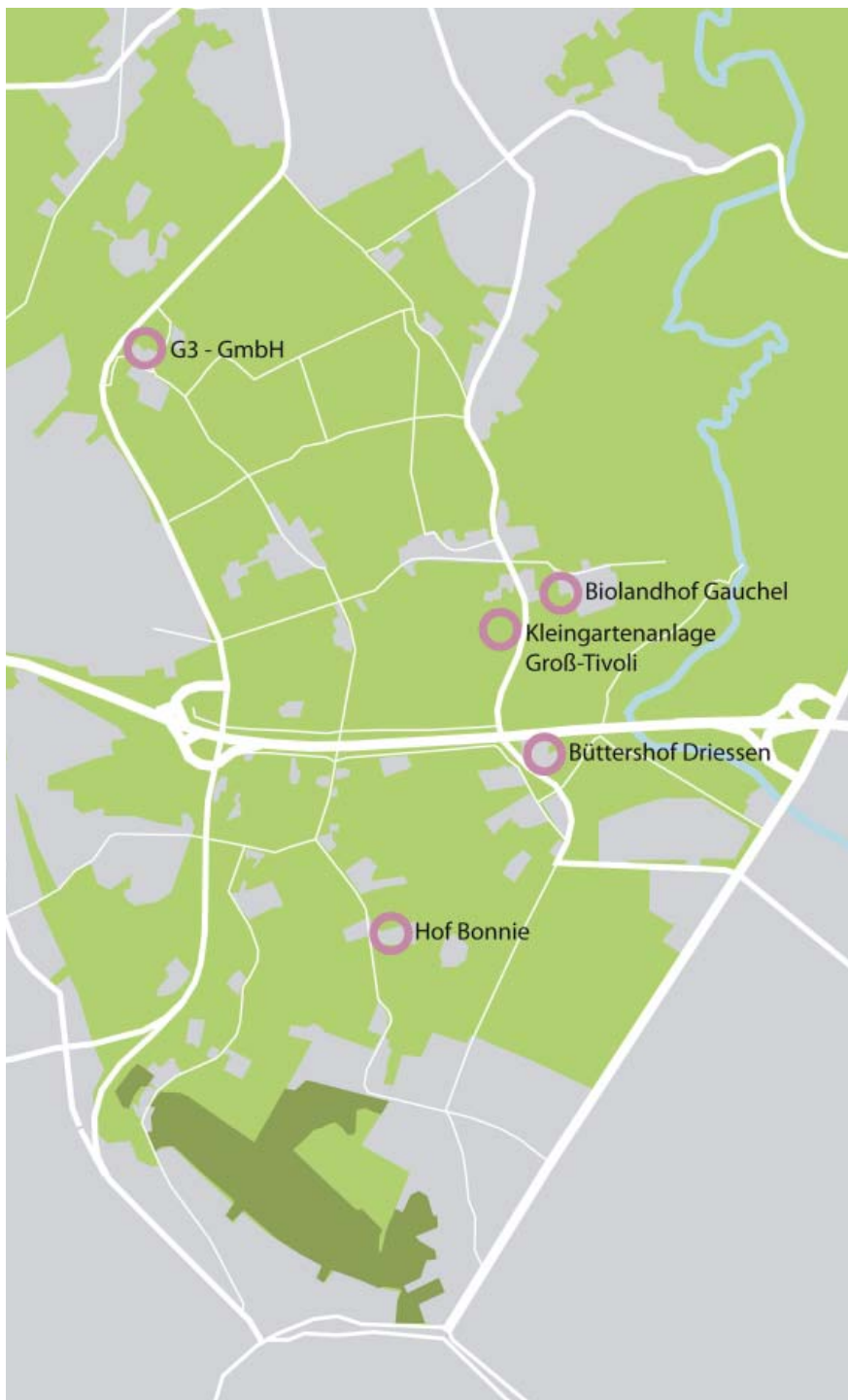
GENERAL MAP OF THE INVESTIGATED FARMS

Hof Bonnie

address: Strüverweg 72 52070 Aachen
manager: Herr Christoph Bonnie since 1996

Farm and house are cultivated in the third generation. The area is 32 hectares mostly located in the Soers. He pursues the principle of integrated production, specializing in vegetables and keeping milk cows. The products are almost sold directly on a farm shop located in the courtyard. Two schools and the Institute Babor cosmetics are supplied with fresh fruit. The products range from fruit and vegetables, with some varieties change seasonally, on bread, pasta, dairy products and beef from their own cattle. In addition, firewood is sold and Christmas trees at Christmas. The concept of the farm is to offer mainly their own products and some products from local suppliers of the wholesale market in Düren, Burtscheid and the Eifel. The farmer also provides space for „meine ernte (my harvest)". People without their own garden can rent a parcel on which they can grow their own products. The farmer arranges the first seed and provides a weekly information hour. Water and equipment is provided by „my harvest". Economically the farmers expects only in the sense that more customers are drawn to the farm to purchase the products at the farm shop. There is also an area where customers can cut regional and seasonal flowers themselves.

products

vegetables

regional and
seasonal products

suckler cow husbandry

sale of beef from one´s own
slaughtering

flowers

pick-your-own
flowers

**chimney wood
christmas trees**

purchase

of regional products for sale in the
farmshop (dairy products, eggs,
sausages, bread etc.)
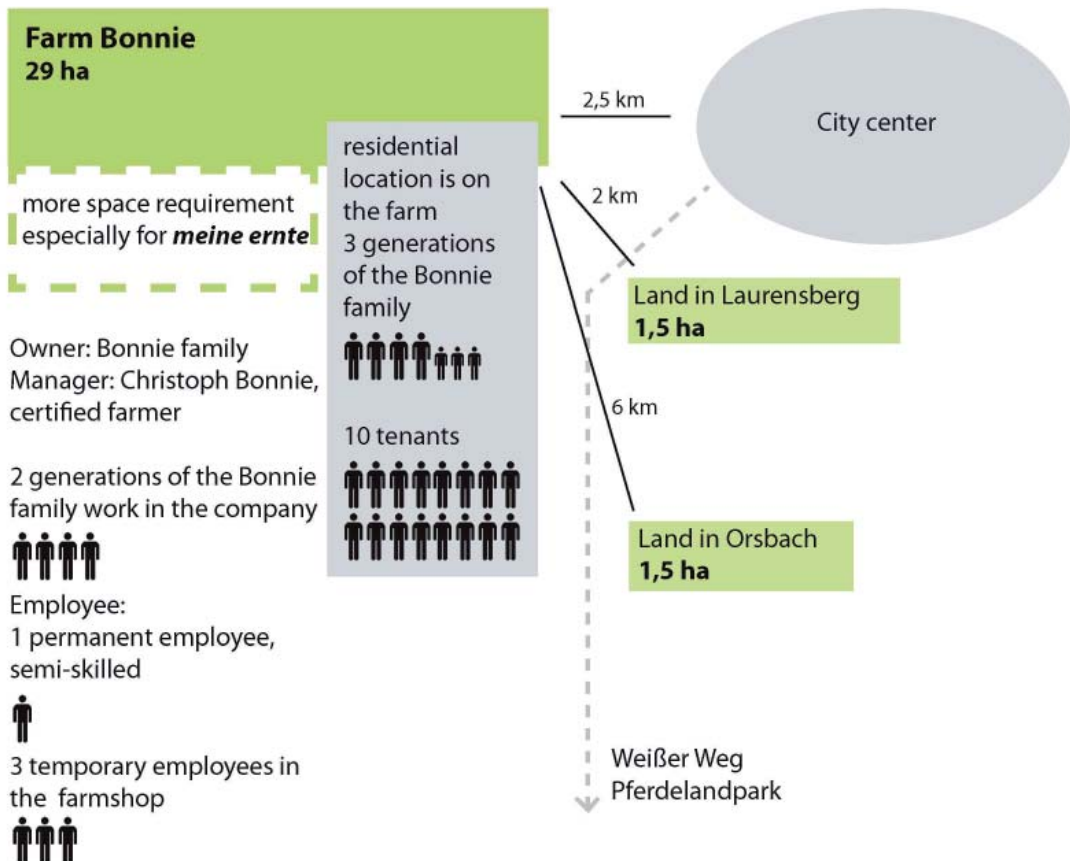
branches of industry farm Bonnie

Bonnie's farmshop

principle of integrated produc-
tion, direct marketing

purchase of additional products
from Düren, Burtscheid and Eifel
(dairy products, eggs, sausages,
bread etc.)

pick-your-own flowers

regional and seasonal flowers

„meine ernte" („my harvest")

farm Bonnie provide the fields,
disseminate the first seed, provide
water, office hour with the famer
one´s a week, the offer of equipment,
water tank and marketing via „meine
ernte"

**urban agriculture from the farmer's point
of view:**

+ *the farmshop´s closeness to the city*

+ *residential location, recreation and
friends in suburban location*

- *recreation tourism per e.g. „Pferde-
landpark" induces problems because
of people crossing the fields, dog
owners and more danger of infection
for animals*

- *more reglementations, plant extention
at the location is not possible*

marketing and customer profile

advertising in
local newspapers

„my harvest"
field rental,
web presence

private costumer
regular costumer,
local residents, people
from the city

supply

social services
2 schools in Aachen

supply

farmshop

corporate customer
supply of fruits to an
cosmetical institute in
Aachen
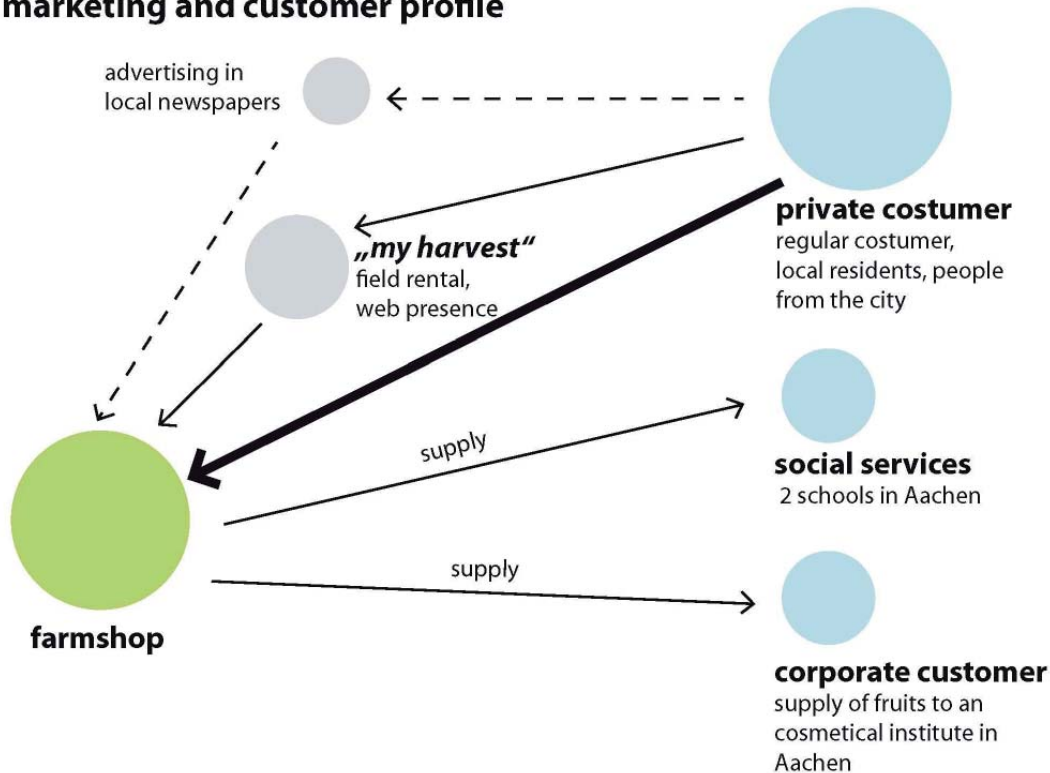
G3-GmbH

address: Küppershofweg 13, 52072 Aachen
manager: Ulrike Hager, Eckhard Müller

Since 2000 Ulrike Hager and Eckhard Müller are running the farmyard in Aachen. First leasing it and then aquiring it in 2010. The G3- corporation includes 4 areas. The tree nursery „Grünwerkstatt", the farm shop „Blütenreich" which includes the floristry, the manufacturing of glass objects „Glas im Garten" as well as the workshop for landscape gardening „Ein Garten für mich" run by the landscape architect Ulrike Hager. The farm has an area of 20 hectare where cut plants for the floristry are cultivated. Some of these products are ornamental shrubs, fruits, cut flowers and grasses. In addition they distribute the organic herbs of "Herb's" from Oldenburg. Currently mostly major customers are supplied, but in the future the owner's plan is to focus more on private customers by expanding the farm shop and by concentrating on web-advertisement and order via smartphone. Next to the major customers there is a second group of customers. These are private regular customers living in the area between the farmers company and his residency. Using the self-developed quality certificate „Regioblume" the regional production of cut flowers is highlighted. The idea is to promote the label so that its use becomes widely spread
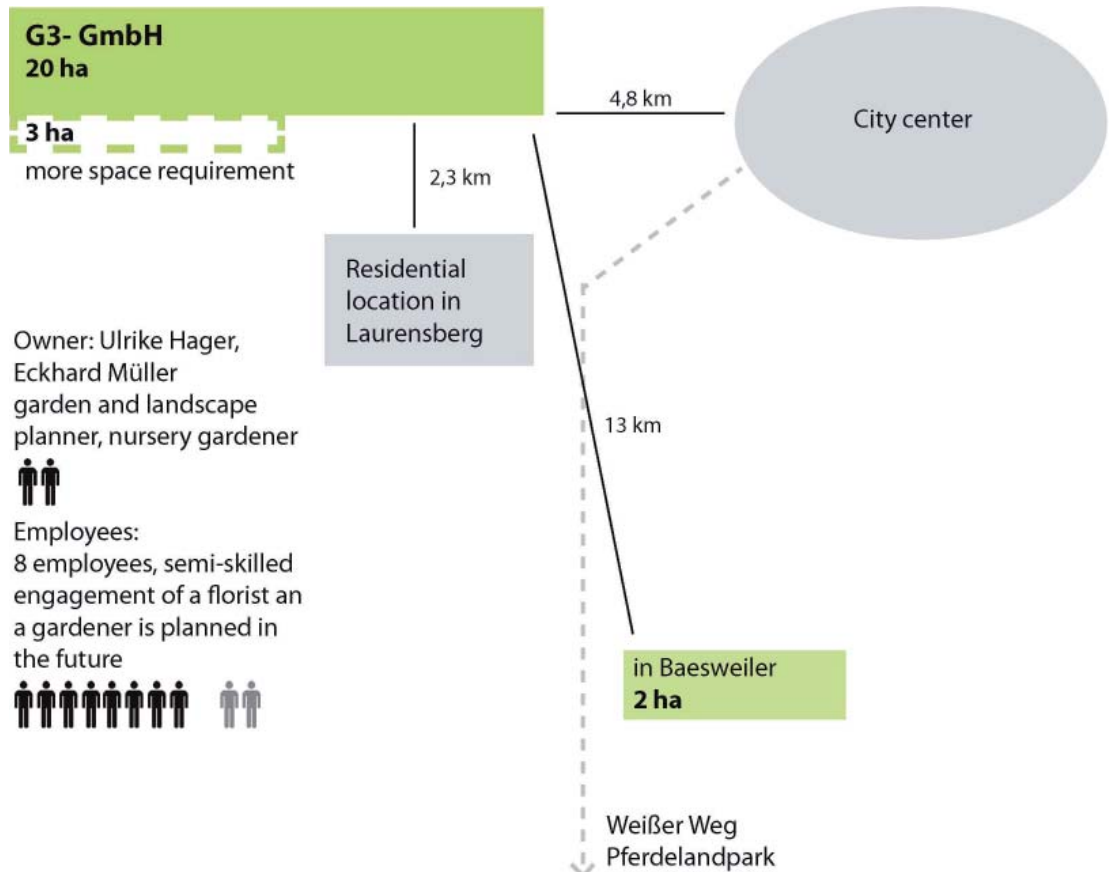
products

ornamental shrubs

cut plants,
bushs (ca. 4 ha),
bosk, cut flowers

floristic padding

fruits, gras, fir sprigs,
wreaths, christmas trees

distribution of organic herbs
from „Herb's" in Oldenburg

urban agriculture from the farmer's point of view:

+ *closeness to the city for farmshop and supply of private customers necessary*

+ *recreation tourism per e.g. „Pferdelandpark" established new customers*

+ *fast accessibility of the residential location in a suburban area*

branches of industry G3- GmbH

„Grünwerkstatt"

nursery garden

„Blütenreich"

farmshop
floristic
development intended

„Glas im Garten"

glasart
glas objects

„Ein Garten für mich"

planning workshop for garden and
landscape planning

marketing and customer profile

market
intended

web presence
order via smart-
phone, Apps

recreation tourists
Pferdelandpark

garden workshop
„Ein Garten für mich"

private costumer
regular costumer,
local residents, people
from the city

private costumer
between residential
location and farm

supply

central market
in Düsseldorf

supply

supply

supply

business location farmshop

large customer
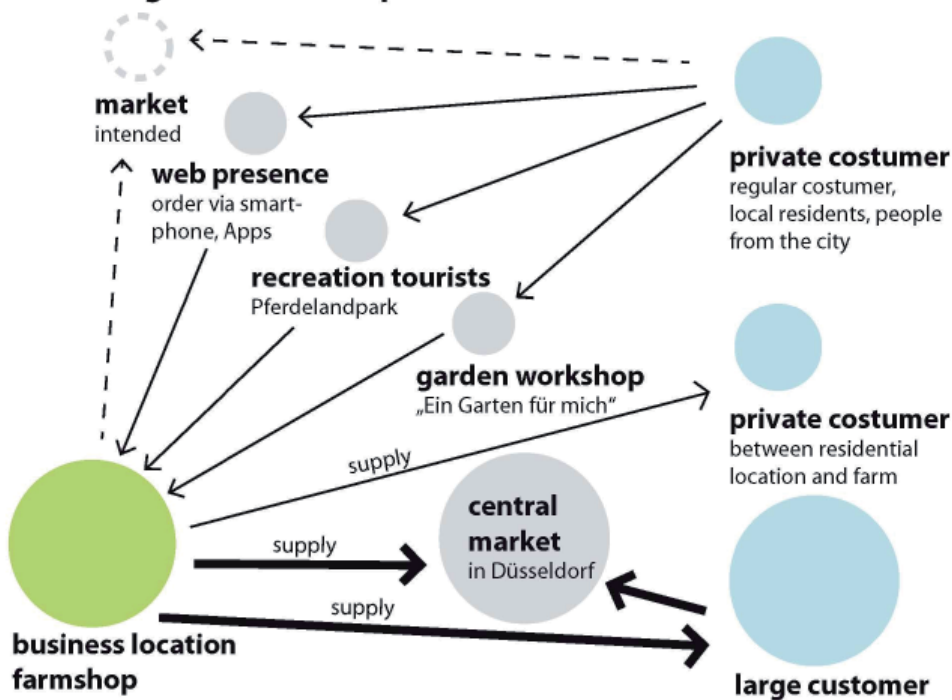
Büttershof Drießen
address: Soerser Weg 268, 52070 Aachen
manager: Herr Markus Drießen since 2000

The Büttershof Driessen is a pure dairy farm with 220 cows. Markus Drießen´s father Heinz-Josef Drießen bought the farm in 1974. It is now managed by the second generation. Markus Drießen and his wife have both studied agriculture. They have three daughters: 6 years, 4 years and the youngest is only a few days old. Heinz-Josef Drießen, Markus Drießen, his wife and a semi-skilled worker do the work. The cultivated area is 115 ha. 10 of these hectares are adjacent to the farm buildings and owned by the Drießen family. The remaining 105 ha are leased, partly from the city, partly by private landlords, and are scattered around the farm. The average size of these areas is 3.5 ha. The farthest is 8-9 km away. On these areas, maize and grass silage are produced as feed for the cows. The harvest is taken by a contractor. Parts of the areas are used as a meadow for younger cows. Mr Drießen buys coarse colza meal and beet-scrap as power food in addition. Before Christmas they sell christmas trees that come from the Eifel and Westerwald. The dairy farm itself doesn´t have a benefit of being close to the city. There are disadwantages of limited space and therefore high rents. Soerser Weg is a positiv aspect for Christmas tree sale.

Büttershof Drießen

10 ha around the farm, property

Owner: Fam. Drießen
Manager: Markus Drießen, certified farmer

2 generations of the Drießen´s family working in the company

Employee:
1 permanent employee, semi-skilled

residential location is on the farm

3 generations of the Drießen´s family

10 tenants

3,2 km

City center

0 - 9 km

leased land (around the farm)
105 ha

products

dairy cow husbandry

corporate customer pick up the milk from the farm, self-produced maize and silage of gras for feed, purchase of concentrated feed

suckler cow husbandry

sale of male stirks

christmas trees

purchase from Eifel and Westerwald, farm gate sale

urban agriculture from the farmer's point of view:

+ *closeness to the city attractive for free time, friends and school*

- *slowly walking promenaders on agri-cultural roads*

- *high land leases because of little avail-able area*

marketing and customer profile

Büttershof

corporate customer
pick up the milk from the farm

private customer
purchase of christmas tress only
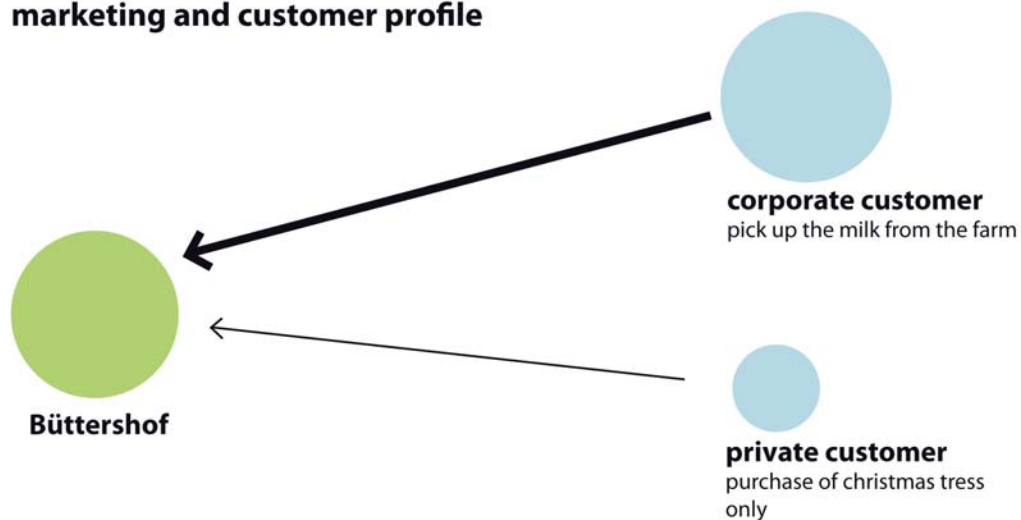
Allotment gardens "Groß Tivoli"
Adress: Berensberger Straße 300, 52072 Aachen
1.Chairman: Hubert Coonen

The Groß Tivoli allotments were founded in 1922. Displaced by the new stadium of Alemania Aachen, the allotments were moved to their current location in 2009. Since then 39 members cultivate a garden plot between 250 and 350 square meters. The plot size and type of use is determined by law (Bundeskleingartengesetz); it can therefore not be used for any commercial purposes. The law also specifies that at least 1/3 of the plot has to be used for growing fruit, crops or vegetables, in a typical variety for allotments. In the shared-use areas there are different types of fruit trees which are maintained and harvested equally by all members. The motivation of the members, however, lies mainly in recreation and leisure time. Working outside in fresh air, the nature-related education of the children and to relax in one's own garden are the main reasons; the products themselves play a secondary role. This goes for all members. The funding for the allotments is based on membership fees and the leases for the plots. The use of the clubhouse by neighbours and hiking groups adds some income to the club. Based on its great location within the natural landscape, the demand for free gardens is significantly higher than in the allotments closer to the city centre. However, due to the special situation within a nature conservation area an enlargement of the allotments is excluded.

Allotment Groß Tivoli
2,4 ha

1.Chairman: Hubert Coonen

members:
39 without agricultural previous knowledge

residential locations in the neighbourhood — 0,1-1 km

residential locations in the whole city area — 1-5 km

City center — 3,9 km
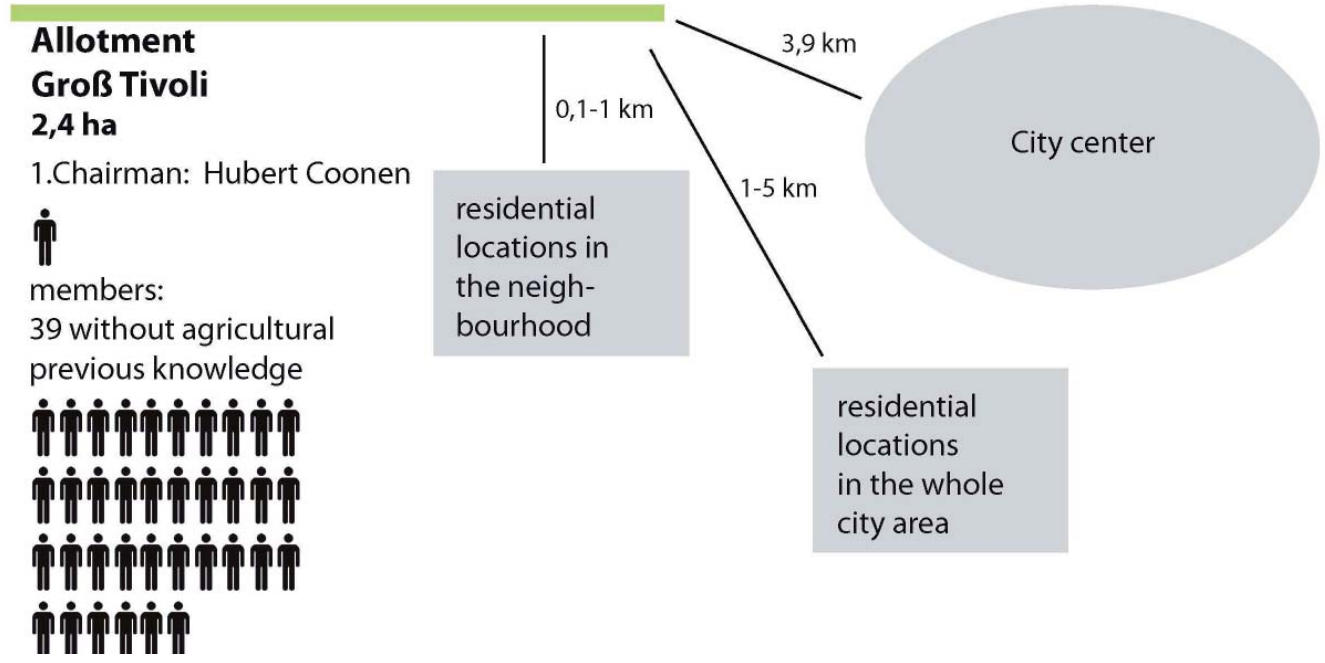
products

economic plants

ornamental plant

recreation

minimum 4 different
kind of economic
plants and 1/3 of the
garden area is presci-
bed, especially
cabbage, patatoes,
vegetables and fruits

flowers, lawn

facilities

club house

coffee shop

urban gardening from the tenants' point of view:

+ *location close to nature in landscape conservation area*

+ *better air than in the city, great view*

+ *increased recreational and leasure time value*

user and handling of harvests

club members

friends and families of
the members

recreation tourists
Pferdelandpark

use of the harvest

use of the harvest

members
cultivation for self use

allotment
coffe shop

garden neighbours
sometimes exchange of
harvest in case of overpro-
duction
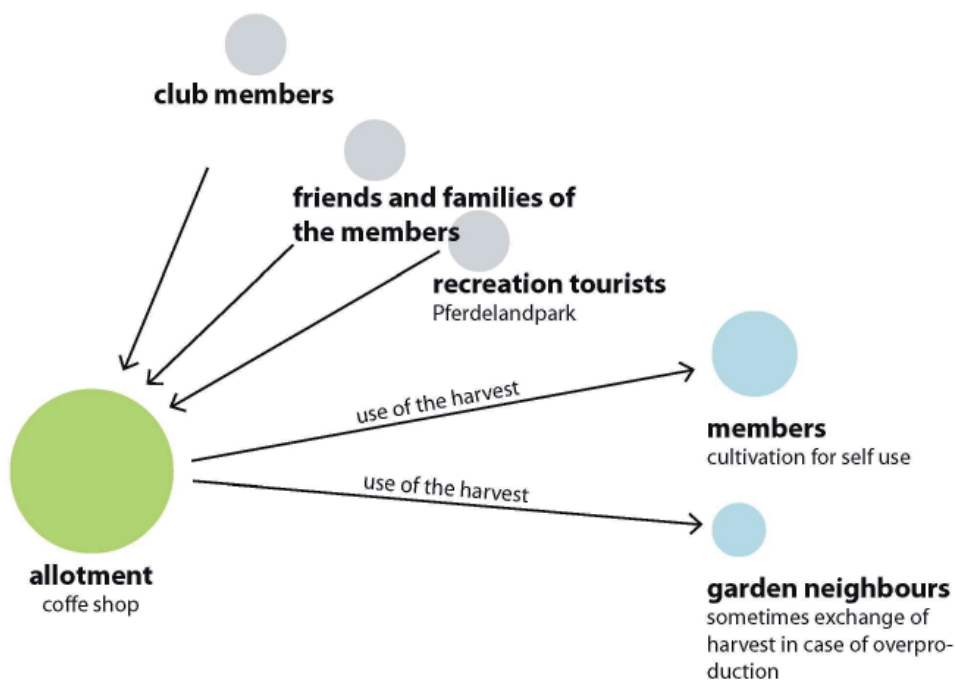
Gut Paulinenwäldchen
address: Zum Blauen Stein 26-34, 52070 Aachen
manager: Herr Volker Gauchel since 1999

The Gut Paulinenwäldchen is a family farm in the north of Aachen. There are two locations, the main farm in the Soers with 60 ha and another location in Vetschau which is leased by the city Aachen and has a size of 57 ha. The farm has two branches of industry, the agriculture and the farmshop. Besides that there is also the association „Klatschmohn e.V." which educated school classes in agriculture and the handling of food and organised several activities. The agricultur is leaded by Volker Gauchel and his wife and the farm shop and the organic vegetable box and its supply is organised by a friendly family, the Schüller-Ruhls. Volker Gauchel cultivate regional and seasonal vegetables especially papatoes and cabbage and practice suckler cow husbandry. All products are certificated organic. In the farm shop they sells their own vegetables and the beef and some other products which they purchase from other farms in Düsseldorf, Bonn and Münsterland. The closeness to the city is good for beeing known and because of good word-of-mouth advertising they don´t need special marketing.

Gut Paulinenwäldchen
60 ha
leased land around the farm

4,7 km

City center

Residential location is on the farm
Gauchel family

assisted living for traumatised children

5,2 km

67 ha
leased land in Vetschau

Owner: Fam. Gauchel
Manager: Volker Gauchel, certified farmer
work together with the Schüller-Ruhl family

Weißer Weg
Pferdelandpark

Employee:
4 permanent employees in the office

7 permanent employees for the organic vegetable box, semi-skilled

8 permanent employees for agriculture, semi-skilled

6 permanent employees for the farmshop, semi-skilled

products

vegetables

regional and seasonal organic products, especially cabbage, patatoes and vegetables

suckler cow husbandry

sale of beef from one´s own slaughtering

purchase

of regional organic products for sale in the farmshop (dairy products, eggs, bread etc.)

branches of industry Bioland-Hof Gauchel

agriculture

cultivation of cabbage, patatoes and vegetables, beef

sale to the central markt and coporate customer, as well as cooperation with farms in Düsseldorf and Bonn

farm shop

principle of organic production, direct marketing

purchase of additional products from Düren, Münsterland and farms in Düsseldorf and Bonn (dairy products, eggs, bread etc.)

Klatschmohn e.V.

school class guidance, education for handling with food and its production, serveral public activities

urban agriculture from the farmer's point of view:

+ *the farmshop´s closeness to the city*

+ *residential location, recreation and circle of friends in suburban location*

- *recreation tourism per e.g. „Pferde-landpark" induces problems because of people crossing the fields, dog owners and more danger of infection through animals*

- *plant extention at the location is not possible*

marketing and customer profile

farmshop

supply

supply

private costumer
regular costumer, local residents, people from the city, supply of the organic vegetable box

central market
in Düsseldorf

cooperation
with farms in Düsselddorf and Bonn
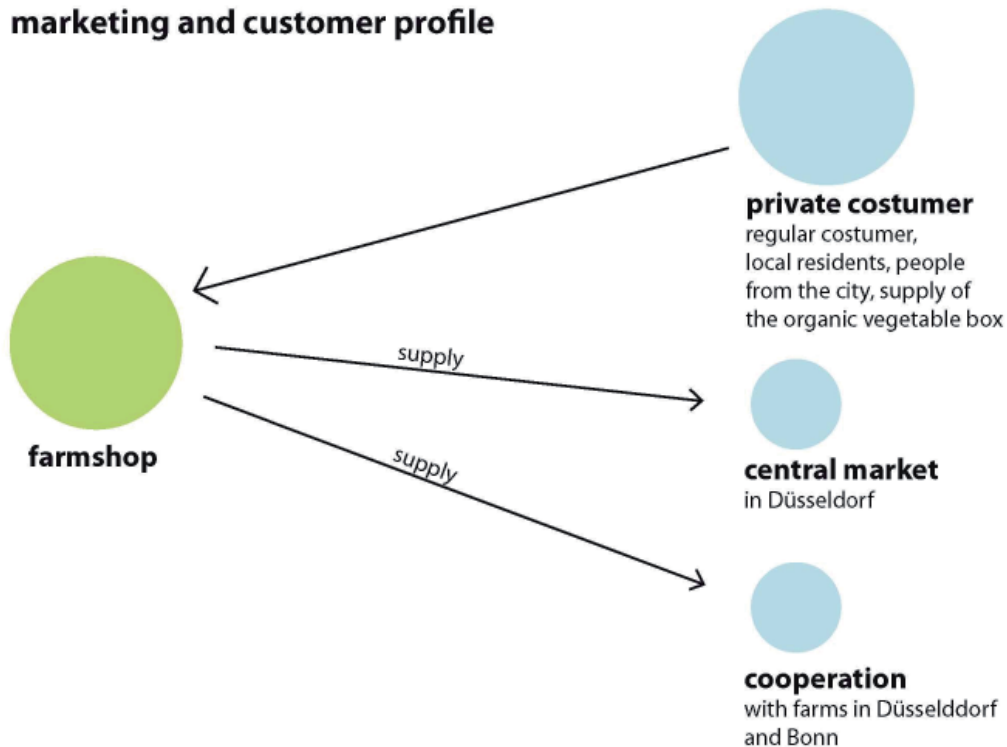
Conclusion

As a conclusion of our work we can say that there is no such thing as a typical farm of the Soers. Never the less there are also similarities between the farms which are clearly influenced by the nearby city. The most traditional farm (Dairy Farm Drießen) is also the one with the least benefit of the city nearby. On the contrary, for this particular farm the little distance to the city leads to economical disadvantage. There are only social reasons, to keep the farm within the city range. For the other farms it is different. Both, the organic farm Paulinchenwäldchen, and the farm Bonnie lay their focus on direct marketing to benefit of the small distance to the end consumer. Also, G3 is trying to improve their direct marketing to use the full potential of its urban location. The concepts of urban agriculture in the Soers are mainly focused on direct marketing, in the case of farm Paulinchenwäldchen the majority of the shop products are not even from their own production. The higher profits by selling the products to the end consumer enable the farmers to counterbalance the difficulties of the small plot sizes. It is noteworthy that every farm in the Soers pursuing its own approach. By beeing so close to each other, the specialization is necessary to establish its own independent client base. Compared with the general statistics of German agriculture, the size of some farms located in the Soers is sufficiently below the German average, as expected. Surprisingly, despite the urban location, there are also farms almost twice as large. This is mainly due to the fact that the many very small urban farms in Germany are recorded in the overall statistics too. It can therefore be expected that even the biggest farms in the Soers are smaller than the average of the rural farms. In contrast to the average German farm, those in the Soers-area are mainly run as a main source of income, which otherwise are nationwide only 45%. Since the concepts of the farms in the Soers are strongly focused on the end consumer it is not surprising that the cultivation of renewable raw materials in the Soers does not matter at all, though it occupies Nationwide about 17% of all agricultural land. On the example of farms in the Soers it can be said that the concepts of urban agriculture are clearly different than those of traditional rural farms. On one hand there is the strong focus on the consumer, on the other hand this opens various possibilities to run even small farms economically.
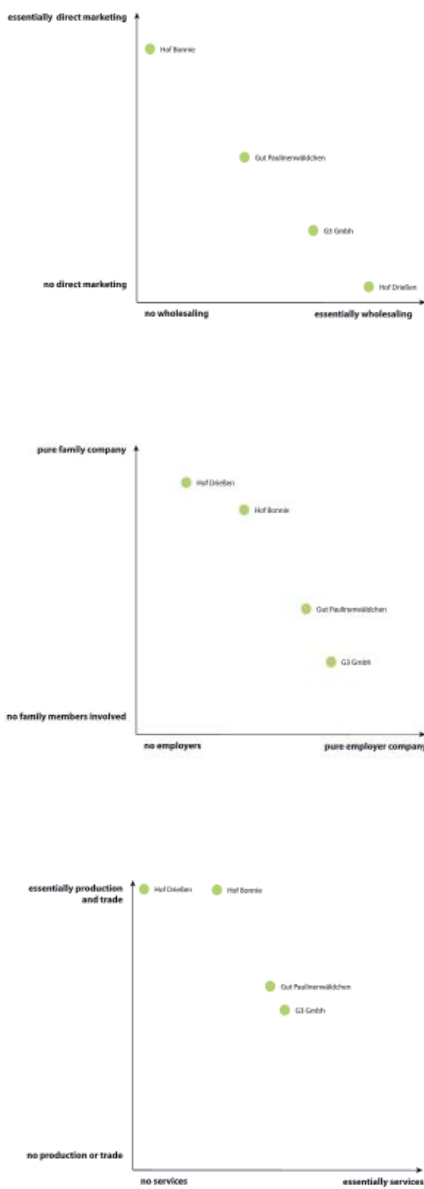
Comparison of the investigated farms
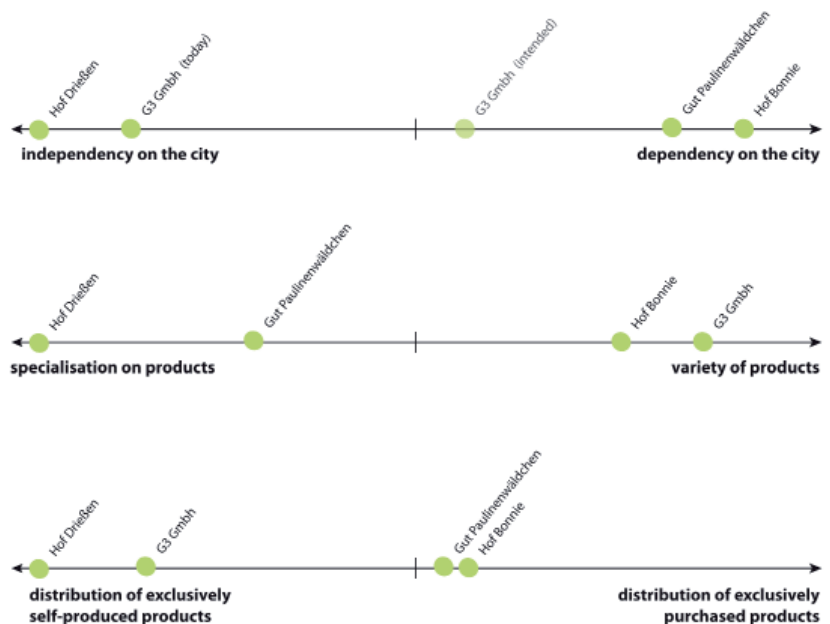
Comparison of Urban Agriculture farms in Aachner Soers with nationwide average data of Germany

portion of family business in the german agriculture (2008)
source: Statistisches Bundesamt, Agrarstrukturerhebung 2005 und 2007, BMELV, 42

- Hof Bonnie
- Gut Paulinenwäldchen
- Hof Drießen
- german average
- G3 Gmbh
- allotments Groß Tivoli (100%)

family business 94%
other types of business

family business operating as sideline basis (2007)
source: Statistisches Bundesamt, Agrarstrukturerhebung 2005 und 2007, BMELV, 42

- german average
- Hof Bonnie
- G3 Gmbh
- Hof Drießen
- Gut Paulinenwäldchen

family business operating as sideline basis in the Soers 55%
family business operating as regular basis in the Soers

average farm size in Germany (2007)

- Gut Paulinenwäldchen (127 ha)
- Hof Drießen (115 ha)
- german average — 45,3 ha
- Hof Bonnie (29 ha)
- G3 Gmbh (22 ha)
- allotments Groß Tivoli (2,4 ha)

portion of organic cultivating acreages (2008)
source: www.bmelv.de/cae/servlet/contentblob/430138/publicationFile/26477/DieDeutscheLandwirtschaft.pdf

- Gut Paulinenwäldchen
- german average
- Hof Bonnie
- G3 Gmbh
- Hof Drießen
- allotments Groß Tivoli

organic farms in the Soers 5,3%
non organic farms in the Soers

portion of leasehold areas of agricultural area (2007)
source: Statistisches Bundesamt, Agrarstrukturerhebung 2005 und 2007, BMELV, 42

- allotments Groß Tivoli — 100 %
- Gut Paulinenwäldchen
- Hof Drießen
- german average — 61,8 %
- Hof Bonnie
- G3 Gmbh — 0,00 %

leaflet „Pferdelandpark", Cities Aachen und Herzogenrath

Planning strategy Pferdelandpark

Location:
Aachen + Herzogenrath, Germany; Kerkrade, Netherlands
Dimension: 2000 hectares
Time of origin/Planning period: 2004-2008
Planning actors & Participants:
International cooperation between Aachen Stadt, Herzogenrath
Stadt, Gemeente Kerkrade;
Tuchwerk Aachen, Lousberg Gesellschaft e.V. etc
policy, natur conservation organisations, famers, citizens;
Conception of the Masterplan by Janson & Wolfrum

The „Pferdelandpark" in Aachen as one of a couple of projects realised in the Eu-Regionale 2008 connects the three countries Germany, the Netherlands and Belgium and has been initiated by the communities of Aachen, Herzogenrath and Kerkrade. About 160000 citizens living in a distance of maximum 15 minutes footpath to this 2000 hectar cultural landscape the Pferdelandpark can be considered as a modern municipal park. (In the brochure of the Masterplan it has even been compared to the New York Central Park.) Surrounded by settlements the landscape has been exposed to growing pressure arising from both demand for building land and demand for recreation area. Converting the attractive space into a regional park should conuter these tendencies. A central project of the Pferdelandpark is the White Way. It is composed of 11 new built stations linked by a path which was in substance already existing, but has now been accentuated by mostly white coloured landmarks. The cultural landscape including agriculture is considered as an image to be staged.The concepts focus is hence placed on recreational functions.

Pressure arising from demand for building land etc
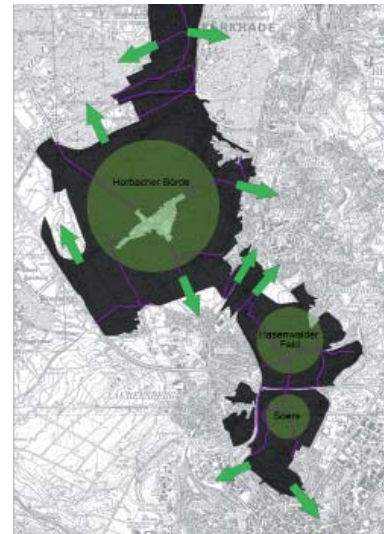
Protection of landscape as well as agriculture
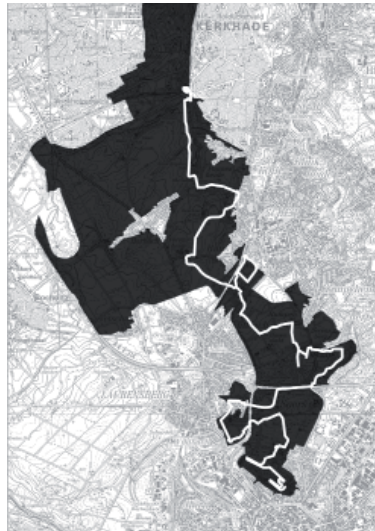
„The White Way": network of ways = „lines"
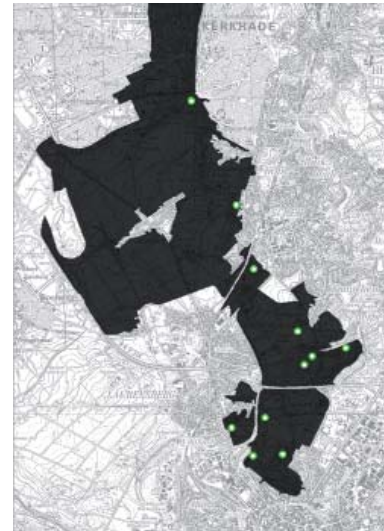
„The White Way": 11 stations = „points"

Urban Agriculture Approaches
– Comparing Small-Scale Initiatives in Cologne,
Germany and Edmonton, Canada

Abstract:

Urban Agriculture (UA) is necessary to mediating the problems of urbanization and food security, while promoting healthy individuals, communities, economies, and environments. However, to date there is a large gap in academic knowledge regarding the topic of Urban Agriculture. This research adds to the discussion of Urban Agriculture through the comparison of UA development in Cologne, Germany to Edmonton, Canada, in hopes to identify best practices and share information. The researcher visited sites and interviewed participants in Cologne, Germany and Edmonton, Canada throughout May-June 2012. Additional project information was found through community garden internet portals and websites. Analytical induction and narrative analysis was used to categorize Project Types and project Functions.

The main Project Types identified include; Individual Plot (of a community garden), Communal Garden, Urban Farm, Education Centre, and Other Projects. Fifteen main project Functions as expressed by participants and through project websites were also identified.

The Project Types and Functions were then used as comparison vectors. It was found that community gardening initiatives in Edmonton are more prevalent, are more established, and place more emphasis on being environmentally friendly. Whereas in Cologne there were well-established Education Centres, and newly created communal gardens mixed with entrepreneurial individual plot initiatives. The main emphasis in Cologne was on the physical and social community creation.

In conclusion it is hoped that the information gathered from both cities can be used to assist in the further development of UA projects in both cities.

Brianne Lovstrom
University of Alberta, Canada

UROP summer student at RWTH Aachen University

The present paper is the result of a 8 weeks research project supervised by Dipl.-Ing. Axel Timpe, Chair of Landscape Architecture within the Undergraduate Research Opportunities Programme (UROP) of RWTH Aachen University

1. Introduction:

"Urban Agriculture (UA) plays a key role in two global challenges: urbanization and food security. It can provide an important contribution to sustainable, resilient urban development and the creation and maintenance of multifunctional urban landscapes. In the globally emerging research field of UA, a European approach to the subject needs to be created. It has to integrate the unique European context regarding its urban and landscape pattern, the important role of the Common Agriculture Policy (CAP) and the needs of the European society. The COST-Action Urban Agriculture Europe (UAE) will initiate the definition of this European approach on the basis of existing research projects and reference regions in the partner countries." (COST – Urban Agriculture Europe).

For centuries societies have cultivated their foods within a regional context, and in crises and times of need food was more intensively cultivated directly within an urban setting, as depicted through the American Victory Gardens of the Second World War (Brown and Jameton, 2000). Although it has been noted by Chandal Nolasco da Silva in the research essay "The Urban Agricultural Movement in Canada: A Comparative Analysis of Montréal and Vancouver" (2009) that crises and low income are not necessary characteristics for the instigation of urban agriculture projects. Due to our history of food cultivation, it seems logical that with an increasing urban population that an ever increasing amount of urban agriculture activities will be founded.

The research aims to illustrate the variance and similarities between two cities that are currently fostering in a wave of urban agriculture projects and support. Cologne, Germany and Edmonton, Canada are cities of similar size, development and environmental conditions (Table 1.0). Through the identification of similarities and differences between the cities (and projects located within), best practices are identified and more understanding is gained into the motivation behind UA projects in general. Furthermore, given the two cities' administrative and civil interests in UA, a secondary outcome of the research is the sharing of information between the two cities.

2. Methodology:

Interviews and site visits were conducted throughout June 12, – July 2, 2012. The main mediums used in Cologne were open dialogue interviews and site visits. Project representatives were asked open-ended questions regarding topics such as: motivation for establishment, project evolution and history, project governance structure, rationale behind participation, functions fulfilled by the project, and future goals. The qualitative responses and overall interview interactions were then analysed using narrative analysis. Closed ended questions also asked included: location, income generated (if any), project size, and species cultivated. In Cologne a total of six interviews with site visits were conducted, with an additional six site visits without interviews. In Edmonton only three interviews via telephone or Skype were possible and only two of these sites were visited (see references for more detail).

To depict a more complete picture of UA in Edmonton and Cologne, additional data was gathered through Internet websites and urban agriculture portals available from both cities. The urban agriculture portals accessed between May and July 2012 were urbangruen.de (Cologne) sustainablefoodedmonton.org (Edmonton). It must be noted that the data collected from Cologne was collected in German and translated into English, whereas no translation was required for the Edmonton data. In all cases, information on technical, social, and environmental aspects was sought.

The qualitative data was then analysed using sociological narrative analysis, where the researcher interpreted the word usage/frequency, gestures, and answer structure. The quantitative data between projects was simply manipulated using concepts such as frequency of occurrence or summation. The qualitative and quantitative information resulted in an assigned Project Type classification and Functions provided by the project. These qualitative characteristics were compared between with the quantitative data and then compared between the two cities in order to infer the different means of which Cologne and Edmonton foster UA. The research followed qualitative induction analysis guidelines, where the researcher gathered, classified and reclassified information through an iterative process.

3. Results:

Cologne and Edmonton were chosen for comparison because of their similar population size, environmental and industrial surroundings, as well as they were relatively well known and accessible to the researcher. However, these similarities (Table 1.0) and the researcher's familiarity of the cities are not the only reasons which made the Cologne and Edmonton good candidates for UA research. Both cities are experiencing a recent wave in community gardens and the city administrators are currently working with stakeholders in both cities to best facilitate the new community and rights oriented land-use associated with UA.

The City of Cologne and the City of Edmonton reach out to UA participants in an effort to try and understand the phenomenon of UA. Both city administrations are looking at ways to support and promote UA as a means of city imagining and furthering sustainable practices. The City of Edmonton is currently (summer 2012) writing their "made-in-Edmonton food and agriculture strategy" (Food and Agricul-

Table 1.0 - City Statistics

Cologne, Germany	Data: 2010	Edmonton, Canada	Data: 2006, 2011
Population (2010)	1 007 119	**Population (2011)**	812 201
Male	487 419	Male	404 875
Female	519 700	Female	407 325
% change (2005-2010)	+ 2.3%	% change (2006-2011)	+ 11.2%
Immigrant population (Nichtdeutsche)	162 764 (16.2%)	Immigrant population (2006)	165 615 (23%)
Age (2010)		**Age** (2011)	
18-29 (persons)	168 235	18-29 (persons)	164 435
30-49 (persons)	321 309	30-49 (persons)	238 870
50-64 (persons)	176 125	50-64 (persons)	150 750
65+ (persons)	183 399	65+ (persons)	94 660
Area (km²)(2010)	405, 17	**Area** (km²)(2011)	684,37
Research UA Area (km²)	min 6.487909	Research UA Area (km²)	min 0.03
Population density (persons/km²) (2010)	2 485,7	**Population density** (persons/km²) (2011)	1 186,8
Agriculture land area (ha) (2010)	6 989	**Agriculture land area (ha)**	------------
Individual income (mean after tax)(2010)	EUR 20 289 ($25 244)	**Individual income (mean after tax) (2006)**	$25 117 (EUR 20 196)

ture Project, City of Edmonton Website), while the City of Cologne offers grants for UA initiatives and is creating an educational pamphlet with information on current projects and how to participate, who to contact regarding questions, and how to start your own project. The hard work being put forward by both city administrations illustrates the profound commitment existent in both cities regarding UA.

The similarities previously mentioned led the researcher to believe that perhaps the UA phenomenon was more of a global or westernized development and that distinct differences within Cologne and Edmonton would not appear. Upon initial analysis it appeared that Edmonton and Cologne had developed and were continuing to develop in a similar fashion regarding UA. However, upon further investigation and categorization of Project Types and Functions it became apparent that the cities did indeed have different UA cultures and structures.

Edmonton, Canada

project distribution and photographic impressions (map: Brianne Lovstrom on GoogleMaps, Photography: Brianne Lovstrom)
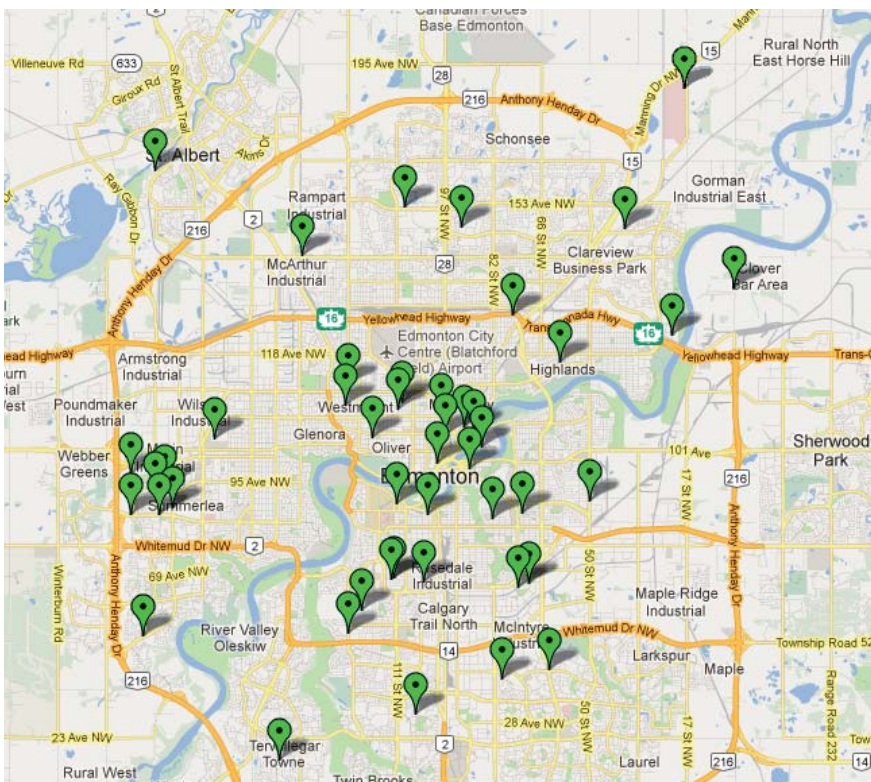
Cologne, Germany

project distribution and photographic impressions (map: Brianne Lovstrom on GoogleMaps, Photography: Brianne Lovstrom)
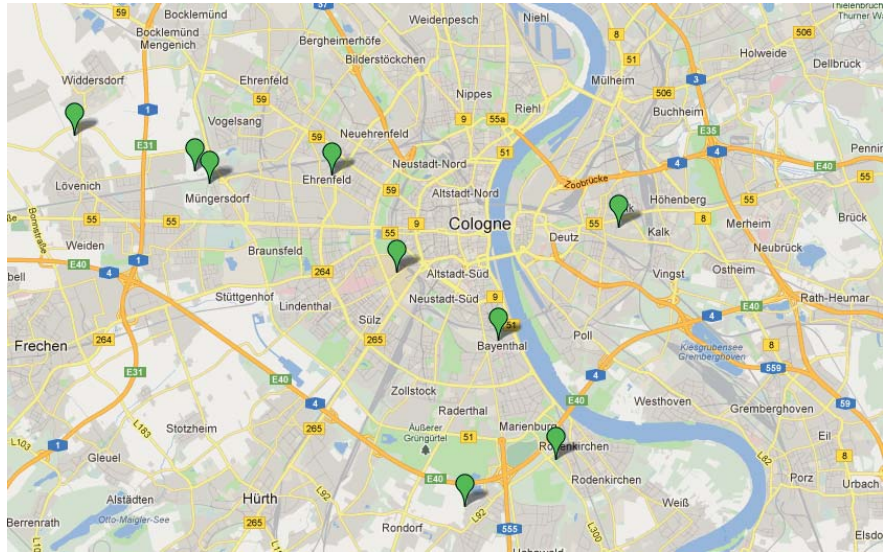
The variation between Cologne and Edmonton became apparent through the iterative process of identifying Project Types and Functions. The Project Types identified included; Individual Plot (of a community garden), Communal Garden, Urban Farm, Education Centre, and Other Projects. The Individual Plot classification refers to a community garden or shared space, which is then divided into personal plots for personal use. For most of these projects a member must pay a rental fee or usage fee for the summer. In Cologne the Individual Plot projects are driven through an entrepreneurial model; and therefore have higher rental fees. A typical Individual Plot in Edmonton had a usage fee of $20 - $30 CAD (15 - 24 EUR); whereas in Cologne rental fees ranged from 400-600 EUR, for what in most cases is a larger plot. Square metre prices are difficult to determine, because not all plots are charged on a per area basis. However, some examples of area prices include 2.80 EUR ($3.47 CAD)/ m^2 with Garten Glück in Cologne, $2.15 (1.73 EUR)/$m^2$ with Highlands Community Garden in Edmonton, and $6.67 (5.38 EUR)/$m^2$ with Idlwylde Cheery Tomato Community Garden in Edmonton. Communal Gardens are the projects that plant, cultivate, and reap the benefits equally amongst users or volunteers (or in some special cases the produce/income is donated to a local charity). There is no formal personal ownership within the garden; however a fee for participation may be required. Urban Farms are the operations whose main goals are to produce food for sale or consumption as a necessary means for personal sustenance and support (Sarah Rich, 2012). These operations may lean more towards production efficiency, and operate with employees, which may be supplemented with volunteers. Education Centres are the operations whose main focus is on providing training and education regarding gardening and food production in general. Food may be produced, sold and/or consumed on the sites; however there is a structured curriculum or facilities for learning. Other Projects include "homeless" projects that may not have a core group of members, may not have a standard location, and do not fit amongst the other four Project Types.

In addition to *Project Types*, fifteen main project Functions as expressed by participants and through project websites were identified and grouped under societal environmental, educational, and economic motivations. Food Production was left as a stand-alone function.

The *Functions* include:

- Food Production: producing fresh, healthy (organic) food,

Societal
- Venue: location to host an event,
- Socialization: meeting and interacting with new people,
- Recreation: enjoying the process of gardening and being outdoors,
- Sharing Information,

Environmental
- Promotion: actively promoting environmental sustainability to the surrounding
population,
- Aesthetics: beautifying an area,
- Land Remediation: improving the surrounding natural environment,
- Biodiversity Preservation,
- Experience Nature: experiencing a less anthropogenically disturbed atmosphere,

Educational
- Inclusive Education: including special needs students through a gardening medium,
- Education: supplementing classroom education,
- Integration: facilitating
- Therapy: providing a calming/healing experience, and

Economic
- Income: providing a source of income.

In total 47 projects were studied. 35 projects were based in Edmonton and 12 in Cologne. 25% of the projects in Cologne were classified as Individual Plot, 33.33% of the projects were Communal Gardens, and 25% were Education Centres. There was also 1 Urban Farm and 1 Other Project. In Cologne the projects are well distributed amongst the identified Project Types. However, in Edmonton there is a large trend towards Individual Plot gardens, with these making up 60% of the Edmonton projects. Next comes Communal Gardens with 28.5% of the projects. Edmonton is also home to 2 school education projects labelled as Education Centres, 1 Urban Farm, and 1 Other Project. Overall there were more projects taking place in Edmonton, a city with a slightly smaller population than Cologne. However the surface area studied in Cologne was 200 times larger than the area of cultivation in Edmonton. This is due to the inclusion of the Kleingärten area in Cologne. As depicted in Figure 1.0 it can be seen that the idea of having a community garden (Communal or Individual Plot) ignited earlier in Edmonton. This earlier ignition coupled with a larger surface area and a currently supportive City Council are likely resulting in the large number of initiatives.
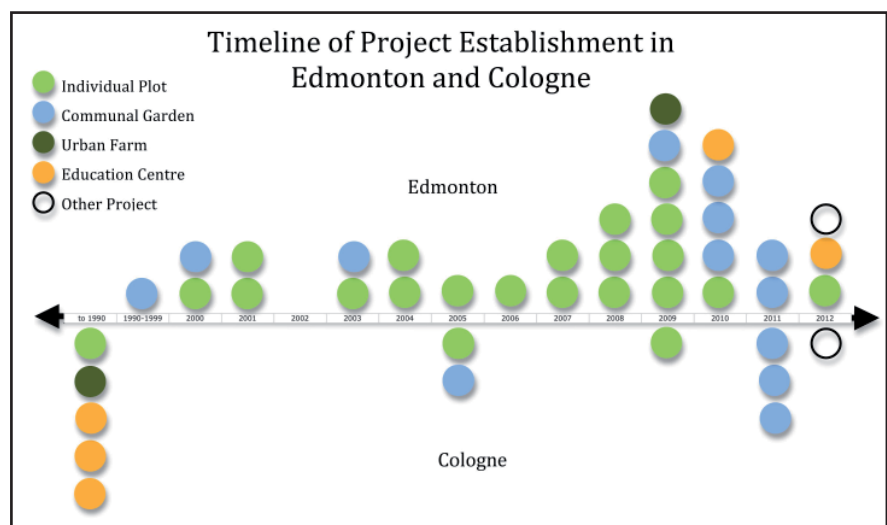
Figure 1.0 - Timeline of Establishment for Currently Operating Projects

Differences in gardening culture became apparent through the interviews and websites regarding the themes of community/society and the environment. Inactuality, the researcher could not strongly distinguish between correlations between Functions and Project Types and city. However while performing interviews and searching websites it was acknowledged that Cologne participants placed more emphasis on the social aspects of the projects, regardless if they were Individual Plots, or Communal Gardens. Having a meeting place within the growing space and meeting neighbours was the first theme to emerge and was brought up multiple times within an interview. In Edmonton, the social and environmental contexts were often woven together, but the emphasis was placed on "organic", "sustainability", and other environmentally friendly related terms. 57% of the projects actively stated that their projects provided environmentally friendly Functions such as sustainability promotion, improving aesthetics, enhancing the environment through land remediation, preserving biodiversity, and providing the opportunity to experience nature (see Figure 1.1).

The differences in motivation and participant perceived Functions are worthy to note, as they will help the cities to further cater towards the needs of their residents. These findings state that Cologne residents are looking for space to recreate and meet new people, whereas Edmontonians are searching for ways to assert their environmentally grounded values. This is not to say that Cologne residents do not share the same environmentally grounded values. In fact the general list of Functions depicts that Edmontonians and Cologne residents participating in UA share most of the same values, instead the results are showing a gap in provision.

Throughout the interview and Internet research process it was clear that UA projects are multi-facetted and a complete comparison between Cologne and Edmonton is not possible. The different Project Types, situational variances, and Function variances do not allow for a clear-cut distinction between practices in Cologne and Edmonton. All projects served multiple Functions and shared these Functions between the Project Types and cities. A project operating in Cologne could be transplanted into an Edmonton setting without looking out of place and vice versa.

The multi-facetted characteristic exhibits itself through the bottom-up initiation of projects in both cities, as projects are created to serve the specific domestic needs and desires of residents. In the cases of Cologne and Edmonton, the civil movement occurred prior to the arrival of municipal governments trying to sort out UA. This allowed the projects to remain multi-facetted and serve the Functions desired by participants. It enabled residents to exhibit their needs and wants through a productive non-harmful manner medium, while the city shares the greening effect offered by the projects.

4. Conclusions:

The results obtained from the research are beneficial to the UA projects and city administrations in Cologne and Edmonton. City administrations should pay attention to the motivations and perceived Functions from participants in order to best support and promote the further greening of the city. Follow-up research should be conducted and another comparison made after the two city administrations have administered their UA plans. This second comparison should focus on the effect of a top-down approach of a political food and agriculture strategy as is being developed in Edmonton, vs. the bottom-up approach of promotion and educational support offered by the City of Cologne.

Nevertheless, because most of the research took place in Aachen, Germany it was more difficult to contact projects in Edmonton and conduct comparable interviews and site visits. The use of narrative analysis was best suited for the project, but the lack of formal interviews in Edmonton led to gaps in knowledge and having to rely on and interpret written script within a website. This medium does not allow for spontaneous response and the option to ask for clarification or more information from the researcher. In the future studies should include dialogic interviews and written script such as a website or information pamphlet from all parties to prevent bias.

In addition, due to the short time-span of data collection, it was not possible to create an exclusive list of UA projects in neither Cologne nor Edmonton. Within the researcher's list of projects are projects, which are known to the researcher, but do not have any data sets. These projects were not included within the 47 projects categorized and analysed, but are included within the mapping exercise and, if possible, the surface area of a city being occupied by UA (in Table 1.0). The data is updated to July 2, 2012; however after this date, new gardens were popping up within both cities. This depicts the commitment and prime atmosphere for UA to grow in Cologne and Edmonton.

5. Evaluation:

The research was presented at the COST UAE Working Group Meeting (July 9-11, 2012), where the importance and advancement of UA was discussed amongst European and International experts. During discussion it became apparent that there exist varying views or what constitutes UA and for what purpose it should be further developed. Small-scale initiatives were commonly brought up within a sociological and policy context as a means for self-sufficiency and pride. It was within this context that the research conducted in Cologne, Germany and Edmonton, Canada became relevant, as it provided specific examples of Functions and motivations for the occurrence of UA through small-scale mediums.

Figure 1.1 - Project Functions and Main Motivations
*Functions identifying main motivation highlighted in yellow

Cologne, Germany

Edmonton, Canada

However, given the European and International context of the COST UAE initiative it is clear that the examples of Cologne and Edmonton are not stand alone phenomena, and that individual cities express UA through different Project Types. While speaking amongst experts from Sweden and Portugal other Project Types not found within the research in Cologne and Edmonton were identified and warrant further research.

At the meeting, researchers also approached the author with questions regarding methodology, process, and findings, as similar comparison projects are taking place throughout Europe, such as Poland and Germany. It is valuable to share the difficulties, best practices of research, and research results with other researchers. This information sharing will lead to a clearer picture of UA in Europe (and the world), so that UA can be further developed and supported.

6. References:

Bibliography:

Brown, K.H. and Jameton, A.L. (2000): Public Health Implication of Urban Agriculture, In: Journal of Public Health Policy, Vol. 21, No. 1 (2000), pp. 20-39

The City of Edmonton: Food and Agriculture Project, In: http://www.edmonton.ca/city_government/urban_planning_and_design/food-andagriculture- project.aspx, accessed June 4, 2012

COST – Urban Agriculture Europe: www.cost.esf.org/domains_actions/tud/Actions/TD1106, accessed July 9, 2012

Da Silva, Chandal Nolasco (2009): The Urban Agricultural Movement in Canada: A Comparative Analysis of Montréal and Vancouver In: www.cityfarmer.info, accessed July 9, 2012

Information und Technik Nordrhein-Westfalen – Geschäftsbereich Statistik (2011): Kommunalprofil Koln, krfr. Stadt - Regierungsbezirk Koln, Gemeindetyp: Große Großstadt, pp. 3 – 6, 9

Information und Technik Nordrhein-Westfalen – Geschäftsberreich Statistik (2011): Statistisches Jahrbuch Nordrhein – Westfalen 2011

Statistics Canada (2006): 2006 Community Profiles, Edmonton, Data table In: http://www12.statcan.gc.ca/census-recensement/2006/dp-pd/prof/92- 591/details/page.cfm?Lang=E&Geo1=CSD&Code1=4811061&Geo2=PR&Code2=48 &Data=Count&SearchText=Edmonton&SearchType=Begins&SearchPR=01&B1=All &Custom=, accessed June 4, 2012

Statistics Canada (2012): Census Profile, Edmonton, Data table In: http://www12.statcan.gc.ca/census-recensement/2011/dppd/ prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=4811061&Geo2=PR&Code2 =48&Data=Count&SearchText= Edmonton&SearchType=Begins&SearchPR=01&B1= All&GeoLevel=PR&GeoCode=4811061, accessed June 4, 2012

Statistics Canada (2012): Population and dwelling counts, for Canada, provinces and territories, and census subdivisions (municipalities), 2011 and 2006 censuses In: http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/hlt-fst/pd-pl/ Table- Tableau.cfm?LANG=Eng&T=302&SR=1&S=51&O=A&RPP=9999&PR=48&CMA=0, accessed June 4, 2012

Twilight Greenaway: What farms can do for cities: A chat with author Sarah Rich In: grist (http://grist.org/urban-agriculture/thinking-big-about-food-in-cities-a-chat-withurban- farms-author-sarah-rich/), accessed July 9, 2012

Research References:

Interviews and Contacts:

Nissing, W. /Röser, S.: Neuland e.V., interview June 18, 2012

Katharina: Obsthain Grüner Weg, interviewed June 18, 2012

Sylvestre, S.: University of Alberta Students' Union, SustainSU, interviewed June 25, 2012

Gregoire, A.: On Borrowed Ground, interviewed July 20, 2012

Pollter, R.: Grenzenlos Garten e.V. – Pflanzstelle, interviewed June 13, 2012

Kuechenhoff, B.: City of Cologne – Finkens Garten, interviewed June 27, 2012

Roußelli, J.: Der Kölner Bio-Bauer, interviewed July 2, 2012

Lampe, G.: Kreisverband Köln Kleingärtnervereine e.V. - Lehr- und Beispiel Garten, interviewed June 27, 2012

Schroeter: La Cava (Meine Ernte), interviewed June 18, 2012

Bowen, S.: University of Alberta Green and Gold Garden, interviewed June 19, 2012

Hoeppner, R.: City of Cologne – Umwelt- und Verbraucherschutzamt

Websites:

http://blogs.edmontonjournal.com/2012/04/09/the-great-raspberry-project-excitingnews- for-would-be-local-gardeners/, accessed May 18, 2012

http://www2.canada.com/edmontonjournal/news/story.html?id=49930522-288c-481ba4b7- 4e6ad9f0fa63, accessed July 4, 2012

http://www.stadt-koeln.de/6/gruen/02825/, accessed June 17, 2012

www.buergerstiftung-koeln.de/projektarchiv/57-interkultureller-garten-in-koeln-niehl, accessed July 3, 2012

www.edmontonsun.com/2011/05/27/inner-city-looking-a-little-greener, accessed July 9, 2012

www.freiluga-schulbio.de/cmsms/, accessed June 19, 2012

www.gartenglueck.info, accessed June 28, 2012

www.highlandscommunity.ca, accessed July 9, 2012

www.kleingaertnerverbandkoeln.de/lehrgarten.htm, accessed June 28, 2012

www.onborrowedground.com, accessed June 5, 2012

www.permacultureschool.ca, accessed June 12, 2012

www.sustainablefoodedmonton.org, accessed July 8, 2012

www.su.ualberta.ca/services/sustainsu/garden/, accessed June 22, 2012

www.urbangruen.de, accessed June 12, 2012

Urban Agriculture Approaches
– Best Practices in a Dutch-German cross border region

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Abstract

Using the municipalities of Maastricht, Aachen, and the former mining region of Parkstad Limburg (examples in Heerlen and Kerkrade), a comparative study was conducted which aimed to identify common characteristics between the urban agriculture projects found in these border cities. Ideally, this study would derive a typology of projects in the region, as well as a pattern of reasons for the similarities and differences in the approaches that the cities have elected to pursue.

The methodology of research included reading literature and online resources on each region, attending regional governance meetings, and contacting stakeholders of the known projects to conduct on-site interviews.
Stakeholders included city planners, interest group participants, social workers, and garden volunteers. Information was collected from the interviews on the platforms of social influences, project history and motivations, governing structure, and successes/failures. From this, the projects were divided upon the typologies of location (Maastricht, Parkstad Limburg, and Aachen) and also scale (Neighborhood, City, and Region).

When analyzing the results based upon location, it was found that each municipality had a similar motivation for urban gardens, as all are experiencing changes in city size and production from the decline of the industry and the current economic recession. However, the projects were more clearly evaluated in the lenses of Neighborhood, City, and Regional Scale, as consistent characteristics were found within each size grouping, regardless of their municipal location.

Introduction and Methodology

Urban agriculture is a field of growing relevance in industrialized countries of the world. Examples are common in major cities where urbanization and high population density inspire people to find new ways of food production and socialization. Urban agriculture is also commonly found in cities like Detroit, where a decline in production has led to population exodus, abundance of brownfield sites, and declining socioeconomic status for much of the population.

Several models of urban agriculture exist, as each region typically has its own set of guidelines and goals. Models include urban gardens, urban farms, and plot gardens. The difference in the models is mainly based on the scale and purpose of the agriculture. For example, a family might choose to tend their plot garden once a week after work, while an urban farm might need hours of work each day. In addition, sometimes urban agriculture might be confused with rural scale agriculture in cities that have a large amount of sprawl into surrounding areas. Because city limits are not always the most decisive boundary in a complex city environment, urban agriculture has also come to include urban, periurban, and commercial settings.

While rural agriculture is supported with money from the European Union via the Common Agriculture Policy, a farming subsidy, urban agriculture is not considered under this jurisdiction and therefore does not recieve federal funds. Because urban agriculture is growing in need, policies should be formed which allow urban farmers to recieve the same benefits as their rural counterparts. However, because of the number of urban agriculture variations and methods, setting up policies for states or nations has proved difficult. One nation could have innummerable reasons for urban agriculture, as many countries have areas which range in wealth and food supply. One possible way to pass policies would be if each region could customize their own policy depending on the overarching needs for the region, and be analyzed in accordance to these specific values.

With this research project, the researcher first composed a contact list of the various urban agriculture projects in the German-Dutch cross border region that links the cities of Aachen, Herzogenrath, Heerlen, Kerkrade, Valkenburg, and Maastricht. Next, emails were sent asking for a short interview session with each of the stakeholders to ask about the motivations, methods, and circumstances surrounding each of the projects. The large majority of stakeholders were eager to meet for the

interview, either because they wanted to further the publicity of their own project or because of sheer curiosity about the researcher's project.

Interview outlines were drafted in accordance with the topics of general information, social atmosphere, history, factors, and governmental structure. These topics helped to organize the interview information and later allowed the projects to be compared upon parallel platforms. In general, the interviews flowed naturally on these guidelines, and the same subtopics were brought up at each meeting. During the first few interviews, all information was recorded throughout the meetings on interview cards; however, soon the researcher discovered that interviews more more relaxed and covered more topics if the information was recorded after the meeting, to allow maxiumum interaction time with the stakeholder.

After each interview, all information was recorded in a journal that organized projects by region. This journal kept all of the information derived from the interviews (names, times, places) and was written as soon as possible after the interview when the details were still fresh. Next, factsheets were composed with condensed information on the 5 topics (general information, social atmosphere, history, factors, and government). Each factsheet also included relevant photos, logos, and mappings gathered from the interviews. During the final phase of the project, graphs were made which condensed the findings into readable scales, and all relevant findings were arranged on a poster. The final poster and findings were presented at the COST Action- Urban Agriculture Europe meeting, held July 10-12, 2012 in Aachen, Germany, and served as a kickstarter for discussions on the current state of Urban Agriculture in Europe.
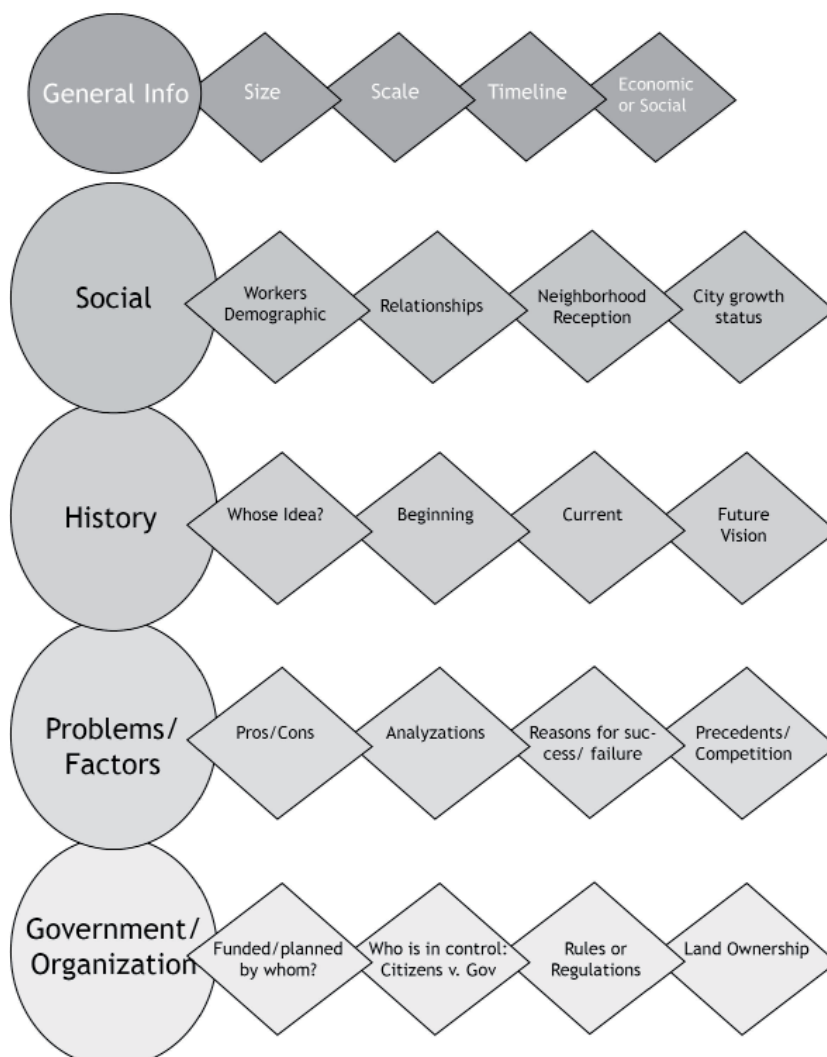

Fig. 1: Interview outline of discussion topics

Project Descriptions

Sphinxpark Maastricht

Scale: City
Timeline: 1 year
Size: 5 hectares

When several planning groups pulled out of the Belvedere area housing project in Maastricht because of financial problems, social plan¬ning groups (including Bureau Europa and RECentre) saw an opportunity to draw social change toward urban agriculture and share the possibilities of the open space. The gar¬den is now tended in 5 programmatic groupings, including herbs, experimental gardens, and city-safe beehives. It is a com¬mon, shared space with no private areas. The future vision is to bring the park to its full potential and increase production of fruits and vegetables.

The site is maintained by a volunteer organization with members who are interested in cultivating the land and finding new ways of urban productivity. The organization does its own planning, as the owners want to place responsibility on the shoulders of the citizens. The people have responded well to the park and are ex¬cited to get involved. Some say they will fight to keep the park alive even after the 1 year deadline. Workers are all ages but mostly young.

Groups working on the project include: RECentre, NAim/Bureau Europa & Maares Projects, Municipality of Maas¬tricht, Province of Limburg, and area devel-opment of Bel¬vedere.

The developer acquired the land but is allowing the gar¬den for 1 year while plans are organized. The lot was vacant when the social organizations saw the prob-lem and took the initiative to address it. The groups want to show the citi¬zens that little input can create a great outcome.

Much of the time and energy of management goes into organizing the workers/workdays, draining resources that could be used to expand the business. The experi-mental space element allows freedom for the volunteers to de¬sign their own plan of action. For the owners, the lon¬gevity of the garden is not important, but that the ideas of UA are planted in the people's minds. The short time¬frame is a curse be-cause people cannot get too invested, but is also a benefit because it forces action.

Slowfood Landscape Maastricht

Scale: Regional
Timeline: Indefinite
Size: 600 hectares

The city of Maastricht was originally an industrial area with high pro¬ductivity that provided life and economic success for the region. When the industrial boom slowed down, the city looked towards gastronomy as a marketing strat¬egy. Now the city's main industry is tourism, and the town planners wanted a way to promote the gastronomic theme visibly. Maastricht created the slow food landscape north of the city to grow high quality food in an acces¬sible landscape, making food available at a cheap price.

The landscape between Maastricht and Valkenburg is cul¬turally important for the region, as it holds many of the historical farmlands, castles and estates that have char¬acterized the city for centuries. As the city grew into the countryside, the town looked for a way to protect these cultural landmarks. The town mimicked examples of slow food in Italy, which provide high quality food that is specific to the region and culture. The project has now grown to near completion after 10 years of plan-ning.

The region uses a public/private form of governance, in which the city plans the land, then chooses individual in¬vestors to groom the land. Companies such as hotels and education centers have been given permission to keep the land, given that they will provide some sort of com¬munity benefit in return for using the farm products. The area uses a bottom up farming method. The Netherlands gave federal money to fund the construction project, and the plan was decided via design contest by the city.

At the beginning, cycling and pedestrian paths were cre¬ated to unify the re-gion. However, where to put the city's traffic was an issue. Maastricht has strict rules regarding old building foundations which prohibit destruction to historical sites. A double layered approach was formed after the city structure of Paris- where automo-bile traffic is underground and greenspaces take priority of above-ground space. Now, university students in Maastricht are working on various lay¬out strategies for market-agriculture combined spaces.

De Moestuin Heerlen

Scale: Neighborhood
Timeline: Indefinite
Size: 800 m squared

The De Moestuin garden was made to boost community pride, encour¬age environmental education, and cut vandalism in the low income neighborhood. Some volunteers are veteran gardeners, while others are new to plant cultivation. The workers share different techniques and crops amongst themselves, and have seasonal cookouts with some of each person's crop. The workers include many first or second generation immigrants, and range in age from 12-75. There is a strong camaraderie among the volunteers as they know names and personalities.

The idea was created by a town planner to create a central programming/ meeting point for the community. Once the land was acquired, an artist was hired to create a plan for the garden. The garden is divided into around 30 individual plots, which are reserved (not rented) by families, indi¬viduals, and school groups. At first, finding volunteers was difficult. However, once the plots began to produce, peo¬ple became more interested. Now the garden grows many types of vegetables and there is a waiting list for plots.

Before the garden, the site was a brownfield, which was a result of shrinking city size (Heerlen is a former mining town) and the need to tear down unused housing. The garden idea was formed by a town planner, who asked residents about their interest. Then an agree¬ment was made with the government to use the land for gardening purposes. The government donated plants and trailers at the beginning. The garden may remain as long as it stays visually attractive.

In the beginning, there was some vandalism and stealing in the gar¬den. How-ever, a fence and key system was added and ev¬eryone respects the beauty and suc-cess of the property. Some rules exist, such as no fertilizers or plastic allowed. People are encouraged to keep their spaces clean, or they must leave. The garden has been established for 3 years and currently has a self-made hierarchy of workers and an indefinite timespan. Plots are separate, but central areas are cleaned by all. Many use the garden as a food source for their families.

Kerkrade Pluktuinen Park

Scale: Neighborhood
Timeline: 1 year
Size: 500 m squared

Kerkrade is a shrinking former mine town, and many residential buildings need to be destroyed because of abandonment and disrepair. A residential project was destroyed in the Pluktuinen garden's site, and new construction was delayed because of financial difficulties. The people in the neighborhood submitted requests for something visual¬ly pleasing. At the same time, the Transition Town movement was looking for a place and connected with Kerkrade administration. Now the garden is planted and producing some fruit. The garden is only allowed on the site for one year, but there is a possibility of movement to another site after this year if the gar-den seems successful.

The demographic of the workers is mostly older peo¬ple and charity groups, along with young children who are brought to the site on school visits. Older gen-erations have shown more interest, possibly because they lived during the second World War and know how to provide for themselves. The garden does not have an economic focus, but is more for social activism. The planners are trying to mix and revive the town population. Transition Town planned and planted the garden, and went into the community searching for volunteers. The plot is an example of transi-tion town farming- where gar¬dens can be used to transform shrinking towns and give energy into the neighborhood. The Housing Association gave 5,000 euros at the beginning, but this money has proved insufficient as the plot grew in size from the original plan. The building corporation still owns the land, and the gov¬ernment and housing assoc. own small parts.

Although project leaders believe that small towns are quicker on revival projects because there is more pressure for reform, these leaders have met some difficulties finding enthusiastic volunteers for the garden, as they believe that some people are distrustful of gardening due to a fear of coal pollution.

Pferdelandpark Aachen

Scale: Regional
Timeline: Indefinite
Size: 2000 hectares

The area is home to around 200,000 people who can ac¬cess the park and use its pathways as space for leisure and recreational activities. The idea was put in place by the Stadt Aachen, Stadt Herzogenrath, and Gemeete Kerkrade city planning offices, so the inhabitants adjusted to meet the circumstances. The proposal has multiple layers: traffic, food, ecological, planning, historical, and touristic. The name "Horse Park" refers to Aachen's strength in horse-themed marketing and is aimed to draw horse enthusiasts.

Parts of the site have historically been used for industry and pro¬duction (textiles, etc.). The greenspace came into dan¬ger when the surrounding municipalities began to sprawl. The land preservation is important, as it characterizes the traits of the region. The idea was proposed and awarded funding at the EURegionale 2008 Conference. The park embraces the natural landscape, without a lot of infrastructure built. A White Way of white-colored flowers connects focus activity nodes which teach char¬acteristics of the region.

The City of Aachen proposed the idea as a way to further the Greenspace agenda of the city, as well as preserve natural resources surrounding the city. The city receives funding from the EURegionale conference, which is not shared with the farmers who own and tend most of the land. The city owns other parts of the land, and rents it out to farmers. Some farms allow citizens to come farm from the city as a way of publicizing their farm products.

Some farmers resisted becoming a part of the park be¬cause of potential damage to their crops. Informational pamplets were printed cautioning visitors to care for the farmlands during their tours. Some vandalism has occurred in the park as a result of public land use. The park has not encouraged commradery among the farmers, even though they are now linked by a common bond. Farmers now have an op¬portunity to sell their goods to visitors of the White Way.

Fig. 2: Geographical distribution of projects in the cross-border region. Colors refer to the project longevity presented in Fig. 4
(map based on www.openstreetmap.org)
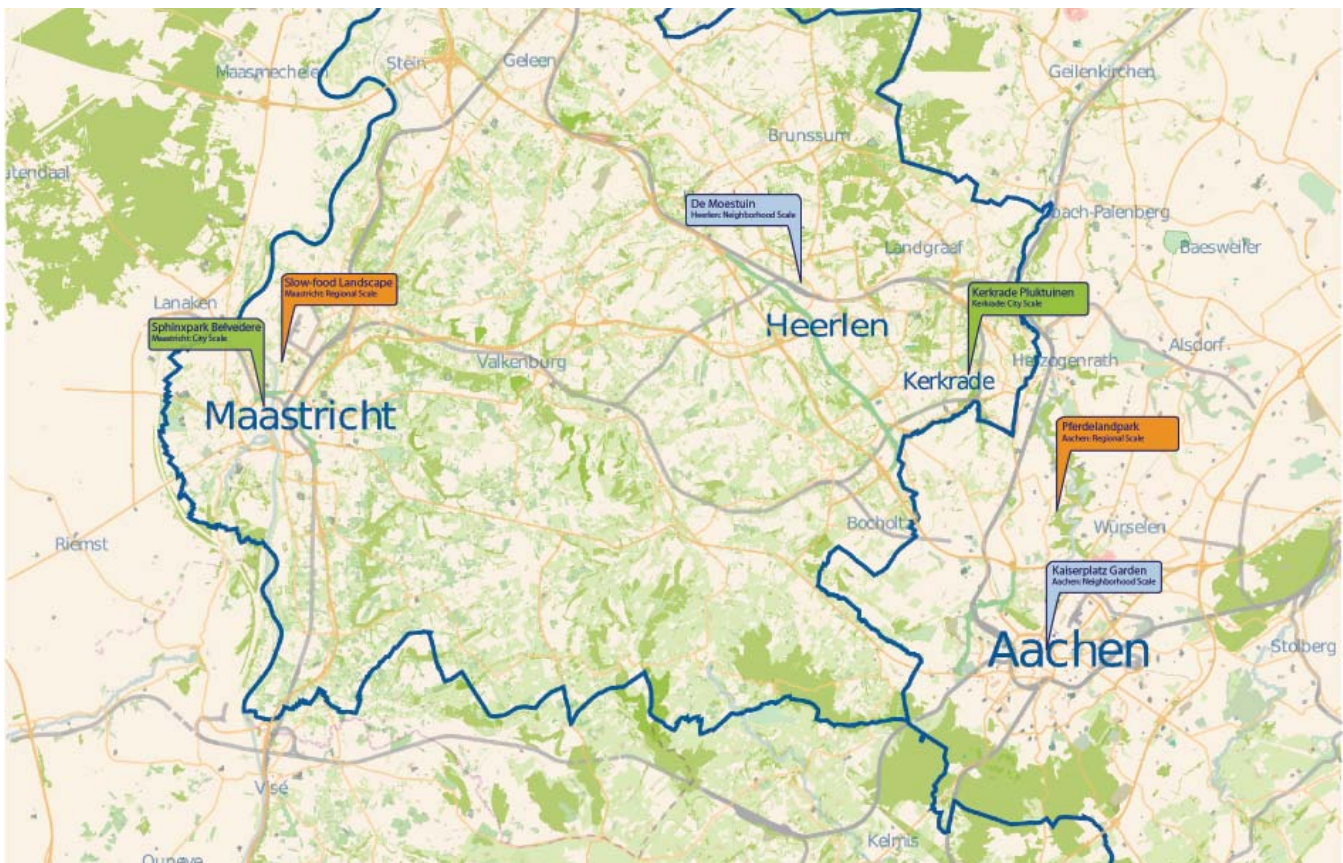
Kaiserplatzgalerie Community Garden

Scale: Neighborhood
Timeline: Indefinite
Size: 5000 square meters

Aachen's Kaiserplatz district was originally occupied with resi¬dences, small stores, a historical cinema, and a historical monument. Ten years ago, a private investor began to buy the land without informing the inhabitants. The cinema was destroyed and the people were told to leave their homes, and plans for a new shop-ping mall were arranged. When mall plans halted, 5000 sq. meters were left vacant. An interest group is in the process of negotiating with the de¬veloper for permission to garden on the space.

The neighborhood has a cultural heritage to the city that the residents want to preserve, as some have been living there up to 70 years. The garden will show op-position to the destruction that has occurred in their neighborhood and encourage people to make the destroyed area into a place of beauty. The garden would serve as a meeting spot and recreational area. Some people have already banded together for the cause and held a garden day to decorate the fence with flower filled bottles.

The previously public main road has now been privatized by the investor, who has bought much of the space in the Kaiserplatz district. There is an interested group of citi¬zens leading the garden movement, which includes resi¬dents of the neigh-borhood and interested citizens from surrounding areas who would like to see urban gardening in Aachen. At least one elected city official is working for the gar-den movement as well. Greenpeace has shown interest in the project, and the group is looking for other financial support.

The interested group would like to have a garden that could be incorporated into the final design of the mall, but are open to other options as well. The developer has been hesitant to give permission; some speculate that he does not want the citizens to get attached to the garden idea.

Garden Size Comparison

The gardens observed by the research varied greatly in physical size, mostly de-pending on governance structure and type classification. The smallest three gardens (De Moestuin, Kaiserplatz, and Kerkrade Park) were community initiatives and took a space of one or several lots. The larger three gardens (Sphinxpark, Slow-food Landscape Maastricht, and Pferdelandpark) were city and regional initiatives and typically organized by multiple governing bodies.

Project Timeline of Longevity

This graph depics the projects along a timeline extension, showing their expected expiration dates. Some projects, such as Sphinxpark and Kerkrade Park, have only been allowed to use the land on the condition that they will move after one year. These short term projects typically are in a brownfield that has future plans for construction. Both Sphinxpark and Kerkrade Park have alternate sites that could be used to house the park after the one year deadline. According to Sphinxpark coor-dinators, the one year deadline is "both a blessing and a curse." The short deadline encourages rapid action and decision-making; however, many people are hesitant to volunteer their time to such a transient project. Die Moestuin has been allowed
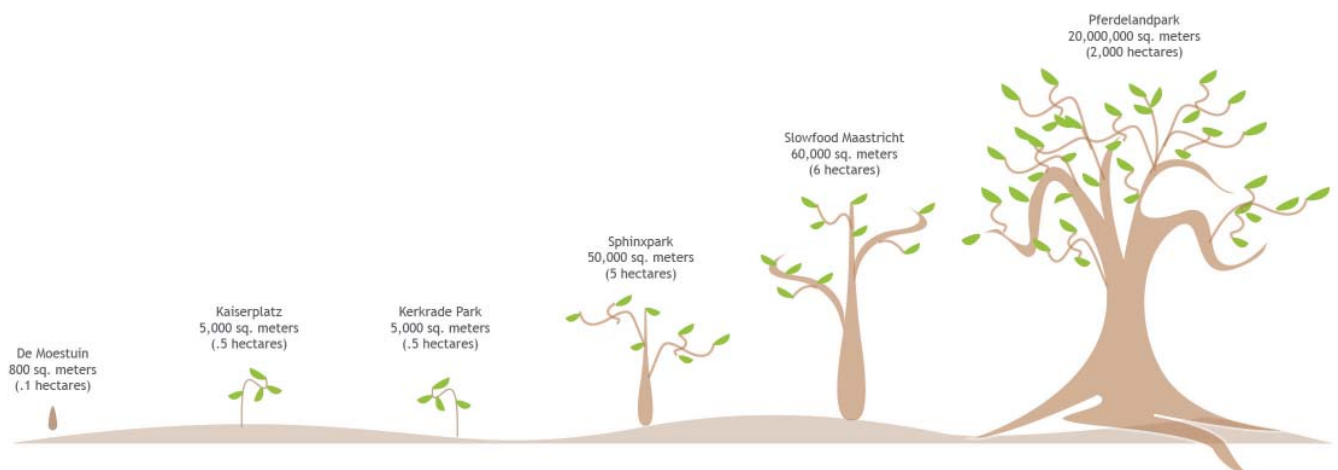
Fig. 3: Garden Size Comparison

Fig. 4: Project timeline of longevity

to use the land plot as long as it is maintained in a visually attractive manner. This instability is an incentive for workers to keep their gardens orderly, and plot owners are asked to leave the group if their garden becomes unsightly. The planners of Kaiserplatz garden ultimately hope that their garden will be incorporated into the future plaza that will be built on the same land parcel. Pferdelandpark and Slow-Food Maastricht were both initiated by the city planning offices to increase leisure and tourism and accomodate transportation in the areas, and both receive a significant amount of government funding. They are planned as permanent fixtures in the landscape. This shows the similarities between project scale and longevity, as the regional scaled projects are allowed to function without threat of deadline. It may be speculated as to whether their long lifespan is in connection with their government ties, or if they are viewed as imperative to the natural character of the region.

Matrix of Garden Objectives

In general, three major driving forces for urban agriculture exist: economic, environmental, and social. This graph, based on Spangenberg's Sustainability Triangle1, places the projects in correlation to three major objectives: social incentives, economic incentives, and environmental incentives. Many of the projects overlapped boundaries, which shows a pattern for hierarchy of objectives as opposed to a single motivating factor. The categories are defined:

- Social: Primary benefits aimed toward human activity, culture, and welfare.
- Economic: Aimed toward producing marketable goods or financial profit.
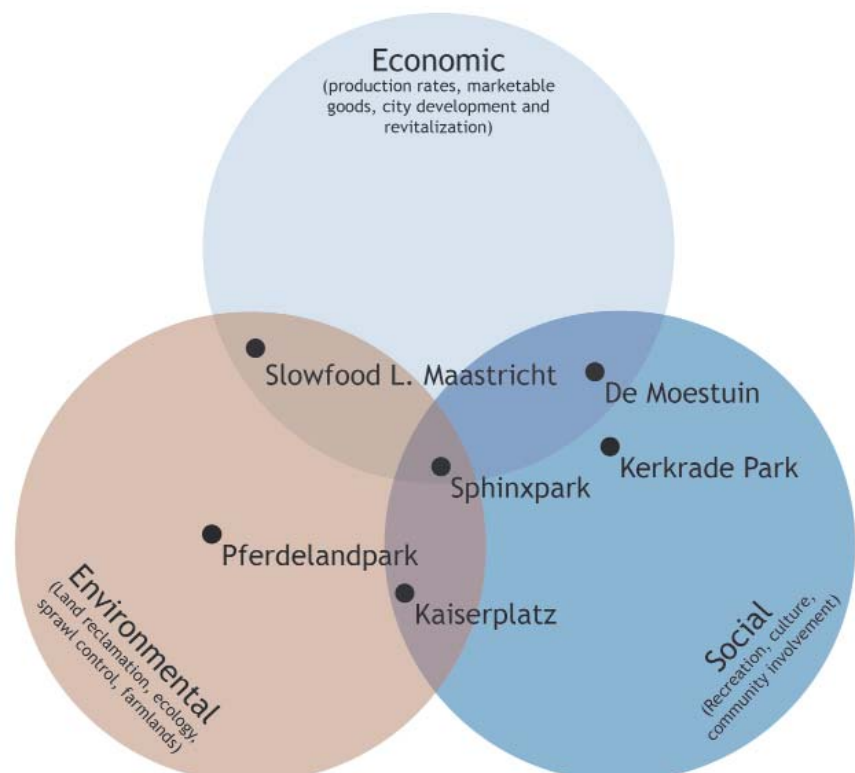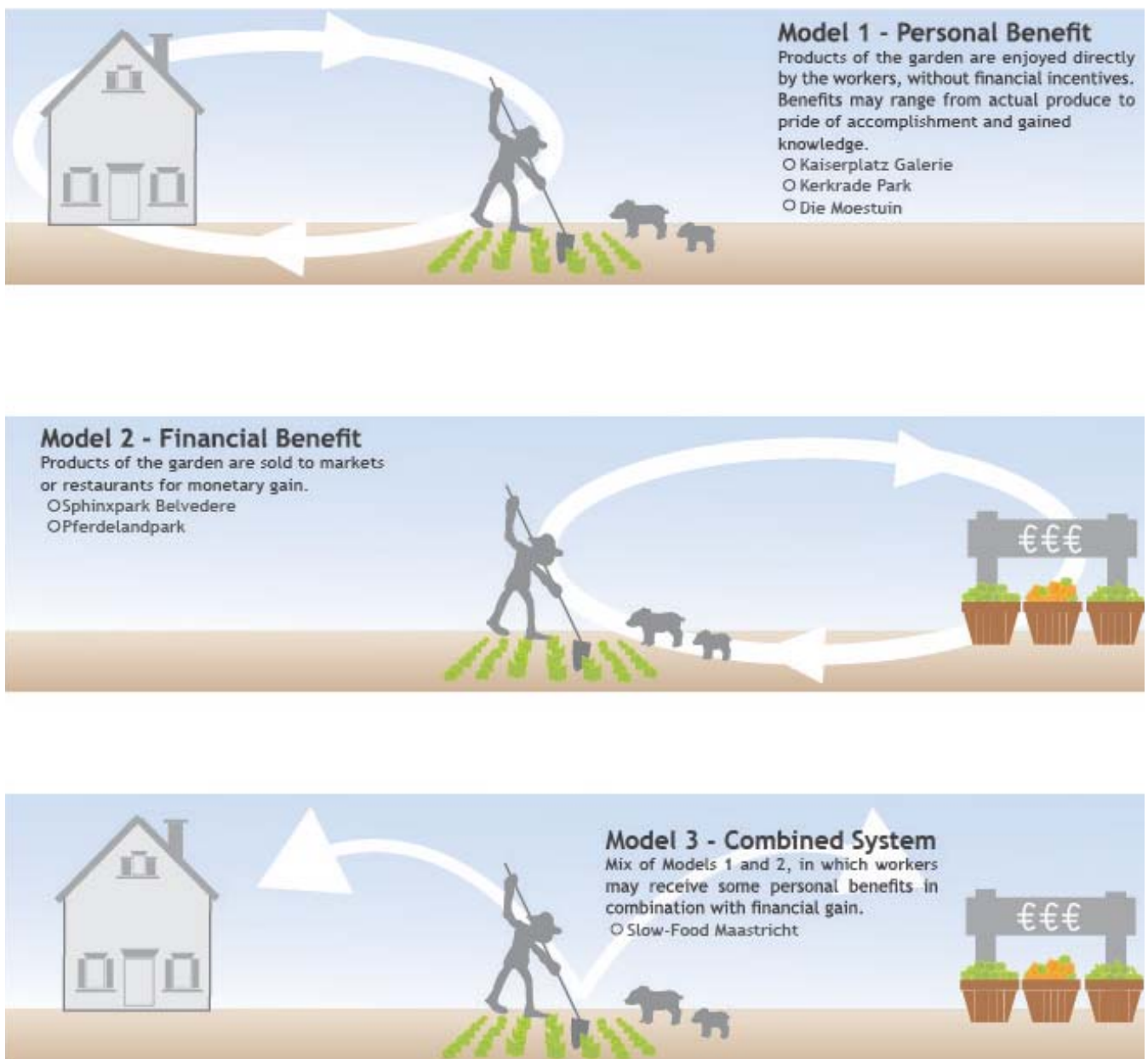- Environmental: Relating to the natural world and biosphere.

Fig. 5: Project classified in relation to the objectives of sustainability

90

In an economic model, the urban agriculture would be implemented as a method of economic stimulus. This includes financial income, touristic attraction, or boosting of the city's socioeconomic climate. In an environmental model, an urban agriculture project might be started in order to protect unique lands and/or species from the destructive effects of urban sprawl. In addition, urban agriculture has several innate beneficiary side effects on the environment, such as cleaner air and water for the city, better soil quality, and less transportation emissions as goods do not need to be shipped from remote farms into the city's grocery stores and markets. Finally, social reasons for urban agriculture could include demographic mixing, community recreation centers, education, and boosting of neighborhood pride.

Methods of Product Distribution

These three graphics show the basic distribution strategies of products reaped from the urban gardens. Depending on the garden's objectives, the workers may not garden with financial incentives but rather for personal enjoyment, social interactions, or fresh grown crops on the dinner table. In these non-monetary based cases, the „products" of the harvest might be actual fruit and vegetables, or more abstract takeaways such as pride of accomplishment, and knowledge of garden and environmental care. Model 1 shows a distribution system where the volunteers are able to bring some sort of benefit, physical or ideological, back to their home for personal enjoyment. Model 2 shows a more financially focused system, where gardeners work for a measurable economic benefit via selling their goods at a market, for example. In Pferdelandpark, many of the farmers use the farms as their occupa-

Fig. 7: Methods of product distribution

Model 1 - Personal Benefit
Products of the garden are enjoyed directly by the workers, without financial incentives. Benefits may range from actual produce to pride of accomplishment and gained knowledge.
O Kaiserplatz Galerie
O Kerkrade Park
O Die Moestuin

Model 2 - Financial Benefit
Products of the garden are sold to markets or restaurants for monetary gain.
O Sphinxpark Belvedere
O Pferdelandpark

Model 3 - Combined System
Mix of Models 1 and 2, in which workers may receive some personal benefits in combination with financial gain.
O Slow-Food Maastricht

tion and primary source of income. The third model shows a combined system, in which the benefits are divided between the workers' homes and the market. Perhaps surplus goods are sold to the market, or market business is a future goal if/when production increases. In the case of Slow-Food Maastricht, the park is divided between private users such as hotels and schools, and investers who tend the land to sell products to the city dwellers.

Applications and Possible Extensions

The applications of the information provided by this study may primarily be of interest to urban/city planners, landscape architects, social groups, sociologists, and students who work in the field of urban agriculture. The in-depth studies of existing gardens may aid interested organizers by serving as models for urban projects at various scales. As explained in the paper, projects should be planned and oriented towards the scale, demographic, and cultural needs of the area. This paper is not aimed at distinguising successes/failures, but rather towards identifying possibilities and trends in current UA projects.

Through the study of existing projects and motivations, a concise yet complete definition of urban agriculture will be formed that can be used for policymakers. Research projects such as this will help to influence these ideas for an urban agriculture definition, as these projects show the multidimensionality that exists between various forms of urban agriculture. Ideally, projects such as this will help gather interest towards the cause of urban agriculture, and a positive vision of change will arise. In addition, this project will highlight the changes that need to take place in the field of urban agriculture. These changes include a widened awareness of the possibilities and breadth of approaches, urban agriculture being seen as a positive and necessary means to healthier cities, and the importance of education on urban agriculture.

In conducting the study, the researcher met a number of doctoral candidates who were researching similar topics, with parallel aims of finding patterns in the current approaches to urban agriculture. This particular project could be modified in a number of ways for further examination, such as comparing projects that exist outside of a single region or cultural boundary.

RWTH student garden_experiencing, creating and appropriating open space

experience

In landscape architectural education, various aspects of open space can be taught. The ecological, economic and social importance of open space can be documented by case studies, statistics and theoretical treatises. But real conviction can be best achieved through personal experience. Exactly this is possible in the student garden. Of course, public space can be experienced by everyone and anywhere in the city. But if public space is actively created and not consumed only, then experiences are much more intense and diverse. In this context it is secondary in which direction the garden will develop. Of higher importance is that the garden is used by students independently while being perceived as a place of constructive student activities by the citizens.

The central location of the student garden at the Aachen "Stadtgarten" is important for its success. This way, many students have the opportunity to visit the garden regularly. Moreover, it allows a public perception.

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create

The garden was designed and will be developed by the students. The chair of landscape architecture accompanied this process only. In an introductory seminar, the students selected their garden location after an intensive site survey of three areas. Subsequently, the students made several designs for the basic structure of the garden. The use requirements of the participating students formed the background of their draft proposals. There were only very few restrictions on the development of garden concepts for the selected area. Reason for this has been that the city of Aachen supports the project very much and that it offers the area free of charge. Only three fields were specified by the chair of landscape architecture, which outline the range of possible uses: gardening, communicating and experimenting.

In the so-called "Gartenstudio" students can for example create their own seedbeds, plant flowers and vegetables or create a medical herb garden.

The garden shall be a place for diverse communication and exchange. Students from different universities, faculties and disciplines can meet each other in the garden and broaden their horizons. Simultaneously the garden can be used by the students as a stage for public events. Thus, the students have a platform for introducing themselves and their work to the city.

Furthermore, the garden can be used as a workshop and studio for various projects and experiments. Within the "Experimentstudio", institutes can offer courses for the students. For example students performed an opening action and built a pavilion as part of an impromptu- draft course.

detail of the pavilion (photo: J.Rolfes)

frontal view of the pavilion (photo: J.Rolfes)

For the opening ceremony of the garden, the students chose the "Red Cube" design. With forty red wooden boxes a performance was developed that represented the three fields of activity in the garden. For example, the boxes have been assembled for seating, plant troughs, a lectern or a bar-counter.

The impromptu design for the pavilion was organized in cooperation with the chair of "Plastik". In a workshop the pavilion was constructed by eleven students in four days. For this they needed 1600 meters of battens and 3000 screws.

Parallel to the offered courses students spent their spare time in the garden with garden activities. With power cultivators, shovels and spades they built firsts seed beds and harvested their first vegetables.

students doing gardening work
(photo: J.Rolfes)

inauguration event (photo: J.Rolfes)

appropriate

Important for the identification of students with the garden is not only freedom of choice, but also the formal ownership of the garden. Because of the intention to create a garden for all students in Aachen, the ASTA (General Student Committee) was asked to take over the ownership.

The garden will continue to be part of the public city park and therefore it can be used by all citizens. Already, many interactions between students and visitors of the garden can be seen. A fine example of this is the use of the pavilion as a festive setting for private birthday parties.

The site character of the student garden has been transformed by the new concept of usage. The place only to be looked at changed into a place of active engagement.

impression student garden (photo:J. Rolfes)

appropriation of the pavilion for celebrating a birthday party (photo: A. Timpe)

Impressions from Aachen

COST- the acronym for European **CO**operation in the field of **S**cientific and **T**echnical Research- is the oldest and widest European intergovernmental network for cooperation in research. Established by the Ministerial Conference in November 1971, COST is presently used by the scientific communities of 35 European countries to cooperate in common research projects supported by national funds.

The funds provided by COST - less than 1% of the total value of the projects - support the COST cooperation networks (COST Actions) through which, with EUR 30 million per year, more than 30.000 European scientists are involved in research having a total value which exceeds EUR 2 billion per year. This is the financial worth of the European added value which COST achieves.

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

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