

Sustainable Food in Urban Communities

Developing low-carbon and resource-efficient urban food systems



Baseline Study - 31 October 2012

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STATE OF THE ART

FOREWORD

This state of the art paper intends to gather selected elements of existing knowledge, research and policy about sustainable food in European urban communities. It also refers to internationally relevant examples. The conceptual framework relies on the analysis of the Food and Agriculture Organization (FAO) and European Commission studies especially by the Standing Committee on Agricultural Research. This paper is divided in three parts:

- **Global context and main issues of sustainable food in urban communities**
- **Food system stakeholders and policies**
- **Challenges for communities: spatial and human dynamics of food**

INTRODUCTION

It seems that there is no official definition of “sustainable food”. One of the more frequently encountered could be from the British Sustainable Development Commission (2005) that considers food and drink sustainable if it:

- *“Is safe, healthy and nutritious, for consumers in shops, restaurants, schools, hospitals...”*
- *Can meet the needs of the less well-off people.*
- *Provides a viable livelihood for farmers, processors and retailers, whose employees enjoy a safe and hygienic working environment whether nationally or abroad.*
- *Respects biophysical and environmental limits in its production and processing, while reducing, energy consumption and improving the wider environment; respects the highest standards of animal health and welfare, compatible with the production of affordable food for all sectors of society.*
- *Supports rural economies and the diversity of rural culture, in particular through an emphasis on local products that keep food miles to a minimum”.*

Another definition by the Sustainable Food Lab¹ permits to encompass all actors involved in food system: *“We define a sustainable food system as one that realizes its purpose of guaranteeing a right to food and respects food sovereignty, that makes sufficient and healthy food available for all at an affordable price, that reflects all productions costs and internalizes external environmental and social costs and benefits in end prices, that uses resources (including natural resources such as soil and water, as well as human resources such as labour) at their rate of recovery and that respects different aspects of the food-culture. All actors of the food chain and governments should contribute to achieve this sustainable food system.”*

The purpose of this paper is to describe and analyse the scope of sustainable food for cities that question the food system in their territory.

The first part will present the global context: how the occidental food system is challenged by new environmental issues and what the actual effects or events in cities are. The second part introduces the large field of stakeholders and their roles. The third focuses especially on cities' actions and initiatives: how cities can promote sustainable food all along the local food chain by supporting urban and peri-urban agriculture, local organic quality food distribution channels, and a shift in eating practices of their population.

¹ <http://www.sustainablefoodlab.org>

I. Global context & main urban issues

The international economic crisis is seen as a major issue in industrialized countries. With restrictions and lower incomes, they try to find solutions in order to create new conditions for growth. They also have to protect the more vulnerable population groups. Following the issues of housing and jobs, food is among the first preoccupations of most people. The current food context is questioned by environmental challenges and consumption patterns that could seriously affect social conditions.

1. Food security, a debate for public policies over the world

"Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. Food security covers availability, access, utilization and stability issues, and — in its focus on individuals — also embraces their energy, protein and nutrient needs for life, activity, pregnancy, growth and long-term capabilities."²

Food is a condition of life. After the fifties and war privations, the development of the agro industry thanks to science and technology, liberated men from famines in industrialised countries. Whereas southern countries still have troubles in malnutrition and agriculture management.

In 2008, an expected increase of cereal prices³ created a food crisis in developing countries. It also disturbed largely the economy of developed countries. This crisis, due to the combination of very bad conditions for world agriculture with increasing oil prices (that increase oil cereal production at the expense of human food production) and speculation put an end to the certainty that has given industrialized countries a sense of security. As Kevin Morgan and Roberta Sonnino⁴, researchers at University of Cardiff noted, "a third of countries where food price riots occurred were in middle and high income countries. Food security is no longer an issue confined to low-income countries."

With world population expected to exceed 9 billion⁵ people in 2050, a new debate is open to create a food system to feed every man while respecting the environment.

2. Environmental issues to challenge⁶

Beyond population growth perspectives for 2050, new environmental challenges will have to be faced.

Climate change due to greenhouse gases that are already in the atmosphere is expected to worsen. Food growing is already significantly affected by climate change, particularly through reduced and unpredictable rainfall, increasing temperatures and heat waves, and extreme weather events. Figure 1 exhibits the probable changes for European territory.

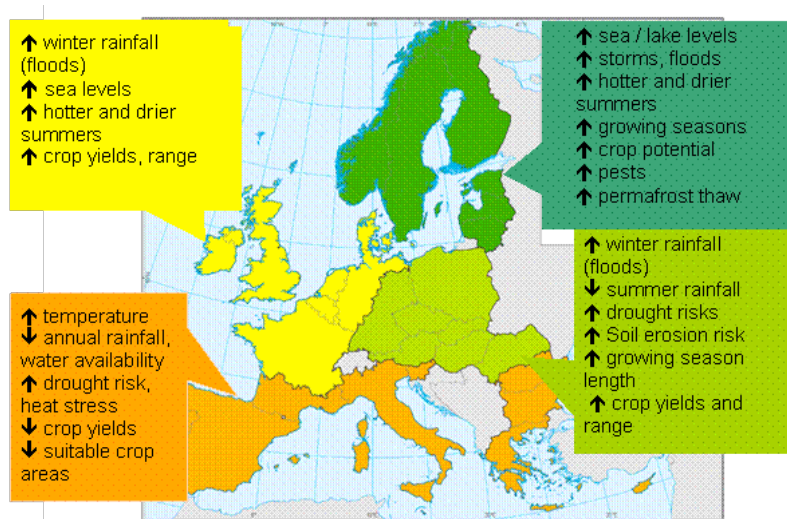


Figure 1 : Projected impacts from climate change in different EU regions⁷

² United Nation commission on sustainable development, Rio + 20

³ Achieving food security in the face of climate change, November 2011

⁴ Morgan, K. and Sonnino, R. (2010) The urban foodscape: world cities and the new food equation. Cambridge Journal of Regions, Economy and Society. Oxford University Press, UK. www.cjres.oxfordjournals.org

⁵ IEA, 2008 in EEA, The European environment state and outlook 2010, consumption and the environment, 2012 update

⁶ Sustainable food consumption and production in a resource-constrained world, The 3rd SCAR foresight Exercise, 2011

⁷ Source : http://ec.europa.eu/agriculture/climate-change/index_en.htm

Scarcity and cost of critical resources are big issues for the food system. Water, non-renewable sources of agrochemicals and natural fertilizers such as phosphorus and nitrogen could lack. Peak oil particularly due to depletion of deposits is seen as a major problem. In fact, cost and availability of fossil fuels are critical to the food system. Farms depend on fossil fuels and on the manufacturing of fertilizers and agricultural chemicals. Fuel is also needed for the delivery of food, including both movement of food through supply chains and how consumers access their food.

Availability of agriculturally productive land, particularly “peri-urban” agricultural land is coming under increasing pressure from competing uses, particularly to accommodate growing urban populations.

According to the 3rd Standing Committee on Agricultural Research (SCAR) Foresight Exercise⁸, scarcity of resources is characterized by “interconnected and highly dynamic issues in a crisis context which depth and scale are still not fully known”. If climate and environmental perspectives are still fuzzy, the environmental impact of the food chain and western diet are strongly questioned.

3. Unsustainable food chain and western diet

There is no ambiguity about the fact that both the food system and western diet are unsustainable⁹. In a context of globalization, the western food system has strong impacts on the environment, uses lot of resources and is very dependent on petrol.

First of all, intensive agriculture that permitted to increase crop yields since the fifties; damages arable lands and makes agriculture dependent on chemical fertilizers and fuel for mechanization. The policies of industrialized countries (notably Europe and the United States) support the agricultural world and farmers with subsidies. Those policies create imbalanced effects on developing countries and disturb the crop production of southern countries. In the last decade, price volatility¹⁰ and speculation created an insecure food context at an international level.

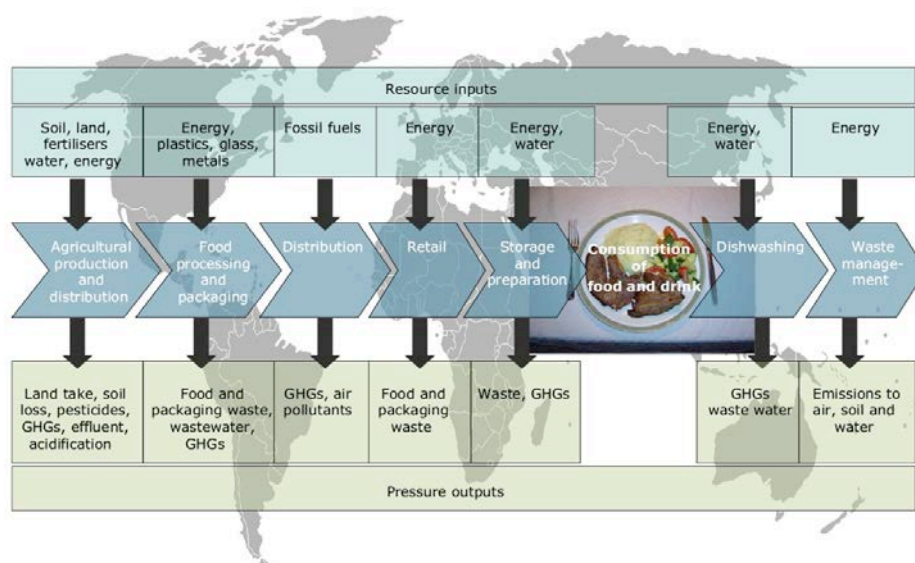


Figure 2 : How the food and drink value chain impacts the environment

Source: compiled by EEA-ETC/SCP

Moreover the whole food chain is based on “just in time” procurement and low transport prices that strengthen dependency on petrol.¹¹ With higher income levels in developed countries, people turn to special products from other regions or distant countries. This evolution in diet was an opportunity for enterprises to develop a new offer of products. Past low oil prices permitted to increase transport miles.

Indeed, there is a strong link between the food supply chain and consumers’ habits. From 1990 to 2005, European citizens changed their consumption patterns by increasing consumption of imported fruits by 11%, eating more prepared food and devoting less time to cooking, eating take away food, drinking more bottled water. Imported food also increased: plus 120% for meat from 1990 to 2007, plus 83% for cereals, plus 174% for frozen vegetables and plus 92% for bananas.

Those trends have huge environmental impacts: need for freezing, packaging waste, long distance food transport especially air and road.

⁸ Sustainable food consumption and production in a resource-constrained world, The 3rd SCAR foresight Exercise, 2011

⁹ EEA, The European environment state and outlook 2010, consumption and the environment, 2012 update

¹⁰ FAO. 2009. State of Agriculture Commodities Markets.

¹¹ Esnouf, C., Russel, M. et Bricas, N. (Coords), 2011 : duAllne – durabilité de l'alimentation face à de nouveaux enjeux. Questions à la recherche, Rapport Inra-Cirad (France), 236p.

In 2007, consumption of food and drinks in household in Europe 27 was estimated to cause:

- 16% of GHG emissions – 22% of which by restaurants and hotels
- 34% of acidifying emissions – 41% of which by restaurants and hotels
- 16% of tropospheric ozone precursors – 21% of which by restaurants and hotels
- 34 % of material resource activated by national consumption – 41% of which by restaurants and hotels

Meat and dairy products are the most impacting products as figure 3 shows.

Kg or 1 000 litres respectively

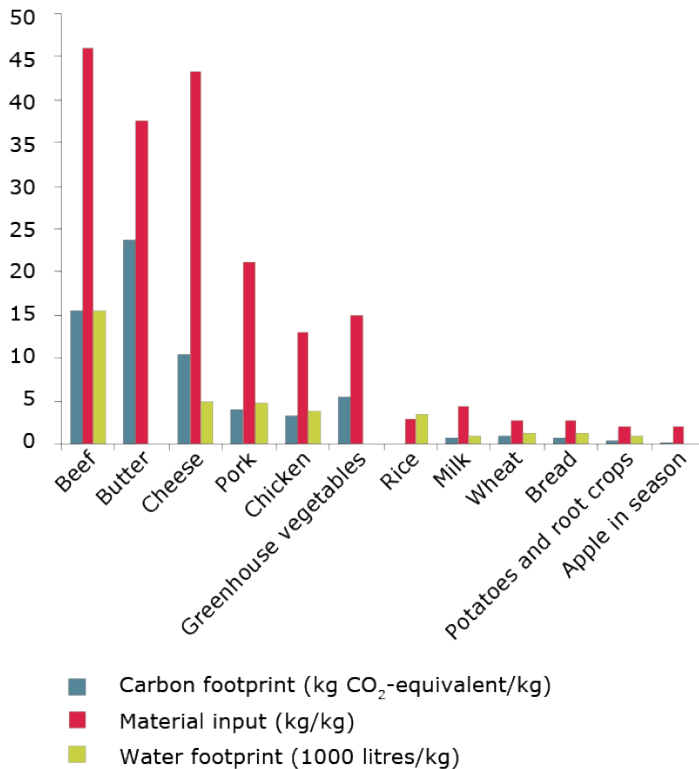


Figure 3 : Carbon, material and water footprint for different types of food¹².

Source: Carbon: Angervall et al., 2008; Danish EPA, 2006; Fritsch and Eberle, 2007; Hirschfeld et al., 2008; Williams et al., 2006; Århus University, 2007; Material input: Kotakorpi et al., 2008; Water: Water Footprint Network, 2010.

Diet changes are also characterized by the explosion of “junk food” consumption. Food full of sugars and fats have strong consequences on public health (obesity, cardiovascular diseases, diabetes of type2) and can have high costs for countries’ health spending.

The recent definition of “sustainable” diets takes into account the role final users play in the act of consumption. *“Sustainable Diets are those diets with low environmental impacts which contribute to food and nutrition security and to healthy life for present and future generations. Sustainable diets are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable; nutritionally adequate, safe and healthy; while optimizing natural and human resources.”*¹³

The last strong impact of food comes from wastage and loss in the food chain. There are various causes that lead to wastage in industrialized countries¹⁴: over production, “high appearance quality standard’s (shape and size), large quantities on display and wide range of products in supply. The FAO report says, *“Abundance and consumer attitudes lead to high food waste”*. Because consumers can afford food, they undervalue it and are not focused on use-by date. According to the Preparatory study on food waste across EU27¹⁵, there seems to be a “lack of awareness” of environmental impacts of food waste, as well as a lack of knowledge on how to use food efficiently (plate size, storage, preferences in taste – for example apple and potato skin are wasted as bread crust). Misinterpretation and confusion over date labels are also a cause of

¹² EEA, The European environment state and outlook 2010, consumption and the environment, 2012 update

¹³ International scientific symposium biodiversity and sustainable diets united against hunger, FAO, 2010

¹⁴ FAO. 2011. Global Food Losses and Food Waste: Extent, Causes and Prevention. Rome

¹⁵ Preparatory study on food waste across EU 27 technical report - 2010 – 054, October 2010

waste. Moreover, a lot of restaurants in Europe and the United States propose fixed prices that encourage the consumer to fill their plate with too much food.

Thus, growing amounts of healthy and edible food are lost along the entire food supply chain¹⁶. The environmental impact is very strong:

“For every kilogram of food produced, 4,5 kg of CO₂ are released into the atmosphere. In Europe the approximately 89 Mt of food wasted produce 170 Mt CO₂ eq./yr, broken down thus: food industry 59 Mt CO₂ eq./yr, domestic consumption 78 Mt CO₂ eq./yr, other 33 Mt CO₂ eq./yr.

The production of the 30% of food which ends up not being consumed accounts for an additional 50% of use of water resources for irrigation, while producing a kilogram of beef requires 5-10 tonnes of water.”

4. Food issues and cities

As Kevin Morgan and Roberta Sonnino¹⁷, researchers from University of Cardiff, notice it, the present trends about food from an international perspective are:

- Higher and more volatile prices,
- Changing consumption patterns,
- Food security that becomes a national priority,
- Effects of climate change on agricultural systems,
- Growing conflicts about natural resources including land, water, forests...

With 73% of the population in Europe living in cities, the food system that used to be related to rural issues comes into the debate for cities' sustainability.

Various aspects of the problem could be highlighted¹⁸:

- Dependency on the food industry and imports (e.g. community “Ile de France region” imports 6000 tonnes of food each day).
- The urban sprawl in Europe that engulfed 3 million hectares between 1961 and 2003.
- Nutritional exclusion of low-income households that live in poor areas and are poorly connected with food retailers.
- Food industry miles that burden the carbon balance combine with the increase of household procurement food miles. The food chain is responsible for 40% of London's global emissions¹⁹

With reference to the 2008 food riots, it seems that disturbances mainly happened first in cities. Indeed, they remain a place of public expression for inhabitants. In order to defuse a potential crisis due to these global food trends, international organizations and local governments open debates and a new framework to rethink food security and environmental issues. Strategies for cities²⁰ to ensure sustainable food procurement could be to:

- diversify procurement for food security by creating local supply,
- maintain procurement from other regions for food that is more effectively produced there (because of good weather conditions...),
- foster ethical consumption.

¹⁶ European Parliament resolution of 19 January 2012 on how to avoid food wastage: strategies for a more efficient food chain in the EU (2011/2175(INI))

¹⁷ Morgan, K. and Sonnino, R. (2010) The urban foodscape: world cities and the new food equation. Cambridge Journal of Regions, Economy and Society. Oxford University Press, UK. www.cjres.oxfordjournals.org

¹⁸ Esnouf, C., Russel, M. et Bricas, N. (Coords), 2011 : duAlline – durabilité de l'alimentation face à de nouveaux enjeux. Questions à la recherche, Rapport Inra-Cirad (France), 236p.

¹⁹ London Agency, 2006

²⁰ Morgan, K. 2009. Feeding the City: the Challenge of Urban Food Planning. (International Planning Studies, Vol. 14, No. 4, 429-436). UK.

II. Food system stakeholders & policies

Food affects and concerns all kinds of organizations: international and national policymakers, farmers, families, citizen organizations, industry sector... This subject creates many debates between the food industry and other movements that denounce the externalities of the present food chain. Nevertheless, all stakeholders call for changes to address environmental issues.

1. Food policies towards green growth and sustainable development

Nearly all recent reports focusing on sustainable food systems insist on the concept of “resilient food” as a core concept. Resilience is “the ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self- organization, and the capacity to adapt to stress and change.”²¹

1.1 Acknowledging food as key issue for sustainability at international level

The green economy is seen as a new development strategy. Green growth is a narrower subject than sustainable development. It does not replace it. According to the OCDE²²: “Green growth strategies need to encourage greener behaviour by firms and consumers, facilitate smooth and just reallocation of jobs, capital and technology towards greener activities and provide adequate incentives and support to green innovation”. In that context, food issues stated in first part could meet solutions and make food chain more sustainable and base for green economy.

- The OCDE proposes a conceptual framework for cities²³ in order to foster economic development by green growth. In this new strategy, environmental impacts (cost in energy, water, and land) shall become a central value to transform the economy by on the one hand creating new activities and new jobs, and on the other hand new taxes on waste or pollution. In 2007, the OCDE organized a conference in order to reflect on a new order of the food chain²⁴
- The United Nations published a report on green growth for cities and communities²⁵. It calls for greening areas in the city and reinventing links between urban and rural areas. ICLEI - Local Governments for Sustainability is an association of cities and local governments dedicated to sustainable development.. A special workshop on resilient food systems²⁶ and urban agriculture took place in Bonn in 2011 and 2012 and presented results in urban agriculture. The focus on local urban agriculture had been identified a long time ago. Indeed, in 1996, the United Nations published a report called “Urban Agriculture: Food, Jobs, and sustainable cities”²⁷.
- The FAO report “Food, Agriculture and cities, challenges of food and nutrition security, agriculture and ecosystem management in an urbanizing world”²⁸ stresses the challenge of relinking rural and urban areas and achieving multi-level governance to reintroduce locally produced food in cities. Table 1 presents the different scales of governance.

²¹ Walker, B., et D. Salt, Resilience Thinking: sustaining ecosystems and people in a changing world, Island Press, 2006

²² OCDE, Toward green growth, 2011 <http://www.oecd.org/greengrowth/48224539.pdf>

²³ OCDE, Cities and Green Growth: A Conceptual Framework, 2001, <http://www.oecd.org/regional/regionaldevelopment/49330120.pdf>

²⁴ <http://www.foodeconomy2007.org/UK/>

²⁵ UN Habitat, Tufts, R., Kehew, R.p Rudd, A; Petrella, L. 2011. *Urban Patterns for Sustainable Development: Towards a Green Economy* http://www.unhabitat.org/downloads/docs/9539_39812_3077_alt.pdf

²⁶ Cities and Adaptation to Climate Change workshop on resilient Food systems for Resilient Cities, June 2011, Bonn <http://resilient-cities.iclei.org/bonn2011/>

²⁷ UNDP. (1996). Urban Agriculture: Food, Jobs, and Sustainable Cities. United Nations Development Program, New York

²⁸ FAO, Food, Agriculture and cities, challenges of food and nutrition security, agriculture and ecosystem management in an urbanizing world, http://www.fao.org/fileadmin/templates/FCIT/PDF/FoodAgriCities_Oct2011.pdf

Food system pillars and main institutions/actors	Local Authorities	National / sub-national / regional government	Civil Society, including private sector (farmers and retailers)	Associations of local authorities (ICLEI, UCLG, etc)	FAO and other UN-organizations
People-centred	<ul style="list-style-type: none"> public procurement mechanisms linked with food and nutrition security nutrition education components 	<ul style="list-style-type: none"> Right to Food framework integrate food and nutrition security into health and social policy integrate the food system dimensions/ components into development policy 	<ul style="list-style-type: none"> consumers-producers linkages consumption patterns / sustainable diets social resilience 	<ul style="list-style-type: none"> involve association of consumers and food related private sector partners 	<ul style="list-style-type: none"> Right to Food – human rights based approach PNTD – land tenure nutrition education, food safety include city-related stakeholders enhance urban-rural linkages aspects
Risk management and ecosystem management	<ul style="list-style-type: none"> territorial approach and urban-rural linkages climate change adaptation and mitigation 	<ul style="list-style-type: none"> linking the relevance of sustainability and resilience with NR management for food and nutrition security 	<ul style="list-style-type: none"> Climate Change adaptation practices urban-rural linkages for ecosystem services, waste management, green labelling, etc. 	<ul style="list-style-type: none"> further involvement in NR management platforms supporting FNS dimensions 	<ul style="list-style-type: none"> land, forest and water management for food and nutrition security expertise and best practices rural-urban linkages and territorial, regional development strategies
Planning	<ul style="list-style-type: none"> including food and nutrition security into urban planning food system management and monitoring mechanisms at local level 	<ul style="list-style-type: none"> include multi-level planning for FNS strategies 	<ul style="list-style-type: none"> inclusion in official participatory mapping and planning mechanisms Community-led planning Private sector responsibilities (CSR) and sponsorship 	<ul style="list-style-type: none"> enhance FNS dimensions strengthen multi-level strategies and design 	<ul style="list-style-type: none"> mainstreaming food and nutrition security at different planning levels, including investment FNS aspects to be integrated in relevant planning activities
Governance	<ul style="list-style-type: none"> local food councils multi-level governance to be driven by urban-rural linkages 	<ul style="list-style-type: none"> participatory mechanisms of designing policy and strategies of FNS 	<ul style="list-style-type: none"> advocacy for FSN related aspects with policy makers and governing bodies contributions to participatory processes 	<ul style="list-style-type: none"> reinforce presence and role of local authorities in international fora 	<ul style="list-style-type: none"> enhancing collaboration and joint partnership to be focused on FNS

Table 1: dimension of implementing a food system approach from local to global level²⁹

Australia National Food Plan³⁰

“Australia’s food system is shaped by global and local factors such as population growth, changing food preferences, economic conditions, climate change, competition for natural resources and diet-related health issues. In coming decades there will be both opportunities and challenges for those involved in growing, processing, moving and selling food—and for all of us as consumers. The National Food Plan aims to strengthen our food system so we can all respond to these opportunities and challenges.

The National Food Plan will provide an integrated approach to food-related policies and programs for the benefit of food businesses and consumers. This will ensure Australia has a sustainable, globally competitive, resilient food supply that supports access to nutritious and affordable food.”

1.2 A transition pathway in Europe

Since 1962 and the creation of Common Agriculture Policy (CAP), food policies are conceived to make agriculture more efficient from an economical point of view by focusing on high quality. CAP is said to have strengthened food security in Europe.

Many efforts are made to guarantee good conditions for agricultural production with regulations on agricultural product quality³¹. Furthermore, the European Union created regulations to inform consumers: certification schemes, traditional specialty guaranteed (TSG), geographical indications, production and labelling of organic products, organic farming, food and feed (GMO), improving communication on agricultural product quality.

Some general tools exist and can foster sustainable food consumption through green public procurement. *“In 2003, the European Commission recommended that Member States adopt national action plans on Green Public Procurement by the end of 2006(...).”*

In 2008, the European Commission’s Action Plan on Sustainable Consumption and Production (SCP) proposed a framework for a shift in consumption and production patterns. The **European Retailers Forum** was created to involve the retailers in the promotion of sustainable consumption and production. The

²⁹ FAO, Food, Agriculture and cities, challenges of food and nutrition security, agriculture and ecosystem management in an urbanizing world, http://www.fao.org/fileadmin/templates/FCIT/PDF/FoodAgriCities_Oct2011.pdf

³⁰ http://daff.gov.au/_data/assets/pdf_file/0008/2175155/towards-a-national-food-plan-for-australia-a-summary-of-the-green-paper-2012.pdf

³¹ http://ec.europa.eu/agriculture/quality/index_en.htm

European Commission called for a foresight study that should enlighten a new food policy: “**Sustainable food consumption and production in a resource-constrained world**” (February 2011).

Two narratives are developed: the first one is “the productivity narrative”. It is based on the belief that science has the potential to develop technologies that can boost productivity whilst addressing resource scarcities and environmental problems.

The second one, “the sufficiency narrative”, is based on the belief that science has the potential to develop technological solutions that are productive, reduce resource use and preserve biodiversity... However, to stay within the capacity of system Earth, demand increases need to be mitigated through behavioural change and structural change in the food system and supply chains.

In the light of these two narratives, the conclusion is to preserve all options and make a synthesis. This report highlights the importance of the local context toward a resilient food system.

With the creation of the **European Food SCP Roundtable**³², composed by 24 members representing the food chain, the European Commission is preparing a transition pathway. This initiative aims “to establish the food chain as a major contributor towards sustainable consumption and production in Europe”.

Moreover, several European Parliament resolutions have addressed sustainable food consumption and production:

- Resolution of 19 January 2012 on how to avoid food wastage: strategies for a more efficient food chain in the EU (2011/2175(INI))
- Resolution of 23 June 2011 on the CAP towards 2020: meeting the food, natural resources and territorial challenges of the future
- Resolution of 18 January 2011 on the recognition of agriculture as a strategic sector in the context of food security

According to Euractiv³³, in the European Commission will publish a Communication on Sustainable Food in 2013. This communication will take in account the entire food chain “from farm to fork”.

As for funds, relevant structural European programs are: LEADER and LEADER+, FEDER, FSE, FEADER. Many topics related with agriculture in rural areas can have support, for example labelling for organic farming by FEADER. Concerning the subject “food in urban communities”, no specific structural funds could be found. It seems that agriculture is seen as a rural issue. Urban issues are often related to planning, social issues, and education. Food is more often related with health and consumption.

The European Commission and the Committee of Regions (COR) work on multi-level governance in relation to food and nutrition security for urban and rural communities.

The other main tool for sustainable food is the next reform of the **Common Agriculture Policy (CAP)** in 2014. Stakeholders from civil society ask for big changes and reforms of the food industry and current food system. The synthesis of a public consultation³⁴ describes various propositions among which fostering local food production and enhancing the linkage between urban and rural areas. In 2006, researcher from INRA published an interesting paper³⁵ that mentioned the need of coherence between promotion of low carbon diets (with less meat and dairy products) and CAP orientations supporting livestock. In 2010, a network of European and National organizations called for a shift in agricultural rules: “*For a new European Agriculture and food policy, that meets the challenges of this century*”.³⁶ Their report aims to: “*promote a new international framework for agricultural markets on a democratic basis*”.

With the cooperation of the European Commission, Slow Food Europe and ARC2020³⁷, a conference took place in the European Parliament in September 2012. The point was to discuss a “more democratic, fair and greener CAP”³⁸. This conference had been introduced by “the good food march” from Munich to Brussels in order to raise awareness on this crucial European debate.

³² <http://www.food-scp.eu/>

³³ <http://www.euractiv.com/fr/node/513731>

³⁴ http://ec.europa.eu/agriculture/cap-post-2013/debate/report/summary-report_en.pdf

³⁵ Courrier de l'environnement de l'INRA n°53, décembre 2006 83, Vers une alimentation durable ? Ce qu'enseigne la littérature scientifique, Barbara Redlingshöfer

³⁶ <http://www2.dijon.inra.fr/esr/pagesperso/trouve/For%20a%20new%20European%20agriculture%20and%20food%20policy.pdf>

Network of European and national organizations from various sectors : European Coordination Via Campesina, Friends of the Earth Europe, European ATTAC network, European Agriculture and Health Consortium, EU Greenpeace Unit, Food and Water Europe, Flemish platform VODO, Platform ABC the Netherlands, Oxfam solidarity Belgium, Terra Nuova, Hungarian Alliance for food sovereignty, UK Food Group, German Seeds action network

³⁷ http://www.arc2020.eu/front/arc_in_a_nutshell/

³⁸ <http://www.slowfood.com/slowlife/pagine/eng/application/conferenza.lasso>

1.3 Food public policy in national level of governance

At a national level in Europe, food sustainability is mainly linked with health issues whereas agriculture is usually linked with growth, sufficiency and environmental issues. Indeed, in the light of increasing obesity and overweight levels in western Europe, nations develop strategies to inform citizens of the risk of diets rich in fats and sugars. For instance, the National food agency in Sweden³⁹ created a keyhole symbol to help citizen to choose the best food and identify healthier food products within a product group. In Belgium, a National Food and Health Plan⁴⁰ is currently guiding professionals of education and health.

In France, diet and overweight is a major issue particularly for low income population groups. Nutrition programmes have existed since the eighties. Recently, the French government⁴¹ has created a law that obliges private television advertising to add messages: “*Eat and move*” or “*Eating food containing sugar is not good for health*” New versions⁴² take into account environmental and global sustainability issues .

Indeed, climate change goals are now part of the food debate. For example, the United Kingdom has a strong action toward the population and industry. DEFRA, the government department for agriculture regularly publishes data on food (consumption, waste...). Campaigns to make people aware of the issues are on “sustainweb”, a website focusing on sustainable food⁴³. For professionals. “The food chain sustainability” is a national interest group, funded by DEFRA. Thus, food is related with engagement to a low carbon strategy. With dairy business stakeholders DEFRA developed a product roadmap to better understand the environmental and sustainability impacts of dairy products⁴⁴.

An original initiative of the Danish government⁴⁵ is to tax high fat food products if they contain more than 2.3% of saturated fat.

2. Food research and networks

The “SCAR” report⁴⁶ stresses the need to focus research on resource conservation and a knowledge base economy in order to get a better understanding of the complexity surrounding scarcity and new pathways for sustainable food. In most European countries, government has developed for long time data bases and research centres on agriculture. Below are listed some research and other networks relevant to the urban sustainable food topic.



The RUAF Foundation is an international network of resource centres on Urban Agriculture and Food security currently active in 21 major cities in 15 countries. RUAF supports capacity development of municipal staff and other stakeholders and

facilitates action research, multi-stakeholder policy formulation and action planning on urban and peri-urban agriculture. <http://www.ruaf.org/>



“Urban, peri-urban and regional food dynamics: toward an integrated and territorial approach to food”

Purefood is a Marie Curie Initial Training Network supported by the European Commission’s Seventh Framework PEOPLE program until 2014 addressing sustainable food supply chains, public food procurement and urban food strategies.. Four of its research projects are about the sustainable food supply chain (“*Consumers as drivers of innovation in new food networks*”, “*Communication, media & sustainable food supply chains*”, “*The role of new food enterprises in reshaping food supply chains*”, “*Greening the Conventional Chain*”). Four more are about public food procurement (among which “*Shaping Sustainable Food Chains through National Procurement Policies*”, “*The Challenge of Scaling Up*”)

The third topic deals with Urban Food Strategies: “*The role of food movements in food regime change*”, “*Enabling integrated food policy within urban governance: key components for policy and institutional design*”, “*Food security and public action for municipal and rural resilience*”, “*Comparative analysis of urban food strategies in European cities*”. <http://purefoodnetwork.eu/>

³⁹ http://www.slv.se/upload/dokument/mat/nyckelhalet/s%C3%BDmbolen/design_manual_for_the_Keyhole_label.pdf

⁴⁰ http://www2.spi.pt/fahre/docslibrary/belgium_nationalFoodandHealthPlan.pdf

⁴¹ <http://denmark.dk/en/lifestyle/food-drink/>

⁴² <http://agriculture.gouv.fr/IMG/pdf/PNA-09022011.pdf> (February 2011)

⁴³ sustainweb.uk

⁴⁴ <http://archive.defra.gov.uk/environment/business/products/roadmaps/documents/milk-roadmap.pdf>

⁴⁵ <http://denmark.dk/en/lifestyle/food-drink/>

⁴⁶ Sustainable food consumption and production in a resource-constrained world, The 3rd SCAR foresight Exercise, 2011 http://ec.europa.eu/research/agriculture/scar/pdf/scar_feq3_final_report_01_02_2011.pdf



Purple is a network of European regions striving for sustainable rural and agricultural development in peri-urban regions. *"Peri-urban areas have the potential to feed more of the EU's citizens particularly those living in adjacent urban areas and have a crucial role to play in meeting today's food*

challenges. These challenges are clear: growing transport and energy costs; concerns about transport impacts such as animal welfare, pollution, congestion; the need to connect consumers and producers; and improving resilience to food crises – global and local." Declaration to the EU Agriculture Ministers Informal Council, Annecy, 21, 22, 23 September 2008

<http://www.purple-eu.org/home/>



LiveWell for LIFE is project which aims to contribute towards the reduction of greenhouse gas emissions from the EU food supply chain and demonstrate what sustainable and healthy diets could look

like for different European countries. This 3-year project starting in 2012 is funded through the EU's LIFE Programme for the Environment and a continuation of the research the Rowett Institute did with WWF-UK in 2010-11. The LiveWell Plate builds on the concept of the "Eatwell Plate" – a visual communications tool created by the UK Food Standards Agency to promote nutritionally healthy diets. The research looked at the compatibility of dietary recommendations for health with environmental sustainability criteria.

<http://livewellforlife.ning.com/>



Corpus is a project supported under the European Commission's FP7 that runs till January 2013. It is a network that links policymakers and researchers on sustainable lifestyles. Food is the first of 3 topics with mobility and housing where

evidence based policy making practices and innovations have been reviewed, foresight exercises developed and knowledge brokering approaches and tools investigated. <http://www.scp-knowledge.eu/>



GreenCook is an Interreg IVc project (2010-2013) aimed at reducing food wastage and to make the North-West Europe a model of sustainable food management, by in-depth work on the consumer / food relationship thanks to a multisectoral

partnership. <http://www.green-cook.org>

Research is more often funded by European or national funds or private organizations (for example WWF for live well plate). Many research studies are about how to create a sustainable diet or sustainable behaviour for consumers.



Eating City is an international network of associations, organizations, businesses, foundations a multi-year program of activities established by the Consortium Risteco - Terre Citoyenne, co-funded by the CLM foundation for Human Progress in Paris, and locally, for each of the different editions, by other

public and private institutions. The aim of the program is to create opportunities of international meeting, in Europe, China, USA and Africa, to elaborate several case studies in multiple dimensions (Ecadim) and a series of publications with concrete proposals useful for public and private decision makers working upstream and downstream of the food chain and also for food industry and food service operators and buyers. <http://www.eatingcity.org>



The Sustainable Food Cities Network of UK pioneering communities at every scale - from individual institutions through to entire city-regions - have recognised the key role food can play in dealing with some of today's most pressing social, economic and environmental problems. It is an alliance of public, private and third sector organisations

<http://www.soilassociation.org/sustainablefoodcities>

3. Civil society organizations

Organizations of citizens or farmers groups also play an important role in the food policy debate. They call for new rules in the food system and make proposals as seen in the CAP current reform process. Selected citizens' organizations and farmers involved in urban food topic are described below.



<http://viacampesina.org/fr/>

La via campesina is an international movement born in 1993. It represents 150 local and national organizations in 70 countries from Africa, Asia, Europe and the Americas it is to say 200 million farmers. The main goal of the movement is to achieve food sovereignty. It ensures that the rights to use and manage lands, territories, water, seeds, livestock and biodiversity are in the hands of those who produce food and not of the corporate sector. Therefore, the implementation of a genuine agrarian reform is one of the top priorities of the farmer's movement.



Slow food is a global, grassroots organization with supporters in 150 countries around the world. It was founded in 1989 to counter the rise of fast food and fast life, the disappearance of local food traditions and people's dwindling interest in the food they eat. For example "*The ark of the state*"⁴⁷ aims to rescue disappearing food specialties. Groups "*document, catalogue and safeguard small and quality agricultural diversity threatened, or potentially threatened, by extinction. The products chosen to be safeguarded include plant species, varieties and ecotypes as well as autochthonous or well-adapted animal populations in a specific territory.*"

Slow food action is also oriented toward improving users' capabilities to recognize food quality for example with "taste training ateliers". At the moment, slow food counts about 100 000 members joined in 1300 "convivia" (meeting groups) worldwide, as well as a network of 2000 food communities who practice small-scale and sustainable production of quality foods. <http://www.slowfood.com>



TRANSITION TOWNS is a movement founded in 2005 by Rob Hopkins, teacher at Kinsale University in Ireland. This network intends to propose solutions to respond to peak oil and climate changes. It also raises awareness about sustainable living. The philosophy is based on permaculture which is a new kind of thinking ecological: work with nature and not against it. The aim of Transition Towns is to recreate conditions for local living, reconnecting men with nature by fostering dynamics among communities in towns. The philosophy of action is not only about food but also housing, money, planning. The movement now counts more than 195 projects in Europe (most of them in the UK) from larger cities to small villages engaged into a transition process toward more sustainable ways of living. <http://www.transitionnetwork.org>

4. Initiatives of the private sector



The **Sustainable Agriculture Initiative** (SAI) Platform created in 2002 (with 30 members among which Nestlé, Unilever and Danone) is a food industry initiative supporting the development of sustainable agriculture worldwide.

Among the latest services and deliverables produced, the SAI Platform published "Principles and Practices for the Sustainable production of Arable and vegetable Crops, Coffee, Dairy and Fruit"; a Benchmark Study of Agriculture Standards and a Short Guide to Sustainable Agriculture. <http://www.saiplatform.org/>

Sustainability in the Food Supply Chain provides an international platform for industry professionals to identify ways to overcome sustainability challenges within the supply chain. It gives an insight in the most recent developments within the sector. <http://sustainability.agraevents.com/>



The **European Food Information Council**, a non-profit organisation which communicates science-based information on nutrition and health, food safety and quality. EUFIC is supported by companies of the European food and drinks industries, and receives project funding from the European Commission.

<http://www.eufic.org/>

⁴⁷ Sources: L'Arca, 2001. Il grano Saraceno della Valtellina. Quaderni dei Presidi Slow Food 2001; Di Napoli Raffaella and Davide Marino, 2001. Biodiversità e sviluppo rurale. <http://www.fao.org/docrep/005/ac784e/ac784e-03.htm>

In conclusion of this part, it seems that *urban food* is getting into debate from the very top organizations as United Nations and from local actions. In fact, the urban food issues are really taken into account with citizens and communities initiatives at a local level: associations, city councils or local authorities as Regions. European policies and National debates are still in a phase of research among the topic. It seems that no specific supporting policies have been proposed yet to help cities developing programs. Nevertheless, many tall and smaller cities have developed initiatives and interesting local policies with proper funds. How did they start? What are their current tools and partners? What do they need to improve their action?

III. Spatial & human dynamics of Food for a resilient food system

Spatial organization of food has been studied by researchers for a long period of time. They were mainly focusing on the food supply chain: transport, economic specialization of territories, agricultural questions. With new environmental and health issues, urban food systems calls a holistic view. Currently, it also attracts new kinds of researches from urban planning, sociology... The subject is all the more attractive that many social innovations have been emerging at local scale in the last decade.

The different initiatives could be grouped in two focuses: creating conditions for growing local food in a “urban rural continuum” and fostering awareness about local and healthy food by fostering changes in all actors behaviours.

1. Create an “urban rural continuum”

The FAO report “*Food, agriculture and cities*”⁴⁸ explains the concept of “*urban rural continuum*” that could characterise the relationship between rural and urban landscapes. According to FAO the relationships between urban and rural landscapes are often “divided, in conflict and separated by cultural and political realities”. Three domains are in evidence that summarize quite well the different dimensions of a potential relationship between urban and rural territories. For developed or developing countries, the socio economic core issues are not identical.

⁴⁸ FAO, Food, agriculture and cities, challenges of food and nutrition security, agriculture and ecosystem management in an urbanizing world, http://www.fao.org/fileadmin/templates/FCIT/PDF/FoodAgriCities_Oct2011.pdf

<i>Domain</i>	<i>Dimension</i>	<i>Core issues</i>
Food and agriculture	Agrobiodiversity	Cities can provide nutrient dense perishable foods and support rural production of other staple foods, integrating local, regional and global supply
	Livestock and aquaculture	Livestock and aquaculture provide important protein sources in urban-rural landscapes, especially in small scale livestock raising and fresh/salt water fish farming
	Food market	Markets (formal and informal) are the primary spaces where rural production meets urban consumption (formal and informal markets) / sources of food, employment, and income
	Food loss and Waste	Post-harvest food loss and post-consumer food waste is a key strategy for urban food security and should be a top priority for urban managers
Natural resources management	Soil and water	Soil resources in urban and peri-urban areas can be compromised in different ways than in rural areas. Water conservation and re-use for food production can serve both urban and rural production / competition for water uses is a concern for UPA
	Land tenure	Tenure in urban, peri-urban and rural areas for food production, handling and markets for cities must be addressed with new policy and support, combining local and national strategies
	Energy	Energy from and for agriculture can be a source of important supplemental energy for production and consumption
	Forest and trees	Urban forests are important for fibre, biodiversity and food crops, especially when integrated in urban-rural corridors and parklands (greener cities)
Socio-economic and health factors	Hunger and malnutrition	Hunger and malnutrition in rural and urban areas is expressed differently and demands both linked and targeted approaches to buffer price volatility and the risk of disaster
	Shifting diets and health	Access to perishable fruits and vegetables is a critical intervention for healthy diets and cities can provide incentives for producers in and near cities to provide healthy food for both urban and rural people
	Food safety and street food	Food and water contamination in urban areas requires application of sanitary standards and practices that help support local producers (urban and rural) and protect the health of consumers.
	Migration and labour	Rural-Urban linkages and impacts on food system are one of the most urgent pressures on public services, including food supply for cities. Holistic approaches linking rural to urban and urban to rural migrations with a focus on women and youth can help to rebuild healthy and vigorous food systems in and around cities.

Table 2: Components of food system across the urban rural continuum

Two visions could be distinguished to achieve a local food system: urban agriculture that would stand in the heart of the city and close peri-urban and rural agriculture that could both procure food and involve city inhabitants in the act of producing.

1.1 Maintain link with peri-urban agriculture

Some cities have traditional link with close rural areas and has maintained this link thanks to urban planning land tenure to protect close arable lands and support local farmers and organizations.

Barcelona

Baix Llobregat Agricultural Park, located in the Llobregat Delta, (10 minutes west of Barcelona) is the traditional main food supplier of the Region. The park has a surface area of 2930 hectares surrounded by high quality fruit and vegetable crops (open air and green house production). The Provincial Council of Barcelona; the Country Council of El Baix Llobregat, the Farmer's Union in Catalonia and 14 municipalities' owners of lands administrate and develop the project.

<http://www.diba.es/parcsn/parcs/plana.asp?parc=9&m=297&o=1>

Portland protect land for food production⁴⁹

In 1979, Portland established an urban growth boundary to protect farms and forests surrounding the metro area from urban sprawl and promote efficient use of land inside the boundary. Local governments have developed programs to support regional Food economies to strengthen the viability of producers and resist development pressure.

⁴⁹ Donovan J, Larsen K and McWhinnie J. Food-sensitive planning and urban design: A conceptual framework for achieving a sustainable and healthy food system. Melbourne: Report commissioned by the National Heart Foundation of Australia (Victorian Division), 2011, <http://www.heartfoundation.org.au/SiteCollectionDocuments/Food-sensitive-planning-urban-design-full-report.pdf>

United Nation Human Settlement Programme⁵⁰ and ICLEI call for a “*new green mosaic*”, a conceptual framing for urban sustainable development that may reconnect rural to urban areas through open spaces for recreations, small allotment crop... The Victorian Eco-Innovation Lab in Australia proposes urban design/planning principles close to this idea as illustrated in Figures 3 and 4.

“The concept ‘food sensitive planning and urban design’ (FSPUD) coined and articulated by VEIL in 2008 (...).

Food sensitive urban design is an approach to planning and urban design that explicitly addresses the way food is produced, moved, processed and consumed, to create places that make it easy for people to meet their food needs and focuses on the following overarching principles: health and fairness, sustainability and resilience, livelihoods and opportunity, community and amenity.”



1. Land use policies to protect farming use
2. Buffer of appropriate land uses between residential and agricultural land to protect both, and potentially enhance amenity and micro-climate
3. Consideration given to the impact of lost agricultural land when land use change
4. Appropriate zoning to establish land uses for city farms where people can learn about food production, share equipment and information, and to provide a local attraction. City farms also incorporate facilities to distribute and process produce from productive streetscapes.
5. Development densities optimized to minimize land take whilst ensuring access to recreation and productive space for Food growing.
6. Productive streetscapes incorporating olives, apples, oranges, nut trees and root crops in the nature strip utilizing treated run-off from streets for irrigation.
7. High amenity strategic walk way / cycle way networks to optimize access to food.
8. Town square incorporating farmer's market and demonstration garden, highlighting aesthetic contribution of food plants and educating people about their use.
9. Land uses organized to provide an integrated network of green infrastructure that meets the city's need locally and minimizes downstream environmental impacts

Figure 4: Some examples of strategic planning measures applying Food Sensitive Planning and Urban Design' principles

Planning is one of the relevant tools to increase quality spaces and diversify land tenure. The below wasteland rehabilitation's project in Philadelphia provides an example of reintroducing green spaces.



Philadelphia regreening: farmadelphia

Finalist Competition: “Urban Voids: Grounds for Change” Sponsor: City Parks Association and the Van Alen Institute.

⁵⁰ UN Habitat, Tufts, R.; Kehew, R.p Rudd, A; Petrella, L. 2011. *Urban Patterns for Sustainable Development: Towards a Green Economy* http://www.unhabitat.org/downloads/docs/9539_39812_3077_alt.pdf

1.2 Develop urban agriculture

SCAR mentions “*new forms of sustainable viable food production*” in urban agriculture and glimpses the potential in modernizing urban gardening for the “*production of fresh fruit and vegetables, as well as small birds, animals*”. Thus urban and peri-urban areas are recognized to have very good soil quality⁵¹ excluding industry polluted soils.

For example, private gardening is part of culture in many European countries. During the second world war, people in France and in the United Kingdom assured food procurement with self-production.

London

London Food Link is a network of 285 organizations and individuals that work towards increasing the availability of sustainable Food in London, tackling the barriers preventing access to healthy and sustainable Food for all Londoners, protecting and celebrating London's diverse Food culture. Currently 30,000 people in London rent allotments to grow vegetables and fruit, and 14% of households grow vegetables in their garden.

<http://www.sustainweb.org/londonfoodlink/>

The food production in towns is close to consumers and may reduce the footprint of the food system if species are adapted to local conditions. To make it possible and upscale initiatives, the FAO talks about a new paradigm: “*sustainable intensification*”⁵² that could diversify supplies. Adapted agricultural techniques and agricultural concepts offer new solutions.



Renewal techniques

Techniques like:

- aquaponics,
- hydroponics,
- aeroponics,

intend to cultivate vegetable without a lot of land that is expensive in urban areas.

Initiatives and architectural projects present new forms of urban buildings that integrate food production like urban farms⁵³ that use new forms of crop culture.

Detroit

“a project of farm in Detroit (the world's largest urban farm), its business plan calls for 'the deployment of the latest in farm technology, from compost-heated greenhouses to hydroponic (water only, no soil) and aeroponic (air only) growing systems designed to maximize productivity in cramped settings. Visitors will be able to "walk down the row pushing a baby stroller," he promises. The farm will focus on high-margin edibles: peaches, berries, plums, nectarines, exotic greens and heirloom tomatoes.”



Roof gardening⁵⁴ and vertical gardening⁵⁵ are also interesting initiatives for urban agriculture.

⁵¹ Netherlands Environmental Assessment Agency and Stockholm Resilience Centre, 2009

⁵² FAO. 2011. Save and Grow: A Policymaker's guide to the sustainable intensification of small crop production. http://www.fao.org/ag/save-and-grow/index_en.html

⁵³ <http://inspirationgreen.com/urban-ag.html>

⁵⁴ [http://www.ecologieurbaine.net/sites/www.ecologieurbaine.net/files/imce/toitures_vegetales_implantation_de_toits_verts_en_milieu_institutionnel_2007.p](http://www.ecologieurbaine.net/sites/www.ecologieurbaine.net/files/imce/toitures_vegetales_implantation_de_toits_verts_en_milieu_institutionnel_2007.pdf)

⁵⁵ <http://ediblegardensnw.wordpress.com/category/vertical-gardening/>



Sweden →

Vertical gardening innovation

← Montreal

UQUAM, "Verdit Toit" and Montreal urban Ecology Centre published a technical study that questions green roofs in the city. It gives clue to implement green roofs on institutional buildings.



If urban agriculture is a good way to increase local food production and reconnect people with food, it has to be done with precautions. A recent environmental study on growing fruits and vegetables on green roofs in Berlin, states that the rate of pollution is significantly high due to car exhausts.

1.3 Organize the delivery

"Delivery" is a major issue in transforming food supply chain. Actually, a large part of food procurement comes from supermarkets and major retailers. The delivery chain is organized with trucks from shipping lines or airways toward logistic plat-forms located in the fringe of the city or wholesale markets. Then smaller trucks are bringing food to shops and catering. The last five kilometres are known to have the major truck impact.

The term "Food miles" refers to the distance food is transported from the time of its production until it reaches the consumer. From 1978 to 1999, Food Miles have increased by 50% and now some 40% of all road freight is food⁵⁶. Raw materials are transported for being processed by food industry and then products are covering further distances to get into supermarkets. An American study⁵⁷ shows that the greenhouses gas emissions related to food are mainly coming from the production phase: *"Transportation as a whole represents only 11% of life-cycle GHG emissions, and final delivery from producer to retail contributes only 4%."*

High food mile products come from far away and can have a dumping effect on local production in developed countries. For instance, *"since 1970 some 60% of the UK's apple orchards have been lost and UK imports half a million tons a year, half from outside the EU ..."*⁵⁸

Even if major retailers are looking to respond to the consumers' price concerns, the economic and social impact on developing countries (from where cheap food often comes) can be very strong with the disorganization of the local production.

Road transportation has other impacts on the environment such as noise and urban air pollution -. Amsterdam has experimented with an electric City Cargo to transport food and goods.



Amsterdam City Cargo

City Cargo aimed to take out half the number of trucks that enter the city: from 5000 to 2500 a day. From delivery points outside the city centre the goods were taken to several hubs throughout the centre from where they are delivered to their final destinations. There, they were handled by small electric vehicles. Considering the size of Amsterdam, the hubs could be located strategically just outside the centre and the cargo trucks in principle could be taken out of the loop.

⁵⁶ The logistic business, Reducing Food Miles, Green Propaganda or Sound Business Sense, <http://www.logistics.co.uk/wp-content/uploads/reducing-food-miles.pdf>

⁵⁷ Food-Miles and the Relative Climate Impacts of Food Choices in the United States Christopher L. Weber * a n d H S . Scottmatt HEW S Department of Civil and Environmental Engineering and Department of Engineering and Public Policy, Carnegie Mellon University, Pittsburgh, Pennsylvania 15213 Received November 28, 2007. Revised manuscript received March 4, 2008. Accepted March 14, 2008. <http://pubs.acs.org/doi/pdf/10.1021/es702969f>

⁵⁸ Hoskins R, 1998, How Green are our Apples?, SAFE Alliance in The logistic business, Reducing Food Miles, Green Propaganda or Sound Business Sense

Another experience in Dresden in Germany proposes to use trams for freight transport for a car factory. The “Cargo tram” runs from the logistics centre to the factory through the city without increasing traffic.

Delivery function is a core issue for local urban or peri-urban food production. Indeed, the more food production will be fostered, the more retail places will be needed. A good delivery plan spreading to all the city areas can create opportunities to sell local production. If open air markets and local markets often play this role, traditional retail could also be involved (i.e. Green carts in NYC p18).

Manchester delivery plan

“Manchester Sustainable Food Delivery Plan is the city's first Sustainable Food Delivery Plan. The 14 food related actions contained with MACF have been considered for their impact on carbon reduction, increasing food resilience and food democracy and refined into 5 key themes. The plan is intended to span the next ten years and pave the way for actions beyond 2020.”

<http://www.feedingmanchester.org.uk>

It seems that some cities have progressively adopted a holistic view on the food system. They often start from one or two specific issues (health, land tenure, low carbon strategy, labour...) and progressively open the debate toward other topics.

New York City global food policy

New York City has been one of the first cities involved in local food policies. Starting with a health focus, the municipality developed a range of measures in order to address all aspects of food:

- Healthy Food Access and Awareness: Improving Healthy Retail Access, Promoting a Healthy Diet, Nutrition Education, standards for healthy food
- Promoting food security program: food stamps to buy food at farmer's market, emergency food line, Schools meals
- Food system sustainability: Promote walkable destinations for retail and other services, Facilitate urban agriculture and community gardening, Promote green space on remediated brownfields, Continue the watershed protection program, Launch a study of New York City's food distribution pathways, Create additional opportunities to recover organic material, including food waste

<http://www.nyc.gov/html/nycfood/html/home/home.shtml>

In a context of innovation toward sustainable urban food, one of the main challenges is up scaling the different initiatives to create a real dynamic around food. Even if all conditions for local food procurement are present, it seems that fostering demand for fresh vegetables and food is a core issue.

2. Foster global organisational and cultural changes toward sustainable behaviours

Cultural transformations have been strong since the eighties. Changing behaviours in household consumption is a hard task. Cities do not always have all keys act and need action from national or international policy. Nevertheless, some tools can be efficient if used with all territory stakeholders. Public food procurement, employment policies and information campaigns may progressively obtain good results in transforming urban food system.

2.1 Public food procurement and healthy practices

Most of the cities involved in food policies watch public food procurement as a good lever to raise awareness on health issues. Public administration services (primary schools, sometimes secondary schools, hospitals...) represent opportunities for procurement of local and healthy food. The “school public plate”⁵⁹, constituted by resilient food (environmentally respectful, locally produced when possible) is a nutritive and equilibrated meal served in canteens. It is a strong tool for changing food consumption patterns.

Public food procurement in Roma: “All for Quality food program”

In January 2010, Rome's Council adopted a decision on GPP for food and canteens. More than 144 000 meals are served daily across 550 nurseries, primary and secondary schools. 92% are prepared on site with 69% of them including organic food. A vast number of nutritionists and dieticians advise and monitor the service, which also counts on the involvement of canteen commissions comprised of parents and school canteen staff⁶⁰.

http://ec.europa.eu/environment/gpp/pdf/news_alert/Issue14_Case_Study34_Rome_food.pdf

⁵⁹ Kevin Morgan and Roberta Sonnino, State of the world, Rethinking School Food: The Power of the Public Plate, 2010, <http://blogs.worldwatch.org/transformingcultures/wp-content/uploads/2009/04/Rethinking-School-Food-Morgan-and-Sonnino.pdf>

⁶⁰ FAO, Food, Agriculture and cities, challenges of food and nutrition security, agriculture and ecosystem management in an urbanizing world, http://www.fao.org/fileadmin/templates/FCIT/PDF/FoodAgriCities_Oct2011.pdf

Thus, communities have possibilities to insert “sustainable clauses” in procurement proceedings. The public plate is not only a way to lead children toward awareness of food; it also creates real markets for new kinds of food. If “local” food is not recognised as a criterion in public procurement, labels can be taken into account.

2.2 Local food procurement linked with culture and employment

According to the third SCAR foresight exercise⁶¹, communities are seen as a scale for action. It highlights the opportunity of fostering the link between people and farmers. “Experimentations” could relink population with food production and better inform them on markets. The recent term “Locavore” designates a person that procures food in an area from 100 to 250 km around the location.

Since the nineties, research looks at re-localisation of the food system. Debate between researchers led to questioning the local food system in order to investigate local food sustainability. A US researcher⁶² shows that local food is seen to be “*fresher looking, fresher tasting, of higher quality, and a better value for the money*”.

Local food procurement

In the United States, Community Supported Agriculture⁶³ has grown from 50 in 1990 to 1000 in 2008⁶⁴.

In France, AMAP⁶⁵ is a system that connects groups of inhabitants to a farmer who delivers them fresh and local products. The originality is that the group is involved in the food production process.

Nutrire Milano

In Milan, Slow Food, Università degli Studi di Scienze Gastronomiche and Politecnico di Milano intends to create a metropolitan food chain and promote the short supply chain. This holistic food project, which involves food retailers and caterings operators, calls for a food chain supported by traditional farming practices.

<http://www.nutrire milano.it/>

Considering the future mainstream of green growth proposed in international United Nations and ODCE reports, the development of urban agriculture could be a good way to develop employment.

Brussels urban green agriculture

An original cooperation makes the link between a low carbon environmental strategy and the employment sector in Brussels. A recent study yet to be confirmed reveals a potential of thousands of jobs related to sustainable urban farming and food transformation, new local distribution schemes, waste management.... A first step currently underway is to create an urban farm in the municipality of Anderlecht on a 3000 m² roof that will offer 10 new jobs. Urban farming employments should become an opportunity for young and unqualified job seekers.

If employment is a way to reconnect people and inhabitants with the food topic and make them active in social life, education and information campaigns are still necessary to open larger debates.

2.3 Information and education campaigns on food and/or low carbon strategy

As stressed in first part, strong diet changes occurred in the last past decade. To offer local fresh food is not sufficient to get people to eat more vegetables and less meat. Important issues to change behaviours include:

- *Reconnection with food needs*

In the last century, a nutritional transition has taken place (that occurs nowadays in developing countries) toward a protein-rich diet. This was characterized in European policy by subsidizing livestock producers (dairy, butter and milk, meat) whereas fruits and vegetables producers were not supported.⁶⁶ To make people aware of what they need to live, nutrition information is recognized as a good tool. According to the authors of the duAllne study, in the eighties, the scientific publications about cholesterol and all communications on it had effects on the consumption of certain food products such as meat, butter... To get a chance to change individual behaviour those messages have to be validated from a medical and policy perspective. .

⁶¹ Sustainable food consumption and production in a resource-constrained world, The 3rd SCAR foresight Exercise, 2011

⁶² Hardesty S.D., 2008. The growing Role of Local Food Market. American Journal of Agricultural Economics 90 (5): 1289-1295

⁶³ Brown C., Miller S., 2008. The Impact of Local Markets: a Review of Research on Farmers Markets and community Supported Agriculture (CSA). American Journal of Agricultural Economics, 90 (5): 1298-1302

⁶⁴ Hardesty S.D., 2008. The growing Role of Local Food Market. American Journal of Agricultural Economics 90 (5): 1289-1295
<http://agecon.ucdavis.edu/people/faculty/shermain-hardesty/docs/the-growing-role-of-local-food-markets.pdf>

⁶⁵ <http://www.reseau-amap.org/>

⁶⁶ Esnouf, C., Russel, M. et Bricas, N. (Coords), 2011 : duAllne – durabilité de l'alimentation face à de nouveaux enjeux. Questions à la recherche, Rapport Inra-Cirad (France), 236p.

- *Prevention of social inequity*

It seems that health costs (heart diseases, Diabetes type II...) are increasing in western countries. The current trend is the creation of deeper gaps between high and low income people in front of health and food. For disease prevention, national and local campaigns are indispensable tools (as healthy public plate in canteens) to encourage consumption shifts.

Considering those issues, solutions could be found in linking food with affordable prices, accessibility and conviviality in order to create a convivial shift. Retailers have a role to play. Indeed, if retailers can advise consumers on the sustainability of food, they can also propose fresh, local food.

NYC green carts

Green Carts are mobile food carts that offer fresh produce in certain New York City neighbourhoods. Since the program's start in 2008, nearly 500 vendors have opened Green Carts in City neighbourhoods, helping many New Yorkers buy fresh fruits and vegetables close to home.

<http://www.nyc.gov/html/nycfood/html/home/home.shtml>

Other initiatives could help establish businesses in specific areas close to low incomes inhabitants.

The Pennsylvania Fresh Food Financing

"The Fresh Food Financing is a state-wide economic development initiative that aims to attract fresh Food retailers to urban and rural underserved communities. The FFFI provides grants and loans to qualified food retailers to help meet costs. Funds may contribute to land acquisition, construction, equipment financing, capital grants for project funding gaps, and funding for workforce development. (...) Eligible stores are located in a low to moderate income census tract, provide a full selection of fresh Foods, and locate in areas that are currently underserved. By 2009 the scheme had brought an additional 5,000 jobs and 1.6 million square feet of fresh Food retail space to the state of Pennsylvania. From 2010 this model has been adopted at a Federal level and is being rolled out across the United States."

<http://www.thefoodtrust.org/php/programs/fffi.php>

In London, a project also relates urban food production with employability⁶⁷ and states that getting involved in gardening can help people to get better skills and reconnect with society. Other projects around Europe have similar goals.

- *Reconnection with taste*

In the context of the current food chain mainly based on the food industry's system, the risk is to have a trend of standardization in taste and diets. Conserving originality in food is also part of people's culture. Slow Food "convivia" works on this topic. The organization has an educational website⁶⁸ for children and adults and convivial meetings around food tasting. The question remains: how to link those initiatives with people that do not feel like participating because of cultural gap?

- *Connection with environmental issues*

With the development of various initiatives and large scale communication on sustainable development and agendas 21 in cities since the nineties, food topic can be an understandable and less technical way to raise awareness on climate change and other main environmental issues.

Lille biogas canteens and urban transport plan

Since 1992, Lille in France is separately collecting and recovering the organic waste fraction. After some technical research, the city council chose to develop methanization that needs garden and food waste. In 2006, schools and colleges were involved in this selected waste collection. In the urban transport plan 200 buses circulate thanks to the methane produced from this waste. Prevention campaigns are

⁶⁷ http://www.skillsdevelopment.org.uk/pdf/Roots_to_work_full%20report.pdf

⁶⁸ <http://www.slowfood.com/education/>

CONCLUSION

In a world transition with new environmental, economic and social challenges, an unsustainable food supply chain with high demands in oil, fertilizers and resources is no longer affordable for nations. Food is a major issue that no longer belongs only to the national or global level.

Various cities have taken initiatives to bring food back into public debate. Urban communities can have a key role to play in transforming the food supply chain. Cities are close to the country side where food is grown and close to the consumers that are also its inhabitants. They know their inhabitants and have developed tools to bring them better living conditions in education, planning, housing... Knowing that food growth, food consumption and waste are major impacting facts for greenhouse emissions, cities are able to identify the various stakeholders needed for actions in their territory and can directly exchange with them to better understand the system and find solutions with them. The food system that seems so huge at world scale become understandable at urban communities scale. Local public policies can change how food is grown and how it is consumed by creating conditions for a local sustainable food supply chain. Acting on food and talking about food contributes to changes in representations and give meaning back to food growing and food consumption.

The different experiences quoted in this paper show that a holistic vision can have positive effects on the economic sector because thinking up a new system gives rise to new opportunities and new kinds of uses for people. For instance, agriculture that used to be the major economic sector for employment before the arrival of the food industry and intensive agriculture could be considered differently. Reconnected cities with the country can lead to the creation or re dynamisation of businesses in all stage of food activities and especially in tproduction, transformation and retail.

The “urban continuum” concept is also very useful to understand how to reconnect people with food; this reconnection can pass through the reallocation of land use and the global organization of food in the territory. With urban sprawl, distinctions between urban spaces and rural areas are complex. The Veil's Food Sensitive Urban Planning brings tools to imagine new urban organisation that could recreate strong interactive links. The originality of this proposal comes from the development of a holistic view where urban spaces are part of the urban food system. This view shows where and how food is grown, how it is delivered, and where it can be enjoyed.

PROFILES OF THE PARTICIPATING CITIES

City profile for Amersfoort



Main characteristics of the town

Amersfoort is situated in the centre of The Netherlands. Amersfoort originated around the banks of the river Eem (names Amer in the old days). Three types of landscape are surrounding the city. In the West and South sand dunes and pine forests on the glacial geo-formation. In the East typical farming landscape. On the Northern side of the city the flat, open, meadow landscape of a former polder.

Amersfoort has a historic city centre with monuments that go back to 1300. After a flourishing period in the late Middle Ages the city stayed quite stable in a rural area. From the end of the 19th century the city started growing, due to the connection to the first railway-system in The Netherlands. On the glacial slopes a green suburb develops with rich houses and monuments. On the other side of the railroad, small housing was established for the railroad workers. After World War II, the city grew further for 2 decades. In 1980, about 80.000 people were living in Amersfoort. The city was then selected by the national government as a 'city for growth' within national urban planning strategy. Rapidly the city expanded in direction North with famous modern architecture and city planning to 149.000 at this moment providing lodging opportunities at the boarder of the dense and expensive triangle Amsterdam, Rotterdam and Utrecht (cities that are within a distance of respectively 50km, 80km and 20km). The current population profile of Amersfoort is rather young,

educated with middle to high incomes. The town planning is to grow to 160.000 inhabitants by the year 2020

Main characteristics in terms of food and sustainability

The city of Amersfoort is active on two integrated fields of interest: development of strong and independent communities, and stimulation of sustainable food in the city and the region. The municipality of Amersfoort stated that the three central values of the city-administration are 'community involvement', 'decisive', and 'sustainability';

Local groups have established a broad programme of activities in 2011 around local and sustainable food, supported by grants of the central government, that were very successful; then the Amersfoort Region was appointed the Dutch 'Capital of Taste 2012' and many activities continued under that banner.



Growing...

Amersfoort is surrounded in the North and East by a rural area: North (Eemland), mainly Dairy farming; in East (Gelderse Vallei), a mix of intensive pig and poultry farms, dairy farming and (Flevopolder) large scale arable farming; in South-West (de Kromme Rijn area), fruit production.

The municipalities at the East of Amersfoort united to form a Food-Valley, with the international knowledge centre of Wageningen University as flagship.

Most food growing activities are situated outside the city. In Amersfoort, 180 jobs are recorded in agriculture and fishing for 92 related companies and farms. In the city and its direct outskirts, some small allotment garden areas are contributing to the food supply. 58% of the housing stock is privately owned and 66% of housing have private ground/gardens but these are not highlighted as urban food production opportunities.

Delivering...

Most of the food consumed in Amersfoort is distributed via large supermarket chains. The HORECA sector is well developed with 392 companies registered as hotel, restaurants or cafés employing 1570 persons but most of them are supplied by large catering and professional companies.

V-Day@eetstee



De Eetstee is an organic restaurant situated in the historical centre of Amersfoort. It is the initiative of a young chef that took the challenge of catering to good food amateurs at reasonable price using mostly local organic products and offering vegetarian cooking 3 days per week. Questioned on the emulation his initiative created in the restaurant offer of Amersfoort, the chef stressed the success of *De Eetstee*. The restaurants need for organic ingredients caused an evolution of the offer of certain suppliers (e.g. wine) but for the moment not many competitors followed in its tracks.

Public procurement of sustainable food in public canteens is at the very beginning with only the town hall canteen serving as a pilot.

BROODJE van de STREEK



Via public tender the catering of the town hall restaurant is 95% sustainable, with special

emphasis local food products. A small market of organic regional products is even proposed in the restaurant itself. *Broodje van de Streek*, Sandwich of the Region is a new action focusing the introduction of a sandwich/lunch dish of pure, regional products at company restaurants of public authorities

In and near Amersfoort, there are three specialized shops exclusively selling organic products, and around 5-10 small shops at the farm gate.

Landwinkel



Landwinkel is a national organization supporting farmers in opening shops at the farm gate. *Landwinkel* works as a co-operative, pooling products from local farms so that each outlet offers not only its own products but all the products from the local network. *Landwinkel* also provides commercial and merchandizing support (i.e. brand, packaging, shop design, information and advertisement material...) greatly facilitating farmers' access to having their own shop.

VoedselKollektief Koppelpoort



VoedselKollektief Koppelpoort food collective has around 120 members. Members can order

vegetables and fruits every Tuesday that the collective buys from local farmers. Members pick up their order every Thursday. All members help by doing some tasks.

There is a Community Supported Agriculture initiative with 50 members (Het Derde Erf).

Het Derde Erf, Community Supported Agriculture



Het Derde Erf is a community supported agriculture (CSA) project located in a farm on the outskirts of Amersfoort. Members according to their willingness and availability are taking part actively in the cultivation and harvesting of vegetables for the weekly baskets as well as in the collective management of the CSA. Other volunteers, such as overworked employees seeking stress relief, also help with the cultivation. The farmer and the members see this collaboration as a positive and satisfactory experience from the point of view of social involvement to quality of the food. Although the economic model remains below the breakeven point for the farm: despite the manpower provided by the volunteers, the farmer sees CSA more as a hobby than a profitable activity.

Enjoying...

Trends in the population relating to food reported by national monitoring are mainly related to healthy and convenient food though awareness about sustainability aspects is gaining ground. The small share of the population engaged in local sustainable food is very active but limited at the niche level for the moment.

The city of Amersfoort is leveraging on enjoying food as a strategy to raise interest of the population in food and increase food quality expectations both in terms of taste and sustainability.

Two special food related project stand out as evidence of this strategy: *Echt Eten in de Eemstad* with a farmers' market established since 2011 and *Hoofdstad van de Smaak 2012*. These initiatives

have a positive effect in terms of awareness raising of the city population even if they mostly involve a small share of the population, notably foodies and environmentally-concerned people.

Echt Eten in de Eemstad



Echt Eten in de Eemstad is a group of initiatives to promote sustainable and good food in the city. It included *Mini Moestuin coach*, the mini kitchen garden coaching with the participation of 325 families, some schools and a total of 1100 kids about growing their own vegetables and herbs in their own 1 m²-garden; *Smaak van de Streek*, a quarterly seasonal farmer market promoting good products and traditional food coming from local producers; *Mobiele Keuken*, a mobile kitchen to organise collective cooking events in the field; *De Boer op* visits of farms; *Foodtrails* to visit by bicycle some of the local food producers; *Eetbars Amersfoort* supporting citizens initiatives...

Hoofdstad van de Smaak 2012



All along this year, the designation of Amersfoort as *Hoofdstad van de Smaak*, *Capital of Taste* is the occasion to organise a large variety of recreational, educational and popular activities focusing on healthy and honest food, with a pure taste, and an emphasis on regional products. Amersfoort and the

surrounding municipalities of the region will focus in particular on one product, the potatoes to discover all it's refined and gastronomic aspects. *Hoofdstad van de Smaak 2012* culminates with the Week of the Taste in early October.

Opportunities and challenges for the development of sustainable food

Towards a local sustainable food system

The food business is of vital importance for the agricultural surroundings of Amersfoort, economically, socially and from a landscape-viewpoint.

On a macro-economic scale the agricultural sector makes 4% of the total economic sector in the province of Utrecht.

City-farming, sustainable foods, healthy citizens, are topics that are rising within the city and the region. In this context, the challenge is mostly to shift the large scale intensive agriculture that is important for the regional economy as well as distribution channels mostly based on large national supermarket chains towards more sustainable practices. The strategy of the city to leverage on the change of the demand is certainly the key. To date, the efforts started mainly 6 years ago are promising but have only reached engaged minorities and superficially changed the food market behaviour.

Ensure economic sustainability

Within the share of the production initiatives oriented towards local sustainable food, the difficulty is also to reach economic viability. This issue of fair trade in sustainable agriculture generating enough income for the producer without increasing selling prices is a general concern and also an issue in Amersfoort.

One of the promising strategies is to leverage on customer participation: as in the example of *Het Derde Erf* Community Supported Agriculture (presented above), members are taking part in the cultivation, harvesting and management of the initiative both reinforcing their feeling of belonging and strengthening its economic sustainability.

De Boerenstee - multi-functional farming



De Boerenstee is one of the many different examples of multi-functional farming. The farm nice location allows it to welcome tourists in a bed & breakfast. Part of the unused farm buildings have been refurbished into hotel bedrooms and a new large space has been built with restaurant facilities to host conventions and seminars 'in a green context'.

Another promising strategy is to leverage on multifunctional farming as in *De Boerenstee* case above generating more regular incomes from a range of activities from selling directly their products in farm gate shops to restaurants, lodging at the farm and any form of local tourism that farms near the city can organize.

Ensure convenient supply facilities...

Amersfoort focused its effort to both stimulate local sustainable food production and to raise corresponding expectations and demand among the population. The match-making action "*City is looking for farmer*" in 2007 and 2008 set the ground to kick-off a series of projects both on the growing and enjoying side.

For the share of the population who show interest in sustainable food, its accessibility on a regular basis seems to be one of the key bottlenecks.

For projects initially initiated as awareness raising events such as the quarterly farmers market *Echt Eten in de Eemstad*, the challenge is to transform it into a more regular process and to multiply the initiatives. The logistics and delivery on a regular basis in the city seems to be key. Beyond groups of active enthusiast participating in the Community Supporting Agriculture-like communities, limited daily access to sustainable food appears as a barrier to supplying a larger share of the city population.

Stad zoekt Boer - City is looking for farmer



In 2007 and 2008, the city of Amersfoort organized large stakeholder conferences called "city looking for farmers" to kick-off match-making between farmers near Amersfoort and initiatives on sustainable food within the city. This process results in around 140 'matches' from early contacts to the kick-off of collaboration projects on sustainable food supply, health, education, recreation or business...

Exploration of new solutions (i.e. delivery points in local supermarkets; new farmer's retail spaces in the city...) is in progress to improve sustainable food access in the city.

Enabling bottom-up initiatives and removing barriers

The current strategy of the city of Amersfoort to promote sustainable food is to enable citizens and stakeholders to take action and strongly engage in multiple initiatives on both the Growing and Enjoying side of sustainable food.

Public authorities seem to focus less on classical levers to promote sustainable food such as public procurement, public canteens, awareness raising campaigns ... But they show a strong commitment in engaging and facilitating civil society initiatives.

Regulatory changes, such as the change in the municipal law to allow growing food in public spaces is a good illustration of the posture of public authorities enabling bottom-up actions. The food sector in general and in particular in the Netherlands is strongly regulated. This regulation is necessary to ensure food safety and quality but it may also constitute barriers to innovation especially to original and breakthrough initiatives reinventing the traditional food chain. In view of this situation, the public authorities of Amersfoort show a very progressive posture both encouraging the emergence of bottom-up driven initiatives and following attentively their development reacting

promptly when they encounter barriers. This 'enabling posture' is certainly an interesting model to share within the URBACT network especially with traditionally top-down public administration cultures.

Self-Maintenance Contracts



Self Maintenance Contracts give citizens of Amersfoort the possibility to take charge of one piece of public green space. More than 150 contracts are currently established, mainly small allotments and some larger ones up to the case of an entire public park self-managed by inhabitants living nearby.

The municipality also employs one day per week a so-called 'Green Brokers' who play the role of multi-purpose facilitators for the population to engage in initiatives around sustainability, greening the city and growing food. The change of the *Self Maintenance Contracts* legislation from allowing only decorative plants to allowing growing food for instance enables inhabitants of the building in the picture above to plant fruit trees on the public space between the buildings, engage in their maintenance and leverage on this initiative to revitalize social life between the inhabitants...

Keeping the momentum of a lively fabric of bottom-up initiatives

On the *Enjoying* side, many food-oriented public events have been organized to raise awareness of the population and of professionals from the food sector: *Streekmenu* (chefs participating in a local menu project); *Sofie op de Wallen* (large annual public meal); the quarterly farmers market *Smaak van de Streek* and many other inclusive micro-initiatives mixing food with music, games, health, learning or recreational popular activities. These numerous initiatives will culminate in early October in a week of celebration of *Hoofdstad van de Smaak*, Amersfoort as Dutch Capital of Taste. The strategy of stimulating social innovation and bottom-up initiatives creates a lively and promising context to promote sustainable food. It raises also a

series of questions. How can we connect and synergise those many small initiatives? How can we upscale the most promising one? How can we reach populations beyond the foodies? How can we embed more in-depth the emerging interest in food and gain from the traditions of countries with stronger food cultures?

Last but not least, the activation of the social fabric is based on a continuous renewal of projects and initiatives by city stakeholders. Capital of Taste is the current highlight but nothing important is foreseen after. The sustainable food stakeholders see the participation in URBACT as a possibility to leverage on to keep the momentum.

Initial focus of the Local Action Plan (LAP)

The municipality of Amersfoort has sustainability as one of its three major goals for the development of the city. Its ambition is to be a CO₂-neutral city by 2030. Sustainable Food is a major subject in two strategic programs:

- Sustainable Amersfoort (2010-2014)
- Amersfoort Green City (2004-2015)

Both programs are working on the topic of Food by stimulating and supporting private initiatives, and co-producing with public-private partnerships on several actions and investments. A limited budget is available to support actions, by co-funding. An inventory has just been completed in and around Amersfoort of initiatives ranging from City-farming, through public gardens to neighbourhood gardens. Amersfoort is blessed by a rather large group of entrepreneurs in the area of sustainable food. In 2012 the title 'Capital city of Taste' was deployed for the ambition to draw attention to the topic of sustainable food.

At this point in time there is a view that the LAP will initially focus on the following issues:

- Set up a Regional Food Policy Council to stimulate the current dynamic and synergize the multiple ongoing initiatives;
- Issue an Amersfoort Food Charter to jointly define objectives and create commitment among businesses and the community regarding sustainable food in the city;
- Raising awareness by organizing events and developing & safeguarding the current network;
- Encourage demand and supply, involving local entrepreneurs, creating new businesses and enabling a more sustainable food system;
- Education and knowledge sharing by farm/side visits of pupils and students;

- Governance on destination of city land redefinition of un-built grounds in public space.

Potential long-term outcomes:

- Higher turnover for farmers who produce for the local market;
- More restaurants using local products;
- More outlets for farmers' produce;
- More allotment gardens;
- More private vegetable and fruit growing.

Approach and composition of the Local Support Group

The position of Amersfoort public authorities described before focusing on engaging local initiatives has generated the emergence of an already rich informal group of dynamic stakeholders (social entrepreneurs, community organizers, independent consultants etcetera) directly coming from these bottom-up initiatives or involved in their local management.

Cohherent with its 'enabling posture' the public administration acts as 'backbencher' for this stakeholder group, providing attentive back-up and facilitation.

Beyond this first circle of active sustainable food stakeholders, the repeated gathering actions and awareness raising activities have generated a responsive network of people engaged in some way with sustainable food topics. Numbers are still limited but many respond each time a specific action is proposed.

In this context, establishing a LSG (and/or Food Council) for the URBACT purpose seems within reach. Stakeholders emerged from bottom-up initiatives already active and they should be complemented by representatives from the larger scale agro-industry around the city, as well as food industry and supermarket chains.

The first and currently main intention of the LAP is to establish a long-term Local Sustainable Food Council that will go along the constitution of the URBACT LSG.

- Amersfoort Department of Strategic Affairs & Governance (placed close to the Mayor and Municipal Council);
- Amersfoort Department of Urban Management;
- Representatives of local food production and distribution (farmers, farm gate shops

- organization, city retail and shop
organization, supermarkets...);
- Representative of the HORECA sector
(cafés and restaurants), professional supply
and catering;
 - Social entrepreneurs and community
organizers in sustainable food (i.e. Farmers
market, Green Broker, SlowFood
Movement, Community Supported
Agriculture initiatives...);
 - Representative of major food events
(Amersfoort Capital of Taste 2012...);
 - Local schools and higher education
(Wageningen University);
 - Citizens' organizations;
 - Health care professionals.

City profile for Athens



Main characteristics of the town

The city of Athens is one of the oldest cities in the world with a recorded history dating from c. 1400 BC. The capital and largest city of Greece and the southernmost capital on the European mainland, Athens is located in the southern part of the region of Attica. The Athens Larger Urban Zone (LUZ) is according to EUROSTAT the 7th most populous LUZ in the E.U. with nearly half of the Greek population living there (more than 4 millions), and one of the most densely populated areas in Europe (1.540 inhabitants/km²). The municipality of Athens is the central municipality of the Athens urban zone and the most populous in Greece, with approximately 750.000 inhabitants and a land area of 39 km². It is one of the most built up areas in Europe, enlisted among the top-ten most densely populated cities of our continent (mean population density being nearly 20.000 people per km²). Athens is a major regional transport hub for air traffic, rail, roads and boats. Athens is supported by Piraeus Port, an important centre of the merchant marine, industry, and transportation connecting cities across within the country and abroad. It's a city of numerous excellent institutions of higher education, a major centre of archaeological research, a world-renowned tourist centre of prime international significance for its wealth of culture including: ancient monuments, world-class museums, large contemporary exhibition spaces, art galleries, numerous cultural events.

Athens is a rather densely populated area with 16,830.41 inhabitants per Km² (2011) with a constant increase in the past decades and a reversed outflow in the last 2-3 years with 17% of the population relocating particular to the suburbs or to eastern and southern rural areas of Attica. The

percentage of greenery in the Municipality of Athens is 2.25m² per inhabitant which is a fourth of the average for European cities.

Greece experiences a severe economic crisis. The population suffers from austerity measures. In the Municipality of Athens average annual income per capita dropped from 24.048 € in 2008 to 18.600 € in 2011 and remains in constant decline.

Main characteristics in terms of food and sustainability

Greece is well known for the richness and diversity of its gastronomy. Traditional food production and local quality ingredients are still vivid and appreciated by the population. In this context, sustainable food is only starting to be an issue. The interest in the population for organic healthy food is emerging at the same moment of drastic economic crisis generating food poverty and demand of cheaper ingredients.

Growing...

The agro-food system and agricultural sector maintains a key position in the Greek economy with agriculture representing 12.4% of the active population.

Greece is a mountainous country with small fertile plains but little good grazing land and little cattle-raising. Although Greece has a deficit in beef production, the consumption of beef is not limited. On the contrary it is quite widespread, since beef is the main type of meat consumed in the country. The high demand is mainly covered through imports from France, Netherlands and Denmark.

Lamb is more prominent and the milk of sheep and goats goes into the making of numerous excellent cheeses, as well as first-rate yoghurt. Poultry and eggs are also very popular while olive oil replaces butter.

Greece is surrounded by seas and fishing involves thousands of employees. More than half fishing production is made up of aquaculture, 80% of which is exported.

Kids classes visiting university...



The Agricultural University of Athens, located in town is equipped with large farming facilities to demonstrate agriculture and breeding to the students as well as for research purposes. The university is receiving each year many primary and secondary schools for day tours demonstrating sustainability within all the major productions of Greek agriculture. An average of 116 schools and more than 5,000 students visit the University annually while specific healthy diet workshops have been conducted with some of the students in collaboration with foundations.

The region of Attica is one of the oldest wine-growing regions in the world and there are dozens of excellent wines available. In the region a lot of wineries have open doors to visitors either for wine tourism or for the organisation of events. Moreover, 'barrels opening day' is celebrated by the winemakers of Attica every year. It counts three products PDO (Protected Designations of Origin): figs from Vravra and pistachio from Aegina and Megara. About one sixth of its agricultural land is certified organic. And more than 6500 farms are registered in the region and part of them produces non-certified traditional quality products. The population of Athens seems somewhat reluctant to buy food from the close region unsure of its quality because of the high urbanization and important industrial activity. Although air pollution does not seem to be an issue: if it may be a threat for the health within the city it doesn't affect much food quality.

The area covered by the Municipality of Athens is mainly limestone and provides few opportunities for urban farming, mainly because of the densely built urban fabric. The majority of residences are apartment buildings. The percentage of gardens is low. Most apartment buildings have terraces but

very often already occupied by solar panels to produce hot water.

Recent town planning has revealed that there are 750 acres of undeveloped and neglected open spaces scattered around the city. These include deserted army bases, abandoned factories with some 10-20 acres spaces in the Chelidonous area and in Elaiona and smaller 1-2 acres scattered places all over the city.

Delivering...

From the areas where food is grown the food is distributed in major distributors or directly to small-medium warehouses. There is the central fruit and vegetable market which covers a large part of the distributed products.

Most of the final consumer distribution is based on supermarkets with a persistence of small neighbourhood shops and food street markets operating in the morning and early afternoon and managed by the Municipality (control, cleaning...). In these street markets, a significant number of farmers from neighbouring areas directly bring their products to the consumers (see *Organic open air farmers markets*).

Organic open air farmers markets...



During the last decade, open-air organic farmers markets develop. They mostly operate in the late afternoon/early evening. A list of these markets is available on the Internet with schedule and places. But they are not regulated by the Municipality and therefore less embedded in Athens citizens habits. Organic farmers directly sell their products reinforcing the link between local producers and Athens' consumers. Organic and non-organic markets develop as two parallel channels neither mixing to avoid quality and price discrimination.

Promoting sustainable food through public green procurement is in the focus of the Municipality but only at early exploration stage. The current national

public procurement rules are very rigid and do not leave much space to orient public canteens towards sustainable organic local menus (see *Athens Municipal Nurseries*). The non-stop working day starting at 8:00 – 9:00 to finish around 15:00 without lunch break makes that public canteen are reduced to the one in schools and nurseries limiting the possibility to leverage on public procurement to promote sustainable food. On top of that situation the current economic crisis pushes administrations to reduce costs in general and targeting more cost efficient products.

Athens Municipal Nurseries...



The 82 nurseries of the Municipality of Athens are managed by a Municipal Agency ("Athens Municipal Creche") serving around 4000 meals to kids per day. On top of it, the two central kitchens are preparing 2500 extra meals per day for homeless and people in extreme poverty. The food procurement is based on large international procurements procedure. Most of the food is still coming from Greece. Introducing green criteria seems difficult within the current legal procedure. Options of trying to include sustainable criteria on one particular ingredient (i.e. eggs) is currently in discussion as well as splitting procurement for nurseries with procurement for charity meals in order to better adapt sustainability criteria to each population.

Enjoying...

Athens has countless fabulous locations (seaside localities, the fascinating historical centre, urban and suburban places of great beauty) as well as pleasant weather during much of the year and its inhabitants enjoy good food and eating out. Thus, there are thousands of eating-places in all these parts of Athens providing inhabitants and a large numbers of tourists, especially in the summer. Apart from numerous restaurants with foreign cuisine, hundreds exist serving the world-famous Greek

cuisine known for both its health benefits and its fabulous tastefulness and including in particular extra-virgin olive oil, green vegetables (raw, cooked, stuffed), fresh fish and seafood, tasty bread, honey, amazing desserts, good wines.

Athens citizens as well as Greek population in general are keen of good local ingredients and traditional flavours. They get more and more interested in the origin of the food they consume and prefer Greek products instead of imported ones. They consider Greece as a small country and tend to assimilate national and local production. There is a growing interest in the protection of the environment and into sustainable food but this phenomenon still need to strengthen and wider develop.

The demand for organic food is also raising but tends to be slowed down by the economic recession.

Catering is suffering from the crisis. In the past decades eating out as opposed to eating at home increased very much. This trend has reversed drastically in the last 2-3 years and the percentage of persons working in food service outlets has drastically decreased since 2008 by approx. 20%.

Carbon-free olive oil...



Food Standard, a consultancy company providing quality, organization and marketing services to agribusinesses and the wider food supply sector, took part to the development of a climate neutral virgin olive oil. It took into consideration possible reductions of carbon emissions all along the olive oil production chain (olive grove, olive press, bottling). By measuring the carbon footprint of the olive oil production, they managed to develop a new product and leverage on this symbolic product for Greece to raise awareness and interest on sustainable food.

Opportunities and challenges for the development of sustainable food

A rich food culture...

Greece is well known internationally for its rich and tasty cuisine. In particular the traditional Greek food is emblematic of the famous Mediterranean diet reputed for being one of the healthiest diet in the world.

Although this traditional cuisine is still very vivid and appreciated, industrial products, junk food and low quality ingredients are developing increasing the level of malnutrition and obesity among all the population. On top of that situation, the Greek emigration diffused abroad a cheap and low quality version of souvlakia/gyros restaurants blurring the image of the healthy Mediterranean diet. The huge touristic activity in all the country and especially in Athens generates the emergence of a large range of tourist *taverna* serving more or less good quality food.

Traditional taverna and quality organic restaurants...



Athens offer of restaurants is huge and is ranging from traditional tavernas that still serve original Greek cuisine to more modern restaurants leveraging on Mediterranean diet fusion menus. All of them celebrate the quality of ingredients and excellent cooking.

The violent economic crisis reduced dramatically the frequentation of restaurants by the most affluent part of the population whereas lower incomes claim for access to cheaper food products.

This situation pictures perfectly the two-fold etymology of the word crisis and can be seen as both a threat and an opportunity for introducing sustainable food.

On the one hand, the economic crisis coming on top of general trends toward more convenient industrial, pre-prepared food may lead to vicious circled effects in term of quality. The challenge is certainly to give access to cheaper food without promoting more industrial fat and sugar intensive unhealthy products. Organic local quality products may then only appears as a luxury for happy-few.

On the other hand, the same situation could be seen as an opportunity to invert the current bad nutritional trends and promote healthy sustainable diets. The same population who tries to find less expensive food products to buy is at the same time still seeking for quality. The pathway toward a Mediterranean diet based on simple local ingredients, cheaper low-meat menus and less dairy products appears a challenging but promising alternative.

Eleonas' urban farm...



Eleona is a neighbourhood of Athens with mixed industrial and commercial areas and some large waste-land is planned to be turned into an urban farm (municipal property approximately 20.000 m²). The project is about to start and foresees benefits both in terms of creation of jobs for unemployed people and of urban production of food for poor household hit by the crisis.

Engaging in local farming...

Athens is lacking green spaces and its very densely built urban fabric, lying mainly on limestone, is suffocating under frequent heat waves during the hot season. Greening actions towards the generation of climate-altering ecosystems is for sure an important issue to take into consideration. Beyond the recent focus of the National Strategic Reference Framework on green roofs and the apparently mixed results obtained until now by pilot green space on rooftops of schools in Athens, a wider action towards a more systematic greening of any available spaces in the city is needed. Within this context, urban food production is increasing the

attractiveness and possible benefits of green spaces for the population. The Municipality of Athens is supporting a large action towards reclaiming available urban space for growing food either implementing real urban farms on the larger pieces of land (see *Eleonas' urban farm*) and urban gardening on smaller plots. The use of public parks and even the very symbolic conversion of a couple of streets into green spaces have been approved and is in process to be implemented (cf. *Green streets*).

Plato's Academy Green streets...



Two streets in Plato's Academy neighbourhood are about to be turned into green orchards. One was planned to be turned into a pedestrian area and the other was foreseen as a street in the urban plan. In both cases a consultation process with local population reveal a garden would be more appreciated. These are only two streets but in a city relying heavily on car such as Athens, turning streets into gardens is of highly symbolic value!

A particular consideration is made on schools. Some of them have already developed their own educative gardens (see *Kids classes visiting university* and *Urban gardens in schools*) and the Municipality intends to generalise such activities in all schools located within the city of Athens.

Give visibility to what exists...

The topic of sustainable food is emerging within the Municipality of Athens. The Athens University of Agriculture is an important knowledge centre that gathers data and is able to generate information on the food chain in Athens and the Attica region. Interesting and promising initiatives in terms of urban agriculture, organic markets, food education, etc. are developing but no clear and synthetic overview and systematic assessment of all food-related issues seems to be available yet. Such a state of the art may help to orient action toward a

sustainable food system. It may also give visibility on what already exists in terms of good and promising practices around food and would probably give the Athenians a better image of their food system than the one they tend to have.

Urban gardens in schools...



In order to foster knowledge and interest in local quality food for young generation, the Municipality of Athens intends to support primary schools initiatives to organize small educative vegetable plots within the schoolyards. More than just the cooling effect of green roofs, such garden maintained by the pupils are the occasion to organize many teaching activities around sustainability, local ingredients, healthy cooking..., and then raise awareness and shift eating habits.

Engaging participation...

The culture of public authorities tends to be very top-down starting first with approval at political level, to be then implemented in the administration and finally proposed to citizens. No real space is left for participation. Public authorities intend to keep control. The population is placed in a passive posture: citizens expect the public authorities to take action first and participation is not trusted and considered. This situation result in public action often disconnected from citizen practices and usages (see *Market in the park...*). Engaging participative bottom-up processes is a strong challenge both for the public administration culture and for the population.

Market in the park...



The “Traditional Open Air Market and Craft Units and Agro tourism” is a recently build park in the mixed industrial area of Eleonas near the Plato’s Academy neighbourhood. The park has apparently been built to host an open-air market of traditional products and services, mainly in the field of craftsmanship and tourism. Big buildings from large institutions and companies surround the area. Disconnected from users it is unlikely that such development projects take place and have success there.

Initial focus of the Local Action Plan (LAP)

The Municipality of Athens is very keen in developing a LAP on sustainable food in the occasion of the URBACT Thematic Network. The Municipality does not have any action plan on sustainability for the city in general and on food in particular. Public administration seems not to be so familiar with action plan or tend to develop large and generic action plans heavy to implement. Therefore the Municipality of Athens intends to leverage on URBACT Project to develop a LAP that is focused (with a reasonable number of precise and coherent actions) and pragmatic (with clear implementation steps and defined costs).

Current objectives of the LAP are:

- To increase the amount of fresh food that is grown and harvested in and around the city by local people and business;
- To improve natural resources management and to reduce the amount of food waste along the all food chain;
- To raise the awareness among the population around what is sustainable and healthy food and the challenges it

represents for the city and for its inhabitants;

- To shift people practices to eat local (starting with Greek products and then regional ones)

The first and currently main intention of the LAP is to focus on the following areas:

- To establish a clear overview of food issues in the Municipality of Athens describing challenges and listing opportunities;
- To identify any land within the municipality and around that is suitable for urban/peri-urban agriculture (i.e. city-owned, private properties, wasteland, green roofs, schools' yards, private gardens...);
- To implement a labelling scheme certifying restaurants and suppliers using local products and promoting the Greek cuisine and the Mediterranean diet;
- To develop green procurement by the Municipality in particular for nurseries and schools;
- To maintain and promote delivering schemes for local quality products (i.e. develop open-air organic markets, traceability scheme for non-certified products, low-carbon distribution...)
- To develop community and education programs and campaigns (i.e. healthy eating, food education at school, seasonal food, food waste diversion, composting, associated energy and water use...);
- To establish urban community gardens;
- To create school gardens;

Approach and composition of the Local Support Group

The URBACT project is carried-out by the Mayor cabinet and a proper local support group was just starting to be constituted at the time of the visit of the city. The visit itself was an interesting process providing the pretext for people engaged in issues relating to food in a way or another to meet for the first time. A strong dynamic and willingness to discuss and share emerges from this process among the different stakeholders who took part.

The first and currently main intention is to constitute the URBACT LSG around the following groups:

- Representatives from the Mayor cabinet;
- Representatives from Athens Municipality services (Directorate of Strategic Planning, Directorate of Public Spaces, Department of Environment);

- Agricultural University of Athens ;
- Consultancy in food safety and sustainability;
- Athens' Development Agency;
- Athens Municipal Creche;
- The Elementary Education Office for Environmental Education & Awareness
- Producers' associations of Attica (wineries, organic farmers).
- Organisation for Planning and Environmental Protection of Athens (ORSA)
- NGOs that support sustainable food practices (i.e. Prolepsis: Institute of Preventive Medicine Environmental and Occupational Health [www.prolepsis.gr])
- Citizen Neighbourhood groups in the areas of implementation (i.e. Plato's Academy and Eleonas)

City profile for Bristol



Main characteristics of the town

Bristol is a unitary authority area, located in South West England on the river Avon between Gloucestershire and Somerset. It has also a short coastline on the Severn Estuary.

From the 13th century to 18th, Bristol was one of the top three cities after London and York. Growth and prosperity has been linked with sea. It intensified with raise of colonies and international North America trade.

The city population represents 441 300 inhabitants included in a surrounding Larger Urban Zone of about 1 070 000. Bristol is the England's sixth and the United Kingdom's eighth most populous city. This age group makes up almost a quarter (23%) of the total population in Bristol and has increased by almost 50% since 2001.

Gross Domestic Household Income per capita for Bristol, 2010 was £13,784.

Housing is composed by 123 500 houses (66% of dwelling stock) and 62 550 flats (34% of dwelling stock).

The most recent data available on household composition estimates that almost half of all households in Bristol are couple households, a third are one person households, 10% lone parent households and the remaining 10% other multi-person households. Future projections indicate that the number of couple households is likely to fall, whilst the number of one person households is likely to increase.

In total, in 2008, it was estimated that around 21,900 (or 27%) children live in poverty in Bristol, 19,700 of these were aged under 16. These figures are not evenly distributed across Bristol. Wards like Stoke Bishop and Henleaze have incidences of child

poverty below 4%, whereas Lawrence Hill has almost 60% of its children living in poverty, putting it in the bottom percentile of all wards nationally. Almost 2,300 children in Lawrence Hill live in poverty.

The International Labour Organisation (ILO) unemployment rate for Bristol is currently 7.9%, slightly higher than the national rate (7.7%), and greater than the South West average rate of 6.2%. Since 2001 there has been a significant increase in the number of international migrants coming to live in Bristol, particularly Somali communities and Polish residents coming to work in Bristol following the expansion of the EU.

University of Bristol and the University of West of England generate large student population that makes Bristol an attractive and young city.

Key Business Sectors (more than 5% Gross Value Added) that are in order: Banking and Insurance, Professional Services, Health and Social Care, Education, Creative Industries, Leisure and Tourism. Key employment sectors (more than 5% employment) are in order: Health and Social Care, Education, Wholesale and Distribution, Retail, Professional Services, Leisure and Tourism, Banking and Insurance, Public Administration and Defence.

Current share of jobs along food chain is estimated of 10%.

Main characteristics in terms of food and sustainability

The need to look at the food system for Bristol was identified by Bristol's 'Green Capital Momentum Group' in late 2009 following the production of "Bristol's Peak Oil Report". In the report 'Who feed Bristol?' (refer box below), it is said that "Bristol's food system is inextricably linked, now and in the future, with that of the wider region and the rest of the nation".

Who Feeds Bristol?



A large and extensive report has been commissioned both by Bristol City Council and NHS Health Services Bristol. The report carried out by an independent expert draws an in-depth and exhaustive overview of food issues in Bristol as a basis for a food systems approach.

Growing...

Bristol is located in one of the most productive area in UK. Indeed, there are about 5 500 dairy farms that produce 37% of English milk. The region is also home to Yeo Valley which is the leader of organic yogurt in the nation. It is important to stress that the South West contains 38% of England's organic producers. In the UK as a whole 17.5 million hectares is farmed organically equivalent to 4.2% of UK farmland. Over 10% of this land (1.9 million hectares) is in the South West. The region is also a major producer of livestock, accounting for 23% of England's cattle and sheep, with 90% being sold to the supermarket trade. "The suitability of the land for pasture combined with the presence of numerous large and small abattoirs, means that it is still possible for smaller-scale livestock farmers to survive economically despite the increasing market difficulties associated with the major consolidation that has occurred in the food business sector."

Vegetable production in the South West makes up 6% of Great Britain's production. The main crops produced in the region are potatoes, cauliflower, swedes, brassicas, carrots, parsnips and celeriac. There is some production of cider apples and soft fruit, but less than there was fifty years ago. Cereal production in the South West is mainly used for livestock feed because the climate is too damp and cool for producing wheat of the quality required for bread flour.

Face to this kind of high carbon footprint production (livestock and dairy), a local procurement with

special regards to carbon impact could reduce the global carbon impact without disturbing the economy.

Bristol City Council allotments...

There are 107 allotment sites in Bristol as illustrated on the map below. While the majority of sites are managed by the City Council, some are run by Allotment Associations

Urban food production has gained popularity in recent years and alongside more traditional approaches current ideas include roof top growing and the combination of hydroponics and aquaponics to create innovative growing systems.

Food growing in gardens and allotments are a centuries-old tradition, both in Bristol and in England as a whole. Private gardens in Bristol may total 120 hectares.

City Council owned land in and around Bristol:

- Allotments : 199 hectares,
- Farmland/agricultural : 239 hectares,
- Grazing : 47 hectares.
-

Parks & green spaces total approximately 1900 hectares and while much is composed of historic landscape, childrens play areas considerable planting could and does include food growing from herbs to fruit orchards and specimen nut trees.

Community food growing...



The City Council owns a substantial amount of land in the city. With increasing interest from organisations and individuals who want to grow food in the city some of this land is being brought into use for urban agriculture by charities, community organisations, local groups and social enterprises.

Potentially these 2,000 hectares if used for food growing in the City could produce several thousand tonnes of produce, with a cash value of several million pounds, in addition to the educational and recreational benefits. 16% of Bristol's vegetable requirements could be grown within the city.

City farms...



St Werburgh's Farm in north Bristol is one of several city farms that were established as educational centres for their local communities starting with Windmill Hill City Farm in south Bristol. St Werburgh's City Farm has a semi rural characteristic despite its urban setting as its fields are located next to large allotment sites and public green open spaces. It's both a demonstration project for food production and provider of a range of activities for all ages.

Delivering...

The lack of infrastructures for local distribution is a barrier to increase direct sales to independent local retailers, to households, and to local restaurants and caterers.

St. Philip Wholesale market...



St. Philip's Wholesale fruit & vegetable market is a collective association of 36 independents and is the second largest wholesale market distributing in South UK. More important, St. Philip is a key infrastructure providing an alternative to the 'Big 4', the 4 supermarket chains that cover 90% of grocery market and 83% of vegetable and fruits in UK. It is an important hub providing market access for local food production around Bristol. Ideas are being discussed to explore how the Market might reinvent itself as a more inclusive city based hub for a wider range of sustainable food with access for the general public e.g. by providing café's and restaurants showcasing organic and locally grown produce.

75% of the food eaten by the Bristol population is provided by supermarkets. For fruits and vegetables this rate increases to 90%. St Philips Wholesale market supplies the independents.

Bristol has 70 supermarket outlets with more progressing through the planning system and these make up 1.5% of Bristol's food businesses. Bristol has a disproportionately high level of supermarkets even compared to the national level, resulting in the disappearance of many traditional independent greengrocers. For those who remain, there is a disparity in the geographical repartition: Westbury on Trym still has four registered greengrocers, whereas some parts of the City such as Brislington, Filwood and Lockleaze have none. In order to support and where possible re-introduce small retailers, especially missing in many disadvantaged neighbourhoods, Bristol launched the 'Independents' campaign.

Campaign to save the high street ...



The ever-growing share of food distribution in the hands of supermarket chains has dramatically reduced the number independent local shops in high streets in much of the UK. Bristol's High Street Campaign identified 56 designated 'shopping area' in Bristol. Committed to a positive campaign the focus is to raise awareness to keep the 'high street' alive and vivid and encourage increasing interest and commitment from local people to support their local independent shops. To celebrate independent diversity local people had the opportunity to award the shops they liked best in their neighbourhoods.

40% of food is currently wasted throughout the food system from food production, distribution and retail to within households, restaurants and caterers. At the St Philips Wholesale market, significant quantities of fit-to-eat produce have to be sent to landfill, partly because of DEFRA standards on size, shape and appearance."

FareShare...



FareShare SW, the local branch of national charity redistributes about 40 pallets of food per week that would otherwise end up in landfill. 4 staff and 45 volunteers operate a warehouse and distribute food

to 80 charity organisations targeting homelessness charities, elderly, young children, refugees etc. Much more food could be collected but some large corporations are reluctant to participate because of the risk of adverse publicity that they waste so much food. Others are concerned about litigation. Local MP Kerry McCarthy is championing a Food Waste bill in Parliament to address many issues to support greater efficiency in the food system.

Over 2,000 food catering businesses are registered in Bristol. Most of these are small and medium sized enterprises operating small cafés, takeaways and outside catering.

Around 25% of the catering businesses are institutional caterers for the health and education sectors (hospitals, care homes, schools, and colleges). 24% are serving businesses and work canteens. St Philips wholesale market supplies their fresh fruit and vegetable requirement.

Food for Life Partnership...



To address the UK's low take-up of school meals and general disengagement with food, the Food for Life Partnership developed a holistic 'whole school' approach with a 3 level award system to encourage activity in all aspects of the food system from food growing, to more sustainable food on the menu. This approach has resulted in entire families making more healthy food choices. 3 Bristol schools have reached the first bronze level with strikingly positive impact that extend far beyond food...

Enjoying...

Bristol has plenty of people who are passionate about food fuelling a growth in food growing

projects. The Soil Association headquarters is based in Bristol, permaculture groups are active, with a growing number of community orchards and small community kitchens. There are some awards winning restaurants and cafes. Regular food festivals and events are organised e.g. the organic festival and the VegFest is a huge vegan festival. There are regular 'Love Food' events with local suppliers, Slow food markets, and regular farmers markets e.g. weekly farmers market in Corn Street.

From public sector to community groups to individuals many local people are engaged in supporting sustainable food systems. Bristol's overarching strategic food group is the Bristol Food Policy Council, the Bristol Food Network is a longstanding group of food professionals and Bristol's Green Capital Momentum Group are all very dynamic.

with heavy promotion and availability of calorie-dense foods."

These observations published in "Who feed Bristol?" led the Bristol Food Policy Council to create the Good Food Charter as a communication vehicle to raise awareness and action in the city.

Opportunities and challenges for the development of sustainable food

Disengagement with food...

There is an alarming disengagement with food in many sectors of the UK population, characterised by lack of cooking skills and general understanding of food. *"It's not rare to see young people who don't eat breakfast or lunch and go all day long with sweet bars and soft drinks and have fast food for dinner"*

This is now a multi-generational issue.

The Bristol Good Food Charter...



The Bristol Good Food Charter was launched in June 2012 at the Food Conference and is being promoted to raise awareness and activity in all aspects of the sustainable food system in Bristol.

Nevertheless, "Supermarket sales data show that within their sales, purchase of 'cooking from scratch' fresh ingredients is declining, and that there is a relationship with customer age. Older customers buy more fresh ingredients, whereas younger customers buy more ready meals. Bristol, in common with the rest of the UK, is seeing a consistent and serious rise in the percentage of people, including children, who are overweight and obese. This is related to the food system both through car-dependant shopping habits, and through the shift in cultural patterns of eating

Hartcliffe Health & Environment Action Group (Hheag) ...



Hheag hosts many not-for profit activities to holistically address a variety of local issues in Hartcliffe, one of the more vulnerable neighbourhoods of Bristol. Hheag runs a small food shop, a cooking school, a large community food growing site and more recently an orchard. Local people including those suffering from a range of physical and emotional issues including obesity, diabetes, heart disorder have the opportunity to reskill with classes to support young parents who are sometimes so disempowered by modern cultural norms that they place more trust in factory produced baby-meals than their own cooking. A qualified nutritionist in a well kitted household-like kitchen environment guides people one step at a time starting with seasonal vegetable soup and providing sufficient home economics instruction to reach an understanding that cooking meals from raw ingredients is better value than buying ready made meals. And within a few weeks confidence grows

and people learn to cook for themselves to an extent they hadn't realised was possible

Disengagement with food in the Bristol is clearly more of a problem in vulnerable neighbourhoods where pressure exists to eat as cheaply as possible and fast food is heavily marketed as a solution. The overriding picture is that of the conflux of supermarkets quasi-monopoly, industrial food brand marketing pressure, the stresses of busy modern life, an economic crisis and more than one generation lacking basic cooking skills.

Rich pallet of initiatives...

While a share of the population 'divorced' with food on the one hand, on the other hand, the *Bristol Food Network* is consistently sparking a wide range of creative and colourful initiatives. Its rich newsletter and active website clearly demonstrate Bristol as one of the leading cities to promote sustainable and healthy food. The city's huge number of initiatives, large and small, demonstrates variety and maturity. Avon Wildlife Trust's *Feed Bristol Project* for instance (see below) encourages a wide diversity of people and groups to take part in wildlife friendly food growing reaching far beyond those already actively engaged in sustainable food.

Feed Bristol Project...



Situated in the outskirts of north Bristol on a 7 acres piece of land, this new project is twinned with 'Sims Hill Shared Harvest', a community supported agriculture scheme with 65 members divided in growing members, vegetable sharing members and supporting members. The second category is particularly interesting: engaging people with nature and food is not always easy when they don't have time to grow their own allotment. Vegetable sharing members help for 4 hours a week for 6 months and in exchange get access to vegetable year round.

Transitory and pervasive initiatives...

Inevitably some initiatives are likely to be more successful than others. Questions exist of their resilience, their capability to generate economic returns, their capacity to reach the disengaged. Certain initiatives by nature cut across all communities and social layers: i.e. teaching cooking classes to schools (see the *Square Food School* below) both positively impact on children and also their families, often those in greatest need.

Shrinking public funding...

The National Big Lottery's Local Food Fund a £57.5 million programme has funded 428 projects in UK that help make locally grown food accessible to local communities. 3 projects from the Bristol area - including the *Feeding Bristol Project* have benefited. Beyond these projects the challenge seems to be how to keep everything afloat and to support the dynamic Bristol Food Network in a time of shrinking public sector budgets. Even if some initiatives tends to be lighter and financially more autonomous as the Severn Project (see below), supporting them, developing synergies and promoting them extensively to increasing sections of the population, can need a helping hand, financially and in kind.

The Square Food School...



The Park is home to the Square Food Foundation and its training kitchen. Knowle West is one of the more vulnerable neighbourhoods in Bristol where poor eating habits are quite entrenched. Having previously had a good quality wholesome food café fail through lack of interest, the offering is now 'transition food' a mixture of wholesome and 'junk food' so it stays to some extent familiar and therefore accessible to local people.

This provides a progressive pathway to sustainable and healthy food.

The Severn Project...



The Severn project is an integrated food growing initiative and a recovery programme for a range of clients including those with a history of addiction. They are based on 3 sites: Keynsham, Whitchurch where farm shop and café are under construction and the Diesel Depot site and aim to create at 25 full time jobs. The aim is to be self-funded based on funding for each client referral and on income on sale of produce. The director commented with humour: *"...how can you help youth to stop to be dependent if your project itself is dependent on subsidies?"*

Bristol City Council launched the extensive *Who Feeds Bristol?* report at the Food Conference in March 2011 establishing a very well documented systemic investigation of strengths and weaknesses to promote sustainable food in Bristol. Key issues emerging for the report were initially prioritized through a participative public consultation online. The Bristol Food Policy Council (see ULSG) then began developing a structured work programme organised in short, medium and long term actions that will be used as the basis to establish the URBACT LAP.

Current LAP is very much a starting point developed from a series of consultations, conferences and feedback sessions initiated from the 'Who Feeds Bristol' report. Much more development needed to create a sufficiently inspiring vision to make the step change that we seek and the clear steps in how to get there.

The LAP focuses on the following areas:

- Promote sustainable food procurement in the Public Sector by working together with other agencies such as the Health Service supporting local produce by using the Bristol Pound launched in Sept. 2012;
- Support the local independents food businesses, regulating retail, preserving its diversity and in particular focusing on the transformation of the St. Philip wholesale market and the revitalisation of the High Street identified shopping areas;
- Support food growing projects in Bristol by providing land and whatever resources are available e.g. increasing their visibility through the local food newsletter, helping to market their produce etc.
- Effect cultural changes towards both more sustainable and healthy lifestyles through the Good Food Charter communication programme
- Consolidate sustainable food initiatives supporting the Bristol Food Network's food newsletter and other initiatives (i.e. Food Trail Event, Bristol Independents campaign);
- Adopting carbon reduction target for public food
- Developing effective infrastructure and feedback processes to link food interests in the city

The City Farm Café...



St Werburghs City Farm café is a popular meeting place that promotes organic local food. The Café has set up an 'allotment trading scheme' where gardeners from nearby allotments bring their surplus produce and get stamps on a trading card they can then exchange for meals in the Café...

Initial focus of the Local Action Plan (LAP)

Approach and composition of the Local Support Group

Bristol City Council established the Bristol Food Policy Council in 2011 as the overarching strategic group to lead a step change in sustainable food systems in the city. Composed of influential food professionals from diverse areas of experience, the group is chaired by Professor Kevin Morgan from the Governance and Development School, City and Regional Planning of the Cardiff University.

Membership as follows

- Governance and Development School: City and Regional Planning, Cardiff University;
- Proprietor One Stop Thali independent restaurants;
- Consultant in Public Health;
- Lecturer in Food Production and Technology, Royal Agricultural College;
- Bristol Food Network;
- Chief Executive Southwest Food and Drink;
- Proprietor M&D Kidners Ltd, Wholesalers fruit & vegetables;
- Head of Communications and Events, Yeo Valley Farms;
- Programmes Director, Soil Association;
- Councillor, Executive Member: Festivals and Communities, Bristol City Council
- Vice Chair, Bristol Green Capital Momentum Group Bristol City Council;

Note: Bristol Food Policy Council is the first food policy council in the UK. While internationally there is a culture of food policy councils largely in North America and many other countries, their structure and approach varies considerably reflecting the context and local governance of those countries. The Bristol group has now met around 6 times and while successes have been achieved e.g. the launch of the Good Food Charter, the group is very much in its early stages of development and would welcome sharing and learning experiences with other cities, especially in Europe where there is a more established food culture. We seek a step change towards sustainable food systems for our city and anticipate inspiring and creative ideas to emerge while working alongside our URBACT Partners. Already from our activities in the EU URBACT Sustainable Food in Urban Communities programme we are seeing positive results as we raise the profile of our work and draw ever more interest from our community forging new links and consolidating networks

City profile for Brussels



The gastronomic event "Bruxelles Champêtre", in front of the Royal Palace

Main characteristics of the town

Brussels is well known as a dynamic, active and pleasant city for its visitors and inhabitants. Its main market square, a UNESCO heritage site bordered by 15th century corporation houses is considered among the most beautiful places in the world. Brussels also owes its attractiveness to its quality of life: half of the territory is covered by green spaces.

Beyond the tourist vision, Brussels Capital Region is an urban centre made up of 19 municipalities with approximately 1.1 million inhabitants. This city-region is a dense urban area of 162 km² located within a larger metropolitan area of 2.5 million inhabitants. Brussels has a dense, cosmopolitan and ever-growing population in part because of its role as the capital of Europe. The city population is made by 74% of Belgians and 26% of foreigners (in fact, 46% of foreign origin). Many workers and service users live outside the city borders and commute daily. The city is made up of three zones: the city centre, a series of historical dense areas, and residential suburbs. The housing stock is composed of 50% of apartments, 31% of individual houses and 16% of houses divided in flats. The city combines the roles of European capital, Belgian capital, Flemish community capital and French community capital. Indeed among many other languages, French, Flemish and English are commonly heard in Brussels' streets. A striking social feature of the city is the asymmetry between the considerable wealth produced in the area and a relatively low average income of its inhabitants which is 18% below the national average (12 750€ per year). The unemployment rate is quite high (17.4%) and a quarter of the population is living under the poverty line. The Brussels Capital Region

is characterised by a significant presence of the service sector with a dominant administrative function.

Food is one of the reasons why tourists enjoy visiting Brussels. The "Made in Brussels" label gathers many excellent products: the famous chocolates (pralines) are exported all around the world; biscuits such as "speculoos" (close to gingerbread)... Products such as fries, Brussels's waffles, beers, honey, are recognised for their quality and taste.

Main characteristics in terms of food and sustainability

For many years, Brussels has taken numerous actions to address the environmental challenges specific to a green modern city-region. For example, as a signatory of the "Covenant of Mayors" Brussels aims to become a low carbon city by 2025.

After having engaged in sustainable food research and actions for several years, "sustainable food" was explicitly established a regional priority in a governmental declaration in July 2009.

The declaration stressed notably a focus on sustainable gastronomy as a means for attracting tourism and the need to develop sustainable urban agriculture, food transformation, distribution, food services and health education thank to public food procurement in canteens. Calling for a strategic plan to be drawn up involving all stakeholders of the food sector and an inventory of initiatives, the declaration also stressed the role of canteens in educating about healthy, balanced and environmentally friendly diets.

The food system plays an important economic role. There are more than 25.000 jobs in the food service sector, 6000 in the food industry, 500 in production and plenty others in the distribution sector. The food industry represents 10% of industrial employment in Brussels and is the third industrial sector in the Region in terms of jobs. Some businesses are already engaged in Sustainable Food and employ 2.500 persons in Brussels Capital Region, of which about 1.000 are in delivering and the remainder in catering and processing.

Growing...

Agricultural space is rare in the city (268 hectares - potatoes, wheat, and barley), among which only 2% is organic crop production. There are 7 real farms, 4 pedagogical farms and an urban agroecological farm on the territory.

All green spaces combined cover 8000 hectares including: 32% private gardens, 12% public gardens, 7% brown-fields, 7% farmlands, 4% playgrounds, 3% railway embankments, 2% cemeteries, 3% next to road.

On-going actions on *Growing* supported by Brussels Environment notably focus on self-production through individual and community vegetable gardens and support to educational farms.

Allotment Garden Action Programme...



Brussels Environment has allocated since the 1990s 190 vegetable plots in parks available for households. Through a call for proposals, funds have been allocated for the launch of new community vegetable gardens (16 launched in 2 years). The association “Le Début des Haricots” is mandated to support these community gardens. It enables a self-production of produce that is healthy and cheaper without the need for fertilisers and transport and creates social ties, setting an example for park visitors. Currently, 170 people are on waiting lists demonstrating a great interest among inhabitants.

Globally, 0.79 % of green spaces are devoted to kitchen gardens. More or less 35% of inhabitants own a garden and about 85% have an access to an open space such as gardens, terraces or balconies. Gardening activities are common in Brussels, 19% of the people have a vegetable patch in their gardens.

There is limited space available to maintain or expand urban production, especially since there is a competition for land with housing (given the population explosion) and concern regarding soil and air pollution. Therefore, commercial production is a challenge in the Region. Private spaces and unexpected types of public land could be used. There is clearly a will to maintain and relocate part

of production into the city and foster fresh, local and seasonal consumption.

Urban Agriculture for commercial purposes is a small but rising sector in Brussels. A growing number of initiatives are being started...

Delivering...

Retail tends to be dominated by large chains and, as said in introduction, there are many jobs in the processing and delivering sectors.

Food service businesses purchase foodstuffs at the wholesale market and in specialised supermarkets. Similarly 84% of Households get food at the supermarket. Some low income people have access to social groceries. It is possible to find organic food in a lot of places (smaller shops or groceries, but also in supermarkets, in markets, via organic basket collection points, internet orders).

On-going support to *Delivering* by Brussels Environment notably supports sustainable food distribution projects.

Nos Pilifs farm...



Located in Neder-Over-Heembeek, Nos Pilifs farm is an education farm and organic retail platform that combines commercial activities and social integration providing jobs for 120 disabled people. The mix between business and integration at work is an interested example of social business. The farm recently launched a platform delivery scheme of organic fresh fruits and vegetable bags.

Another kind of procurement for local food is possible through the GASAP Network (Groupe d'Achat Solidaire de l'Agriculture Paysanne). It is an umbrella organisation of individual citizen groups that gather around a farm and engage themselves to regularly purchase a vegetable and/or fruit basket during a whole season (a type of Community Supported Agriculture – CSA).

The GASAP Network



Photo credit : Dieter Telemans

The GASAP network began in 2006 and has now 60 groups (more than 1200 families) purchasing from 14 vegetables and fruit producers.

There seems to be a great potential for developing new kinds of connections between consumers and local producers for instance through organic farmers' markets. Innovative solutions such as bike powered deliveries are breaking through.

Enjoying...

Because Brussels is a cosmopolitan city, its cuisine is strongly influenced by ethnic diversity. The traditional gastronomy is well represented by "brasseries" that show the friendly aspect of food culture in Brussels.

40% of all meals are taken outside home which provides work for 6.000 businesses and 25.000 people. The Horeca (hotel, restaurants and café) sector is slowly evolving towards more sustainable practices with many new businesses embracing sustainable food principles.

However, businesses encounter difficulties in procurement of local food, logistics (how to keep up with a changing menu) and consumer expectations (difficulty to accept seasonality).

On-going Brussels Environment activities on *Enjoying* notably focus on supporting sustainable canteens (in companies, schools...), greening public food procurement, as well as developing, testing and disseminating tools and approaches for school children and households.

Canteen eco-calculator...



The private catering company Sodexo is currently providing half of the meals taken in canteens in Brussels. In response to Brussels Environment's will to improve environmental performances, they are fine-tuning an eco-calculator that indicates the meal's carbon footprint. Criteria considered include the product's origin... They successfully tested the reduction of the average meat portion size in the European headquarters Toyota in order to decrease carbon impact...

270.000 meals are served every day in canteens in Brussels. Since 2008, Brussels Environment has proposed three "sustainable canteen" courses for the kitchen staff of canteens. 94 canteens participated (representing almost 85,000 daily meals). Theoretical and practical training were regularly organised in this framework.

Concerning sustainable food, Brussels Environment launched awareness raising campaigns about seasonal vegetables, giving tips and recipes to empower citizens and children in food matters, to fight against food waste... The ambition of the city is to give everyone the opportunity to have access to fresh and healthy food with limited environmental impact.

Sustainable food at schools...



Schools are in demand of sustainable food. Two axes are developed by Brussels Environment

- Background work with canteens: 15 schools and 2 providers of school meals were integrated into the program "sustainable canteen". More than 30 000 meals/day are concerned.
- Raising awareness and changing behaviour of students and educational staff: In 2011-2012, about 6000 students were involved (cycle of three animations on "less food wastage"). In 2012-2013, more than 6000 new students will be involved in projects funded directly by Brussels Environment: 16 schools (5057 students) who develop their own project "sustainable food".

Food Challenge...



"The food challenge" is an initiative of Etterbeek (one of the 19 municipalities of the region), supported by Brussels Environment in the context of the call for sustainable food projects in 2011. The idea was to create dynamics around sustainable food by empowering families to become ambassadors of the topic. During 6 months, 12 households were involved every fortnight in activities such as cooking classes, taste workshops... Behaviours and view on food quickly evolved...

Media campaign



Brussels Environment has developed a media campaign for the general public with the message "eat local and seasonal" (2 years, 4 season/year, in 2011 & 2012). The campaign won 2 awards.

The success of the call for sustainable food projects (50 projects submitted in 2011, 82 in 2012) shows the popularity of the topic to a wider public.

Rencontre des continents...



This organisation aims at developing positive relations between different cultures. One of the main tools is food because it reveals a lot on how society works. Many themes are addressed: the connection between the economic and social environment, the sanitary crisis, individual and collective engagement...

Even in tourism, many actors seek to create the conditions to develop a sustainable food culture image. The region promotes Brussels' Gastronomy through the *Brusselicious 2012 year of gastronomy* and the *Taste Brussels* week involving restaurants;

Taste Brussels (Goûter Bruxelles)...



“Goûter Bruxelles” is a yearly festival (carried by the Slow Food movement) engaging restaurants to experiment local sustainable menus for one week with animations, tasting, organic vegetable gardening... For the third edition, in September 2012, 71 restaurant took part, 5 well-known chefs acted as ambassadors, a variety of food walks were proposed, gardening and apiculture courses provided - showcasing Brussels as a welcoming green gastronomic city to enjoy and taste.

Brusselicious...



In 2012, Brussels organises the year of *gastronomy* as a year-long food festival with events, demonstrations by great chefs, essential dining spots, products created for the occasion... This initiative invites inhabitants and visitors to reconsider the way to eat well.

Opportunities and challenges for the development of sustainable food

A strong engagement with food...

Beyond the cliché of chips and mussels, Brussels inhabitants and policy makers show strong interest in food. Policy documents address all stages of the local food chain, notably the 2009 governmental declaration (see introduction) that lead to the adoption of a *Regional Action Programme of Support to Sustainable Food Demand* in 2012; the *Kitchen garden action plan (2012)*; and the 2010 *Waste prevention plan* that tackles food waste. Moreover, Brussels Environment is involved in the European Interreg IVb Green cook project to reduce food waste (2010-2014) and takes strong action on sustainable canteens leveraging on catering companies through green procurement.

A strong political will towards sustainable food...

The main objective of installing farms in town is to demonstrate that it is possible to relocate part of production and bring the consumer closer to the production cycle. This complements a more global supply nearby, which means also and above all, the development of cooperation with the other two regions of Belgium.

Urban production is set as a goal for the regional government, with use of available land to produce sustainable food for the citizens ranging from reallocation of surfaces to agricultural production and commercial gardening to intensification of private gardens and use of public spaces to grow food. In addition to maximising the remaining arable land, a specific intention is to explore the potential for rooftop gardening with a first inventory of 394 ha of flat roofs available for urban farming. The ABATAN greenhouse project to be implemented on the renovated slaughter house including vegetable gardens on the rooftop and aquaponics experimentation are emblematic of the will to intensify urban production. Such urban agriculture is labour intensive and therefore generally assessed as too expensive. The intention of the Minister of Environment is to turn this constraint upside-down through an Employment-Environment partnership between the government and all stakeholders. The aim is to build synergies between labour-intensive sustainable solutions and creation of green companies and green jobs in particular for youngsters with low education levels. A recent study yet to be confirmed reveals a potential of thousands of jobs related to sustainable urban farming and

food transformation, new local distribution schemes, waste management...

Rooftop garden experimentation...



Vegetable growing in bags experimented on the Royal library rooftop: an educational and awareness raising project on a famous building in the centre of Brussels with views to stimulate systematic terrace gardening and more production-oriented developments...

Aquaponics experimentation...



Aquaponics is the marriage of aquaculture (fish farming) and hydroponics (growing vegetables without soil). In June 2012, the "Village Partenaire" in partnership with GroupE One developed a pilot scale aquaponics unit. Its purpose is to act as a catalyst project and test a series of economic parameters.

Towards consolidation and innovation...

Activating stakeholders around food reveals an important potential for innovations and in particular for hybrid solutions involving citizens, public administration and private sector. The first local support group meeting was the occasion for a lively exchange of ideas for possible future initiatives, such as citizens investing collectively in agricultural land to prevent speculation and ensure available land for young farmers (refer to box: Terres en vue); pairing a neighbourhood with an agricultural area in difficulty; intensifying the use of public industrial canteen kitchens making them available to cooking schools or citizens who want to make preserves in the summer; etc.

Beyond these individual examples and ideas the city is interested in consolidating and synergizing all the potential activated around sustainable food.

Terres en vue...



Terre-en-vue is an NGO and cooperative that facilitate access to land. They support agroecological projects either through helping new farmers to start up or by assuring the maintenance of existing farms. Citizens can buy shares in the cooperative which in turn buys agricultural land thereby putting an end to speculation.

Initial focus of the Local Action Plan (LAP)

Brussels' policy priorities for food focuses on a transition towards sustainability, boosting the local economy and employment and generating synergies between initiatives. Health and social issues are equally being considered.

The involvement of Brussels towards sustainability in general and towards sustainable food in particular has been clearly demonstrated above. Numerous projects and small scale pilots projects have shown promising results. The Region now intends to link up these individual projects, upscale promising initiatives, generalise best practices and develop a local sustainable food system. The transition should be based on an advanced collaborative process involving all stakeholders concerned and based on collective commitments, support to innovative projects and networking of all players.

URBACT LAP should help finalise translate current plans (in particular the 2012 "*Action Programme of Support to Sustainable Food Demand*") into a series of concrete and operational actions but also to move from pilot scale to a larger scale and work on the entire system, not only on demand.

The first and currently main intention of the LAP is to focus on the following areas:

- Support urban innovative production and self-production;
 - Promote food growing on any possible available land public and private, from large plots and gardens to innovative rooftops, terrace and vertical production;
 - Explore public-private partnerships with operators able to deliver complete solutions including diagnostic, technical studies, business plan and implementation;
 - explore the obstacles such as soil and air pollution research areas suitable for production, identify the relevant financial arrangements
 - explore ways to make the food transformation industry more sustainable
- Generalise the current best practices in terms of sustainable food in canteens for schools, public and private workplaces;
 - Study transition costs and solutions for canteens and Horeca sector;
 - Support generalised participation of canteens and canteen caterers to the sustainable food programme;
- Develop a framework of references (labels or brands ...)
- Develop education of canteen staff to raise awareness of consumers on quality, healthy and sustainable food while reducing waste;
- Support joint education programmes combining learning about sustainable food in class and experiencing it in the canteen;
- Support education, behaviour change and access to sustainable and healthy food for all;
 - Study transition cost issues for households and in particular for those with low incomes;
 - Mainstream successful experiences of cooking courses, family food coaching, intercultural exchanges and collective construction of a sustainable food culture;
 - Develop the food resilience of households (i.e. self-production, preparation of preserves, good storage conditions, cooking leftovers and reducing waste...)
- Support the creation and the diffusion of innovative short food circuits businesses;
 - Increase the already well developed direct food purchase schemes (i.e. food purchase group at the farm; vegetable box delivery);
 - Develop innovative rural-urban partnerships (i.e. farmers markets, pairing between neighbourhoods and countryside areas);
 - Study and develop efficient delivery for urban food production;
- Employment-Sustainable Food Partnership" to exploring and supporting the potential the emergence of new businesses and green jobs
 - Foster innovation through cross-fertilization and hybridization of current promising solutions;
 - Study profitability and job creation potential of innovative production, delivery solutions and food waste reduction;
 - Study the requirement and efficiency of support with stakeholders (i.e. networking, knowledge, subsidies...)

Approach and composition of the Local Support Group

The Brussels-Capital Region already support a series of formal and informal networks of sustainable food actors (i.e. RABAD Réseau des Acteurs Bruxellois pour l'Alimentation Durable - Sustainable Food Brussels Stakeholders Network). The URBACT LSG should build on these existing groups and strengthen and intensify the networking. The challenge will be to involve the "classic" actors" of the food system: in fact, it is necessary to both create new business and move towards greater sustainability of existing ones. In particular, though the LSG, the URBACT project should foster the implementation of the transition of the food system over the entire food chain. An overall aim is that all these actors should meet each other and have a clear and exhaustive picture of the sustainable food stakeholder landscape.

The LSG started on the occasion of the Lead Expert visit with some of the following members. It is intended as a dynamic and evolving group that will adapt and enrich itself along the project according to emerging needs. The current list includes

- Ministerial Cabinets
 - Environment;
 - Economy and Agriculture
- Regional administrations:
 - Brussels Environment
 - BEA (Brussels Enterprise Agency);
 - Regional Ministry - Agriculture;
 - Regional Ministry - FEDER Unit;
- Municipal administration
 - AVCB (Municipalities of Brussels Association)
- Universities
 - FUST Louis (economics)
 - ULB/IGEAT/CEDD (behaviour change)
- Representatives of *Growing*
 - Production : Terre en vue, le Début des Haricots, la ferme Nos Pilifs, Tournesol
 - Economics : Groupe One, Greenloop
- Representatives of *Delivering*
 - Small shops: UCM
 - Short food networks: la ferme Nos pilifs
- Representatives of *Enjoying*
 - Associations: Rabad, Rencontre des continents, Tournesol, DDH
 - Consumers: CRIOC
 - Representatives of canteens, catering, transformation, ...;

City profile for Gothenburg



Main characteristics of the town

Gothenburg is situated on the Swedish west coast. The city's land area is 450 km² and is part of a large green region covered by lakes and forests. The city has succeeded in keeping a nice environmental living with many beautiful parks that are part of a living style. Green spaces are numerous with 175m² per citizen.

The population counts 516.000 people and over 940.000 people in the larger urban area. It makes Gothenburg is the second largest city in Sweden. With about 32.700 euros, the households' median income is high, but prices are too. Gothenburg is a city strongly involved in environmental matters. Its first Agenda 21 action plan was a pioneer when it started very early in 1992.

The City of Gothenburg is situated next to the sea and it's hence natural that fish and sea food has influenced the food culture. The sea gives the west coast its shellfish, which are world-famous for their flavour; there are mussels and farmed oysters, and of course fresh fish caught daily. Fish and shellfish sold each week at the fish auction range about 86 tons. The port has played a key role in the past and is still the largest port in the Nordic countries. The largest private companies are settled in the city and provide jobs to the population: car industry (Volvo Cars, Volvo Trucks, Volvo Info Technology), telecom (Ericsson) and technology (SKF). The two Universities (Chalmers and University of Gothenburg) are as well two mayor employers and create a dynamic ambiance. Gothenburg is continuing to develop as tourist centre and in 2010 the Gothenburg region had 3.370.000 bed nights at hotels.

Main characteristics in terms of food and sustainability

Sweden has a growing food industry that is of major importance to rural as well as urban areas. Attention is always paid to animal health and welfare. Many Swedish farmers are proficient in organic cultivation, and environmental thinking is far-reaching with regard to sustainable food production in cultivated and wild areas and in the sea.

In 2012, Gothenburg is "the Food Capital of Sweden". In fact, this appellation is not only a title. Major efforts are spread to raise the level of knowledge, efficiency business and skills in food. The country's vision is to become the new culinary nation in Europe by 2020. The vision extends all the way from field to fork, from institutional catering to luxury restaurant. The City of Gothenburg includes this thinking in a larger focus on future sustainability solutions.

Mistra Urban Future...



Mistra Urban Futures is an international center for sustainable urban futures founded by seven organisations from the Gothenburg region. The vision of Mistra Urban Futures is to increase capacities to transform current, unsustainable urban development pathways to more sustainable urban futures in the global South and North. Mistra Urban Futures focus areas are Fair, Green and Dense cities. Separately and even more when they are combined, these focus areas make a powerful contribution to sustainable urban development, both in practice and research. Food is one the issues of the research network.

Growing...

Urban farming and peri-urban farming have increasingly become concepts included in urban planning and the discussion of Gothenburg as a

sustainable city. The latest leisure swan survey made indicated that 20% of the inhabitants wanted to grow. There is thus a need for an organized response to the questions from the public and officials that pops up more often. In order to treat these issues from an intelligent and common approach the Parks and Landscape Committee has given its administrative department the task of writing a guideline for the cultivation of the land on which the committee is responsible for and trustee - that is public land and natural areas for recreation and nature conservation.

Community gardens...



The community garden “*Stadsnära odling*” is an innovative public platform where citizens can log and describe their growing project and the place they intend to set the community garden. The platform allows checking the land availability, who own it and start administrative practices to implement the project.

Stadsnära odling is run by the City of Gothenburg’s Property Office with the aim to encourage small-scale cultivation close to peoples’ homes. The goal is to start new plantations, farming in unconventional places, cultivations that bring joy and help to spread knowledge and create contact between generations and people from different parts of the city and the world. But also to develop the cultivation and allotments that already exist in Gothenburg.

Collective private initiatives are also germinated toward the development of an urban farming activity enable to deliver fresh local food to people and restaurants. Even if those activities are still in margin, they foster a real interest among inhabitants in certain areas.

Gothenburg falafel...



Stadsjord (“urban agriculture”) is a three years projects built on multi-stakeholder engagement in sustainable small scale food production. The aim is to reach the development of socially, ecologically and economically resilient and create more fun in urban life. Indeed thanks to this local production the so-called “Gothenburg falafel” is made with urban local produced beans, instead of chick peas that are not growing in Sweden. It is a good example of sustainable food fusion to match an ethnic popular food with ingredients available locally.

Pedagogical gardens at schools are currently developed as pilot project in Gothenburg. The first aim is to give children opportunity to reconnect with nature. Those gardening activities are seen as a proactive education technics to empower youth with different capabilities: collective work, environmental knowledge, food consciousness etc.

Guldhedsskolan's pedagogical school garden...



This two years project is one of two pilots for pedagogical gardens and will be followed by four new schools in 2013. This project aims to collect lessons and generate a pedagogical package to mainstream the pedagogical garden practice to all schools of the Municipality.

Delivering...

Population food procurement is quite classical in Gothenburg with people buying to large stores and supermarkets.

The innovation comes from the Traffic Office and the Procurement Company that are setting requirements for transportation in the public procurement. They intend to include specific clauses in order to decrease the environmental impact of products. Public procurement is turning to be a strong level to change major supplier of food in public services' habits.

Fair trade aspects are as well becoming increasingly important in the public procurement. This improves sustainability with a global local policy aiming to buy fair and organic, but also to carry retailers towards new choices of products to sale.

In Spring 2011 Gothenburg was certified Fairtrade City. This means that the Municipality must live up to criteria for fair trade procurement, conduct active information work on the subject and have a certain amount of Fairtrade products on supply in shops, cafés and workplaces.

Enjoying...

There is a varied food culture in Gothenburg. In areas with a high proportion of people with foreign origin, local festivals such as Hammarkullen festival in Angered, has become a yearly event where food inspired from different countries are an important part.

Global Picnic...



This young and fresh initiative aims to organise convivial food events to bring different ethnical backgrounds together and reciprocally stimulate exchanges on food and sustainability from different ethnical points of view. Exchanges are source of mutual tolerance. Other projects under development are an inter faith bus tour, tasting nights and cooking classes with different themes around the city.

<http://globalpicnic.se>

Fairtrade City...



For several years there has been a big trend with television food programs, cooking books and people renovating their kitchens to top standard. Major national television food programs and food magazines have emerged. Food topic is part of the Swedish peoples' discussions and could create new job activities for dynamic and original persons.

Lindåsskolan school Chef...



Even Bakke is a young and motivated Chef who innovates towards sustainable practices and challenge canteens rules. He takes part in international canteen Chef competitions, involves pupils to help in the kitchen for a couple of hours a day and proposes to the pupils to taste the food in a self-service way, instead of wasting food they don't like after having taken too much on the plate. This open minded chef intends to raise interest and respect to food and creates dialogue with canteen employees and as well as with the pupils.

The 'Klokboten' of the tastiest sustainable meals...



The City of Gothenburg's environmental committee invited chefs from the city's kitchens to share their tastiest sustainable recipes. This cooperation resulted in a sustainable cookery book named 'Klokboten'. The name plays on words in Swedish: 'kok' means cookery and klok means wise. This cookery book contains, in addition to recipes for sustainable meals, practical tips on what every individuals can do to increase the percentage of sustainable meals.

A recent national survey among adults in Sweden shows that Swedes eat too much sugar and too much of the wrong kind of fat, but too little fruit and vegetables. Worst eating habits have young adults. A reduction of greenhouse gases (GHG) is necessary as the food sector is a great major contributor to GHG emissions. In the EU, food consumption is estimated to contribute to around 30% of the total GHG emissions, more than the total emissions from the transport sector. The highest range of emission associated with production is from animals especially ruminants like cattle and sheep. Food ingredients like fresh vegetables, cereals and pulses are in an opposite level associated with a low amount of GHG emissions. This environmental consciousness have led politicians to act on public food meals.

The Swedish model of free school dinners for all children in compulsory school is unique in the world. It is in school that we learn to eat healthily. The municipality of Gothenburg tries to influence the food culture in families towards more organic food, ethical labelled food, less meat and more healthy food. In the public sector, nutrition and organic food are in focus. When asked in surveys, people are in general positive to start eating less meat, but their aim is not always shown as a real act.

Opportunities and challenges for the development of sustainable food

High sustainable meals targets...

The City of Gothenburg serves food in schools, hospitals and care centres: in total around 19 million meals per year. The Municipality focus therefore on sustainable meals to reduce the negative environment impact related to the production and consumption of food.

Local politicians set high targets and have made sustainable meal as a priority in the municipality budget. The objective is to reach 50 percent sustainable meals in the public sector by 2014.

Class sustainable recipe competition...



In addition to increasing the share of organically produced foodstuffs, some schools have begun to work with a commitment to specific issues, such as reducing the amount of plate waste. Another educational way of opening the eyes of schoolchildren has been to involve them in a recipe competition. The class that composed a meal consisting of a large share of organically produced foodstuffs, vegetables and legumes won. The winning recipe was then served in the school restaurant.

The challenge for the Municipality is to find ways to reach these objectives. Gothenburg has already produced a strategy with measurable goals. The strategy focused mainly on increasing the share of organic and fair trade products, serving seasonally-adapted food only, giving priority to eco-labels, increasing vegetables and legumes share in public menus and reducing plate waste. The municipality also decided that all meat served in the city's public sector should be organically produced, a challenge due to the high cost of organic meat that will reinforce the necessity to increase the share of vegetable and legumes. Products like coffee, tea, sugar and bananas should all be certified organic and/or fair trade.

The municipality intends to leverage on this large amount of meal it serves to both improve the availability of quality food among suppliers and shift eating habits in the population. A concrete action plan should now be defined to turn these strategies into operational changes and implementations with a regular measure of the progress made.

Coordination and transversality challenge...

The city of Gothenburg has a decentralized administration. The sustainable meals objective is therefore both a challenge and an opportunity in terms of transversal and multilevel governance. All of the committees and boards are responsible for finding the best way to reach the target according to their conditions, following up their budgets, analysing progresses made towards sustainable meals and coordinating internal governance for reaching best synergies between each local action taken.

Co-ordinated purchasing and the environmental and social responsibility demands that are imposed on suppliers have helped the City of Gothenburg to get value for money, while also progressively reducing the burden on the environment.

Environment diploma...



The city has set up a labelling process for public events such as concerts or conferences with a set of sustainable criteria including organic catering, reduced waste, eco-label products, use of tap water for drinking, etc. in order to award the event with an "environment diploma".

Initial focus of the Local Action Plan (LAP)

The Municipality of Gothenburg intends to reduce its environmental impact focusing on the food area in particular. High targets have been set to implement sustainable meals and the strategy to reach these targets is primarily based on sustainable procurement for the large quantity of meals served by the 600 public canteens of the city. The URBACT project is seen as an opportunity to inspire the services of the Municipality with innovative solutions within public canteen and beyond likely to facilitate and mainstream food habits and eating behaviour changes among the population.

The first and currently main intention of the LAP is to focus on the following areas:

- Leverage on meals served in schools, hospitals and care centres to shift eating habits toward more sustainable ones:
 - Implement a 'Veggie Day' per week in all public canteens;
 - Develop a communication strategy on how to communicate sustainable meals and 'Veggie Day' etc. to pupils and their parents
 - Raise awareness among canteen Chefs and employees and train them to sustainable practices;
 - Leverage on 100% organic meat targets over costs to oblige canteens to reduce meat portions and increase vegetables and legumes in the plates;
 - Develop actions towards sustainable meals in public canteens to reach also restaurants, hotels and bars;
- Develop synergies between schools curriculums and food-based educational activities:
 - Develop from current school gardening pilots projects a dissemination kit to mainstream educational orchards in all schools of the municipality;
 - Multiply sustainable eating education events and training at schools and explore for systematic synergies between sustainable food education and curriculum development;
 - Leverage on 'home economics' hours on the curriculum to raise tasting capabilities, cooking skills and knowledge on quality food among pupils and teachers
- Increase the opportunities of self-production and respond to the population willingness to grow food:
 - Develop community gardens throughout the city searching for land opportunities and possible implementation in public parks and gardens;
- Implement measurement procedures based on multiple criteria to generate a more accurate picture of sustainable meals state of the art and enable assessment of progress made.

Approach and composition of the Local Support Group

The initial composition of the Local Support Group shows a large number of civil servants coming from different sectors and independent units of Gothenburg public administration. The transversal nature of the sustainable food topic on the one hand and, the decentralized organization of the services of the Municipality implies to involve in the LSG representatives from these different services in order to create the momentum for change in public food management. The first kick-off meeting of the LSG gather in consequence more than 20 stakeholders from different part of the public administration. Representatives from NGO's and innovative projects were also present.

The first current composition of the URBACT LSG is based on the following members:

- Representatives of Gothenburg Environment Administration;
- Representatives of Gothenburg Consumer Guidance Office;
- Representatives of Gothenburg Procurement Company;
- Representatives of Gothenburg Education Department;
- Representatives of Gothenburg Property management;
- Representative of local administration of Lundby;
- Member of the Swedish Society for Nature Conservation;
- Representative of the Gastronomic academy of West Sweden Society;
- Member of the Global Picnic non-profit organisation;
- A political representative of the Environment and Climate Committee

City profile for Lyon



Main characteristics of the town

The city of Lyon is located in the Rhône Valley in South East France. The town offer a nice environment with various UNESCO World Heritage Sites as "Vieux Lyon", a medieval area built at the foot of "Fourvière" Hill. The recent redevelopment of many green spaces on the Rhône banks has made a great transformation to enhance the living conditions. The city is composed of three parts: old medieval quarter, buildings from 18th and 19th century and new architecture of 20th century in characteristic area of "Part-Dieu". The three public Universities are a resource for a dynamic student population.

With about 500 000 of inhabitants, Lyon is the third city of France and the second in regard to whole the urban area (2.5 million of inhabitants). The Regional Capital of Rhône-Alpes used to be the place of active textile factories and is now a shrine of health, pharmacy and chemical industries. Lyon welcomes 5 competitiveness clusters, including 2 world-class clusters: Life Sciences and Chemical. The city is known to be a European economic hub thank you to well-connected transports.

In 15 years, Lyon has become a very attractive city with high level of income population (25 610 Euros) and also high population density: 2.364 inhab./km². The wealthy city is surrounded by sensitive areas that gather more fragile population as in the 8th district of the town. A special focus of food project points on equal food access to all kind of population in the larger Lyon urban area.

Main characteristics in terms of food and sustainability

The city of Lyon has great opportunities in implanting a sustainable food system thank to the dynamic associations' life and potentialities of a preserved rural space surrounding the city.

Growing...

Rhone-Alpes is a major agricultural production area in France. It's also the first region for the part of organic production. It represents more than 5% of agricultural land in 2010 against 2.8% for national average rate. The "Beaujolais" is a well- known wine production area in the North of the city.

Food is mostly grown around the city in a range of 200km. Farmers from the peripheral area provide food to street markets. Currently and because of urban pressure phenomenon, only one farm still exists inside the city.

The tradition of "workers plots" has long been a characteristic of Lyon. It was a way for medium and low income households to grow their own food. Nowadays, there are stil semi-private allotments but most of the community plots are managed to become "collective gardens" that develop social ties.

30 collective gardens...



Lyon municipalities has developed a policy that aim to support gardening practices offering associations or groups of inhabitants to share and take care of gardens with "no fertilizers" and in a collective way. In this project, the "Réseau Santé" gardeners invite members, schools or visitors passing by to discover medicinal herbs and vegetables.

Due to the shape of the old buildings, there is no tradition for rooftops gardening. New places to grow food could be located around buildings from the 70's

and 80's, in spaces own by social living companies (private but strongly related to local authorities). In the more deprived areas where difficulties are stronger, social centres are using kitchen garden as a tool for integration.

Pré Santy inclusion garden...



The Pré Santy is a vegetable garden aiming first at improving social inclusion in a difficult social logging area in the South of Lyon. The gardening activities is at first more a pretext than an aim but it is constitutes an interesting cases promoting sustainable food among underprivileged population: the garden requires a reasonable piece of land but it is large enough to enable 20 families to experience eating vegetables they produce from time to time and to organize more than 20 neighbourhood events around self-grown food per years...

Delivering...

The national and international food production passes by the wholesale market of Rungis (Paris) before to come to Lyon by privates transport companies trucks. Supermarkets have their own delivery logistic.

As for local food, the production to sale is gathered to the local wholesale market nearby Lyon. Resellers buy there the products they will sale at the street markets while producers bring their own products. There are 65 well distributed markets in the city that animate street life and foster social ties. Markets are seen as a good way to reach people in their consumption habits.

Street markets...



The 65 streets markets in Lyon are an opportunity to talk about food issues: origine of products, quality and taste. On these occasions, young Chefs are invited to cook new recipes from vegetable they found on the market...

About half of shops in Lyon are cafes, hotels or restaurants. The traditional name for restaurants is "le Bouchon Lyonnais". The intention of municipality is to foster new behaviours for both consumers and retailers thank to the creation of the Lyon Fair and Sustainable City label.

Lyon Fair and Sustainable City label...



Lyon "Fair and responsible" was set up in 2010 in order to create a community of sustainable practices among the trade people in town. The label is characterised by transparency of selection criteria, progressive improvement process for those not yet eligible. The cooperation happens in club of exchange between entities awarded with the label. The aim is to labelled 400 business or associations toward 2014

The strong will to change how food is perceived has also permitted to trust a producers' consortium to animate one of the oldest market in town: the Halle La Martinière that is supposed to open in 2013.

Halle La Martinière...



The old original covered market "La Martinière" will soon be restored to become the healthy, fresh and local food market downtown. The consortium that was chosen is composed by producers' cooperatives and proposes an original business model half way between low scale food purchase groups and large scale supermarkets...

There are 5 social groceries in the territory that aim to support low income people with their food procurement in sensitive area. Innovative solutions to spread has been found in order not to create a new food gap between people that can afford quality food as organic products and those who would never think about it.

Enjoying...

The city of Lyon has a long history of typical traditional French cooking, as warm meals with three dishes. Beside the fast food culture and short break for lunchtime, there is still a strong habit for lunch during about 1h30. Real engagement with food can be noticed and the participation in active international network called "Delice" offer the image of a dynamic and innovative city in matter of food. There are "great chiefs" that have opened restaurants and encourage progressively the development of a sustainable gastronomy culture. Also 4 restaurants in different ranges of prices, propose a choice of sustainable meals that are not always very well understood by the consumers. It seems that sustainable food restaurant is still reserved to a kind of population involved in sustainable issues.

Social and Solidarity grocery shop...



The original grocery "La passerelle" is a social business that fosters a mix of the population working on two types of clients: 'beneficiaries' accessing mainly food charity stock and 'solidarity clients' attracted by organic food sold at fair but full market price to them. Both evolve in the same space the one providing better margin to the shop that are reinvested in giving to the other a discount on organic and fresh food.

Zone Verte...



"Zone verte" is an advanced model of restaurant using only fresh organic local food, with a Chef improvising from what is available from the associated farmers. The eco-integrated approach range from furniture design composed of wood table and trays to the educative approach of the owner. Nevertheless this advanced model experiences is lacking from clients as advanced as it is...

Opportunities and challenges for the development of sustainable food

Synergizing between levels and sectors...

Food as habitat and transportation is pointed one of the most critical issue in terms of sustainability. The *Sustainable food for urban communities* topic emerges as a new concern for cities. It tends to involve different areas of competences of the municipalities that most hardly used to collaborate before. In Lyon in particular, a systematic involvement of each of sectors of the municipality with a potential to leverage on food has been made by the coordinator to get all administrative stakeholders around the table: 'Social and fair economy' sector working to preserve quality food access for families in poverty; 'Social policy' sector leveraging for instance on urban gardening to foster social inclusion; 'Retail' sector focusing the maintenance of street markets and retail equity; 'Tourism' sector promoting the city through traditional gastronomy and its evolution; 'Sustainability' sector covering organic local food under the City sustainable label scheme; etc. Beyond the different municipal sectors, involving close peri-urban agriculture and market gardening call for the competences of *Urban Community of the Grand Lyon* including the city of Lyon and the 58 municipalities around. Close agriculture issues also tend to involve two other administrative level of the *General Council* managing the *Departments* around Lyon and the *Regional Council* managing the *Rhone-Alpes Region*.

The transversal profile of our topic stretching across administrative structure in silos and multiple governance levels emerges in a more or less strong way in all visited cities. Breaking these silos and engaging collaboration between levels appears in Lyon as a key-issue to get the big picture of sustainable food on the administrative side. The number of stakeholders to be around the table is already challenging to start with the local support group even without taking into consideration the necessary stakeholders from the private and non-profit sectors that should also embark. Synergizing the multiple grassroots, public and private initiatives taking into account the complex French administrative architecture seems to be a challenge for Lyon.

A strong supporting infrastructure...

The counterpart of this complex so-called 'administrative machine' is that a strong diffuse support is available across the territory to monitor

the city challenges and progress in them of sustainable food, to take action and provide help and technical support to stakeholders, to communicate and give visibility to the population and show what has been achieved yet. The *Lyon Fair and Sustainable City* label is a structured and well developing program carried by the *Sustainability Department* of the municipality. Same organized management is to be found for instance for the collective gardens: a period of promotion supported by the Municipality has reached up to 30 gardens across Lyon. A careful mapping and analysis of all the different experiences leads to a change in the management support by the city to work on the consolidation of existing gardens (to reach financial autonomy and stable participation) before expanding their number.

Each different sector related with sustainable food benefit from such a strong facilitation support from the Municipality. Participation to the URBACT Thematic Network is seen as an opportunity to build convergence and synergy between all the different areas of promising sustainable food practices present in Lyon. In particular the city has a strong culture of traditional gastronomy that beyond the well known Chefs is deeply rooted in the population practices. The region around is granted with a flourishing agriculture able to provide the population of the city with fresh and healthy food. The challenge and the focus the Municipality would like to engage with is to leverage on both its culinary tradition and agricultural potential to mainstream sustainable food especially among the less privileged part of its population.

Initial focus of the Local Action Plan (LAP)

In contrast with the traditional top-down administrative culture, the Municipality intends to engage the co-production of the Local Action Plan within the round of stakeholders involved. This process should take place in the implementation phase. Already from the first discussion raised for the preparation and during the Lead Expert visit a general orientation emerged towards building synergies across administrative sectors and level between the range of promising initiatives and projects relating to sustainable food. The specific topic of food poverty and giving fair access to healthy and sustainable food leveraging on both the rich agricultural hinterland and the cultural capital of gastronomy of the city.

The first and currently main intention of the LAP is to focus on the following areas:

- Raise awareness and facilitate access for underprivileged families:
 - Mainstream food education schemes such as the *Famille Alimentation Positive* experience coaching a groups of families change of food behaviour;
 - Facilitate access to street markets for the whole population exploring new timetable matching work hours;
 - Stimulating the emergence of new *social and fair* retail solutions (i.e. disseminating the *Social and solidarity grocery* model or redistribution of unsold fruits and vegetables reducing waste and impact of street markets such as the successful *Tente des Glaneurs* experiences in the city of Lille)
- Engage food sector towards taking actions for more sustainability:
 - Consolidate the *Lyon Fair and Sustainable City* label and extend the current 160 labels attributed so far to the target of 400 commercial entities awarded with the label with a large share relating to food;
 - Develop the *80 KM Challenge* from the current 10 projects started to more initiatives in coordination with ARDAB, the regional association for the development of organic agriculture;
- Strengthen the diffused sensitivity to food in the population:
 - Intensify experiences with young Chefs sensitive to sustainable and healthy food issues renewing and enlarging Lyons' reputation in terms of gastronomy;
 - Raise awareness on sustainable local quality food among the widest circles of restaurants and hotels in the city;
 - Involve these new Chef in changing the population food habits (i.e. reproducing successful animation recently made in the street markets);

Support Group representatives of each sectors and levels connected with sustainable food in order to generate a coherent approach on the side of the city public authorities. The counterpart of stakeholders from the non-profit sector and from the private sector will be engaged also in the Local Support Group.

The first and current intention is to involve in the URBACT LSG the following members:

- 2 or 3 Lyon City Council : sustainable dpt, local economy dpt and social dpt ;
- 1 academic;
- 1 Lyon collective garden network (Pass'jardin)
- 1 social grocery shop
- 1 grocery shop and dairy producer consortium (Halle Martinière)
- 1 or 2 restaurants
- 1 Urban Community "Greater Lyon"
- 1 association social food and health
- 1 small organic dairy producer

1 small food businesses

Approach and composition of the Local Support Group

The complex administrative puzzle in which the city of Lyon evolves will induce to involve in the Local

City profile for Messina



Main characteristics of the town

The city of Messina is the third demographic reality of Sicily. The area is a vital service centre not only for the city and the surrounding municipalities of the Province, but also for Calabria and Straits area. The particular geographical position of the city, squeezed between the Peloritani hills and the sea, has meant that the industrial economy was lacking of suitable areas for its expansion. The hinterland is characterized by numerous villages that have now become satellites of a suburb. They are witnesses of history and traditions that should be protected and enhanced within the theme of identity.

According to the 2001 census, Messina counts 252.026 people that represent 38% of the population of the whole province and 5.07% Sicily. Emigration towards other cities highlights a less dynamic period for the city. Indeed it has the "oldest" population among Sicily major cities. Moreover Messina has a low activity rate of 56.5% (in Italy the figure is 62.1%) and the employment rate is particularly critical, it can reach 42.7% in particular areas.

Despite economic difficulties, Human capital territory can be seen as a potential for a highly competitive environment. In particular, residents provided a University degree rose from 12.375 in 1981 (5% of the population with at least 6 years) to 26.311 in 2001 (11%).

"Trade and other services" represent 17.7% of the activity and "Industries mining and manufacturing» 10.2%. But the great economical stakeholder remains the state that employs 47% of the labour force.

Today, the university is one of the relevant services. It has 11 faculties and 80 graduate programs. The city is home of national centres for research that have obtained international awards, respectively, in

the field of renewable energy, new materials and marine environments.

The Metropolitan City of Messina is a land full of scenic and cultural values. Messina offers all the functions of metropolitan significance.

Main characteristics in terms of food and sustainability

Currently, Messina is willing to act on food topic in front of the changes in consumer's food habits. Indeed, if Sicilian gastronomy is one of the prides of Italy it is also an image and a valuable economic sector to preserve. Public authorities, local associations and many stakeholders are gathered to create a barrier to the loss of their food culture.

University of Gastronomy...



The Department of Food Science and Environment of University of Messina will soon become University of Gastronomic Science. They are bound to invest in a new laboratory allowing them to better qualifying local food products. The demonstration of sustainable food buffet organised in the occasion of the LSG first meeting is a good way to promote the whole curriculum ...

Growing...

Messina has long been a major place for agriculture in Sicily and agricultural activities are still Employment providers in the province of Messina. Currently it concerns 9.700 persons. Agricultural production has an added value of 219 million euros, or about 2% of the total value added of the province. Exports and imports in the agricultural sector and have a positive balance for the province: it imports 20 million, while exports amounted to 42 million euro. The same trend is also reflected in the food industry products that are imported and exported 53

million to 97 million. If figures are good, there is a potential to improve profitability and develop jobs offers.

In the 80', agricultural sector started to decline in favour of tertiary. Now that unemployment has become a major issue for the city, agricultural sector is seen as a good way for job creation. Indeed, many lands are abandoned with catastrophic consequences of current uncontrollable fire in summer. A good peri-urban planning focused on agricultural land should have positive effects to stem fire troubles and offer opportunities to create new businesses. Various farmer cooperatives would be interest in cultivating the brownfields.

The municipality of Messina will also intend to foster a shift in the seven villages so that they could become the place of profitable growing businesses.

Az. Agricola Coop C.a.i.f.e...



This little family cooperative manage as well the culture of vegetable and the process. Listening to one of the 3 co-op entrepreneurs, the whole infrastructure could serve for other local production. Sales policy could also become more efficient.

Thanks to high schools an University Department promoting of local production and traditional food, young people could be interest in developing new agricultural businesses. currently, there is a deep need to foster the link between education (school / University) and business skills.

Its albatros...



Fondazione Albatros is a high technical institute that sponsored a course for the enhancement of local products and local production. This private training centre trains for farmers that need resources on communication and management to develop their business.

Delivering...

Delivery is quite classical in Messina. Supermarkets provide larger quantity of food for households. One of the challenges would be to strengthen the organization of open-air markets in most parts of the city where to meet local producers and consumers. Always in this aim, Municipality of Messina and Province of Messina initiate the creation of a brand to promote local products.

Open air market...



Once a month, an organic market takes place in one of the squares of the city centre. The open-air market is organized and run by one of the largest environmental organizations in Italy and involves producers who hold organic certification. Weekly farmer's markets of whole organic and zero-mile foods (wine, oil, fruit, etc.) are also organized by farm associations (Coldiretti). The open-air

markets are periodically controlled by Municipal Police.

The biggest opportunity in delivery lies in the promotion of purchase groups. The Slow Food Association has proposed an initiative for the formation of purchasing solidarity groups, inspired by the principles of healthy and genuine eating. The procurement of sustainable food could be more efficient all the more efficient than the purchasing group is considered as an intermediate level between citizens and producers, and generally facilitates the mechanisms of purchase / sale. This initiative could enhance the revitalization of local economy.

Purchasing solidarity group...



The Slow Food Association has proposed and initiated the creation of purchasing solidarity groups to stimulate principles of healthy and genuine eating. This initiative may facilitate the mechanism of purchase and sale and relink consumers with producers.

Restaurant is another opportunity to raise the interest on local food nevertheless there is still a deep task for encouraging inhabitants to choose in different way.

Restaurant with half local menu...



A project promoting restaurants with half of the food on the menu coming from local production was a successful idea. Nevertheless, it declined with the end of the project subsidies...

How incredible is to notice that foreign visitors could be more interested by local good food menu than inhabitants.

Agritourism...



Agritourism is a growing trend in Sicily that enhance farmers to welcome tourists for local food meals and to host them at the farm. The development of such activities in Messina could become a successful way to revitalise declining farms through multifunctional farming...

Enjoying...

Food is entire part of Italian culture. Social life is often described by meetings at home or at the restaurant enjoying the pleasure of sitting at the table, tasting traditional foods with friends. The preparation of homemade food has been in the past a main characteristics of Sicilian culture. Since about ten years, an increasing gap can be noticed

between old and new generations. Young people are attracted by fast food and start to lose the pleasure of cooking. This phenomenon is not as strong as in other European countries nevertheless things should be stem thank you to health information and a proper nutrition education for younger generations. Slow food is one of the best partners toward this goal.

“Mangiamoli giusti” and “Adopt a sheep”...



Slow Food organise an education campaign on how to eat properly fish: not too small to secure reproduction and not too old because of heavy metals. Other campaign from Lega Coop consists in building links between cities and countryside proposing urban inhabitants to adopt a sheep in a rural farm: a light idea that induces families to visit the sheep and permit reconnection with territory...

Globally, there is a need to re-find of ancient traditions about production of homemade tomato paste, marmalade, in oil vegetables, etc...that is why the Municipality of Messina has organized, since 2010 and in cooperation with the professional schools of the city, an event called "Novello Day: Aromas and Flavours" to promote local good products.

The home-made culture...

The cooking of traditional specialities used to take place traditionally at home every weeks. Since little time, emerging trend of home-made bread among younger generations can be observed and seems to reconfirm the home-made culture...



Opportunities and challenges for the development of sustainable food

Food oriented culture...

Messina demonstrates a strong potential based on its traditional and still very vivid food culture. The issue of sustainable food in urban context emerged more recently probably because of the diffused average attention to food and eating quality products, the close agricultural hinterland rich of local traditional food production and small transformation enterprises oriented to quality and what could be qualified as a diffused gastronomy and popular interest in food as a cultural and identity backbone.

Part of the food feeding the city comes from international agro-business, industrial transformation and supermarket chains distribution but a local traditional food system still exists. Talking about sustainable food then refers both to raising awareness on emerging sustainability challenges but also rescuing the traditional food system from destruction.

Observing food culture in Messina during the initial short visit, many specific attitudes or activities emerged as symptomatic and could be stimulated to avoid the dilution of this culture or to regenerate engagement with food where it was lost.

For instance teaching food is a 'global experience': a food school installed in a former monastery facing the Messina strait panorama is surely a highly stimulating place for pupils to learn food as a professional capability but also more in-depth as a culture. Even if managing a food school in a classified building isolated from city transport is certainly a challenge, the model is certainly worth to imitate in order to instil appetite to quality food among pupils...

Canteen chef...



The experience of the canteen of the agricultural school gives an inspiring vision of what a canteen chef could be: he has his own micro-production and supplies some genuine products; he likes experimenting some new and special recipes as in the occasion of the LSG visit...

Faro DOC from the school...



Passionate staff from the agricultural school imagine a strategy to face school budget shortage: from teaching wine production they pass to producing quality wine with the launch of a new faro DOC high quality wine: first 12000 bottles to be sold this year...

Another example could be picked-up among the very creative set of action imagined by Slow Food in general and in particular by its local representation in Messina. Interest on food should be supported by a 'permanent narration' of the food: *"barrels where the wine is made are in oak wood but in Messina province barrels used to be made in cherry and also jasmin wood that gave the wine a special flavour we would like to reproduce..."* is one of the many many

examples of the constant narration of food along the 2 days of visit trying to continuously communicate and tease passion for food. A narration effort of the food, of its origin, the farmers who made it and the land they emerge from, the description of the organoleptic feelings and the social dimensions attached to it are essential lever to raise interest and educate about food...

Slow Food Messina...



Slow Food Messina organises 60 meetings per year. They intend to transfer food passion through tasting encounters, animation in schools, researches and preservation of endangered products...

Consolidating the strong food culture...

A strong diffused interest in food and vivid traditional local food is a good asset but not a guaranty for leapfrogging to a sustainable food system. Messina's population is like everywhere challenged by lack of time, loss of cooking skill, easy-food appeal, supermarket strategies, etc.

The strong food culture is an advantage but also a risk. This culture seems to be so rooted in the land that the population demonstrate an excess of trust in its resilience and tend to be blind to the changes in progress (among youth in particular). An interesting example was reported by one member of the local support group: people from Eolie island nearby used to make a range of fine fried pastries called *Nacatole* or *Giggi*. Adults loose the habits to bake them and the pastries suddenly disappear: current generation was not making them anymore. Only through a project bridging the cooking knowledge of the remaining elderly people with young generation allows to rescue and reinstall the tradition.

The loss of a food culture happen progressively if it is not constantly revitalised and discontinuities are likely to appear in the course of one generation and may be irreversible.

Initial focus of the Local Action Plan (LAP)

The challenge for the city of Messina is to promote sustainable development paths to recover hill neighbourhoods to the original vocation through recovering autochthone agriculture, to foster consumer awareness and to stimulate youth entrepreneurship.

These targets require an articulated action plan and a strong governance. The stakeholders involved by Messina should help focusing the rights projects and initiatives, identifying innovative ways to involve more people, especially policy makers to develop a new urban and green economy.

The first and currently main intention of the LAP is to focus on the following areas:

- Short food circuits
 - Promote pilot projects to create short food circuits "from farm to kitchen" and AMAP-like schemes;
 - Explore the possibilities of Internet based social networks to organise local food purchase groups;
- Information, formation and entrepreneurship
 - Consolidate/enhance the skills of the population to appreciate and distinguish good quality food;
 - Promote in the primary school the knowledge about local agrarian culture;
 - Implement farm training periods for high school for agrarian study and universities to promote particular skills on agriculture, gastronomy, green economy
 - Increase entrepreneurship education and curriculums to stimulate pupils to create new businesses;
- Use abandoned lands for agriculture
 - identify and acquire/expropriate (possibly by public-private partnership) abandoned former agricultural land in terrace in the neighbourhoods' hills around to promote spin off farms and agrarian enterprises by new graduates from high school or university (at least 100.000 square meters more in next 7 years);
 - identify public spaces to promote urban gardens (at least 10.000 square meters more in next 7 years);

- Launch a Messina Region quality and traditional food label to identify the local products and to identify restaurants that cook local products.

Approach and composition of the Local Support Group

Getting together and collaborating doesn't seem to be spontaneous and easy for stakeholders.

Reasons should be found in the specificities of the local culture: participation is not in citizens habits who'd rather vote and delegate their responsibilities to elected representatives. The difficult economic and social context stimulate individualism and diffidence towards other player. Aware of these difficulties, local coordinators did a amazing work to build the LSG organizing a pre-meeting just after the kick-off of the URBACT network, visiting each of the potential stakeholders and making interviews with all of them in order to raise trust and appetite to take part.

The first meeting of the LSG was then a success. The preparation work ensure large participation to the first meeting and for part of the group also to the site visit after. Currently the LSG is composed of:

- Manager of the Messina Province;
- President of the Chamber of Commerce;
- Department of Food Science and Environmental, University of Messina;
- Department of Economic, University of Messina;
-
- Fondazione Albatros (food and city marketing higher education);
- Department of Panning, University of Reggio Calabria;
- President of the provincial confcooperative;
- President of the provincial legacoop;
- Manager of provincial Slowfood;
- Manager of provincial ESA (Agricultural Development Authority);
- Responsible of Coldiretti, Messina; (Association of farmers)
- Agricultural High school "Cuppari"

City profile for Oslo



About Oslo

Oslo is the oldest of the Scandinavian capitals, and its history goes back to 1000 years ago, when the first settlements were built at the inlet of the Oslo fjord. It is the regional capital, key port, regional transport hub, tourist centre, scientific, and academic centre.

The geographical area of Oslo is 450 km². 2/3 of the area is green, either as protected forest or as green recreational areas. The city centre is surrounded by woods, lakes and 40 islands in the fjord. The city has a blue-green image, as it is surrounded by the blue Oslo fjord and green hills and forests.

As of 1.1.2012 the municipality of Oslo has a population of 613 285 inhabitants. The Oslo *region* has 925 242 inhabitants (1.1.2012). The population currently increases at record rates, making Oslo the fastest growing city in Europe. Most dwellings in Oslo are apartments; these are concentrated in a few dense areas while other types of dwellings such as single family houses and townhouses dominate the landscape.

In 4th quarter 2010, 426 124 people had Oslo as their place of work. The main job sectors are: shipping industry, information technology, telecommunications and multimedia, offshore and engineering activities, biotechnology and pharmaceuticals. The City of Oslo employs approximately 43 000 people. At the end of September, 11 056 people registered as unemployed in Oslo. This is an increase of 292 persons compared with the same month the year before. 3.2 % of the labour force in Oslo is now registered as completely unemployed.

Unemployment in Oslo is 2 % higher than one year ago, but remains low compared to the rest of Europe. The average household income was NOK 362 000 in 2010 (45 250 euro).

Main characteristics in terms of sustainable food in Oslo

Growing

Oslo is far ahead when it comes to urban, organic agriculture, and a lot is happening in this area.

The Agency for Urban Environment (BYM) is running Bogstad visit farm, which has been organic for years. Bogstad welcomes schools and kindergartens. Every year 4000-5000 children learn about agriculture, meet animals and harvest potatoes which they get to take home. Demonstration fields for grains and herbs are used both by the public for self-study and educational programs for schools. The farm also produces organic cereals, meat of lamb / sheep and cattle. Grazing animals from Bogstad tend the landscape within City of Oslo's management areas in the forest and on the islands. In cooperation with the County Governor of Oslo and Akershus' agriculture department, BYM is about to develop Bogstad visit farm into an arena for professional development and networking, for agriculture in general and urban organic farming in particular, *and* as a bridge between conventional and organic farming, and between city and country.



There is ongoing work with a zoning plan for Sørli visit farm in Østmarka. Sørli is planned as a full farm with organic animal husbandry and cultivation fields. Operations and animal husbandry shall happen in joint operations with Bogstad visit farm.

Oslo Education Agency is running Geitmyra school garden, which is a professional and educational Centre for school garden activities in Oslo. Geitmyra can become a centre for development of future

school gardens. A large number of schools in Oslo have school gardens, but of slightly different standard. Some former school gardens are turned into allotments.

Oslo has a tradition for school gardens. An important goal of school gardens is that students experience the joys of nature. There is a focus on developing students' ability to feel responsibility, respect and understanding of animal and plant life, and to engage in conservation and environmental issues. School gardens may be a learning arena in dealing with different subjects, such as science, and Activity School (SFO). In addition to that, students can learn to work with soil and grow food, it is natural to focus on current topics such as organic food, locally produced food, environment and climate, as well as culture and diversity. These are themes in several curricula such as math, language and science. School gardens can help with practical examples. School gardens can be a gathering place and inspiration for learning and fun for students.

Nordre Lindeberg farm is also a visiting farm, run by the District of Alna. The farm has a diversified livestock and crop production, adapted for different age groups and users.

Two other farms in Oslo include The Royal Kings Farm (Norwegian Folk Museum) and Abildsø farm in the District of Østensjø. The Royal Kings Farm has been operating organic milk production, and is in the process of planning a visit farm. Norwegian Folk Museum has the "Trønder Courtyard" inside the museum area, which is visited by schools and kindergartens. Here, there is a small crop field. Abildsø farm runs "The School Farm"; the farm has an agreement with schools in the district area about offering students at the middle and secondary level an alternative school day.

In Sørkedalen there is traditional farming of grains and many horse stables. Agriculture in Maridalen consists mainly of grain production. There are strong restrictions on operations in the basin of Maridalsvannet.

The Agency for Urban Environment has, as part of the Cities of the future project, established a partnership with the MAJOBØ project (Food and land where you live). In connection to this the Ministry of Environment has granted funding. MAJOBØ is a grassroots movement for the establishment of local and organic consumption and growing of food. The MAJOBØ project is initiated by the network Gaia Agenda. The Agency for Urban Environment participates in MAJOBØs steering

committee, and has made land available. MAJOBØ has contributed to the creation of "The Glory"; new allotment gardens in Bjørvika.

Cities of the Future have previously been in dialogue with the District of Sagene to establish a knowledge centre for organic food growing on roof areas on Sagene community building.

Allotment gardens in Oslo



In 2012, Oslo has 20 allotment garden areas totalling approx. 1000 allotments. Allotment sizes range from 5 to 250 m². 70% are 50m² or less, and approx. 20% is smaller than 25 m². Spring 2012 600 persons/families were on the waiting list for allotments in the established allotment gardens in Oslo. This is an increase of almost 60% over the past two years. The waiting list is especially long on the large allotment gardens in central city: Geitmyra has 245 on the waitinglist, Egebergløkka has 179 and Ola Narr has 70. When "The Glory" allotment gardens in Bjørvika were announced in may 2012, 3800 people applied to have an allotment.

Oslo has about 1000 allotment gardens where food and flowers are grown by private individuals.

There are also about 1000 gardens in *garden colonies* which are mainly private ornamental gardens with small cabins, but some food is also grown here (berries, fruit trees and vegetables).

Sogn garden colony



Anyone who has permanent residence in Oslo, can apply for a garden in a garden colony. The land is rented from the municipality. Garden colonies were established for citizens who did not have access to a private garden. Since it is the municipality that owns the land, the municipality sets requirements for maintenance of common areas, gardens and cottages. The garden colonies are meant to be open parks for the city's population, and the areas should meet high standards. At Sogn garden colony (see picture) they established a "green gardening group", encouraging more organic and edible plants in the gardens. One of many activities is to make 1 m² vegetable beds to reintroduce the practice of growing food.

Geitmyra school garden



Geitmyra school garden was established in 1909. Right from the start Geitmyra has been the heart and centre of all school-garden activities in Oslo. Since its inception 100 years ago, there has been school garden activities at Geitmyra, which today is the largest and second oldest existing school garden in Norway. It is like an oasis in central Oslo and a learning environment for up to 15 schools. Here is a unique collection of 350 fruit trees, which also acts as a gene bank for fruit trees. Geitmyra is a professional and educational centre for school gardens in Oslo. Here you can get help and advice on the establishment and operation of school gardens attend courses for teachers and staff on school activities.

MAJOBOS roof garden at Alna Shopping Centre



Alna is a shopping centre. In 1996 they constructed a green roof at that time more for decorative purposes showing a piece of nature in an otherwise heavily built environment. The summer cooling benefits of the roof have been recognized. MAJOBOS together with the property developer and the original green roof contractor conceived to turn Alna green roof into a permaculture food garden.

Delivering

Most Norwegians buy their food from supermarkets and the market is dominated by 4 supermarket chains. The biggest supermarket owner is "Norgesgruppen" with an almost 40% market share. The supplier market is also dominated by a few companies/cooperatives: Tine for dairy, Nortura for meats and Bama for fruits and vegetables.

There is a slowly growing focus on healthy, local and organic food in the supermarket industry: for example the dairy company Tine now labels all milk sold in Oslo as "milk from Østlandet", i.e. locally produced milk. Kiwi, one of the supermarket chains, recently launched a new campaign to cut VAT/taxes on organic food items and has already run a similar campaign for fruits and vegetables for several years. In Oslo, two of the biggest supermarket chains promised to cut prices and offer organic food at the same price as conventional food. Spring 2013, The Norwegian Agricultural Quality System and Food

Branding Foundation is launching a major campaign on organic food. "The Green Keyhole" is a well-established Nordic labelling system for health(ier) food products. The Norwegian government is particularly supporting organic and small niche food manufacturers.

Oslo has several box-scheme companies offering food delivered to your door. Some are all organic, some focus on dinner items etc. These box schemes seem to fit well with the increasing demand for healthy yet convenient food, however the price level indicates that high income families will be the main customer group. So far, Oslo does not have any Community Supported Agriculture (CSA). However, there has been several initiatives to start up CSA farms, and interest groups are still working to make it happen.

In some parts of the city you will find "immigrant shops"; small independent grocery shops run by immigrants with a vast selection of fruits, vegetables and exotic food items. These are quite popular and offer fruits and vegetables at a low cost. There are also high-end food shops which offer high quality food items, preferable different labels than in the supermarket chains, and with an emphasis on organic food and local specialities.

Oslo Food Court



Oslo Food Court, and indoor food market, opened on October 2nd 2012. Over three floors totalling almost 3500kvm you find an arena for all who are concerned about food and dining experiences. The food court, in addition to acting as a marketplace, can also be an experience for those who love food. It is a meeting place for the man in the street, the people who are interested in food and professionals. You can teach and be taught. Food Hall offers a combination of meat, fish, vegetables, coffee - everything from the best manufacturers / distributors in Norway. Here you find cafes, restaurants, small specialist shops and a

variety of food-related activities. You will experience food up close - see, taste, listen and enjoy.

Oslo has a Farmers Market which takes place on a regular basis in fixed marketplaces. In spring there is a market about every other weekend, from mid-August until Christmas there is a market every weekend. Every year in September/October, a huge farmers' market-like food festival take place in Oslo on the city hall plaza with more than 100 stalls. The festival attracts local food specialities, suppliers from all over the country and is immensely popular among people in Oslo. The products there are mainly processed foods like jams, oils, cured meat, cheese etc.

Enjoying

In general, you can say that there are two parallel trends relating to food in Norway. Food is becoming cheaper and more industrialized. People are demanding more processed foods and the market is developing quickly. Now consumers can get fresh ready-chopped onions and frozen ready-made mashed potatoes in the supermarket.

On the other side, a share of the urban population with high education and high income are becoming more aware, and is demanding healthier, environmentally friendly and local specialty foods. It is trendy to be interested in food and many people take on cooking as a hobby.

Oslo leads the way in offering different foreign dishes and ethnic restaurants. People in Oslo eat out far more frequently than people in the rest of the country. 46% of the population in Oslo eats out once a week or more. There are also more people in Oslo who are interested in exotic food than in the rest of the country, and this is where people eat Japanese food and tapas. Drinking habits have also become more continental in Oslo. Interest in wine and wine culture is considerably greater in Oslo than in the rest of the country (SIFO).

As in other countries, there are several popular TV programs about food. For example the celebrity dinner show (celebrities invite other celebrities for dinner), Gordon Ramsey and Jamie Oliver. Lately, there has been a debate which has received quite a lot of attention about the quality of food in Norway and food labelling/marketing following a report from the Norwegian Consumer Council revealing misleading communication about the quality of food products. The large players such as the supermarket chains and the major suppliers are under pressure to deliver food of higher quality and more precise labelling and marketing of food products.

As in the rest of Europe and America, a lot of food is wasted in Norway and Oslo. Matvett is a project that is focusing on reducing food waste. The goal is to reduce food waste by 15% before 2015 (from 2010). Oslo just finished implementing an expanded recycling scheme for food waste and plastic. Oslo has been sorting paper, glass and metal, and has a unique system (?) for bottle return for decades. In 2013, Oslo is building a food waste treatment factory near the city. Here, food waste will be converted into bio gas and bio fertiliser. Bio gas can be turned into bio fuel and is already being used for buses and garbage trucks in Oslo. The produced bio fertiliser will be offered to farmers.

Matvett.no - webpage about how to reduce food waste



Matvett.no, operated by the FORMAT project is a webpage for thoughts, ideas and actions on how to reduce food waste. Research shows that while industry and food retailers also throw food, it is consumers who account for the largest volume. Every fourth shopping bag actually goes right in the trash. This corresponds to 51.1 kg per person per year. On matvett.no you get all the information you need to reduce your food waste. You also get facts on food waste - what we throw and why. You can download reports and read what the press writes about food waste.

Biogas factory; recycling Oslos food waste into biogas and bio fertiliser



The waste-to-energy agency in Oslo are building a biogas plant in Nes, Romerike for recycling food waste into biogas and organic fertilizer. This plant will use source-separated food waste from Oslos households and other actors. Biogas is a CO₂-neutral fuel, and organic fertilizer is an environmentally friendly and nutrient-rich fertilizer product for agriculture.

Opportunities and challenges for sustainable food in Oslo

(Examples, not exhaustive)

Norwegian food culture

During the past decades, new food habits have emerged in Norway. Food has become more international, more diverse and more industrialised. Cities are more disconnected from food production and rely more on import and transport. City dwellers are disconnected with the origins of food. Since the 80's and throughout the 90's and 2000's convenient supermarket food has become the main food trend.

Norway is however "waking up" and rediscovering food traditions and developing a new sense of food culture. Food is receiving a lot of attention in the media and there are several popular TV-programs about food and cooking.

New policies

Urban agriculture has been receiving a lot of attention on a political level in 2012. There are already opportunities for sustainable food in existing policy, and the suggested new agricultural policy for Oslo provides further opportunities. The politicians are discussing a centre for organic urban agriculture in Oslo. Participation in URBACT thematic network will help to put sustainable food on the agenda, politically, internally in the city administration and

externally. A lasting focus on the topic will help support a relatively fresh food movement in Oslo and facilitate cooperation, motivation and inspiration to existing and new initiatives.

Green roofs

The potential for green roofs in Oslo has not yet been mapped, but green roofs are receiving more attention, both from an energy perspective, from a climate adaptation perspective, from a food growing perspective and from a recreational garden perspective. For the new "Barcode" district downtown (the new high-rise buildings by the central station) the municipality included in the zoning regulations a requirement of a minimum of 50% green roofs. Oslo is planning or considering green roofs for several new buildings where Oslo can influence the development.

Geitmyra Culinary Centre for Children



Geitmyra culinary centre for children wish to teach children about the joy of making and eating good food, about where food comes from, and the basic principles behind food production and manufacture. Geitmyra believes that enjoying food is of value in itself, but can also contribute to learning and enabling children to make better and healthier food choices. They strive to give children an understanding that every time you create and consume food you are a participant in the food chain.

A new movement

Spring 2012, the property developers in Bjørvika "Barcode District" decided on an art project; they wished to establish 100 allotment garden plots in the midst of highways, high-rise buildings, asphalt and dirt (see box). Through a newspaper article, they invited the people of Oslo to apply for an allotment,

and after 4 days, they had received around 4000 applications (!) This seems to have hit a nerve and the property developers discovered a demand for land and an opportunity to grow food that was not predicted. Together with the MAJOBØ project which has registered more than 80 organic food growing initiatives in Oslo, and more than 300 nationally, "The Glory" allotment gardens are enabling a movement of young gardeners, perhaps with a nostalgic and romantic approach to food, to access land and knowledge once lost, but now found. The young gardeners are looking for a sense of community, and through growing food, being a part of the solution for a better future.

Transport

The City of Oslo has done a possibility study to reveal the potential for an efficient city distribution connected to public procurement. "Project Green City Distribution" will develop solutions to achieve a more efficient and environmentally friendly goods distribution in the city centre. This will have implications for food as well as other commodities.

"The Glory" allotment gardens



«The Glory» is an ecological initiative and project about urban food production initiated in April 2012. The Glory is located at a rocky "island" in the middle of a rough building site surrounded by roads, railway lines and the airing towers for the submerged tunnel underneath. As of today The Glory consists of three main parts: The Glory Allotment Garden with 100 allotments, a field measuring 250 m² where several types of ancient grain such as spelt, emmer, einkorn and bere barley is grown and a program consisting of a number of events and seminars for learning and exchanging ideas. The level of pollution in the area will be monitored to gain knowledge about the conditions for urban gardening.

Egerløkka allotment gardens



Egeberggløkka allotment garden is Oslo's oldest allotment garden established in 1917 as "the potato allotments". The allotment garden contains several old fruit trees and has a magnificent view of the city. One of many projects in the garden is a social entrepreneurship project

building a partnership with the regional agricultural management through URBACT. As late as august 28th 2012 a centre for urban agriculture was debated in the city council and is set to develop a local agricultural policy, initiated by the Vice Mayor for Transport and Environment. There is opportunities interplay with the LAP in connection to this. Oslo wishes to embark on a participatory method to develop the LAP, and perhaps a new agricultural policy, and to include the ULSG members in the process. The LAP will both build on already existing policy, existing action plans within the ULSG, and address a future agricultural policy for Oslo.

Already existing policies touching into the field of sustainable food are:

- Urban Ecology Programme 2011-2026
- Action Plan for the Cities of the Future Oslo 2010-2014
- Action Plan for Environment and Climate 2012-2015
- Green Plan 1993 (revised edition currently in political treatment)
- The Municipal Master Plan 2008-2025

Possible further development in the area of urban organic farming: a centre for urban organic farming may partly contribute to fulfilling different goals and measures in the Urban Ecology Program (2011-2026):

- Purchase and sale of property to contribute to sustainable urban ecology. Buying property should be used as a means of achieving the goals of continuous green structures, allotments and school gardens, opening waterways and ensuring public access to the shoreline.
- Secure spaces for school gardens and allotments.
- Oslo shall work for a better environment and a reduced ecological footprint in partnership with the government, NGOs and the private sector.
- Creation of an environmental information centre in Oslo is investigated, in cooperation with voluntary / private, municipal, and government agencies who are interested.

Trailer garden – Transition Towns



Transition Towns Sagene planted vegetables, herbs and flowers in a trailer and parked in public parking spaces summer 2012. They did this to show that there is a great need for allotments in Oslo, and that the car gets too much space in the city. A very visible project which gave them quite some publicity.

Initial focus of the Local Action Plan (LAP)

Oslo is very serious about developing a local action plan for sustainable food in Oslo. The topic of urban agriculture is receiving a lot of attention politically and ambitions are high. The City is very pleased to have the County Governors Agricultural Office represented in the ULSG and look forward to

National policy:

- In its policy statement from the 7th October 2009, "Soria Moria II Declaration," it stated objectives for organic production and consumption of organic agricultural products. It is a goal that 15% of food production and consumption in 2020 will be organic.

(A future agricultural policy for Oslo will build on existing national policies)

Approach and composition of the Local Support Group

Oslo was the last partner to join to the project in September 2012. However, the city has been able to arrange an information meeting when the lead expert was in Oslo 8.-9.October. Oslo has a large group of stakeholders to choose from when composing the local support group and it is not yet clear how to choose and create a well-functioning and productive local support group. However, a preliminary local support group met for the first time in October to receive and give information about URBACT Sustainable Food in Urban Communities. There would have been more stakeholders present, had it not been for the size of the meeting room available.

The timing for URBACT SFUC could not be better. Oslo has just seen the growing season of 2012 full of new initiatives and a new trend about DIY food growing. The media is writing about it, the politicians are talking about it, and the even designer shops are selling equipment for creative home gardens. In Norway in general, people are starting to become more aware about healthy eating, criticizing industrial food and looking at food traditions and a stronger food culture as a part of this movement.

The preliminary local support group who met on the 8th of October was:

- Representative for green mapping project, Agency for urban environment
- Project manager for food waste recycling factory, Waste-to-energy agency
- Project coordinator, Gaia Agenda/MAJOBBO (Food and soil where you live)
- Manager, Splint AS/MAJOBBO
- Project manager, Geitmyra culinary centre for children
- Chief of school gardens, The Education Agency
- Communications manager, Matvett AS (Reduction of food waste)

- Department for agriculture, County Governor of Oslo and Akershus
- Bogstad organic educational farm, Agency for urban environment
- Green garden committee, Sogn garden colony
- International office, City of Oslo
- Representatives from the Cities of the future project, Agency for urban environment
- Director for Department for climate and environment, Agency for urban environment
- Arts project manager, Bjørvika property development
- Oslo region organic gardeners



City profile for Ourense



Main characteristics of the town

Ourense is a medium-sized city in the Northwest of Spain, next to Portugal's borders. It is located in the confluence of rivers Miño and Barbaña. The urbanised high density downtown is surrounded by a peri-urban zone plenty of forest areas. Natural city borderline are mountains covered by chestnut trees, pines and eucalyptus. Those lands are currently not exploited.

The city is the district capital and the third one of Galicia Region. It holds 32,41% of all district population. Because of its location, it is the natural communication path between Galicia and the rest of Spain. This situation is expected to be reinforced when high speed train development works in connection with Spain Capital will be finished. Most remarkable and economic potential in Ourense is its thermals. With more than 5 million liters water running from several hot springs, Ourense has turned to be the second city of Europe in quantity of thermal water.

The 108.002 inhabitants of the city are part of a mainly elderly population with a middle age of 44 years old: "under 15" are 12,75%, "16-64" are about 64,9% and "more than 65" are 22,3% of the population. Ourense holds almost 42.000 dwellings, 18% of them are single-family houses (7.585). A 33% of population (13.838 dwellings) has terrace, yard, patio, garden or allotment. 25,48% of population comply about not having good access to leisure areas (open and closed ones). On population distribution, it can be noticed that 6,5% of population lives in peri-urban fringe.

78% of the working population work in services. One of the most significant data about Ourense is its unemployment rate, which reaches 36% on total and 53% on youth. Those figures are directly connected with a strong migratory movement. In 2010, Ourense net migration rate was 6,34.

Consequently, Ourense is characterized by a standstill or even negative growth tendency.

Main characteristics in terms of food and sustainability

The food project in Ourense started in January 2011. Traditionally, the city use to have a strong culture in growing food with a majority of farmers. After war with the raise of tertiary, working population has turned to be townsmen and agriculture activity has progressively decreased. Nevertheless, land is still there and hopefully has kept all its quality thank to non-polluted activities in the territory.

Ourense total amount of local businesses food processing industries (including beverages) means 1,1%, distribution business make 3,2% and restaurant/food-industry activity means 9%. Working population charged with food production (agriculture, stock breeding) mean less than 1% of total active population.

Growing...

The major issues of "growing" topic are, on the one hand, dealing with the big uncontrollable fires on abandoned lands, and on the other hand promoting a dynamic local food supply that could create new kind of employment opportunities and maintain a strong local food culture.

9% of Ourense territories is legally reserved for agricultural uses but there is not big farming facilities location. Indeed, pieces of land are disseminated in the city. Common growing places are private household small gardens and allotments with an average surface 1,5 ha and mainly located in Ourense peri-urban fringe: Seixalbo, Santa Cruz de Arrabaldo, Beiro, Castro de Beiro, Ceboliño, Cudeiro, Santa Mariña do Monte, Montealegre, Palmés, Rairo, Reza, Trasalba, Untes, Velle, Vilar de Astrés, Vista Fermosa, Canedo.

2000 m² of urban public garden are allotments cultivated by Ourense neighbours. Many other actors are involved in growing food as farmers, cooperative farming workers and household farmers.

Recovering traditional style and food production in Seixalbo ...



Since 2009 the city council is supporting a patrimonial rehabilitation of houses in Seixalbo, a 780 inhabitant's village in Est Ourense peri urban area. This place is well known for its dynamic social life also connected with traditional food culture. Most of the dweller families own allotments. The idea of recreate a local air market on one of the village squares may be an occasion of linking local hobby farmers and professional producers with consumers coming from the city centre.

One of the main issues of promoting local food is to renew the images of agriculture that is currently seen as laborious and hard job. At University of Vigo, the existence of curriculums in food sector is a way to attract new kind of producers and maybe change the people perception on agricultural matters.

University of Vigo Science Faculty Research Groups...



Currently, University is building on cross-fertilization between 3 curriculums of Food Science & Technology, Agricultural Engineering and Environmental Science. The 300 students are likely to take active part in the Ourense food project by working on local food system and be vector of sensitization.

Another action is to enable inhabitants to grow food in their territory. An early education training in public allotments may have an effect of reconnecting people with the pleasure to cultivate and reap self-production.

Urban vegetable plots for citizens...



City Council has developed a pilot project on urban vegetable gardens: an area of 2.000m² where citizens are welcome to farm their own horticulture products. A little portion of these allotments are reserved to primary schools, where kids develop several educational projects.

Delivering...

Most of the food delivering is made with transport by road. Even if there is no figures about it, a larger part of the population buy his food in the numerous supermarkets and the two malls of the city. Local food supply chain is not currently effective. Nevertheless, there is a potential for development with the 2 traditional markets in historic centre and in Ponte areas with its 110 retailers that procure 210 jobs. Those are planned to be completely restructured and modernized. Even if the majority of sellers and consumers are more than 50 years old, it seems that a renew kind of young people come to get their food in week end time.

Moreover, two food purchase groups are actively connecting farmers and consumers. Semente CO-OPS is composed by more than 30 people on a buying commitment with around 8 producers from neighbor rural areas. "CO-Ops Auriense", got a buying commitment with an established ecological cooperative with 5 associated producers and 6 collaborators joining their purchases in order to decrease transportation costs.

Some small retailers are still selling food in the city centre. With the development of a local food procurement, the "delivering" could become a way to recreate jobs around food.

Ourense and Canedo Central Market refurbishment...



The city council is focused on the rehabilitation of the two traditional markets in order to make integrated projects and promote local vegetables and food production. The new markets will include facilities as complementary supermarket, parking and new bases for developing social life as bars, restaurants, meeting points. Currently, consumers can have free public transport access if coming to shop at the local markets.

Enjoying...

Ourense, as part of Galician culture, holds an important tradition related to food and cook. People are proud of having an “Atlantic diet”, different from what is used to associate to Spain (“Mediterranean diet”), based on quality raw ingredients (mainly fresh horticulture) and pork meat: a homemade low elaborated cooking. There are also some identity and distinctive local specialties (products and dishes) as chestnuts, octopus, as well as a well-known and highly valuable wine production. Within this cultural context, gastronomy is a highly valued and beloved element in the city: Ourense hold a wide range of restaurants and catering services and people commonly make use of them, most of time linked to social activities (i.e. celebrations). Tourism assessments had shown gastronomy is the visitants' second most valuable item within the city.

Sabores de Ourense...



“Sabores de Ourense” took place twice a year, two weeks in Autumn and two weeks in Spring since 4 years. Restaurants, pubs and taverns are invited to create small dishes (“tapas”) on a topic proposed, usually the use of local and seasonal raw products, to enter a sort of popularity and quality contest. Several prize categories are awarded regarding public vote, professional jury, press jury, etc... With around 6.000 votes and around 40 businesses involved, this event is quite popular among neighbours and is also a tourist attraction.

The municipality has developed a special communication events program to raise awareness on the rich food local context and potentialities. The cooperation with active organisations shows a will to create a share dynamic around food topic.

Ourense VI Agroecological Week...



Since 2005, several local civic associations (ecologic NGOs, cultural associations, etc) have joined forces in order to organize one-week event on ecological and sustainable agriculture. Several issues are addressed in an extent program of activities: ecological seeds bank exchange, panels, round tables, excursions to agroecological farms...

Opportunities and challenges for the development of sustainable food

Sustainable Food Lab at the market...

One of the most innovative projects promoted by Ourense Municipality is to implement a 'Local Unit of Food and Nutrition' in collaboration Ourense University's curriculums in Food Science & Technology, Agricultural Engineering and Environmental Science.

This so-called 'Unit' is not precisely defined yet. It intends to provide quality training, information on healthy and sustainable diets, food's environmental footprint awareness, develop dissemination campaigns, panels and events, produce learning materials oriented to schools teachers, provide potential new farmers eco-friendly agriculture tools and resources, promote a certified label for Ourense products, network with local stakeholders involved in sustainable food, etc.

Market Food Lab...



Hands-on food lab located inside the market and animated by a mix of students may appeal the population passing by with all kinds of animations regarding the promotion of sustainable food. A new cooperation between students from the food sciences, tourism and business curriculums may be efficient to cover the whole topic of supply chain from farm to fork. This initiative could also attract younger people and student families in the market.

A large program would recall activities of a joint public-private research centre. The breakthrough innovation is that the unit is planned to be based in one of the currently empty grocers shop in Ourense central market. The precise location has already been decided (see Market food lab). This strong orientation intends to promote 'hand-on' activities rooted in the daily living of the city, to have students

designing and experimenting new solutions directly with the population passing by... This setting of the food unit point clearly towards form of Sustainable Food Experimentation Lab at the market rather than an academic disconnected from realities. The Market Lab may be confined to niche activities and faced with too much to achieve. But involving the student to engage with the population, prototype and test ideas and solutions directly on the spot at the very node where producers, retailers and consumers interact is for sure a guaranty of intense transversal and pragmatic action-research.

Small scale systemic experimentation...

Ourense's municipality interest in promoting sustainable food has emerged recently but seems to be a strong initiative building on the particular place of food and food production in Galicia in general and for inhabitants of Ourense in particular. Therefore the city shows a slightly different situation compared to most of the other cities in the project: initiatives are currently starting targeting growing food on derelict land in 10 villages around; setting the conditions in each village for some volunteers to start a micro-farming activity; engaging elderly community there in a tasting and advisory food panel; implementing a direct delivery scheme to Ourense's centre and regenerating the traditional central market as a new place to buy and enjoy 'Comete Ourense', the future 'Eat Ourense' label covering and giving visibility to the whole project. This initiative is small scale and achievable: their promoters at the municipality declare with a certain irony: *"we can't afford big projects, therefore we are aiming at changing the mentalities with small scale experimentations"*

The setting of both the *Market Food Lab* and this *Comete Ourense* tentative short food scheme assumes a very promising attitude in terms of territorial development and governance of the municipality based on 2 particular characteristics. The food production, distribution and consumption scheme assumes a systemic dimension. More than isolated initiatives along the sustainable local food chain, an overall strategy is proposed in order to synergize and generate a micro local sustainable food system;

This holistic orientation may be risky as beyond municipalities' skills to catalyse an integrated project, the chances to set an entire new system at ones without failures are limited. This risk is minimized by the fact that all the implementation is small scale (limited number of garden farmers, light production), multiple (10 villages involved in synergy but experimenting in parallel) and experimental (progressive implementation, bottom-up involvement, progressive adjustments).

The combination of small scale, systemic and experimental characters makes these first steps of Ourense Municipality towards the path of sustainable food and despite its limits, a stimulating development to observe.

Villages Project Groups...



The high dynamic village of Seixalbo is the pilot of an experimental project pooling of unused land for market gardening. The organisation of such an innovative project relies on the cooperation between inhabitants that would rent or lend allotments to new farmers of different kinds: urban citizens that want to grow food or need complementary incomes, unemployment people, hobby farmers... In case of success, 10 other villages selected for their food production potential could be involved. The Village Project Groups based on local authorities, neighbourhood, cultural associations and citizens may ensure strong roots in the territory and user participation.

Initial focus of the Local Action Plan (LAP)

As described above the Municipality of Ourense has a rather clear and focused programme of interrelated actions. It is based mainly on short terms small scale actions that intends to be a first step towards raising interest and more appetite to sustainable food in a traditional and food-focused context where the need for sustainable food doesn't emerge spontaneously among stakeholders and within the population.

- Growing: facilitating a land exchange between people who own allotments but does not cultivate them and people who doesn't have lands but are willing to cultivate orchards.
- Setting up a database for land mapping where citizens own their own can register as owners and farmers inspired by the

pilot experience developed online in Spain: www.huertoscompartidos.es.

- A legal contract will be developed by City Council Law Department technicians in order to give technical support and ensure the security of these exchanges. No monetary exchange will be authorized.
- Delivering: City Center Traditional Market of Ourense is named to be one of the core operating bases within the project.
 - implementation in the market of a Local Unit of Food and Nutrition;
 - Transfer of selling vegetables model based on less intermediaries (rianxo) to small villages in the peri-urban fringe;
 - Further development of campaigns to power up this facilities;
- Enjoying: In order to join forces within the City Council, collaboration with the Ourense City Council is under negotiation in order to introduce "Comete Ourense" products in future editions of Ourense Gastronomy Weeks (in Autumn and Spring), a popular food event organized by this department.
 - Creation, during the bi-annual "Sabores de Ourense" food festival of a special prize category under the label "Comete Ourense" awarded to the dish made with these food products.

Approach and composition of the Local Support Group

The first LSG met during the visit was composed of the stakeholders from the pilot village of Seixalbo together with municipality level stakeholders. This workgroups works only for Seixalbo pilot experience but not for the entire project. Therefore, conversation has been established with several actors named to be definitive ULSG:

- Local Authority, LSG Coordinator,
- Member of City Council, LSG Secretary,
- Representative for University of Vigo, Associate Professor,
- Representative for degree students of University of Vigo ,
- 2 Representative from Seixalbo workgroup,
- Member of ecologist NGO Adegá,
- Representative for ecologists movements,
- President of civil, youth and cultural association, Social Agent,
- Member of civic feminist association World March of Women and member of Co-Ops,
- Semente, Social Agent,
- Journalist, Member of Co-Ops Auriense.

City profile for Vaslui



Main characteristics of the town

Vaslui is located in central-east side of the historical region Moldavia, in the north-east region of Romania, at 70 km from the east border of Romania and EU with the Republic of Moldova.

The development of Vaslui started in 1968, when the city became the capital of Vaslui County, the intensive economic, social and cultural development, is evidenced by the evolution of the population: the number of inhabitants has turned from 17960 in 1966 to 73527 in 2002.

92% of the population lives in urban areas in blocks of flats (18,274) and individual houses (2273), the remaining 8% living in the suburbs in 1789 individual houses. As a general aspect, in September 2012, the average income in Vaslui was 1049 RON per capita, which means almost 240 Euros, while the national average income for September was 1530 RON per capita, the equivalent of almost 340 Euros. The share of active labour force in total population represents 55.65%, and 19% of the population is on retirement. 20% of the population attends an educational form of learning, held in one of the 48 public educational facilities.

Most of the population has completed an organized form of public learning (21% university studies, 19% post high school, 48% high school, 10% gymnasium studies).

In the sixties, agriculture was the main activity in the region, but from 1965 to 1985 a sustained industrialization of the city was decided and along with constructions of many industrial production capacities (compound of synthetic fibres, fine mechanics companies, furniture compound, textile and clothing factories, food industries). Thereby, the population that previously was involved in agriculture around the city was attracted to work.

The Revolution of 1989 and the fall of the Ceausescu's regime brought besides democracy, liberty, and market economy, also a series of negative economic effects. The transfer of state property to private led to the closure of several of the heavy industry factories and the dismissal of most of the qualified labour force (which had just been attracted from the agricultural area). The only companies that have survived, were those in the clothing and food industries, on which the properties transfer was made to local investors.

At this point, the branch structure of the industrial production is characterized by the large share of the processing activities. Textile clothing industry is preponderant and it is based on the existing tradition in this area for almost 40 years, but also on cheap labour force (mostly women), which allows companies in this field to work in Lohn system with various Western countries.

The structure is completed by companies operating in the food industry and by those in the construction. The commerce has become the most dynamic sector, rapidly adapting to the market economy and has attracted a part of the active labour force, immediately after industry (3200 people).

The dismissed labour force returned to agriculture, an area where since 1989, the cooperative property (characterized by working large areas of confiscated lands from owners between 1945 -1962, their own production being also confiscated by the state), was returned to former owners and so, the lands divided into small individual households.

After 2007, with entrance in the European Union, part of the active labour force migrated to other European countries (especially Spain, Italy, England), working in the field of agriculture and construction, much of the returned lands remaining unused or worked rudimentary.

Main characteristics in terms of food and sustainability

Growing...

20% of the employees work in food industry, agriculture and food commerce. The 4.000 small agricultural farms registered in the Vaslui Municipality; exploiting an agricultural area of 4,700 ha (70% of the municipality total area) could satisfy the entire demand on the local market for the food supplies needed by the 73.000 consumers with "sustainable" products, even uncertified from an ecologic perspective, provided that these farms produced more than their own needs.

Because of land fragmentation and because of unfavourable social and economic factors, in most

of these farms (small subsistence exploitations) the land is worked barely without any mechanization involved and with no fuel-based agricultural equipment, with no use of fertilizers and synthesis pesticides, growing stimulators and regulators, hormones, antibiotics (as producers do not afford to buy these products), animals and poultry are bred close to a natural habitat (with no use of additives, complementary substances and chemical synthetic substances in their food), while animal products are not processed.

The resulting vegetal and animal products are close to their natural condition, but they are not certified according to the national and the Community legislation as a product of “ecological agriculture” (a protected phrase that EU has attributed to Romania to define this agricultural system, which is similar to phrases such as “organic agriculture” or “biological agriculture” used in other member states).

Even though in 2011 Romania ranked first worldwide by the increase in the number of farmers certified within the ecological system, Romania being a leader in ecological agriculture for the south-eastern part of Europe, at the level of Vaslui Municipality, only 9 farmers are certified in the ecological system.

Small farmers are merely contented with satisfying the needs of their own households, without competing with “industrialized” products. They are not aware of the economic and social benefits resulting from their certification as “ecological farmers”. They do not know the stages that must be followed in the strictly observed process aiming at the sales of products with “ecological” label (the national “AE” seal).

Almost 99% of the population provided with garden is growing vegetables and fruits. When living in flats, they tend to take it from relatives in the rural areas nearby (about 70% of them have this possibility). This tradition of self-production covers a large share of households' need of fresh food.

Self-production private gardeners...



Whatever is the size of the house and socio-economic level of its owner, beyond the garden's gate starts a real private food production with tight plantation of fruit trees, rows of vegetables and lines of grapes, rain water harvesting from all the roofs available, water tanks and some forms of irrigation system to distribute it.

Delivering...

In Vaslui Municipality, there is a strong industry for the processing of vegetal and animal products: dairy processing, milk being collected from agricultural farms in the county (i.e. milk processing, meat (pork, beef and poultry products) and milling products, bread manufacture, processing of bio-diesel and oleaginous pants).

Because of the small productivity and the inconstant production of small farms, no business unit in Vaslui is certified as “bio system processor”.

Familial honey production...



Consbit Srl is an example of small scale non-certified family food production: Mr Tibulca takes care of 200 hives installed in a wood in the outskirt of Vaslui producing about 6 t of honey per year. His

wife is taking care of the packaging unit installed in a house nearby and his sister is taking care of the marketing. The all project has been supported by EU fund and is selling in the region and a bit beyond...

Most of the factories distribute the products through their own district shops. Fruits and vegetables are bought mainly from the market.

Despite this production and processing potential, the vegetables and fruit markets and stores are invaded by "chemically fertilized" products, which are bought because they are cheaper, while the areas especially arranged by the City Hall for the products offered by individual producers remain unoccupied. Supermarkets are being represented by 4 transnational firms (Kaufland, Penny, Lidl and Carrefour).

Traian food market...



The Traian market is a modern building divided in 4 sectors: fruits and vegetables; cheese and dairy; meat; fish. a special place is reserved by the municipality for the local 'producers' and avoid the stalls being all taken over by 'sellers' of less quality products coming from all the country. A food quality control laboratory is also installed in the market and seems to play an important role in the trust of the people.

With a budgetary allocation of almost 4 million Euros, local authorities are building a new market in which the local healthy products will be a priority. The market will be dedicated only for vegetables, fruits and fresh or minimal processed meat and milk products. Places for individual producers being distinctively marked from professionals merchants. Ion Mincu High school trains pupils for working in food chain (i.e. waiters, cooks, farmers etc.)

Enjoying...

Most of the family budget is spent for food. It is customary that the food is prepared in one's own home, dining at the restaurant being occasional. Vaslui population buys more and more local products and starts to believe that they are healthier than any others. The involvement of local authority attracting the local producers to sell in our markets is helping to develop a proper "food culture".

Healthy snacks distribution at school...



Funds are allocated from local and county budget to distribute fresh fruits and quality food products (milk and rolls) in all schools of the municipality. Most of the pupils are eating lunch at home and there are no school canteens. Therefore this initiative aligned with the National Program of Encouraging fruit/vegetables and fresh food consumption intends to raise youth awareness with sustainable and quality food.

There isn't a strategy dedicated to food field. Protecting the environmental capital (field, air, water) and the necessary actions to develop an ecologic agriculture that will use natural fertilizer and traditional seeds, allow nature to take its course and reduce the distance between production and consumers are general objectives comprised in Socio – economic development strategy of Vaslui municipality, approved through Local Council Decision no. 32/2009, strategy that has sustainable development of municipality as a general objective. Actions:

- facilitate the individual producers of traditional products access in the local markets administrated by Vaslui City Hall (not necessary ecological certified products)
- promoting traditional or ecological local products through annual fairs organized in our city, where local or surroundings producers were invited
- stimulating consuming and changing the habits of the cultures used in the rural area of the municipality by inviting – at local events – individual ecological producers from different areas of the country.

Opportunities and challenges for the development of sustainable food

A resilient city?

The conjunction of 3 key factors makes the situation of Vaslui city remarkable in terms of food resilience:

- Vaslui is a middle size town immersed in a still vibrant rural environment. The local agriculture production is more than enough to feed inhabitant of the city and produce even surplus to be sold on the external markets;
- Traditional practices of self-production probably reinforced during the domination of the communist regime result in a population highly engaged with food, growing in its own gardens, producing vegetable and fruits, making its own wine, buying seasonal to make preserves, piling stocks in purposely made storage basements, etc and demonstrating a certain autonomy;
- The economical crisis hitting a population with relatively low incomes combined with a specific land division slow the possibilities of industrialisation of the local agriculture. Mechanization towards large scale intensive is difficult and small local farmers generally can't access unsustainable modern fertilizers.

As a combination of these different phenomenon, the city of Vaslui appears very close to what is commonly depicted as a resilient city demonstrating a capability to feed itself, based on local production and transformation processes that it keep under own control, with gardening, preserving and cooking skills distributed across a population involved in quality food and presumably a relatively high collective capability to resist to external perturbation.

At a turning point...

A young couple met during the visit show a symptomatic profile. Both working in the public administration with relatively reduced incomes they have bought a piece of land with the intention to progressively spare money to build their own house. Do they intend to grow food in their garden then? Spend part of their days off to prepare their own preserve and make their own wine? The declared answer is yes. They are interested in food and would be proud in front of their relatives and in their circles of friends of making their own food products. Contemporaneously the first Carrefour supermarket is about to open in Vaslui and one can legitimately wonder if all youth in Vaslui share the same values and ideal of resilient way of living.

Household resilience...



Mr and Mrs Tinaru, a middle-high class retired couple is certainly not representative of the 3-4000 single family houses with cultivated garden. Their brand new house on a large 8000 sqm piece of land is much above the average line. But their engagement with food seems to be much more symptomatic: they are organized as a real self-production growing food in two on more than half of their plot, experimenting many varieties of grapes and tomatoes, making their wine and piling home made preserves in the summer, storing food in their 'natural fridge' specially made cave and welcoming any visitor with a complete tasting of their production.

Vaslui is certainly at a turning point where it has to decide whether it will strive for economical development, industrialisation of the food sector, production oriented to exportation at European scale, etc or if it will leapfrog the emerging consumption society and leverage on its current assets in terms of food resilience to evolve towards a consolidation and reinforcement of its sustainable food system.

The municipality of Vaslui seems to be aware of this leapfrogging challenge in the way its socio-economic development strategy is formulated. Key issues seems to be:

- to foster transformation of local farming and gardening increasing reasonably the productivity while securing its quality and sustainability;
- to promote fair market access to local quality production whether it is certified or not in particular engaging in the building of food markets and promotion of annual local producers fairs;
- to maintain and enhance the engagement of the population into food by encouraging traditional inclination and raising awareness to ecological production.

New market gardening farmer...



Marius Gorcea has been presented as the most outstanding representatives of the 4,000 farmers registered in Vaslui City. Former driver, he decided a couple years ago to set up a small market gardening business. Supported by EU subsidies for young farmers, he managed to pool 5000 sqm of land from 14 different owners. With barely no prior skills in agriculture he set up a vegetable production with better efficiency compared to family gardening and traditional small farm (i.e. larger land plots, irrigation, limited variety of vegetable matching the demand...) but still keeping the fundamental assets of traditional quality food gardening.

Initial focus of the Local Action Plan (LAP)

The preservation of the earth working tradition, the animal or poultry breeding tradition associated to increased productivity and competitiveness of local products – made by processes and techniques that may be defined as sustainable, may lead to the social-economic development of the municipality, increased prosperity and improved sustainable way of living for the citizens of Vaslui municipality. The strengths of Vaslui's agriculture and food industry, correlated to the opportunities existing on the European market, to the local market of products certified as the result of the barely initiating "ecological agriculture", should lead to the development of new economic activities and, implicitly, to the creation of new jobs to counterbalance the rather high unemployment rate especially in Vaslui agriculture where only 300 employees being registered.

The first and currently main intention of the LAP is to focus on the following areas:

- Develop a set of mechanisms to encourage small farms to increase their production capacity

and competitiveness within the respect of sustainability (i.e. facilitating land use evolution, pooling small lots into larger ones, counselling and training services meeting farmers' needs of restructuring and improving their agricultural performance; information and training regarding the opportunities and economic benefits of ecological agriculture and of their certification within the "bio" system).

- Development of a permanent communication platform for specialists, producers, processors, traders and other interested actors in the field of food ecological products production and trading, aiming at the promotion and direct connection between offer and demand for traditional, ecological and natural food products.
- Development of promotion, information and training campaigns regarding the concept of ecological agriculture aiming to raise consumers' awareness regarding the benefits of the ecological products consumption (in particular to overcome the higher prices for "clean products", whose quality is guaranteed by an inspection and certification system).
- Promote establishment of units certified for the processing of "ecological" raw materials in order to get higher economical value with trading of certified transformed products instead of raw agricultural products.
- Strengthen the education of youth toward ecological agriculture and food transformation sector.
- Reinforce the respect for family agriculture and support its strengthening and development as a desirable lifestyles for youths in order to consolidate household contribution to local food resilience and welfare in the municipality;
- Actions must be developed to generate local distribution channels for the facilitation of consumer's direct access to small farmers' products and the support of local markets.
- Education of citizens (especially of the young generation), aiming at the appreciation and purchase of food made of traditional, ecological agricultural products resulting from agricultural cultures, animal breeding or energy-saving processing industries, which do not use chemical fertilization or additives, preservatives or aroma additives.

Approach and composition of the Local Support Group

The first meeting of the LSG in the occasion of the LE visit brought together about 15 stakeholders with an interesting mix of representatives of different local public authorities departments, local research and academia, business organizations and also local entrepreneurs such as innovative local farmer and small food transformation business. Other representatives of small business and big business, existing social enterprises, sustainable food related not-for-profit groups, user communities should join the LSG. It is to be noted that for the first meeting of the LSG in presence of one of the Vice-Mayors, the local press and local TV was present to report about Vaslui participation to the URBACT Thematic Network.

The first and currently participants to the URBACT LSG are:

- Elected representatives from Vaslui City Hall (Mayor or Vice-Mayor and Councillor);
- Municipality Markets, Fairs and Cattle Market Direction;
- Municipality Agriculture, Patrimony Direction;
- Municipality Commercial Direction;
- Local Agency for Energy Efficiency and Environment Vaslui;
- Chamber of Commerce, Industry and Agriculture Vaslui;
- Representatives of the small farmers registered in Vaslui City;
- "Movila lui Burcel" Local Action Group:
 - 48 signers of the establishing act:
 - 16 local councils (of municipalities (villages) nearby Vaslui)
 - 10 NGO (non-governmental organizations, of which 6 growing animals associations, 2 cultural associations, one environmental civic association, and a religious organization)
 - 20 private companies having activities in agriculture, forest exploitation, production, services, commerce, etc.
 - 2 individual farmers
 - Its main purpose is social and economic development of the member-communities.

"Ion Mincu" High School (agriculture and food transformation education);

Synthesis of the state of the art

European context for 'Food sustainable Consumption and Production'

The European Commission is about to propose a communication on sustainable food (2013) in order to make the entire food supply chain more sustainable and follow up on the resource-efficiency roadmap (2011). Core stakeholders have already been involved in a "European Food sustainable Consumption and Production round table" to take a harmonised, life cycle approach and facilitate an open and results-driven dialogue among all players along the food chain (www.food-scp.eu).

At present, food represents 30% of the global greenhouse gas emissions from its way of production to the final waste. To address environmental issues, it is all the entire food supply chain that needs to change: from the large amount of resources needed by the growing process (petrol, fertilizer, water...) of crops and livestock to the huge waste of food. About 50% of total food produced go to the waste disposal. Households, retailers, caterers and consumers are responsible for the wastage and it seems that consumers have never been so unaware of food value. Almost a century ago, there was a dreadful fear of famines while nowadays edible food is thrown away. Food waste has to be landfilled or incinerated at very high costs. Waste treatment also leads to greenhouses gas emissions.

This expendable resource approach will not fit a situation where resources are constrained. The 3rd Standing Committee on Agricultural Research (SCAR) Foresight Exercise (February 2011) showed how difficult it will be to fulfil all needs in the low carbon society to come. European citizens will have to find ways to change both production and consumption patterns. This core report mentions the fact that many European people are no longer aware of how and where food is grown. Indeed, 73% of European people live in cities quite far from production realities even if geographically close. Many children have never seen a farm and think that food only comes from the supermarket. In its path towards independence and food security, modern society has forgotten to keep a link with reality: food is a condition for life and not only a lifestyle.

The other main incentive to focus on the food supply chain is the present awareness about the food industry's autonomy. Even if Europe is a main food world producer, the process is in the hands of the food industry and the private sector at an international level. Confronted by shocks linked to price volatility or peak oil, how will nations feed their people? How could city authorities react to such events? Indeed there is a need to question "food" as a political subject for all levels of public authorities.

What could be a local food policy towards a resilient local food system?

When FAO mentions 'food security', it no longer focuses only on cities in developing countries but also in developed countries. The city of New York was primarily involved in food policy in response to obesity increasing rate and health conditions. It has now developed a whole strategy to understand how food is managed in the city. San Francisco and Barcelona have also a kind of traditional food policy and created a food strategy for urban planning through green belt preservation.

Indeed, cities have many reasons to focus on the food topic, notably because they have to deal with the food supply chain consequences such as unhealthy consumption that harm public health. They are concerned with the amount of food waste to collect and treat, food education in school canteens, food miles and greenhouse gas emissions on their territory... But the most relevant reason could be to maintain some independency or sovereignty about food. According to the FAO, it could be impossible to ensure food security without the food industry's intervention and supermarket delivery systems. Nevertheless, recreating local food supply chains could have benefits to answer some main issues about sustainable development: reconnection between consumers and producers that enhances a possibility to revalue food production and reduce waste, reallocation of abandoned lands for agricultural activities, development of new businesses around food...

Such ambitions need to rely on solid tools to help cities organise the creation of a global vision of the local food system.

New concept and tools for a local food policy

Some tools already exist that demonstrate a global view of a food system at a city scale. The concept of urban rural continuum developed by the FAO insists on the current disconnection between rural spaces and

urban spaces. This disconnection is not only a geographical issue (transport links are quite efficient to ensure connections) but also a symbolic one. Traditional links between cities and the countryside used to rely on a form of good dependence: the country side brought foodstuffs and cities were places to exchange or find some specific products. With the increase of intermediaries in the food system, farmers sell the major part of their production to companies from the food industry and no longer to consumers directly in town. The products can travel long distances for food processing to sometimes return very near to their original started point. This long road travelled is expensive in transports costs but also creates GHG emissions. The presence of supermarkets in towns as well as in the country side have disorganised the relationship between country side and city. The FAO calls for a new linkage between them. An effective urban rural continuum could partly solve the question of dependency and reduce in a major way environmental impacts of the food chain. This could be a first step towards local food resilience.

With this objective in mind, Veil lab from Melbourne in Australia has developed a global tool called "Food Sensitive Urban Planning". This new approach allows considering urban spaces starting from food issues. How to create agricultural spaces in towns or in periurban areas? How to deliver food fairly and properly to consumers? How to create spaces to enjoy food in a convivial way and give people good living conditions?

Those questions find answers with the help of urban planners, sociologists, architects... The mix of views is particularly adapted to address the transversal food issue. Nearly each Department of a city authority could be involved in re-thinking a new local food system.

Synthesis of the city profiles, converging points, expectations and contributions

Visits of an average of one and half day have been organized to the 10 partner cities. A specific questionnaire was sent in advance to each city coordinator and returned to the Lead expert in order to prepare and make most of the visit. A program of the visit was also agreed upon in advance to make most of the time available in the city. In particular the program focused on site visits (eight to ten cases emblematic of sustainable food in an urban context), an initial meeting of the forming Local Support Group and a meeting with public authorities responsible for the engagement of the city in the URBACT project. Lunch and dinner times were often used as an opportunity to visit specific food-related cases and meet more stakeholders informally. Some cities spontaneously leveraged on the initial visit of the Lead expert to communicate their new involvement in the URBACT Thematic Network through internal media (municipality website and newsletters) and to the local press (4 articles published in local newspapers and 2 interviews of Lead expert by local TV).

In short, the ten visits allowed building a first catalogue of 98 cases of best practices of sustainable food in an urban context (a light exhibition of the best practices case was made by the city partners during the first enlarged network meeting at the end of the Preparation Phase in Bristol). Site visits, informal interviews and presentations during Local Support Group meetings allowed the Lead expert to engage in more than 250 different face-to-face discussions with local stakeholders involved in sustainable food and build a good understanding of the current developments of the topic in the 10 cities.

A varied panorama of cities and populations...

The network offers a good coverage of varied situations regarding the involvement of cities towards a more sustainable local food system on the one hand and the engagement of the urban communities in achieving this system on the other hand.

Territorial contexts...

The partner cities are distributed from extreme West to extreme East of the European territory. They also cover latitudes from South in Italy, Greece, Rumania and Spain till Nordic part of Europe with large difference in climate influence of agriculture.

They range from medium size cities with a population between 70 000 to 250 000 including Vaslui in the East of Rumania, Ourense in Galicia region of Spain, Amersfoort in the periphery of Amsterdam in the Netherlands and Messina right on the strait between Sicilia and Italy.

Then come a group of medium-large cities with population ranging from 400 000 to 1 100 000 including Bristol in the West of UK, Gothenburg on the Sweden Baltic coast, Oslo in the South of Norway, Athens, the capital city of Greece, Brussels-Capital Region in Belgium and Lyon in the centre-East of France.

Beyond the size and demography the nature of urban fabrics of the partners cities and the regional context in which they are inserted plays an important role in our subject. Athens or Lyon are a very dense and mineral city whereas cities like Oslo, Gothenburg or Brussels present a more loose urban fabric leaving more opportunities for food production at periphery.

The direct peri-urban areas may be characterized by a very populated urban sprawl especially for the biggest cities like Lyon, Athens, Brussels or Amersfoort in comparison with very rural outskirts like for Ourense, Vaslui or Messina.

Finally the regional context is well-known for having a rich agriculture like Galicia for Ourense or Rhone-Alpe for Lyon in comparison with Attika region around Athens or with the regions around Oslo or Gothenburg.

It is to be noted also that some of the cities are important port with a fishing tradition influencing the diet in Messina, Gothenburg, Oslo, Athens and till certain extend Bristol and Ourense when Lyon, Vaslui and Brussels are based in the hinterland.

Food cultures...

Beyond the territory and land context, a striking difference emerges in the food culture resulting in large disparity in terms of resilience, environmental impact and CO2 emissions relating to food in the different partner cities. Italy, Greece France and Spain are world-known for their respective gastronomies: Messina, Athens, Lyon and also Ourense demonstrate what has been spontaneously called by the other cities of the network a strong food culture. Whereas countries like Norway, UK or Netherlands suffer from a weaker food culture that dissolved quickly into the push of low-quality food brought by modern agro-industry.

The challenge for Oslo, Bristol or Amersfoort belonging to the latter group is to recover from this situation and the topic of sustainable food is seen as an opportunity to build or rebuild a food culture. For Messina, Athens and till a certain extend Lyon, Ourense and Vaslui, the challenge is opposite: they still have a strong food capital and they strive to avoid its on-going erosion. Sustainable food is then seen as a leapfrogging opportunity to pass from a still vibrant traditional food culture to a sustainable one without passing to an intermediate stage of industrial consumption.

The posture of the population in front of food reflects this polarization: cities with strong food culture demonstrate a population that is strongly rooted and engaged with food. This traditional and diffused engagement is robust but signs of erosion are clearly visible in particular in the food habits of the new generations in Messina, Athens, Vaslui and these cities tends to demonstrate a certain blindness to the risk of this evolving situation.

The cities lacking of a strong food culture shows generally a very dynamic and colourful communities of food activists. In Amersfoort, Oslo, Bristol, Gothenburg and also Brussels and Lyon that shows both patterns, food activists multiply initiatives from urban gardening to food festivals. These so-called 'foodies' represents a minority. They often high visibility tends to hide a mainstream population rather disengaged with food and not necessarily sensitive to the food community arena.

A general reclaiming food movement...

Despites the rich variety in territorial and cultural differences described above, the network of cities shows strong elements of convergence for what regards the theme of sustainable food for urban communities.

Food resilience as an issue

First of all the theme appears clearly as an issue for all the participating cities and a deep concern to reach a more resource and carbon efficient food system. Some as Bristol, Brussels, Amersfoort or Lyon, Gothenburg or Oslo have already demonstrated interest at both citizens and political levels. But also for newcomers, joining this URBACT Thematic Network appears as an opportunity catalysing a mix of latent requests ranging from defending traditional gastronomy, reducing food-related health diseases to increasing city resilience or reducing its carbon footprint.

Crisis as threat and opportunity

The generalised economic crisis generates precariousness in access to food for an increasing number of families across the cities of the network. This is blatantly obvious in cities hit by the crisis like Athens, high unemployment rates as in Ourense or Messina or among a significant part of the population living in poverty like Bristol or Brussels. Other factors such as fast population growth also affect richer cities like Oslo. Sustainable food then seems an even less attainable goal and a low political priority when even cheaper low quality industrial food becomes difficult to afford for underprivileged population groups. The reality of food poverty is clearly highly sensitive but the cities of the network also see some opportunities that are linked to any crisis. Transition towards sustainable food reveals many synergies with the revitalisation of the socio-economic fabric. Cases in Bristol such as the “Feeding Bristol” local community growing project or reengagement in cooking activities supported by the “Hartcliffe Health & Environment Action Group” provide direct benefits in kind to the families with decreasing purchasing power. Labour intensive food production activities especially in urban contexts present for Brussels, Ourense or Athens a potential of job opportunities and the emergence of new entrepreneurship.

Creative activism and resisting traditions

A 'reclaiming food' bottom-up movement is strongly emerging opposed to previous decades where food was perceived in terms of service, convenience, innovation and modernity. According to food cultural background describe above, this diffuse reclaiming food requests assume different forms: a creative activism reconnecting with self-growing food, cooking skills, social or symbolic values of eating together and innovating in new forms of delivering, cutting intermediaries, inventing short food networks. At the opposite, we can see in cities with strong food culture forms of resistance to preserve tradition, an attachment to original culinary principles and a diffuse resistance to any changes including towards sustainable concerns.

Transversal push

Another characteristics of the reclaiming food trend is its transversal aspect: it pools together all what is relating to food in each cities mixing often initiatives born with very different motivations. Urban gardening for instance may start as an activity facilitating social inclusion of marginalised population. It may also originate as an art project, an educational initiative, a pretext for socialisation, a production enterprises or a simple recreational hobby. Those different motivations tend to blur and most gardening initiatives are multipurpose. The resulting aggregations made by the transversal nature of the network theme increase the number of initiatives to be found in a determinate city but often bring together heterogeneous initiatives difficult to handle with same supporting policies.

Leveraging on food attractiveness

The population engagement process into sustainable food tends to be based on similar strategies building on this reclaiming food movement and leveraging on engaging dimension of food: quality, tastes, gastronomy, socialisation, pleasure... This indirect strategy is working quite well: Initiatives of from community gardening to food festivals and from farmer seasonal markets to cooking schools tends to pop-up everywhere. It raises interest in food first in order to focus on sustainability. The limit of this strategy is that many initiatives reach an involvement in food but not necessarily in sustainable food. In other words, many promising food initiatives as listed before may also stay happy and enthusiastic moments of socialisation and gastronomy events that hardly influences the population food practices and in particular, the reduction of its environmental impacts.

Up-scaling niches

The last common aspect to be underlined is that most of the initiatives considered in the different cities are at a niche stage and strive to upscale. Promising solutions emerged both in terms of sustainable food and of potential new business models. The challenge is now to screen the most promising ones, generate viable enterprises, bring them to a regime level in order to both provide sustainable food to larger share of the urban population and to generate employment opportunities.

Screening promising initiatives...

Partner cities show a panorama of initiatives ranging from micro-actions to more structural projects or policy changes. The most colourful and visible ones such as food-art happenings or large popular food-oriented gatherings are not necessarily significant in terms of local transition towards sustainable food. Reciprocally, important on-going transformations based on sustainable procurement in school canteens or redynamisation of a market gardening city-belt may have less visibility and raise less popular attractiveness but have greater impact at the end.

Estimate social involvement

Most of the initiatives considered have a systemic nature: a community garden generally combines multiple direct effects (i.e. diffusing growing skills among the population; sample production of vegetables...) and generates indirect effects (i.e. reconnection with the use of fresh ingredients; revitalisation of the neighbourhood life...). It is therefore difficult to estimate the importance of each single initiative for the multiplication factor of combined direct and indirect effects. Some of the visited project introduced spontaneously a simple assessment scale trying to estimate how many people are touched by the initiative.

GHG emissions and resource efficiency

Initiatives promoting food witnessed in the different cities have a great value to reengage the population with food and this is already very important to generate an interest in food prior to introduce sustainability concerns on the one hand. On the other hand and as already mentioned earlier in the text, a reengagement in food is necessary but not sufficient to ensure that focused initiatives are promising in terms of sustainability. Reduction of GHG emission and improvement of resource efficiency has to be considered for each of the emerging solutions to be part of the new local food system in each city. Progresses on sustainability indicators are necessary across the network in order to classify best practices in terms of sustainable food, give priority on the most promising one and reorient the others.

For instance, in Brussels half of the meals taken in canteens are provided by the private catering company Sodexo. In response to Brussels Environment's will to improve environmental performances, the company is fine-tuning an eco-calculator that indicates the meal's carbon footprint.

Governance of the local sustainable food system

Partner cities welcome the topic of sustainable food recognising it is a critical issue in future urban contexts. The transversal nature of this subject is challenging most of the municipalities' infrastructures. Food was dealt with before at higher national or regional levels. Its approach at city levels tends to pool together sectors that did not particularly interact before. Lyon and Gothenburg in particular underlined how the sustainable food topics requires bringing together land use issues with the department of urban planning and the department in charge of parks and gardens, environmental impact assessment with the department of environment, low incomes, population mitigation and department dealing with social inclusion, entrepreneurship and job creation and the department of economics etc.

Generating synergies

The 'reclaiming food' movement generates many and heterogeneous initiatives, often isolated one from another and developing informally without any overall strategy. The challenge for the partner cities is then to keep the momentum, to create links between these initiatives. Such micro-projects may stay independent niches if they do not synergize. Isolated food-related initiatives can be compared to acupuncture needles stimulating specific points of the territory. If well chosen so that they link together, cross-fertilize and reinforce each other, these points may generate a systemic effect that go beyond a series of localised benefits - a systemic transformative effect on the territory and generate the emergence of a local food system.

Governance postures

The postures adopted by the municipalities in the different partner cities in order to stimulate and generate these systems of food initiatives show also very important differences. In most of the cases public authorities consider they should initiate and lead public participation. In Athens for instance, the Eleonas' urban farm is born as a top-down project decided at a political level that is subsequently seeking engagement of the local

population to take part to growing activities. Ourense also shows a strong development policy involving 10 surrounding villages in a collaborative market gardening project. Afterwards, municipalities tend to monitor and control the projects they initiated as in the case of Lyon that achieved the stage of 30 community gardens and decided to slow down new creation in order to monitor as in an incubator if the community gardens evolve towards a financial and management autonomy. Bristol tends to adopt a more loose posture watching the many food initiatives emerging in the city, comparing the social entrepreneurship business model behind them and their capabilities to grow and disseminate autonomously and with less public or private subsidies in this period of budgetary shortage. At the opposite extreme from Athens, Amersfoort shows a situation where the lead is left in the hands of the local food community and the public administration is adopting essentially a back-up governance posture especially removing barriers – mainly on legislative issues – that prevent the grassroots movements to develop.

Platforms and experimentations

Beyond this main polarisation between top-down initiatives driven by public administration and bottom-up movements where the public administration adopts a back-up posture, some cities show specific and innovative governance features.

Bristol established an informal policy platform: the Bristol Food Policy Council is not an official administrative body of the municipality but it acts as such. A dozen of representatives of local food stakeholders including small and large businesses, non-profit organisations, academics and public authorities regularly meet, discuss food-related issues and problems and work as a think tank and an advisory panel for local governance.

Ourense shows a series of initiatives right in line with current debate on the right of experimentation of public authorities. The main starting initiative of the municipality is an articulated project involving stimulation of market gardening in surrounding villages combined with a direct delivery scheme and the refurbishment of the historical central market. The whole project works as a small-scale experimentation testing both different relatively independent initiatives and their integration through a strategy brought by the municipality.

Resulting themes and crosscutting issues

The URBACT Thematic Network “Sustainable food for urban communities”, composed by 10 European cities intends to show how cities can create a coherent food policy that would take into account environmental, social and economic issues at their level of action.

Organization in 3 themes

In line with the concept of rural-urban continuum presented in the State of the Art, three themes have been selected to organize the multiple vibrant and heterogeneous initiatives of cities along a local sustainable food supply chain: “Growing”, “Delivering” and “Enjoying”. These themes have strong links with each other and are related with the capacity to act and with the various competences of the cities and partners. This generic focus allows the creation of a framework in which every city can express its own strategy.

Growing

The theme of Growing explores all possible ways to grow food near or in the city. It includes: fostering sustainable agricultural growth in urban and periurban areas thanks to urban planning strategies; the use of derelict lands; safeguarding and improving the fertility of lands; developing new technologies that do not need so much land to grow; encouraging decentralised individual, community and commercial fruit and vegetable gardens & food production; encouraging households and citizen 'organisations' to grow food in the city, in gardens, in parks, on public and private green spaces, on rooftops, on balconies...

Delivering

The theme of Delivering explores ways to distribute, share and procure local food inside the city. It includes more sustainable and less carbon intensive delivery systems giving efficient opportunities to local production; enabling direct links between supply and demand for sustainable food; facilitating the transition of existing distribution market actors towards greater sustainability and lower carbon intensity; stimulating the

emergence of new ones (e.g. food businesses, retail...) and other local initiatives (e.g. markets, purchasing groups, networks, transparency in food chain...)

Enjoying

The theme of Enjoying explores how people in the city can embrace a sustainable, happy, healthy and vibrant food culture in canteens and households. It includes increasing the demand for sustainable food (e.g. local products, without pesticides, seasonal and fresh products...) and encouraging sustainable practices (e.g. food storage, preparation, avoiding waste...) by supporting changes in perceptions, attitudes and behaviours of canteens and final consumers and by involving urban consumer groups not previously reached or aware and adapting the approaches to their specificities (e.g. low-income households, single person households, different food cultures, young families lacking cooking skills...).

Crosscutting issues

The transversal overview of the main lessons learned during the visits of the 10 partner cities reveals 4 main recurrent concerns that will be put forward as 4 key crosscutting questions. They will systematically be considered in the network's discussions and deliverables for each theme:

Synergies, governance & local system:

How can we link multiple promising food practices, develop synergies, increase resilience and generate the vision of a coherent local food system?

Jobs & business models:

How can we consolidate promising food practices, transform them into sustainable businesses and upscale sustainable food initiatives to reach a larger share of the population?

CO2 & resources efficiency:

How can we check and improve promising food practices in order to reduce emissions and impact on resources and energy?

Social inclusion:

How can we leverage on sustainable food transition to reduce food poverty, foster (re)engagement with growing and cooking food, support inclusion of marginalised and underprivileged population groups and enhance cohesion between communities?

Transnational and local levels

At transnational level

Major reasons to take part to this URBACT Thematic Network emerged from discussions with the forming group of local stakeholders in each city and from the interactions between cities' requests and assets on sustainable food.

Transfer experiences

First of all, cities will reciprocally benefit from the experience of the other cities in developing particular actions such as public procurement to promote sustainable food both from the demand and the supply sides. This is for instance an area where Brussels, Gothenburg or Vaslui could transfer part of their know-how to Athens, Bristol, Oslo and Amersfoort. In the same way the experience of Lyon with a municipal Fair and Sustainable City Label and of Bristol with its Good Food Charter will strongly benefit other cities for instance the Eating Ourense label, the Messina Region food label or the Greek Cooking label for Athens.

Implement ideas

Beyond possible exchanges of experiences between cities (see exhaustive presentation of 'gives and gets' hereafter) the transnational URBACT exchanges will allow to transfer inspiration and innovative ideas that

pop-up in one city and may be implemented right away in many others within and beyond the network. To pick up one out of many as an example: reducing food waste is a critical concern in particular for school canteens where kids show often a narrow food spectrum and are reluctant to finish their plate. A pro-active canteen chef in Lindåsskolan a primary and secondary school in Gothenburg invented the tasting spoon: tea spoons available on the self-service food line allow kids to taste the food before they help themselves thus reducing food waste for dislikes or excessive quantities taken. This and many such tiny but significant social innovations could easily be adapted to school canteens of the network and beyond.

Keep the local momentum

Participation to the URBACT project is also seen as a good way to keep the momentum among the current developing reclaiming food movement. Amersfoort just completed a year of activities and events around “Hoofdstad van de Smaak 2012”, Amersfoort as Capital of Taste of the Netherlands. One of the next challenges of the municipality is to find a new engaging framework to go-on stimulating all the local food-oriented initiatives and the participation to the URBACT network is a good European opportunity to stimulate local dynamics.

Cross fertilize between supporting (re)engagement and avoiding disengagement

Current situations reveal partner cities with an active food community stimulating a population disconnected with food on the one hand, and partner cities with a traditional strong food culture fighting against its erosion on the other hand. The URBACT network offers in particular a very important opportunity of cross-fertilization between both groups of cities. The former group shows a wide range of explicit public policies and social initiatives that could be adapted to the latter group. Reciprocally, the latter group has invented a series of actions of strengthening and revitalising their existing cultural assets that could be transposed to the former group context. Within the Italy-born Slow Food movement a wide variety of food-reclaiming actions evolved, adapted and reinvented with the internationalisation of the movement: for instance and among many good practices, the *Atelier del Gusto* (Taste Workshop) or the *Presidi* (safeguarding action to literally 'rescue' an endangered food species) are both suitable to support the (re)engagement and avoid disengagement with food of populations.

Leverage on existing governance and policy practices

The URBACT network presents a great opportunity to influence reciprocally governance posture and policy practice habits. The very confrontation to a municipality facing similar challenges but taking action in a totally different way shows that alternatives exist and may be efficient even if in a different socio-economical context. Cross-fertilizations in governance cultures concerns for instance the role of public participation: Bristol encourages synergies between public and private funding requested by “growing” initiatives; Amersfoort gives particular attention to removing barriers to food-related social innovations; Lyon provides knowledge and expertise support to the study and management of community garden dynamics.

Embody a vision

One more interesting appetite triggered among partner cities by the participation to the URBACT network is the generation and embodiment of the sustainable food vision. Cities, as seen earlier in the text focus on a series of challenges in terms of food security, access and quality and aim at improving their resilience. Each of the partner cities intends to build a more resilient and sustainable local food system. They each compose their own mix of solutions between local specific challenges, emerging popular initiatives, working policy practices. The constitution of a Local Support Group pools together active forces and the projection into a Local Action Plan envisions progressively how a sustainable food city may look like in the near future. Actually, the focus on a selection of emerging best practices during the Lead Expert visits provided samples of what food resilience might be. For instance, the city of Vaslui is immersed in a still vibrant rural environment with limited access to expansive mechanisation and unsustainable pesticides or fertilizers; traditional practices of self-production were reinforced during the domination of the communist regime and a large part of the population is still highly engaged with food, producing vegetables and fruits, making their own wine, piling stocks in purposely made storage basements, etc. Thus Vaslui may embody for the other cities of the network, one of the possible visions of a resilient sustainable food city.

Complementarities of the network

The 10 partner cities provide a good coverage of the different challenges and opportunities for what regards their common focus on transition towards sustainable food in urban contexts. Their disparities is therefore a great strength for the purpose of the URBACT Thematic Network as most of the requests cities have in terms of acquiring knowledge, transfer experience, learn from good and bad practices can be found among the same group of cities. The enlarged network meeting at the end of Development phase in Bristol was the opportunity to involve the representatives of each cities in a 'market place of gives and gets': interaction sessions successively focusing on the one hand on what each city can give and who may be interested in what it wants to give and, and on the other hand what each city wants to get and from whom what it wants may be available.

We reproduce in the chart below a synthesis of several of the exchanges foreseen by the different cities:

Amersfoort

will provide to the network...

- Development of strong and independent food communities;
- Events/animation of sustainable food in the city and the region;
- Experience in multifunctional farming; food shops at the farm gate;
- Open source urban food map;
- Report on unconscious behavioural change through catering restaurants;
- Inspiration by chefs;
- Public procurement work with caterers to improve sustainable offer ;
- Examples of Community Supported Agriculture;

and will get from network...

- Experience in structuring sustainable food governance;
- Experience in stimulating self-growing initiatives;
- Policies stimulating more regional food production;

Athens

will provide to the network...

- Experience in promoting local and organic farmers markets;
- A vibrant and rich traditional quality food culture;
- Experience in maintaining/strengthening traditional assets (i.e. promoting local gastronomy, food-oriented tourism,);
- Agricultural university knowledge, including on organic growing;
- Examples of online sharing of home cooked meals based on home cooking culture;

and will get from network...

- Supporting Practice in developing urban farming project on waste/available urban land;
- Experience in green procurement for public canteens;
- Experience in direct links between consumers and producers (purchasing groups, farm gate shops, multifunctional farming);
- Experience in developing educational programs at school;
- Development of participation and citizens' engagement in local food projects;
- Experience in implementing and developing a local food label;

Bristol

will provide to the network...

- Experience in governance and policy tools (i.e. Bristol Food Policy Council; Food Charter);
- Practice in engaging local food growing projects and urban gardening;
- Examples of regenerating food culture (i.e. cooking schools; competition of chefs producing planet friendly vegan food)
- Practice in supporting local wholesale market;
- Market studies and strategies, annual quality of life survey asking about food accessibility;

and will get from network...

- Experience in land protection to preserve food production near the city;
- Practice in rebuilding relationships/direct links between farmers and the market,
- Experience in green procurement for public catering;
- Practices of food culture and behaviour change at large scale;
- Capabilities in linking and synergising multiple food-related initiatives into a local sustainable food system;

Brussels

will provide to the network...

- Experience in sustainable canteens / public green procurement;
- Experience in allotment and collective “productive” gardens;
- Practice in supporting/stimulating food activism (food events, gastronomy, cooking, cultural exchanges...);
- Experience in food solidarity purchasing groups;
- Pilot of organic market in university for the students;
- Projects of high productivity sustainable food in urban contexts (pilots in aquaponics & rooftop gardening);

Gothenburg

will provide to the network...

- Practices in educational school gardens;
- Practice in active school canteens (i.e. innovative Chef, pupils engagement);
- Policies for sustainable meals in canteens, low meat / high quality products;
- Experience in behavioural change;

Lyon

will provide to the network...

- Experience in collective gardens and social inclusion;
- Promising practices to give access/engage low incomes population with healthy/quality food (social groceries);
- Practice in collective purchase groups;
- Experience in supporting street markets and pilot of new indoor food co-op market;
- Experience in leveraging on gastronomy and population engagement in food to promote sustainable food;
- Policies oriented towards sustainable development for businesses (i.e. label);
- Competition of inspirational chefs with local products;
- Family food coaching pilot;

Messina

will provide to the network...

- Rich food-oriented culture and values;
- Practices to support and regenerate the population’s interest in food and cooking (University, Secondary School, Slow-food);
- Food production in agricultural school (wine);

and will get from network...

- Experience in innovative rural-urban partnerships; platform of distribution for sustainable food; efficient delivery for urban food production;
- New business models emerging from promising cases;
- Experience in food behaviour changes through formal education/informal training to sustainable food, sustainable food for all, food resilience for families;
- Synergy building to turn single initiative into a local food system;

and will get from network...

- Experiences in public canteens and schools-based sustainable food education;
- Practice in engaging community gardens and food growing projects by the population;
- Development of coherent transversal governance supporting sustainable food;
- Best practices in sustainable food consumption and related knowledge and tools to implement it;

and will get from network...

- Practice in reconnecting underprivileged populations with healthy quality food and vegetable-based diets;
- Development of coherent transversal governance supporting sustainable food (Food Policy Council);
- Actions for sustainable and healthy food towards students;
- Participative digital maps of sustainable food initiatives (Green Maps);
- Knowledge and tools on food impact assessment and measurement method for efficiency of actions;

and will get from network...

- Experience in raising new food production business models (especially with towards young farmers);
- Promising practices in raising population awareness and education on sustainable food;
- Experience in community supported food projects (CSA, AMAP...);
- Governance and practice of participation and citizen engagement;

Oslo

will provide to the network...

- Range of experiences in stimulating community gardening and self-production;
- Experience in educational activities for schools on food growing and cooking (culinary centre for children);
- Experience in food waste campaign in stores;
- Practice of cooperation with big festivals on organic food;
- Green city distribution feasibility study (cutting intermediaries);
- Project of Food & Vegetable wholesale terminal in the city;
- Tool to compare foot print of local and imported food;

Ourense

will provide to the network...

- Regeneration of traditional food markets as sustainable food/restaurants urban centre/landmark;
- Launch of a small scale sustainable food system experimentation;

Vaslui

will provide to the network...

- Diffused food self-production practices and population engagement in food close to a food resilient model;
- Promising practices in local food markets and market gardening.
- Promoting the traditional concept of preparing and preserving food with local products within the family ('home-made')

and will get from network...

- Practice raising population interest and skills in cooking and appreciating good and healthy food;
- Experience in sustainable food public procurement, organic canteens and design of sustainable menus;
- CO2 Labelling of food;

and will get from network...

- Practice in pooling unused land and engaging micro-farming entrepreneurship;
- Experience in short food circuits (CSA, AMAP...);
- Experience in local quality food label;

and will get from network...

- Experience in sustainable periurban food production and short food circuits
- Practices and tools to raise population awareness and interest in sustainable food;
- development of an urban agriculture which can subsequently contribute to employment, young people stabilisation;
- experience in shortening the chain between producers and consumers;

At local level

Robust Local Support Groups

The visit of the Lead expert has been the opportunity to meet each time and without exception the forming Local Support Groups in each cities. What is striking for each city is the already quite robust and consolidated LSG: large tables fully occupied and packed meeting rooms with an average of between 15 to 25 local stakeholders demonstrated both the commitment of cities and of their co-ordinators able to raise interest for the URBACT project and gather such a number of stakeholders often on a very short notice due to summer holidays in the middle of the Development phase.

Beyond the following general remarks, the detail of each forming LSG is presented at the end of each City Profile.

Willingness to take part

The first meeting of the LSG has been an opportunity for many local stakeholders to meet for the first time. Round tables of participants' presentations, reactions to the presentation of the URBACT network and exchanges on expectations clearly reveal interest of local stakeholders to meet. Even when they happened to know each other before, this was for most of them the first time they had an opportunity to exchange about sustainable food issues. And even where groups had already been formed prior to the URBACT project, as was the case in Bristol or Amersfoort, the interest was high for more frequent, informal and forward looking opportunities to share own initiatives, projects, problems... and to discuss the local food system.

Bottom-up or top-down

Different involvement processes for participants to the LSG emerge. One type of approach was cities that organise a palette of representations ranging from all departments of local public administration that may be involved with sustainable food to actors from the food chain and non-profit organisations. It was the case in Lyon, Messina, Athens and also Oslo and Gothenburg. Another approach were LSG established as rather horizontal group emerging from existing active food communities as in Amersfoort or Bristol. In both cases, the public bodies and non-profit organisations were very well represented, somewhat less the private businesses.

URBACT II

URBACT is a European exchange and learning programme promoting sustainable urban development.

It enables cities to work together to develop solutions to major urban challenges, reaffirming the key role they play in facing increasingly complex societal challenges. It helps them to develop pragmatic solutions that are new and sustainable, and that integrate economic, social and environmental dimensions. It enables cities to share good practices and lessons learned with all professionals involved in urban policy

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