

Sustainable Urban Food Provisioning



Key messages

City authorities have a key responsibility in building more sustainable urban food systems that will improve food security and healthy diets, reduce food waste and provide decent livelihood opportunities for all those working in the food chain, as well as improve environmental sustainability.

Development of resilient urban food systems requires the use of existing and new policy and planning instruments such as land use planning, design and development of infrastructure and logistics (i.e. for waste management, food storage and marketing) and public food procurement.

The closing of urban nutrient, energy and (food) waste streams, the creation of short food supply chains and the synergies between multifunctional properties of food production and other sectoral policies should be simultaneously taken into account. Only then, an urban food system can be built that is more than just a collection of individual projects.

The city region level is the most relevant scale at which to develop and implement an integrated and comprehensive solution for a future-proof urban food system, and to best foster sustainable urban-rural linkages, improved ecosystem services, better spatial planning and climate change adaptation.



Food is an integral part of the urban agenda

Growing urbanisation and food insecurity, rising food prices, climate change impacts and resource depletion, have all prompted cities and citizens around the world to develop policy and programmes for more sustainable resilient urban food provisioning.

In addition, alarming increases in diet-related ill-health, obesity and malnutrition, require cities to ensure their populations have access to sufficient, affordable, healthy and safe food.

Food is also increasingly seen as a driver for other sustainability policies related to health, transport, land use, social and economic development, waste management and climate resilience.



"We cannot build a sustainable city if it feeds itself in an unsustainable way. This could create health problems, societal problems or a wasteland beyond our borders. Ghent launched its local food policy in 2013, in order to create more visible, shorter supply chains; support sustainable food production and consumption; increase social added value of food projects and avoid, limit and reuse food waste". Tine Heyse, Deputy Mayor City of Ghent, July 2015

This brief features recommendations and practices on urban food policy and interventions resulting from the SUPURBFOOD- Sustainable Urban and Peri Urban Food provisioning programme.

It also constitutes a call for municipal authorities to work together to strengthen capacities and influence relevant regulations (land use policies, food waste, waste recycling and short food chains) at national, European and international levels.

Surplus tomatoes are dumped on farmland in Tenerife, Spain - Sally A. Morgan Ecoscene/Corbis

Reducing food waste

It is estimated that one-third of total food produced for human consumption is lost or wasted each year. In the UK alone 4.1m tonnes of food are thrown away each year, with over half of it unused and almost 10% still in-date.

Retail grading standards cause part of this problem. In Zurich (Switzerland), up to 30% of produce that does not meet aesthetic standards relating to appearance, weight, size, colour and shape is rejected.

The European Union, national and local governments, together with the private sector and consumer organisations, should reform policies, regulations and labelling related to grading standards of food to minimise food waste.

In Zurich, a supermarket chain, retail companies and processors have started a dialogue with the Federal Administration for the food law to allow a *longer* shelf life for those food products for which food safety issues are not a serious problem (e.g. cereals). The UK government has revised date labelling to avoid consumer confusion by better differentiating “*best before*” (taste and quality) and “*not used after*” (food safety) dates.

Food waste reduction can also be supported through targeted events, education and awareness raising campaigns, funding support and promoting examples of good practice. In 2015, the Flemish government (Belgium) signed a ‘Chain Roadmap Food Losses 2020’. This public-private action is providing a ‘food waste consultancy’ for food companies as well as information to restaurants on best practices for helping customers take their leftovers home.

The French National Parliament has set a target of reducing food waste volumes by half by the year 2025. Local authorities and NGOs raise awareness among households and school canteens on how much food waste they produce and how to reduce this amount.

Optimising residual (food) waste streams

Following the ‘pyramid of waste’ is key. The first action is to reduce food waste and then to optimise the recycling of city food and organic wastes in the following order of priority: (1) (Re)Use for human food (fresh or processed); (2) (Re)Use as animal feed; (3) Recycle as raw materials for industry, (4) Recovering resources through transforming into fertiliser and (5) Provision of energy.

In cities like Strasbourg, Lille and Rennes (France), local actors organise events to re-use food; soups made from food that otherwise would be thrown away is served at festive events. In Ghent (Belgium), the city hosts a ‘soup kitchen’ in one of their buildings, where people cook and eat together food that would otherwise be wasted and voluntarily pay a donation for their meal.

The cities of Bristol and Bath (United Kingdom) support both municipal collections and community projects that compost household food waste, whilst generating energy from the composting process. In Rotterdam (The Netherlands) experiments are being conducted in recovering water from urban sewerage sludge and reusing it in greenhouse production. It also purifies and transports CO2 emitted by port industries to the nearby greenhouses to stimulate crop growth, and pilots composting of green wastes to shift away from incineration.



The City of Rotterdam promotes composting of green waste - Municipality of Rotterdam

Shortening food chains

Short food chains are an important component of urban food systems. Short supply chains can support small-scale farmers and allow them access to the market, which has a positive impact on the local economy, enhances consumer access to fresh food, boosts rural-urban connectivity and fosters local food cultures. Strengthening direct producer-consumer linkages through short food supply chains also improves food governance and transparency in the food system.

Local governments can support the development of innovative short food chains through farmers' and street markets that need to be visible, easily accessible and supported with adequate facilities. Infrastructure is also needed for local food processing and storage. Public procurement (to schools, council offices, prisons, old peoples' homes, hospitals) can provide an important role in fostering markets for more locally produced foods.

In 2014 the Latvian Cabinet of Ministers issued a regulation to include environmental criteria in food and catering procurements for public institutions. By calling for fresh and seasonal products, that comply with national quality schemes or biological certification, and for environment- friendly packaging and transport, local supply may be supported. The municipality in Jelgava (Latvia) awarded co-funding to a cooperative group of farmers and artisans to operate a mobile local produce shop going to smaller local parishes.

The city of Bristol promotes the development and strengthening of regional supply infrastructure - local wholesale markets, food processors, local abattoirs, dairies and farms. They also aim to increase numbers and geographical spread of shops within the city from which people can buy a wide range of food products; to end food deserts that leave people without access to fresh, sustainable food.

The Beijing city council (China) has supported Jinghe farm to develop an internet platform that functions as an online market place and links producer and consumer cooperatives. The Rome (Italy) and Zurich administrations promote farms

in their cities with a special website, allowing citizens to buy directly from city farmers. The city of Quito (Ecuador) has set up 14 producer markets where 1000 tonnes of locally organic produced food is marketed each year.

Protecting land for urban and peri-urban agriculture

Localised production can also begin to address the high-energy use and greenhouse gas emissions characteristic of the globalised food system, but for urban and peri-urban agriculture to work it needs access to land.

Local governments should protect existing agriculture land in and around cities by limiting building projects on this non-renewable resource. Further they can enable access to land for food production in urban and peri-urban areas by renting appropriate public areas to farmers, either as traditional farms or managed by co-operatives or community groups. This requires urban land use planning that takes agriculture into account.

The city of Ghent provides subsidies for community gardens and links actors so that locations that are temporarily available can be used for food growing. The city of Rosario (Argentina) preserved their horticulture greenbelt by extending the peri-urban protection zone from 400-800 ha. The city region of Vigo (Spain) has a tradition of peri-urban mountainous common land. Collective management supports multifunctional land uses including a variety of forestry and farming options.



Bio Trade Fair in Quito - Jatun Ayllu (AGRUPAR)



Safeguarding allotment gardens on public land in Ljubljana - M. Bija Glavari

Creating synergies

Another guiding principle in the design of resilient urban food systems is to encourage multiple benefits from land and use food as a medium to link different urban policy objectives.

Local governments, in partnership with gardeners, civic groups, charities, and food producers can use food initiatives to provide wider societal goods such as community building, social inclusion, education, nature conservation, improved health outcomes and enhanced quality of life.

In 2013, Rotterdam changed the zoning designation of a large piece of peri-urban land to a multifunctional area for education, food production, biodiversity and leisure. Cities like Beijing and Shanghai are developing agro-parks with similar functions. Zurich promotes multifunctional land use on 10% of its urban area. The city actively buys land to protect these spaces from construction and provides incentives for biodiversity preservation and organic farming.

Other examples combine food production with biodiversity and landscape management, flood risk reduction and climate-change mitigation. The protection of rice cultivation in the floodplains in Antananarivo (Madagascar) supports a staple crop for a large part of the urban population, which mitigates floods during the rainy season and contributes to job creation for farmers.

Aligning organisational structures

Re-designing urban food systems in order to simultaneously address several urban policy domains requires the alignment of existing structures to facilitate the involvement of different departments and jurisdictions in food planning. Such arrangements can ensure greater coherence and increase efficiency of policies and programmes to have a greater impact on the food system which in turn benefits the city.

Bristol formed the 'Bristol Food Policy Council', based on the experience of Toronto (Canada). With members drawn from a range of stakeholders including the local food industry, the City Council, Universities and grass-root bodies, it has developed a 'Good Food Plan' with clear outcome indicators. Ghent and Rotterdam have set up similar multi-actor platforms and networks.

Involving stakeholders from public, private and civic spheres helps such initiatives to be more resilient and self-supporting. Multiple actors can also coordinate public communication events for more sustainable food consumption, preparation and production.

The challenge now lies in developing comprehensive food policies and strategies in city regions where different levels of government need to work together. Such collaboration will not only benefit the creation of a resilient urban food system, but also strengthen the role of local and city region governments as competent actors in safeguarding the welfare of their residents.



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"The Municipality of Quito has an explicit policy objective to improve the livelihood conditions of Quito inhabitants. Support to local short food supply chains linking producers to consumers helps create income and employment opportunities and enhances consumer' access to fresh food."

Alfonso Abdo Félix, Executive Director Metropolitan Agency for Economic Promotion, Quito, July 2015

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