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# Designing Urban Food Policies

Concepts and Approaches

 Springer

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# Foreword

The urban food system sustainability issue first and foremost raises personal concerns regardless of whether you live in a city or rural area, in a so-called poor or rich country, or are a leader or an ordinary citizen. One may ask: Under what conditions can I feed my family? What part depends on my culture, my economic capacity, my personal choices or the prevailing food system? How would I adapt to a crisis situation?

These personal questions soon shift the spotlight onto the systemic dimension of urban food systems and their sustainability. One may then ask: Have I ever lived in a nonsustainable urban food system? Have I been aware of such systems? Individual responses to these questions would be wide-ranging, but several images come to mind: the food plight of people living in cities during wartime, the impact of the 2014–2015 Ebola epidemic in West Africa on the distribution of foodstuffs and the urban riots that gave rise to the Arab Spring in 2010, which were triggered by uncontrolled soaring food prices. Nowadays in Europe, commodity producers are also bearing the brunt of the economic power of supermarket chains—and, who knows, next it could be consumers in that position. In the summer of 1982, meat supplies to a large European capital were at a standstill—but city dwellers managed to mobilize their family networks in rural areas within 2 weeks, leading to the formation of informal supply chains to solve the problem.

There is a risk of feeling powerless when defining an urban food system management strategy because of the complexity of the issue and the diversity of situations, constraints, stakeholders and viewpoints. Experience sharing, awareness of analytical approaches and mobilizable reference frameworks are thus particularly crucial in this setting.

Some urban systems—including transportation and water provisioning—are amenable to technical analysis or systems modelling, while scenario simulation can a priori help to identify weaknesses and preventively implement improvement strategies.

Urban food systems are however much more decentralized, so the authors of this book advocate a sustainability approach geared towards strengthening actors' expertise, their ability to explain their vision and objectives, identify levers to which

they have access and implement them in co-governance situations. This type of approach is favoured by the Milan Urban Food Policy Pact that was signed in Milan in October 2015 by more than 100 mayors of cities from around the world.

This approach is jointly driven by historical knowledge, which can clarify current situations and issues, and by an in situ case study around the city of Montpellier (France). The main recent theoretical approaches presented in Chap. 4 and the conceptual framework proposed in Chap. 5 will help many urban food system stakeholders analyse the setting of their city, identify similar experiences, as well as share, compare and capitalize on knowledge.

Given the major challenge of ensuring the sustainability of urban food systems, this book—coordinated by the UNESCO Chair on World Food Systems, CIRAD and INRA, with the support of Agropolis Fondation—provides a conceptual framework and basis for knowledge development and sharing. It comes as a very welcome contribution on this crucial issue.

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# Preface

Cities have been propelled into the forefront of the debate about sustainable food policies because, with rapid urbanization, the urban realm has become a locus for three of the most significant challenges to the conventional food system—multifunctionality, co-governance and city-regionalism.

Under the banner of multifunctionality, the urban food movement has challenged the conventional idea that food should be treated as a simple commodity like any other. But urban food campaigners resist this idea by arguing that food cannot be so easily commodified because, unlike manufactured commodities, we ingest food and it plays a vital role in the health and wellbeing of people and the planet.

The urban food movement—a loose and sometimes chaotic assemblage of municipal activism and civic engagement—is also challenging the idea that the food policy arena is reserved for corporate interests, national governments and international bodies like the World Trade Organization (WTO). One of the most rapidly growing social movements of our time is the advent of food policy councils, or food policy partnerships, where civil society organizations are joining forces with municipal politicians and officers to fashion a more sustainable urban foodscape, one in which the values of public health, social justice and ecological integrity are treated more seriously in the food policy equation. New forms of co-governance are beginning to emerge in our cities as politicians realize that they have to design policies *with* rather than for civil society—and urban food policy is in the forefront of this process.

City-region food systems constitute a third challenge to the conventional food policy mindset, which has been dominated until recently by the logic of globalization and the placeless foodscapes where price is extolled over provenance. The new urban food movement champions a sustainable food system in which cities are able to reconnect with their regional hinterlands as well as consuming fairly traded products from afar. Sustainability should not be confused with green autarchy! Sustainable city-region food strategies pose a challenge because they contest one of the deepest divisions in capitalist society—between town and country.

Creating sustainable urban food policies will face many barriers, not least because they pose such fundamental challenges to vested interests in the conventional food system. But this system is not set in aspic, and one of the great merits of this book—based on the work of leading scholars associated with the Agropolis Foundation—is that it explores the scope for sustainable urban food policies, one of the greatest societal challenges of the twenty-first century.

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Finally, we thank David Manley and Paul Cowan for translating this book.

# Introduction

The present book is in keeping with the aims of the Sustainable Urban Food Systems (SurFood) research project supported by Agropolis Fondation. This flagship project was set up to coordinate, amplify and globally showcase the interdisciplinary research of the different institutional members of Labex Agro. It has been written in response to a request from Agropolis Fondation’s Science Council to build a conceptual framework for the analysis, evaluation and development of sustainable urban food systems.

## **The Twenty-First Century Heralds the Dawn of a New Era for Cities**

Following the reign of nation states, there is every reason to believe that the twenty-first century will be a new era for cities.

First because, from a structural standpoint, currently over half of the world population is urban (compared to 30% in 1950), and it will increase to two-thirds by 2050 according to the United Nations (2014). Medium-sized cities have considerable weight in this process since half of the urban population presently lives in cities of fewer than 500,000 inhabitants, while 1 urban dweller in 8 lives in a megacity of more than 10 million inhabitants. Africa and Asia—two continents that are still mainly rural—will be the locus of most of this urban population growth (2.5 billion more people in the next 35 years). Together, China, India and Nigeria will account for nearly 40% of the world’s population growth by 2050. This raises major challenges in meeting housing, infrastructure, transportation, energy, employment, education, health and, of course, food needs.

Second because cities are gaining tremendous social, political and economic power. This power rises which—in addition to the demographic weight that cities represent—may be partly explained by production system changes taking place worldwide in a globalization setting and by the financial disengagement of States in

land-use planning. Cities represent powerful local hubs that States can rely on to manage transitions to new development models. Cities have thus extended and asserted their power in many areas of social life to transform an ambient ‘ecodesire’ into tangible local reality (Haëntjens 2009) while developing their scope of operations to ensure their sustainability (Emelianoff 2007).

## **Cities as ‘Human Settlements’**

This trend is reflected by the growing number of territorial sustainable development policies and the development of global networks of local urban governments. At the 1992 United Nations Conference on Environment and Development (Rio Earth Summit), local authorities in each country were called upon to set up local Agenda 21 programmes tailored to their local setting, considering that: ‘[...] As the level of governance closest to the people, they play a vital role in educating, mobilizing and responding to the public to promote sustainable development’ (Chapter 28 on local authorities’ initiatives in support of Agenda 21).

Urban networks (Metropolis, International Council for Local Environmental Initiative and the Global Network of Cities, Local and Regional Governments) have spearheaded initiatives to ensure the tangible implementation of local Agenda 21 programmes.

The sustainability objectives were strengthened 4 years later at the Second United Nations Conference on Human Settlements (Habitat II) in Istanbul in 1996. Launched 20 years earlier in Vancouver in 1976, this UN process marked the beginning of an initiative to provide a reference framework for international cooperation on the topic of ‘human settlements’. This expression reflects a desire to consider cities as the outcome of relationships between inhabitants and their structures—a form that urban populations build and organize (Emelianoff 2007).

Many voluntary partnerships between cities worldwide were later formed, especially on the climate change issue, for the exchange of good practices and joint commitments. These networks have often played a major underlying yet little-known role in international governance. Given, for instance, that cities account for around 70% of total greenhouse gas (GHG) emissions even though they only occupy 2% of the Earth’s surface area (UN-Habitat, 2011), the C40 Cities Climate Leadership Group (a network of 83 cities worldwide) has made commitments to reduce emissions by 2020, corresponding to the cumulated emissions of Portugal and Argentina. Organized in networks, cities are thus now managing to cope with a number of global challenges.

## **Global and Organic Cities**

Cities have also gained economic weight in this new globalization phase. A World Bank analysis (Kilroy et al. 2015) showed that three-quarters of 750 surveyed cities had grown faster than their respective national economies since the 2000s.

The American geographer, Saskia Sassen, devised the ‘global city’ concept to describe the impact of liberalization and financialization processes on some cities since the 1980s (Sassen 1991). According to her, the current globalization phase is marked by a simultaneous geographic dispersal and concentration dynamic, whereby economic activities and industrial installations are increasingly dispersed throughout the world, while central management functions (accounting, legal, public relations, etc.) have become highly reconcentrated in a number of global cities that host the headquarters of major multinational companies, financial institutions and stock markets. These global cities are therefore defined by the key role they play—with central command functions—in the new global economy, which has given rise to a transnational urban system. The spatial scale of these global cities, which are benefitting from privatization and economic deregulation, is thus taking ascendance over the national scale.

Globalization has cut main cities off from their national economies, or even distanced them from their territorial anchorage. The food sector therefore represents a tremendous opportunity for cities to recreate the sometimes lost link with the environments that produce their food. It is also a chance to forge new links with ‘organic cities’ of the past (Steel 2008), which prevailed prior to the industrial revolution when cities were literally shaped by food—with the spatial structure of cities organized around central food markets, often surrounded by buildings symbolizing the religious (church), economic (chamber of commerce) and political (city hall) powers, with street names referring to foods or food shops and the architectural design of houses related to food supply, etc.

Feeding cities has therefore become crucial despite the fact that this issue was no longer being taken seriously in some regions of the world. Carolyn Steel takes the example of London, where it seems to be taken for granted that sufficient food must be produced, transported, distributed, sold and cooked daily to feed 8.6 million people, and the generated waste must also then be managed. This challenge nevertheless must be met every day in all cities worldwide.

## **Feeding Cities: An Urban Planning Issue**

There is rising awareness that growing and often poorly controlled urbanization leads to urban sprawl, socio-spatial inequality, pollution and environmental degradation associated with nonsustainable modes of production and consumption. The increased distancing—geographic (remoteness from basins), economic (increased number of intermediaries) and cognitive (ignorance of production

conditions)—between cities and supply basins raises many problems: increased transport costs, energy consumption and food loss and wastage. Finally, relationships between city and rural dwellers are becoming less tight-knit as a result of the many food processing, logistics, distribution and catering operations.

Food has again become a global discussion issue as a result of the 2008 crisis regarding agricultural raw material prices and following numerous health crises (bovine spongiform encephalopathy, avian influenza, etc.), while cities are increasingly interested in finding ways to meet city dwellers' expectations on improving their diet. This twofold global/local movement is reflected on a territorial level by an increase in initiatives on food relocalization, urban agriculture, farmland protection, school canteen provisioning, etc. This plethora of innovations is still poorly structured, while accounting for or including it in integrated food policies is still a recent phenomenon.

Pothukuchi and Kaufman (1999) were among the first authors to focus on the importance of the role of food in the city. According to these authors, at the time, there were at least four reasons for city representatives' lack of interest in the food issue: the food system did not require special attention as it was considered to be functioning well, the food sector was not within the purview of urban planners, this sector (contrary to the transport and housing sectors) did not attract financing, and, finally, food was considered to be primarily a rural agricultural issue (not an urban one).

According to Morgan (2009), the latter argument is not admissible to justify the 'puzzling omission' on the part of planners regarding food. First, the multidimensional aspect of the food system means that it has a substantial impact on other sectors such as public health, social justice, energy, water, land, transport and economic development. All of these sectors are considered to be key concerns of urban representatives who have every right to deal with them. Second, considering food production as an exclusively rural activity challenges the fact that in many cities worldwide, urban agriculture has a pivotal role in food security and in others it inspires a rich socioeconomic movement geared towards producing food in cities.

## **Emergence of New Urban Food Strategies**

The food issue—certainly 'too big to see' (Steel 2008)—has long been overlooked by urban actors. Over the last two decades, however, many cities have developed their own food strategy while incorporating different aspects of the system in a common framework: production, processing, distribution, access, consumption and waste management. These strategies are often integrated in broader initiatives to promote urban sustainability (Jennings et al. 2015) and reduce the urban-rural divide (Forster and Getz Escudero 2014).

To this end, local urban governments (cities, conurbations, metropolises) have a number of levers at hand: tenders for collective catering food supplies (school canteens, hospitals and other public institutions), land management (especially

preservation of production areas), development of commercial areas, neighbourhoods and flows, formation of governance structures such as food policy councils, creation of farmers' markets, etc. A local food strategy along these lines could help in dealing with different issues: improving food quality, reducing losses and wastage, stimulating local economic development, strengthening solidarity between urban dwellers, improving their health, protecting the environment, etc. (Wiskerke 2009).

Strategies implemented by local urban governments are supported by a broader movement of initiatives geared towards relocalizing food systems run by individual or associative bodies, local governments at different scales, farmers, agrifood companies and research stakeholders (Feanstra 1997, 2002; Hendrickson and Heffernan 2002; Feagan 2007; Muchnik et al. 2007; Martinez et al. 2010; *Association des Régions de France* 2014; Rastoin 2016). This food relocalization movement has also been the brunt of criticism, e.g. accused of being a 'local trap' (Born and Purcell 2006)—the claim that the geographical governance scale alone does not ensure food system sustainability. Indeed, the actors and the agenda they set up are the actual guarantors (Hinrichs et al. 1998; Brown and Purcell 2005; Watts et al. 2005; Born and Purcell 2006; Kneafsey 2010).

Urban areas in North America have been testing food policies since the early 1990s (Neuner et al. 2011; Viljoen and Wiskerke 2012), with Toronto being one of the cities spearheading this trend (Blay-Palmer 2009), but this dynamic is not solely embraced by industrialized countries. The Brazilian metropolis Belo Horizonte is thus lauded as a pioneer for having developed an urban policy to combat food insecurity. Its experience provided a model for building the Brazilian nationwide *Fome Zero* (zero hunger) programme (Rocha and Lessa 2009). In the same vein, many other cities have experimented with local food insecurity control strategies via school canteens, urban agriculture and short supply chains, including (among many other examples) Mexico City, Medellín (Colombia), Rosario (Argentina), Gampaha (Sri Lanka), Nairobi (Kenya) and Accra (Ghana).

Civil society mobilization has been decisive in all cases (Morgan 2009). These initiatives provide technical and economic alternatives to the standard food production, processing and distribution model while also giving rise to other modes of governance that stimulate local democracy processes (Guthman 2008; Lang et al. 2009; Starr 2010; Block et al. 2012).

These local initiatives are gaining momentum and converging in national and international networks such as Sustainable Food Cities (UK), Resource Centres on Urban Agriculture and Food Security (RUAF Foundation), Transition Network (TN), African Food Security Urban Network (AFSUN), Eating City, International Council for Local Environmental Initiatives (ICLEI), International Urban Food Network (IUFN), Sustainable Food Planning Group of the Association of European Schools of Planning (AESOP), etc.

Caroline Brand (2015) nevertheless clearly demonstrated that the movement of territories towards an integrated global view on the food issue is not a clear-cut trend. There is still often a gap between the rhetoric on the issue and the actual fact of taking the food situation into account in territories. Moreover, the strategies

implemented are often fragmentary and just deal with one of the many facets of the food system, or else they do not seek to explicitly intervene on the food system *per se* (Hodgson 2012).

## **Towards a Conceptual Framework**

This book is structured as follows for the purpose of gaining insight into, analysing and conceptualizing the dynamics between cities and their food systems:

It first focuses on the limitations of the industrialized food system (Chap. 1), which is currently dominant worldwide but unsustainable. Many reports have highlighted the pitfalls: high nonrenewable resource consumption, socially and economically unfair, not very rewarding for some stakeholders, a major contributor to biodiversity loss and climate change via GHG emissions and a generator of food waste and wastage. Global urbanization magnifies these negative impacts. Meanwhile, however, cities pool a number of resources that provide an opportunity to enhance the sustainability of urban food systems.

The relationship between cities and food is then discussed from a historic standpoint, from antiquity to World War II, while being geographically focused on Europe and the Mediterranean region (Chap. 2). Different types of intervention by urban authorities are analysed over a time scale: safeguarding of food supply chains, organization of local markets, ensuring food quality, combating food fraud, waste and soil fertility management, etc. The aim of this chapter is therefore to showcase the wealth of initiatives undertaken over time to promote urban food policies so as to broaden the scope of discussion options in current debates.

Nowadays, to tackle the issues set out in Chap. 1, what policies have been implemented by cities, and what are the governance aims, means and models (Chap. 3)? This chapter—via a typology of urban food policies on these points—investigates the relevance of urban food supply relocalization and seeks to measure the extent to which food systems could be effectively modified at the local scale.

The sustainability of food systems and especially of urban food policies has become a focus of research along with the development of a number of conceptual frameworks for their analysis (Chap. 4). This chapter provides an overview of existing frameworks. While not striving to be exhaustive, a few emblematic approaches that have been developed are presented to take the urban food issue into account in an integrated way. This chapter highlights the need to combine the different approaches.

This appraisal provides an opportunity to present the approach developed by the SurFood programme, which aims to develop urban food policies and build analysis and assessment tools, while providing knowledge on possible policy options that urban actors could potentially implement to build more sustainable urban food system models (Chap. 5). This approach dovetails three dimensions: levers that cities have at hand to manage food at their scale, the problems they must deal with and the

governance arrangements implemented to launch a food strategy. The objectives of this approach, its uses and potential applications are specified in the chapter.

This approach has been applied in the metropolitan Montpellier area. In 2014, Montpellier Méditerranée Métropole voted in an agroecology and food policy with the support of researchers involved in the SurFood project (Chap. 6). This chapter investigates the urban food governance emergence process, from the point where food is placed on the agenda when drawing up public policies in local urban governments to the mobilization of civil society actors.

Finally, the book concludes by presenting a series of potential avenues of research to gain insight into and support the transition dynamics needed to achieve more sustainable urban food systems.

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