



UNIVERSITY OF
GLOUCESTERSHIRE

This is a peer-reviewed, final published version of the following document and is licensed under Creative Commons: Attribution-Noncommercial-No Derivative Works 4.0 license:

Reed, Matt ORCID: 0000-0003-1105-9625, Mettepenningen, Evy, Swagemakers, Paul, Dominguez Garcia, M D, Jahrl, Ingrid and Koopmans, Marlinda E (2018) The challenges of governing urban food production across four European city-regions: identity, sustainability and governance. Urban Agriculture and Regional Food Systems, 3 (1). pp. 1-10. doi:10.2134/urbanag2016.11.0006

Official URL: <https://doi.org/10.2134/urbanag2016.11.0006>

DOI: <http://dx.doi.org/10.2134/urbanag2016.11.0006>

EPrint URI: <http://eprints.glos.ac.uk/id/eprint/5557>

Disclaimer

The University of Gloucestershire has obtained warranties from all depositors as to their title in the material deposited and as to their right to deposit such material.

The University of Gloucestershire makes no representation or warranties of commercial utility, title, or fitness for a particular purpose or any other warranty, express or implied in respect of any material deposited.

The University of Gloucestershire makes no representation that the use of the materials will not infringe any patent, copyright, trademark or other property or proprietary rights.

The University of Gloucestershire accepts no liability for any infringement of intellectual property rights in any material deposited but will remove such material from public view pending investigation in the event of an allegation of any such infringement.

PLEASE SCROLL DOWN FOR TEXT.

The Challenges of Governing Urban Food Production across Four European City-Regions: Identity, Sustainability and Governance

Matthew Reed,* Evy Mettepenningen, Paul Swagemakers, M. Dolores Dominguez Garcia, Ingrid Jahrl, and Marlinde E. Koopmans

CORE IDEAS

- Urban agriculture as civic action
- Challenges to governance systems
- Citizenship and globalized identities
- Neo-Weberian theory and urban agriculture

ABSTRACT

The development of food production in cities has raised some important questions about the governance of these activities and the role of city-regions. In this paper through four European case studies— Bristol (UK), Ghent (Belgium), Vigo (Spain), and Zurich (Switzerland) —we consider the ways in which food is governed at the city level. Our case studies demonstrate the role played by citizens in urban food and the challenges this brings to city-region governance. Through horizontal networking, being inspirational to other cities and citizens, communicating their demands and successes very clearly, urban food activists have raised significant questions about how cities are governed. Using the creation of localized identities, which are inclusive and embracing but rooted in their city, these food activists are looking to a future controlled by a democratic impulse rather than the technocracy of professional city managers. This paper uses a range of Weberian influenced theory to explore the topic of urban agriculture not as one simply about environmental performance but of the construction of new civic identities.

M. Reed, The Countryside and Community Research Inst., The Univ. of Gloucestershire, Cheltenham, UK; E. Mettepenningen, Social Sciences Unit, Flanders Research Inst. of Agriculture, Fisheries and Food, Merelbeke, Belgium; P. Swagemakers, Dep. of Applied Economics, Univ. of Vigo, Campus Universitario As Lagoas, E-32004 Ourense, Spain; M.D.D. Garcia, Dep. of Applied Economics, Public Economics, and Political Economy, Complutense Univ. of Madrid, Campus de Somosaguas, E-28223 Madrid, Spain; I. Jahrl, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland; M.E. Koopmans, Dep. of Agricultural Economics, Ghent Univ., Ghent, Belgium. Received 11 Nov. 2016. Accepted 24 Jan. 2018. *Corresponding author (mreed@glos.ac.uk).

Abbreviations: CRFS, city-region food system; MLG, multi-level governance.

ANY IN-DEPTH ANALYSIS of food initiatives at a city-region level is immediately confronted with a bewildering thicket of national-level governmental organizations, structures, laws, and regulations, before even moving on to consider the regional, local, or European level. These then intersect with sociological flows at local, regional, national, European, and even global levels and then similar pressures from commodity markets and business networks. Initially, this can lead to stasis as the complexity drowns out the commonalities and obscures the particular salient features in an example (Reed et al., 2013). This complexity is a challenge that faces citizens as well as scholars—that of the increasing illegibility of aspects of daily life (Giddens, 1990; Castells, 1996). As this paper sets out to explore, there is much to learn about this complexity that is indicative of the importance of the

Published in Urban Agric. Reg. Food Syst. Vol. 3 (2018):160006.
doi: 10.2134/urbanag2016.11.0006

© American Society of Agronomy and Crop Science Society of America.
This is an open access article distributed under the CC BY-NC-ND license
(<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

challenge of food at the city-region level and the flows and forces that are behind it.

The trend toward the importance of urban food systems is discussed in other papers in this special issue. It poses challenges for governance as it represents the intersection of relatively localized staking, in correspondence with multi-national or globalized regulatory systems and large food commodity markets (see also Curry et al., 2014). As an emergent phenomenon, urban food is enmeshed in further complexity as the existing systems of public governance are designed to support rural agriculture and urban development separately rather than the hybridity proposed by the citizen groups underpinning these initiatives (Ernwein, 2014). Equally, the private mechanisms of regulation and marketing are designed to promote consumerism and corporate profit rather than the civic life envisaged by many urban food activists (Kirwan et al., 2013; Tornaghi, 2014; Sonnino et al., 2017). The resulting complexity often threatens to endanger the viability of projects and the energies of activists but simultaneously encourages innovation into more open, less congested spaces of action. This paper considers four different city-regions that chart various aspects of the emerging urban food systems and the civic challenges that those active within them face.

This article is structured so that these examples are nested within the existing literature on multi-level governance and the challenge of urban food systems to urban governance, as well as to the common agricultural policy. To do this, it reviews the use of the term multi-level governance in the contemporary political science literature and the emerging literature on city-region food system (CRFS) governance. It then details each example, inevitably in a truncated form but highlighting the most salient features, and then discusses the significance for the wider development of CRFS.

Cities as the Locus of Governance

Part of the development of the CRFS perspective has been an increasing focus on the city as the locus of governance. This development can be viewed as coming from three intersecting trends. First, that contemporary capitalism organizes across nodal points which are cities, as these offer an agglomeration of skills, capital, and ICT networks which link together as a relay within the ceaseless circuits of finance and data (Soja, 2015). These trends have empowered some cities that are economically disproportionately important within their nation states; cities such as London have become global entrepôts demographically and economically distinct from the rest of their host country. Second has been a trend, particularly in the context of the EU after 1992, to delegate powers and responsibilities to the regions, as part of the drive toward greater integration under the principle of subsidiarity, with decision making delegated to the regional level (Stephenson, 2013). Third has been a collapse in faith that the nation state can, or for some should be, an active agent for change. Multi-ethnic states such as the UK, Belgium, or Spain have seen pressures and movements to express power in new forms either based on ethnic, regional or

sub-national forms (Castells, 1997; Castells, 2012). The intersection of these economic, political, and sociological changes has positioned the city as a new actor within the existing layers of governance.

The term multi-level governance (MLG) has been common currency in political science and Europe policy circles as a way of describing the complex array of institutions and issues that have arisen through the creation of a pan-European polity (Stephenson, 2013). Hooghe and Marks initially introduced the term as part of an effort to understand regional governance, principally through the argument that it was a way of analyzing the distribution of material goods. Layers of municipalities, regions, nations, and supra-national governmental forums were forms of brokerage that were about the distribution and re-distribution of economic opportunities and rewards. These layers acted to negotiate between various interests, and to act where the market was either failing or did not extend. As a way of describing the emerging European polity, MLG also gained some credibility within policy networks (Hooghe and Marks, 2009).

Hooghe and Marks (2009) re-set their theory to move away from the emphasis on MLG as a form of economic brokerage toward a theory concerned with the 'pre-material values' of those being governed. No longer would consumer goods, either as a way of easing toil or fulfilling the need for status, or economic security, be sufficient to engage people with the European project. Their thesis is that the period until the Maastricht agreement of 1992 saw the EU as an elite project that had little direct involvement by popular actors and a consensus among the political parties representing the members of the EU. After 1992, the elite's hold on the EU project began to fade as those previously excluded began to be involved, and involve themselves, in the governance of Europe. Hooghe and Marks argue that MLG as a theory needs to shift from considering the material, to considering the 'pre-material' or the role of identity in contemporary governance. As integration took hold, Europe has become increasingly fractured by competing identity groups. Economic pressures and mass immigration within Europe have served to benefit those who are politically opposed to the EU, from the left who see it as promoting capitalism and from the right by exclusive identity politics. The identities invoked are those of belonging to a nation and/or a particular cultural group, often in opposition to 'others' be they Muslims, migrants, or cosmopolitans (De Vries and Edwards, 2009). Hence, MLG as a theory is attempting to explain how identity is mobilized in the bid to reconcile citizens' desire for autonomy in this context and its relationship with the inevitably mismatched space described by political authority. Stephenson in a review of 20 years of MLG theory concludes with a call for more applied research on it, and the 'incremental and pluralistic nature of MLG' (Hooghe and Marks, 2009, p. 883).

Other accounts of the processes of EU integration would question the role of identity politics. Fligstein (2010) in his

consideration of the future of Europe, notes that the trajectory of European integration benefitted educated and mobile groups, generally younger people; while those less educated and less willing to travel have not seen such gains. The forms of economic integration, either caused by EU integration or globalization reinforced these groups. Those excluded from the benefits began to reinforce their identities, based on nation and nativist cultural ideas (Fligstein, 2010). Tilly in his consideration of the role of identity in contentious politics would not see these processes as being determined solely by macro-level flows but also by the active agency of those who spin narratives about the boundaries and inclusions that form identities (Tilly, 2005). Castells suggests that in the network society we might consider three types of identity constructed: those that are legitimized by the dominant forces of society, those that are based on resistance to those dominant forces, and project identities which seek a transformation of society (Castells, 1997). In this rubric, we can see that Hooghe and Marks (2009) note appearance of resistance identities, along with those identities aligned with the dominant forces of globalization being legitimized. Resistance identities may oppose the EU from positions of opposition to capitalism and/or cosmopolitanism, while project identities seeking to transcend nation bound capitalism embrace the EU just as do those who favor a new, globalized liberal order. More recently Fligstein and McAdam (2015) have suggested that 'pre-material values' are more closely aligned with the existential problems of human consciousness, aligning their perspective with that of Weber, to a focus on the centrality of meaning making in collective social action. Melucci in his studies of collective action points to the importance of experimentation and networks submerged into daily life as the key work of social movements, which are not visible in the same way as mobilized 'activist' identities.

These latter accounts suggest that there are elements of identity that are political, constructed and dynamic, produced by the work of social actors as well as collective forces and globalized flows. To understand identity, we need to be attentive to how it is created, the cultural materials available as the processes of creating and contesting are at work. Such processes take place in a spatial context, as well as a temporal one, and increasingly the urban becomes a locus as is clear in the recent, renewed focus on the city as nodal points in the networks of globalized exchange (Soja, 2015). Among the flows and metabolism of urban systems, food has been a focus of attention as both symbol and embodiment of the materiality of such flows (Swyngedouw, 2006; Steel, 2008). Wiskerke (2015) in his recent paper defines a city food region as:

An urban food system encompasses the different modes of urban food provisioning, in other words, the various ways in which the locations, where food (eaten in cities) is produced, processed, distributed, and sold, are connected. (Wiskerke, 2015, p. 4).

In these contexts, we can see the three forms of identity creation becoming apparent; (legitimized, resistant, and

project) as different actors attempt to appropriate food with its material cultural and attendant flows used to shape and reshape the fabric of the city, in correspondence and antagonism with the residents.

The literature about the role of identity in urban food movements has been varied, with some seeing it as about an outright resistance to capitalism, others a form of food provisioning, or the attempt to form new communities (Taylor and Lovell, 2013; Sonnino, 2016). It is clear that in some contexts, such as central and eastern Europe, urban agriculture plays a role in domestic food security but also the wider food system (Smith and Jehlička, 2013). For others, these activities are far more politicized, addressing global as well as local concerns, reflecting the role of the city as a cultural metropolis (Cohen and Reynolds, 2014). This has fueled debate as to the purposes of urban agriculture and the diversity of responses to it from the local state, ranging for indifference through to collaboration (Morgan, 2015). Until recently there has been little opportunity to offer accounts of the urban food initiatives that share a common framework of inquiry and reporting into the same analytical discussion (Reed et al., 2013).

METHODOLOGY

All the material for the case studies was collected through interviews with the principal actors in the CRFS in each location and documentary analysis of those relevant to the system as part of the FP7 project SUPURBFOOD. The results of this process were, in turn, informed by comparison with results of parallel processes in the other city-regions, as well as an analysis of EU level policy toward urban agriculture (Curry et al., 2014); ultimately the group of cities represents a convenience sample. Workshops were organized in each city-region at this point to share results of the first round of analysis; the synthesis report was publicly available and results disseminated in the city areas. The next stage was the thematic focus on various aspects of urban food systems, such as land use or nutrient cycling. These results were then shared with stakeholders in the city-regions through workshops, where again results from the wider project were disseminated. In this way, stakeholders in each city-region were given the opportunity to provide input into the analysis and comment on its results at an early stage and have an opportunity to discuss the results. As a second layer of participation and consultation small and medium sized enterprises (SMEs) from each city-region were partners in the project, with the opportunity to feed into the direction of the entire project. The results were publicly available for comment throughout the project. This approach was broadly in line with an inclusive action orientated approach adopted throughout the research. Throughout the project, the term 'stakeholder' was defined widely to include those working within the local state, as volunteers or professionals, as well as activists within the food networks in the city or those who wished to comment on the topic. This method has ensured that a broad group of people have had the

Table 1. Type of interviewee per case study city.

City	Participant numbers and role
Metropolitan area de Vigo	Comuneiros (commoners) (7) Food shop entrepreneurs (2) Consumer group coordinators (1) Horticulturists with home delivery (4) Vegetable nursery entrepreneur (1) Compost producer (1) Forest technician (1) Coordinator market local food products (1) Representative of local administration (1) Alderman (3) Mayor (1) Activists/consumers (2)
Ghent city-region	City administration (3): Representatives of three departments, spatial planning, environment, and economy Province of East Flanders (1) Representative of department for agriculture and rural areas (1) Representative of civic working group Urban Agriculture (1) Urban agriculture entrepreneurs (4)
Zurich city-region	Six actors of two departments within city administration representing health and environmental protection—land planning, nature protection and education, agriculture, and forestry City farmers (4) Farming representatives (2) Actors of civil society (urban gardening initiatives, food coop, consumer food organization) (7)
Bristol	City Councilor (1) Markets Manager (1) Food Policy Council Member (3) Urban Farm Manager (1) Urban Food Activist (4)

opportunity to comment on the development of the research project and not only its results (see Table 1).

Each city, therefore, has a dedicated case study report, as well as other outputs in the press and on-line, but the focus of each is slightly different to reflect the trajectory of developments in each city. As is also apparent they also share commonalities of interest in urban food, in part as a response to citizens' concerns.

Ghent

The port and university city of Ghent is the fourth largest in Belgium, with just over 600,000 residents in its wider metropolitan area, with approximately 250,000 in the main city. With UNESCO protected medieval architecture, and a council-backed campaign for vegetarian food, the city seeks to combine the dynamism of the Flanders economy with an orientation toward a more sustainable future. Citizens of Ghent are active in organizing cultural events and protests, but many projects that relate to food production also arise on a regular basis. The social-democratic party is very influential in the city and has been part of the government coalition for

many years. After the last elections in 2012, the Green Party joined the city government and this social-green coalition strongly advocates local and sustainable food production and urban agriculture in their policy plans (developed in 2013). The policy plan was translated by the city administration into the food policy strategy 'Gent en Garde'. This strategy is promoted as the 'battle for a sustainable food system', and it was developed in the form of a campaign.

For this campaign five objectives were defined: (i) a more visible and shorter food system to strengthen the relationship between producers and consumers; (ii) more sustainable food production and consumption by stimulating sustainable urban food initiatives and addressing consumer patterns; (iii) improved social added value of food initiatives; (iv) reducing food waste; and (v) optimally reusing food waste as a resource with a focus on reusing urban green waste. Part of this campaign involves the supply of subsidies for different projects such as community gardens, and a telephone information line about available land for private gardeners or for projects on locations that are temporarily available. Furthermore, the government facilitates processes of networking; for example, a working group to match 'landless' farmers with owners of land that they could potentially use. Finally, participatory governance is stimulated, for instance through the city's project 'Nothing is Lost', that organized several workshops throughout 2014 in which citizens were invited to brainstorm, share ideas, and establish cooperation around urban waste streams (including food waste).

Through the 'Gent en Garde' campaign, the city tries to facilitate processes initiated by active citizens. The main challenge faced by food initiatives in the city, and the most important point of debate among civic activists and the city government, is access to land. To fulfill the 'Gent en Garde' objectives, the city administration tries to involve conventional farmers maximally and encourages them to produce more sustainably and strengthen their relationship with the city. This approach is not fully supported by the civic activists who fear that land needed for new urban food initiatives will go to conventional farmers. Conventional farmers, from their side, have the same fear toward the new urban food initiatives, so there is tension between these different groups of citizens.

To partly fulfill the demands of the civic activists and help them in their quest for land, the city administration currently follows a threefold strategy: (i) it is trying to develop institutional mechanisms that can stimulate multifunctional land use, integrating the functions of agriculture, recreation, and nature; (ii) it encourages other public landowners to discuss possibilities that could increase the availability of land for sustainable urban food production; and (iii) subsidies are given for temporary occupations of land (often owned by city development organizations) by urban food initiatives.

Despite their efforts, civic activists remain critical about the city government. Civic activists claim that urban food initiatives on temporary locations often signify the type of

activities that are needed in an area, something that land developers and planners should take into account when finally developing the area. In addition, they claim that many urban food initiatives fulfill multiple needs of the urban population. Yet their success is dependent on voluntary efforts, therefore some civic activists argue for more financial support of their work. Finally, there can be a lack of trust from some divisions of the city administration in the management practices of urban food initiatives.

But it is not only the civic activists that are frustrated. The city government and administration have the same feeling because they believe they already do everything that is in their power to do. Some expectations simply cannot be fulfilled at the city level but can only be realized in cooperation with government actors at higher levels, with other districts and other influential market actors. Although at the level of the city they might be very active and have significant influence, at higher levels their influence is much more restricted. This deadlock makes the cooperation between the city government and active citizens more difficult and time intensive, as is illustrated by the following quote:

‘We really should exchange jobs for some time. You will do my job, and I will do yours. You cannot imagine how we share objectives, but you can also not imagine what (limited) means we have to realize them. It would save us a lot of time spent on solving misunderstandings.’ (Urban city planner, part of the steering group ‘Gent en Garde’)

A major point of critique from the urban food initiatives is that the measures taken by the city government thus far are mainly ‘low-hanging fruits’. They were mostly temporary (financial) support mechanisms but did not include changing existing governance arrangements. With that, despite the support of the government, most urban food initiatives currently face legal limitations to develop their innovative practices further. An example is the two urban commercial businesses that use plants, partly collected on public and private land in the city, giving parks and green areas an additional productive function. Nonetheless, at this moment, such practices are based on informal, flexible agreements, and it was not possible to explore possibilities to institutionalize this practice.

There is no doubt that the power of cities is limited. The lack of land suitable for urban food production, for example, is due to a large extent to European (e.g., related to Common Agricultural Policy direct payments) and Flemish policies (e.g., related to the agricultural land lease law or spatial planning). To increase the impact of cities on the relevant higher-level policies, a network of cities could be developed around the topic of sustainable urban food. For Ghent, the already existing cooperation that focuses on the short food chain, the Flemish ‘Platform for Short Food Chains, can be of inspiration providing that the cooperation also involves city administrations. In summary, there is a lot of interaction between practitioners and the city government around urban food. The expectations and roles from both citizens and the

city government have become blurred. Excellent communication, improved cooperation, and trust between practitioners and the governments at city but also provincial, national, and European level are therefore still a significant challenge.

Vigo

Vigo, in the region of Galicia, is Spain’s fourteenth largest city, with approximately 300,000 residents. The city is Europe’s largest fishing port, but has a diversified industrial economy including car production as well as marine engineering and services such as publishing. The city-region faces developmental, governance, and sustainability challenges. In this context of shifting governance responsibilities, and growing governance complexities, resource use about health issues and food provisioning are emerging areas of discussion. Alongside these topics, waste management and nutrient recycling have not received enough discussion. Vigo, a relatively young and industrial city, is surrounded by traditional land ownership and management structures. Alongside food provision through the dominant supermarkets there are still many smallholders producing vegetables in kitchen gardens in combination with small animal husbandry. Also, the city-region is characterized by a large part of the surface consisting of commonly owned and managed land. This common land belongs to ‘comuneiros’ (commoners) (Domínguez García et al., 2017), the inhabitants of the parishes in the city-region which exists at the periphery of the city and also extends into the city itself.

Around 30% of the land in the city region (about 480,000 inhabitants) is owned and managed by ‘comuneiros’. This land most often consists of ‘Monte’, traditionally a multifunctional mountainous zone covered by trees, bushes, and scrub. This common land cannot be sold, inherited, divided, or expropriated. In the city-region of Vigo, there are approximately 100 of these commons managing 24,400 ha, or 32.5% of the total area (Domínguez García et al., 2013). Common land is formally privately owned, as opposed to public state ownership, and is managed by a group of neighbors in a distinct parish. *Comuneiros* are organized in ‘Comunidades de Montes Veciñais en Man Común’ (CMVMCs, Neighborhood Communities for the Common Management of Monte) which oversees the management of these commons according to both legislation and centuries-long traditions.

The projects in the city-region of Vigo demonstrate that CRFS can be far more than community oriented horticulture. The case study simultaneously reveals tensions between different, often poorly communicating administrative levels of, in total, 14 municipalities. The socio-spatial practices of *comuneiros* organized in legally recognized administrative units, the CVMVCs (managing the commons in the parishes), are even higher in number and difference of organizational levels than the municipalities. The regional and national administrations and these often conflict with the local interests’ own projects and its ‘supportive’ environment (Domínguez García et al., 2014, Swagemakers et al., 2014). A side effect of monocultural

forestry with eucalyptus trees that has been implemented all over Galicia over the past decades, and continues to expand in the new rural development plan, is an increased risk of forest fires and exhausting the already vulnerable, mountainous natural resource base in the region. Forest fires affected the commons around Vigo in 2006, and again in October 2017 when 20 large forest fires did not only affect the commons in the parishes but also endangered 400 houses in the metropolitan area of which its inhabitants had to be evacuated, in parishes that belong to Vigo itself (Faro de Vigo, 2017a) and the fire even reaching Vigo's central city park (Faro de Vigo, 2017b), and burned down again a large part of the forested area of the parish of Vincios where two people were killed by the fire.

Despite this tragic event in one of the study areas, the vibrancy of the CMVMC Vincios demonstrates the role that these commons play. Key in this story is the annual monetary turnover the commoners generate and can spend on projects alternative to monocultural forestry. The CMVMC Vincios rents out some of its lands to industries located in a valley and with access to a highway. Together with the income from forestry production, it invests about 65% of the turnover in projects to sustain its 678 ha of common land. Among the projects are the afforestation with chestnut trees and leafy deciduous species, extensive pasturing of goats, cows, and horses, and mushroom production. CMVMC Vincios together with other CMVMCs designed a biomass plant that should produce compost derived from removed scrubland and clearing up monocultural plantations in combination with the green waste from households in the municipality of Gondomar, to which the parish Vincios belongs.

The project can be considered as an inspiring example for the further development of the city-region's attractiveness, promoting the protection of green urban and peri-urban areas in combination with creating opportunities for income generation and employment, as well as cost reduction strategies in the current period of austerity in Spain. It combines the continued impacts of austerity in Spain with an ecological process of encroachment in forest areas by invasive eucalyptus species that exacerbate the likelihood and severity of wildfires (Montalvo and Casaleiro, 2008). The CMVMC carries out multifunctional land-use projects that aim to recover natural spaces and traditional landscapes. Those projects combine forestry, agriculture, stockbreeding, hunting, and leisure while simultaneously preserving the natural, cultural, and historic land assets. With this strategy, Vincios aims to reduce the risk of forest fires and to maintain land productivity. Further, projects were implemented to improve soil fertility by combining reforestation with local varieties (eliminating eucalyptus), using algae as fertilizer, creating pastures, or producing its compost at a smaller scale from available biomass.

The step-by-step creation of coherence and synergies among the projects of the CMVMC Vincios demonstrates that the use of available biomass and promotion of multifunctional land use provides opportunities for developing a food

system grounded in the proper management of the commons. This process has started and gradually unfolds and most likely, as long as the commoners push this type of land use, continues. Next to the provision of landscape aesthetics and biodiversity, the improved soil fertility and quality compost potentially become available for the many traditional kitchen gardens, and in the nearby future perhaps for commercial horticulture activities and the recently initiated community gardens in the city itself and its urban fringe. Next to attractive business models that encourage the efficient reorganization of the food system and the delivery of multiple sustainability and health benefits, the programs and projects also generate new employment opportunities in the area.

Zurich

Zurich is the largest city in Switzerland, with approximately 400,000 of the 1.83 million inhabitants of the Zurich metropolitan area. Zurich is among the world's biggest financial centers. According to several surveys, Zurich was named among the cities with the best quality of life in the world as well as the wealthiest city in Europe (UBS, 2012; MERCER, 2014). Switzerland, which is not a member of the European Union, has different laws and regulations in place to guarantee its distinctiveness from other European countries. This distinctiveness can be seen in the case of the agricultural policies, where Swiss farmers get significant support through national direct payments for food production as well as for agro-ecological measures on farms (Bundesamt für Landwirtschaft, 2015).

The city of Zurich has a strategic goal of becoming a sustainable city by the year 2025 and has defined goals and strategies in diverse fields. Food is not specifically addressed, which several respondents of the city administration argue is due to the absence of a precise definition of "sustainable food" (Schmid and Jahrl, 2014). The first attempts to achieve sustainable public food procurement are mainly framed as CO₂ reduction measures, which address an overall goal of the city: the development of the city toward a "2000-Watt-society". Furthermore, the overall public purchasing motto: "Zurich buys good and reasonable" is not automatically in favor of fostering local and more sustainable food strategies. This has increasingly been criticized by local food initiatives and farmers in and around Zurich. Quite some initiatives that have established in the last decade are now dealing with sustainable food provisioning such as community supported agriculture, urban gardening initiatives, or food coops (e.g., Pflanzplatz Dunkelhölzli, Tor14). However, the perceived growing interest of the public in sustainable and local food issues potentially helps put sustainable food on the policy agenda more frequently. This was, *inter alia*, shown in a large city-wide campaign in 2015 called "Zürich isst" ("Zürich is eating") on sustainable food and consumption with more than 200 events like films, visits, excursions, discussions, etc. (von Felten and Gehring, 2015). The campaign, however, was initiated by city administration

with a donor foundation but organized in a bottom-up approach to allow different kind of initiatives to bring in their activities and to get a platform for communication. In 2016 and 2017, initiated by this campaign, a broader platform has been formed called “Food and nutrition forum Zurich” (“Ernährungsforum Zürich”), after several meetings with different NGOs and persons from city administration. This forum, formally organized as private association, will act as a kind of food council from 2018 on. The initiative is supported again by a private foundation (Mercator Foundation). Despite interest from individuals in city administration, who did not have resources from city policy to push the topic of sustainable food, and civil society actors, who often engage and work on a voluntary basis, it was only after the cooperation with a private donor foundation that activities on a food council started.

The city’s current main approach toward food is still on a form of agricultural production that follows a multifunctional land use approach. The policy goals in this concern are mainly framed along the lines of the national goals of Swiss agriculture, where important goals are the maintenance of the cultural landscape and nature conservation regarding fostering biodiversity (Bundesamt für Landwirtschaft, 2015). One reason for using the rather rural definition of agriculture might be that farmers are mainly supported by agricultural funds at the national level. The city provides additional funds for their city-owned farms. Nevertheless, as referred to by municipal authorities, supporting city farming is a “cheap form of land conservation” (Jahrl and Schmid, 2015).

The city department in charge of green space management (“Grün Stadt Zürich”) has defined diverse goals for its agriculture: (i) design and maintain an attractive cultural landscape with high recreational value, (ii) preserve and promote biodiversity, (iii) produce food, (iv) facilitate “green knowledge” and opportunities for participation among city residents. These goals are to be realized on 810 ha of agricultural land in the city, which accounts for 10% of the town area. The city of Zurich owns 10 farms; nine farms are rented to family farmers. Allotment gardening has a long tradition in the city of Zurich, with approximately 5500 allotment gardens on 135 ha. In recent years, urban gardening initiatives have been established. In 2015, there were 20 community gardens, migrant gardens, or hobby animal holdings (sheep, bees) established on 2.8 ha of city-owned land. One of these is organized as a community supported agriculture (CSA) system with a vegetable box scheme and around 250 consumers. Furthermore, around 20 to 30 temporary community gardens are run mainly on areas for construction with garden produce mostly grown in boxes (Grün Stadt Zürich, 2015). These figures show a diversity of groups cultivating land in the Zurich city area. This is not without conflicts and tensions between the different user groups. Besides the fact that the interests for land use range from e.g., production of food, educational aspects of food production, to recreation interests, all groups are interested in the land.

In the city of Zurich farming and allotment gardening activities have been clearly zoned and defined, with certain support given to farmers. With new urban gardening groups arising, this approach gets increasingly challenged. The main collaboration between civil society and the department for green space management has been in finding suitable places for urban gardening. The department supports urban gardening initiatives by providing land which is mainly either in the periphery of the city and insufficiently accessible by public transport, or it is vacant land on potential construction areas. Even though urban gardening activists describe the current collaboration with city administration as ‘very good and helpful’, they at the same time criticize the land allocation approach, which still favors farmers. Initiatives claim a lack of commitment from public institutions, as it is not clear whether they can keep the fields in the long term to continue their activities. Investments, which are necessary to reach more professionalism, are hampered due to an uncertain future. Consulting farmers directly for cooperation and the provision of land is challenging in times where agricultural land is rare and under pressure in the city area; farmers do not want to “make experiments,” as one leader of an urban gardening initiative states (Jahrl and Schmid, 2018).

In sum, there has not been much cooperation between city administration and civil activists on the topic of food. Collaboration between urban gardening activists and public institutions has so far been solely on the operational rather than on the strategic level. Urban gardening initiatives are not yet considered in strategic and long-term land use management concepts. Even though civil society actors show interests that are in line with city policy goals regarding multifunctional land use (e.g., participation and education or fostering biodiversity). The newly built platform “Food and nutrition forum Zurich” creates potential to discuss and engage in sustainable food from a much broader perspective and it also creates a chance for closer cooperation on a level playing field between city administration, civil activists, and private actors.

Bristol

Bristol has a thriving cultural industry, is a hub of the finance and aerospace industries, hosts two major universities, and the BBC’s Natural History and Food TV production units. The 450,000 people who call the city home, balance between being the gateway to the south west of England, the largest rural area of England, and the cultural cachet of the south east of England. Characterized by entrenched political differences, often leading to stasis at the level of the city council and enmeshed in a complex network of neighboring councils, some of which control areas within the city boundaries, change comes with high transaction costs. Into this context has been a sustained intervention to create a local food and urban food network, in part stimulated by the presence of the Transition Town network but also civic attempts to alleviate poverty, including food poverty with the city.

Table 2. Cities, institutions, areas of activities, and identity type compared.

City	Institution	Key areas	Identity type
Zurich	City Council	Agriculture and horticulture	Legitimized with elements of localized resistance
Vigo	Traditional Commons	Agroforestry, agriculture and biomass	Resistance, regional and local identity
Ghent	City Council	Horticulture, and food consumption	Resistance with elements of project
Bristol	Food Policy Council	Horticulture and food consumption	Project with elements of resistance

A key discursive resource in this intervention has been the publication of the report ‘Who Feeds Bristol?’ in March 2011 which provided a strategic platform for discussion of the flows of food into the city and also the patterns of distribution and consumption within it (Carey, 2011; Carey, 2013). The report considered the resilience of the city and its citizens, encouraging a focus on cooking from basics, a sustainable supply of basic food products, a diversity of food retail in the city, active engagement with food by citizens, and closed food systems that attempt to end resource waste. This became the platform for a Food Policy Council, emulating the models from North America, as a forum for discussion of food issues in the city and to actively plan to influence planning and policy within the city. The Food Policy Council has been the crest of a wave of civic activism with a multitude of initiatives spreading across the city, as activists have sought to experiment across a wide spectrum of areas (Morgan, 2015).

Bristol’s year as European Green Capital saw a plethora of projects sponsored by the Green Capital initiative, although some of them were only for that year rather than linking directly to the previous networks. It became apparent in the city that environmental goals might be in conflict, as a growing amount of land was taken for a mass transit system and despite rhetorical support from the new executive city mayor, practical action has been more limited. This has not prevented the establishment of horticultural social enterprises in and around the city, growing and distributing food, an initiative to prevent food waste and redistribute food in danger of being wasted, as well as food banks and the creation of a local currency with a program to support sustainable food growing. These initiatives have flourished without the direct support, other than verbal, from the city council and the major political parties (Reed and Keech, 2017a).

The impact of Bristol has also been one of an example to other cities in the UK and beyond. Within the city several major NGOs are headquartered, as are national government departments with environmental responsibility and the BBC’s considerable media presence. Activists in the city have acted as movement entrepreneurs in sharing and promoting their actions in publications, especially via the internet, to provide information and inspiration to other cities. Council employees, food activists, and academics have moved to use EU project funding to develop elements of the network, as well as foster the networks of the city. Well organized, clearly articulated, and carefully formulated, the Bristol food networks’ influence is considerable, nurtured in a sympathetic but unyielding local political climate (Reed et al., 2015; Reed and Keech, 2017b).

DISCUSSION

These case studies demonstrate how identity can play an important role in considerations of the multi-level governance. Each city-region provides examples of facets of the experience of CRFSs that may illustrate processes and practices of wider importance (Table 2). Zurich provides an example of how the localized democracy can both enable city-region adaptation but also the limitations of action based at a regional level. Through a focus on common land management and the role of agroforestry the projects in Vigo demonstrate that CRFSs can be far more than community orientated horticulture, and reconfirms the theoretical orientation in this paper on how MLG should incorporate local dwellers acting and adapting the natural resource base to meet common challenges in combination with city-region administrations enrolling policy and planning in collaboration with these social movements in the area. Ghent demonstrates that through re-valORIZING brown field sites and engaging with the socially marginalized, urban agriculture can be woven into the food economy of the city. Bristol represents the most insurgent example, as the citizens imagine new systems of governance to match their aspiration for a CRFS. These examples describe the societal space and structures within which the governance of CRFSs will be constructed. Using Castell’s trio of forms of identity, all are hybrid but tinted and shaped by their relationships with institutional actors.

All of the case studies pose questions about the scope of the state and governance mechanisms in the city-region. In most instances agricultural policy, apart from in Ghent, is decided at a higher geographic level and the city has little control over food production. Simultaneously, although spatial planning is a concern of the city-region, it is limited by national policy and guidance. Even if the city council responds to the demands of its citizens it has few powers over the food chain, therefore it is reliant on indirect influence. In Zurich, the links between city and citizen may be more direct but the council is still faced with a globalized and complex food chain. In Vigo, local dwellers and different levels of city-region administration should engage in innovative land-use strategies of social movements, and within the existing layers of city-region governance find a brokerage strategy which coordinates the different powers and responsibilities in the city-region.

The key resource that all the case studies have identified as central to the future of the CRFS is access to and control over land for growing. The economic pressures on land, either agricultural land and brown field sites as in Ghent or Bristol, or publicly owned as in Zurich, mean that it is not just a question of economic

value but of priorities within the city and surrounding areas. Vigo provides an important counterpoint with the example of land that is held as a common. This counterpoint demonstrates that urban land, which is often treated simply as another commodity, has been a collective resource for hundreds of years and its management can take a wide variety of forms. The demands of urban food increasingly bring into focus the role of land as a resource that needs to be managed for collective ends.

Apart from Zurich, each of the case studies demonstrates the way in which the local state is finding it hard to respond quickly to the demands of its citizens. The social media enabled, and agile networks of food activists are not representative of anyone but themselves and their supporters but their transparency is instructive. Internationally networked, with many members and their agendas openly available to public scrutiny, they make the local state look opaque. Although in several cases, see Ghent, they link to elected political parties, and what is most striking is the lack of vertical integration within the city. Important political actors tend not to see immediate party politics in these demands and as such fail to react to them. This is an immediate disadvantage to these networks as it slows their prescriptions from being adopted but their distance from political parties may play to their advantage in the longer-term. They are describing a space in which the polis, the body of citizens, articulates its demands directly. This, in turn, speaks directly to questions of identity, not national, ethnic, or religious, but as those with rights and responsibilities to the city.

There is a tendency to think of governance as being state centric and linear, that the units that 'do' the governing are within the state, and that power will flow from the regional to the national and onto the supranational. In these case studies, influence flows directly from the supra-national, as EU directives instigate change that would not otherwise happen and it is the national, not city level, state that is bypassed, most directly in the EU case studies but often indirectly in Zurich. Similarly, large corporations can be the agents governing a system, such as the food system or the recycling of waste products. MLG often privileges the *de jure* when the *de facto* is of greater importance.

CONCLUSION

Hooghe and Marks (2009) in many ways anticipate the managerialist call of Barber (Barber, 2014), in which they note the tensions between an engaged and mobilized population with the elites that have previously initiated and guided the European project. Barber argues that by moving the structures of governance to the lowest functional level, that of the city-region, then government would be accountable and responsive, as well as facilitating the intra-city competition that increasingly defines the global economy. Castells (2012) and Hooghe and Marks (2009) all observe the fault in Barber's thesis—the complexity of contemporary identities— as representative mechanisms throughout developed democracies are being challenged.

The case studies suggest that this is not merely a process of ecological modernization, a technocratic adjustment to the emerging challenges of global warming and pressures on resource availability. Rather the emergence of city region food systems also suggests a problem of governance that again stretches beyond definitional adjustments to the boundaries between rural and urban. The challenge for governance is to determine what citizenship means in a world of interwoven layers of governance, with local forces and global flows intersecting. Food offers a way of discussing, and perhaps reconciling some of the tensions around this re-negotiation of citizenship. Food provides a tangible connection to the locality, a storied product that may link to proximate communities rather than anonymous commodities. It can also provide a symbolic distinctiveness, the emergence of goods that represent values and aspirations of the city. Some of the cities have understood the importance of awareness raising through different forms of communication and information events (e.g., Bristol, Zurich, Ghent) in collaboration between the city administration and market and civil society actors, in others until now this remains largely in the hands of citizens who actively change goods and the values these represent (Vigo). These might be necessary first steps to set the ground for MLG food systems and policies.

In our case studies, we have illustrated how localized identities are the bedrock of the urban food networks; they are not exclusive but rather offer an alternate view of the city-region—one controlled by its citizens in correspondence with various layers of government, but also businesses and other networks across the planet. We would argue that the lessons to be learnt from the problem solving and questions posed by MLG in this context are that we need to ask what would happen if not mayors ruled the world, but citizens?

References

- Barber, B.R. 2014. *If mayors ruled the world. Dysfunctional nations, rising cities.* Yale Univ. Press, London.
- Bundesamt für Landwirtschaft. 2015. Direktzahlungen. <https://www.blw.admin.ch/blw/de/home/instrumente/direktzahlungen.html> (verified 15 Mar. 2018).
- Carey, J. 2011. *Who feeds Bristol? Towards a resilient food plan.* Bristol Partnership, Bristol.
- Carey, J. 2013. Urban and community food strategies. *The Case of Bristol.* *Int. Plann. Stud.* 18:111–128. doi:10.1080/13563475.2013.750938
- Castells, M. 1996. *The rise of the network society.* Blackwell, London.
- Castells, M. 1997. *The power of identity.* Blackwell, London.
- Castells, M. 2012. *Networks of outrage and hope: Social movements in the Internet age.* Polity Press, London.
- Cohen, N., and K. Reynolds. 2014. Resource needs for a socially just and sustainable urban agriculture system: Lessons from New York City. *Renew. Agric. Food Syst.* 30:103–114. doi:10.1017/S1742170514000210
- Curry, N., M. Reed, D. Keech, D. Maye, and J. Kirwan. 2014. Urban agriculture and the policies of the European Union: The need for renewal. *Span. J. Rural Dev.* 1:91–106. doi:10.5261/2014.ESP1.08

- De Vries, C.E., and E.E. Edwards. 2009. Taking Europe to its extremes: Extremist parties and public Euroscepticism. *Party Polit.* 15:5–28. doi:10.1177/1354068808097889
- Domínguez García, M.D., D. Copena, P. Swagemakers, and X.S. Fernández. 2013. The Metropolitan area of Vigo in the Northwestern part of Spain. Deliverable 2.2, Work Package 2. SUPURBFOOD project. www.supurbfood.eu (verified 18 July 2017).
- Domínguez García, M.D., P. Swagemakers, D. Copena Rodríguez, J. Covelo Alonso, and X.S. Fernández. 2014. Collective agency and collaborative governance in managing the commons: The case of “A Serra do Galiñeiro” in Galicia, Spain. *Span. J. Rural Dev.* 1:49–64. doi:10.5261/2014.ESP1.05
- Domínguez García, M.D., P. Swagemakers, and O. Schmid. 2017. The commons revisited: Revalorizing the role of *comuneiros* in the redesign of urban agro-food and agroforestry systems. *Urban Agric. Reg. Food Syst.* 2. doi:10.2134/urbanag2016.05.0001
- Ernwein, M. 2014. Framing urban gardening and agriculture: On space, scale and the public. *Geoforum* 56:77–86. doi:10.1016/j.geoforum.2014.06.016
- Faro de Vigo. 2017a. Incendios en Vigo. Cuatrocientos vecinos desalojados en Vigo por más de 20 grandes incendios. <http://www.farodevigo.es/gran-vigo/2017/10/16/vigo-siguen-desalojados-vecinos-cinco/1768200.html> (accessed 3 Nov. 2017).
- Faro de Vigo. 2017b. Incendios en Galicia. Las llamas en Vigo llegan al Castro. <http://www.farodevigo.es/galicia/2017/10/15/incendios-galicia-llamas-vigo/1767901.html> (verified 15 Mar. 2018).
- Fligstein, N. 2010. *Euro-clash. The EU, European identity, and the future of Europe.* Oxford Univ. Press, Oxford.
- Fligstein, N., and D. McAdam. 2015. *A theory of fields.* Oxford Univ. Press, Oxford.
- Giddens, A. 1990. *The consequences of modernity.* Polity Press, London.
- Grün Stadt Zürich. 2015. *Landwirtschaft in der Stadt Zürich.* www.stadt-zuerich.ch/landwirtschaft (accessed 3 Feb. 2015).
- Hooghe, L., and G. Marks. 2009. A postfunctionalist theory of European integration: From permissive consensus to constraining dissensus. *Br. J. Polit. Sci.* 39:1–23. doi:10.1017/S0007123408000409
- Jahrl, I. and O. Schmid. 2015. Policies fostering multifunctional urban agriculture in the city of Zurich. *Urban Agriculture Magazine* 29:30–31.
- Jahrl, I., and O. Schmid. 2018. The governance of urban agriculture and multifunctional land use in the city of Zurich. In: Ch. Soulard, C. Perrin, E. Valette, editors, *Toward sustainable agricultural-urban relations: Innovation, integration, governance.* Urban Agriculture Book Series. Springer, Cham. doi:10.1007/978-3-319-71037-2_13
- Kirwan, J., B. Ilbery, D. Maye, and J. Carey. 2013. Grassroots social innovations and food localisation: An investigation of the Local Food programme in England. *Glob. Environ. Change* 23:830–837. doi:10.1016/j.gloenvcha.2012.12.004
- MERCER. 2014. *Quality of living worldwide city rankings.* <https://www.mercer.com/newsroom/2014-quality-of-living-survey.html> (accessed 13 Feb. 2015).
- Montalvo, J., and B. Casaleiro. 2008. Casos de sostibilidade nos montes galegos. O monte vicinal de Vincios. *Gondomar. Rev. Galega Ecol. Medio Ambiente* 55:33–35.
- Morgan, K. 2015. Nourishing the city: The rise of the urban food question in the Global North. *Urban Stud.* 52:1379–1394. doi:10.1177/0042098014534902
- Reed, M., N. Curry, D. Keech, J. Kirwan, and D. Maye. 2013. *City-region report synthesis (SUPURBFOOD).* Countryside and Community Research Institute, Gloucester.
- Reed, M., and D. Keech. 2017a. Gardening cyberspace. Urban food activism in Bristol and the uses of social media. *Landsc. Res.* doi:10.1080/01426397.2017.1336517
- Reed, M., and D. Keech. 2017b. Making the city smart from the grassroots up: The sustainable food networks of Bristol. *City. Cult. Soc.* (in press).
- Reed, M., D. Keech, J. Kirwan, and D. Maye. 2015. Making the city smart from the grassroots up: The sustainable food networks of Bristol. In: M. Deakin, D. Diamantini, and N. Borrelli, editors, *The governance of city food systems.* Fondazione Giangiacomo Feltrinelli, Rome.
- Schmid, O., and I. Jahrl. 2014. *City region of Zurich (Switzerland). SUPURBFOOD—WP2 Final case study report.* <http://supurbfood.eu/scripts/document.php?id=126> (accessed 11 Feb. 2015).
- Smith, J., and P. Jehlička. 2013. Quiet sustainability: Fertile lessons from Europe’s productive gardeners. *J. Rural Stud.* 32:148–157. doi:10.1016/j.jrurstud.2013.05.002
- Soja, E. 2015. Accentuate the regional. *Int. J. Urban Reg. Res.* 39:372–381. doi:10.1111/1468-2427.12176
- Sonnino, R. 2016. The new geography of food security: Exploring the potential of urban food strategies. *Geogr. J.* 182:190–200. doi:10.1111/geoj.12129
- Sonnino, R., T. Marsden, and A. Moragues-Faus. 2017. Relationships and convergences in food security narratives: Towards a place-based approach. *Trans. Inst. Br. Geogr.* 41:477–489. doi:10.1111/tran.12137
- Steel, J. 2008. *Hungry city: How food shapes our lives.* Vintage, London.
- Stephenson, P. 2013. Twenty years of multi-level governance: ‘Where Does It Come From? What Is It? Where Is It Going?’ *J. Eur. Public Policy* 20:817–837. doi:10.1080/13501763.2013.781818
- Swagemakers, P., D. Copena Rodríguez, M.D. Domínguez García, and X.S. Fernández. 2014. Fighting for a future: An actor-oriented planning approach to landscape preservation in Galicia. *Danish J. Geogr.* 114:109–118. doi:10.1080/00167223.2013.876206
- Swyngedouw, E. 2006. Circulations and metabolisms: (Hybrid) natures and (Cyborg) cities. *Sci. Cult.* 15:105–121. doi:10.1080/09505430600707970
- Taylor, J.R., and S.T. Lovell. 2013. Urban home food gardens in the Global North: Research traditions and future directions. *Agric. Human Values* 31:285–305. doi:10.1007/s10460-013-9475-1
- Tilly, C. 2005. *Identities, Boundaries and Social Ties.* Paradigm Publishers, Boulder.
- Tornaghi, C. 2014. Critical geography of urban agriculture. *Prog. Hum. Geogr.* 38:551–567. doi:10.1177/0309132513512542
- UBS. 2012. *The most expensive and richest cities in the world.* <https://www.ubs.com/microsites/prices-earnings/edition-2015.html> (accessed 3 Mar. 2015).
- Von Felten, B., and S. Gehring. 2015. Nachhaltige Ernährung—was macht die Stadt Zürich? http://www.fibl.org/fileadmin/documents/de/news/2015/SUPURBFOOD-Seminar_Beispiele-Stadt-Zuerich_nachhaltigen_Ernaehrung_16Jan2015.pdf (verified 22 Feb. 2017).
- Wiskerke, J.S.C. 2015. Urban food systems. In: H. de Zeeuw and P. Drechsel, editors, *Cities and agriculture: Developing resilient food systems.* Earthscan Food and Agriculture series. Routledge, Abingdon, New York. p. 1–25.