
The urban foodscape: world cities and the new food equation

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Received on August 3, 2009; accepted on February 8, 2010

A new food equation is taking shape in response to burgeoning prices for basic foodstuffs and growing concerns about the security and sustainability of the agri-food system. Far from being confined to the countries of the global south, food security is now a major issue for the global north, where cities are most exposed to the new pressures on account of their ecological and political sensitivities. This article examines the evolution of urban food strategies in two world cities, London and New York, to explore (i) the meanings of a ‘sustainable food strategy’ and (ii) the scope and limits of food system localization, which is not a surrogate for a sustainable food strategy.

Keywords: food security, sustainable development, urban governance

JEL Classifications: I, Q01, Q18, R

Introduction: the new food equation

During the second half of the 20th century, food became less and less visible in the global north because it was widely assumed that the atavistic challenge of feeding people adequately had been solved once and for all by an industrialized agri-food system that had rendered cheap food accessible to everyone. Although this was never the situation in the global south, where the spectres of chronic hunger and malnutrition continued to haunt large segments of the population, these problems were still affecting a declining share of the developing world’s population, with the glaring exception of sub-Saharan Africa (Collier, 2007; FAO, 2009).

In the past decade, the cautious optimism of the global south and the complacency of the global

north have been rudely shattered by the advent of five profoundly disquieting trends. The first is the *food price surge* in 2007–8, when global wheat prices nearly doubled and rice prices almost tripled. Although prices have recently decreased somewhat, due to worldwide recession, the long-term trend is for food prices to remain at a higher plateau than in the past, which means that hitherto unaffected social classes are now threatened with hunger and malnutrition. Secondly, there is the sharp increase in *food insecurity*: of the world’s 6.6 billion people, some 2 billion are food insecure, meaning they cannot afford a healthy diet and suffer from vitamin and micronutrient deficiencies that limit their physical and cognitive capacities. By 2050, the world’s population is predicted to stabilize at roughly 9 billion, but because of increasing consumption in

developing countries, it will be equivalent to 12 billion people placing demands on the global food system. Given currently available technologies, consumption patterns and climate change, food security for all will become more difficult to achieve unless food security policies are better calibrated with sustainable development policies.¹ Thirdly, food security is now officially deemed to be a matter of *national security*, as the G8 countries confirmed at their meeting in Italy in April 2009, tellingly the first ever such meeting to be devoted to agri-food issues. The food price surge in 2007–8 triggered a wave of political protests in more than 60 countries, a third of which were middle- and high-income countries, highlighting the fact that food security is no longer an issue that is confined to low-income countries. Fourthly, the biggest imponderable of all in this constantly evolving scenario is the effect of *climate change* on agri-food systems around the world. Most serious predictions suggest that the worst effects (water and heat stress, damaged ecosystems and rising sea levels) will be in poor countries that have done least to cause the problem in the first place, exacerbating the problem of food insecurity and creating an enormous ethical obligation on the global north to help the global south with both mitigation and adaptation strategies. Finally, there is the growing incidence of *land conflicts*. One of the most remarkable features of the 2000s has been the growth of overseas investment in agriculture as rich, but food stressed, countries (like Saudi Arabia and South Korea) seek to buy or lease fertile land in poor countries in Africa and Asia to ensure their food security, fuelling charges of food colonialism (Blas, 2009; Cotula et al., 2009; FAO, 2009; Sustainable Development Commission, 2009; von Braun, 2009).

Far from being a short-term cyclical blip, these trends suggest that we have entered a radically new era in the evolution of the capitalist agri-food system. Whether such trends signal the emergence of a new ‘food regime’ is a moot point because the latter is normally associated with a relatively stable constellation of agri-food relationships and much wider structural shifts in class relations, geographical specialization and interstate power (Friedmann,

1993). What we can say, however, is that these trends are compatible with a food regime transition, which has been defined as ‘a period of unresolved experimentation and contestation’ (Friedmann, 2009, 335). In this paper, we will refer to the interplay between the trends identified above through the expression of ‘new food equation’ (NFE). Although it is difficult to provide a generic definition of the NFE, because the local mix varies so much, central to our definition is the idea that the equation signals high-level political acceptance, by national and international governing bodies, of the *multi-functional* character of the agri-food system, which is now viewed and valued in more strategic terms because it is so deeply implicated in burgeoning public health costs, dwindling natural resources and escalating national security threats, for example.

Cities find themselves at the forefront of the NFE for both ecological and political reasons. As a majority of the world’s population is now thought to be ‘urban’, cities have acquired a new role: namely, to drive the *ecological survival* of the human species by showing that large concentrations of people can find more sustainable ways of co-evolving with nature. The agri-food system is at the sharp end of this challenge because of its unique role in sustaining human life and because of its intensive use of climate-sensitive resources, especially land, water and fossil fuels. Cities are also the crucibles of *political protest* because large and rapidly growing concentrations of people are highly combustible places, especially when deprived of the basic essentials of food and water. Finally, over the past decade, city governments in the global north have been in the forefront of public health efforts to stem the rising tide of obesity. In fact, the city has inadvertently become an *obesogenic* environment due to the predominance of energy-dense foods on the one hand and the lack of opportunities for physical mobility on the other. The powerful correlation with poverty means that obesity is not so much an urban problem per se as a problem of poor people in an obesogenic urban environment because, generally speaking, the highest rates of obesity are found among groups with the highest poverty rates and the lowest education levels (Drewnowski and Darmon, 2005).

As we will see in the following sections, the urban food strategies of London and New York were originally launched to address *public health* issues—even though they are now striving to embrace a more holistic approach to sustainability, where health, environment and equity are deemed to be equally important. This seems to be the general trend in Europe, where London and Amsterdam have led the way, and in North America, where Toronto, New York, Seattle and San Francisco are the pioneers of urban food strategies. In developing countries, too, the urban dimension of food policy is assuming ever more importance, with cities like Kampala and Dar es Salaam in the vanguard of this process (Morgan, 2010a).

Of the current generation of urban food strategies, San Francisco merits special attention because no other city in the global north has equalled its political commitment to a holistic strategy that embraces the city and its hinterland. On 9 July 2009, Gavin Newsom, the Mayor of the City and County of San Francisco, issued an Executive Directive on Healthy and Sustainable Food for San

Francisco that is guided by the 11 principles shown in Box 1.

Apart from being the first truly comprehensive urban food policy in the USA, this Executive Directive is notable for three other reasons: (i) it was drawn up with widespread stakeholder involvement orchestrated by *Roots of Change*, a state-wide advocate of sustainable food and farming; (ii) it is ‘joined-up’ in the sense that it applies to all departments in the city government; and (iii) it contains 16 mandatory actions that are time limited, which is what really distinguishes this initiative from all previous food policy statements in the city. For some food planners, the *implementation* of the mandates will be the real key test because, given the state’s perilous fiscal condition, this radical urban food strategy ‘could not have come at a more challenging moment’ (Cohen, 2009).

The implementation of a ‘sustainable food strategy’ is especially challenging for world cities² with a high degree of ethnic diversity, since cosmopolitan populations often retain strong cultural links with their countries of origin. As we will see in

Box 1. *Healthy and Sustainable Food for San Francisco: the guiding principles*

- a. To ensure quality of life, as well as environmental and economic health in San Francisco, the food system must promote public health, environmental sustainability and social responsibility.
- b. Eliminating hunger and ensuring access to healthy and nutritious food for all residents, regardless of economic means, is a concern of all city departments. Investments should be allocated to ensure no San Franciscan goes hungry.
- c. San Francisco’s neighbourhood food environments must allow residents the opportunity to make healthy food choices and reduce environmental causes of diet related illnesses.
- d. To reduce the environmental impacts associated with food production, distribution, consumption, and disposal, whenever possible, city resources will be used to purchase and promote regionally produced and sustainably certified food.
- e. Food production and horticulture education will be encouraged within the City and, to the extent feasible, on City owned land, through urban agriculture including community, backyard, rooftop, and school gardens; edible landscaping, and agricultural incubator projects.
- f. The City and County shall promote economic opportunities in the food sector that create green jobs and local food businesses.
- g. The ability of the City and the County to reduce the environmental impacts of the food system depends on the region’s fertile farmland. The city and County shall support policies that conserve the region’s prime agricultural land.
- h. The City and County shall promote regional agriculture through increasing marketing opportunities for regionally grown agricultural products in SF.
- i. The City and County shall recycle all organic residuals, eliminate chemical use in agriculture and landscaping and use sustainable practices that enhance natural biological systems throughout the City.
- j. The City and County shall promote innovative programs that educate food system stakeholders and the general public on the value of healthy food, and an equitable and sustainable food system.
- k. The City and County shall advocate for federal and state policies that support the principles of this Food Policy.

Source: Newsom, 2009

the following section, this tempers the degree to which local food can be privileged. Although food system localization is a necessary part of a sustainable food strategy, localization and sustainability are not synonymous terms—a point that is sometimes lost in certain green political circles, which champion highly localized versions of sustainable development that border on local autarky. Localization is often assumed to be synonymous with sustainability because it is associated with lower food miles, and the latter tends to be equated with a lower carbon footprint. Despite its popular appeal, this chain of reasoning is deeply flawed because it confuses the carbon footprint of a product, which is fashioned by many activities from farm to fork, with its journey as measured in food miles, which is just one dimension of a multi-dimensional process. The key concept in carbon footprint analysis is *life cycle assessment*, which accounts for every greenhouse gas-emitting process, not just food miles (Edwards-Jones et al., 2008).

Culturally diverse cities that wish to develop ‘sustainable food strategies’ need to strike a balance between the *localization* of their food chains, where the aim should be to calibrate the local production and consumption of seasonal foods, and *globalization*, where the aim should be to promote the use of fairly traded produce from developing countries (Morgan, 2010b). In other words, a sustainable food strategy ought to embrace a twin spatial strategy that tries to promote *cosmopolitan* localism, rather than localism per se. In contrast with defensive localism (which is narrow, self-referential and exclusive), cosmopolitan localism is capacious, multi-cultural and inclusive. Though it would be wrong to equate defensive localism with rural areas and cosmopolitan localism with urban areas, world cities are more likely to have the cultural diversity, social tolerance and liberal politics that help to fashion the cosmopolitan variety. This gives the city a dual identity—as a *bounded* space, with a local territorial identity, and as a *relational* space, which allows urban diasporas to commune with their countries of origin.

In the remainder of the paper we will chart the advent of urban food strategies in two world cities,

London and New York, using school food reform as the main prism through which to understand the nuances of a sustainable food strategy and the implications for food security, sustainability and urban governance. Although these two cities are not necessarily the most advanced examples of sustainable urban food strategies, they have been selected for their unique cosmopolitan nature, which means, in simple terms, that they encapsulate more than any other cities the competing pressures to design a sustainable food strategy that is both locally embedded and globally attuned.

London: local and culturally appropriate food in a world city

As a world city, London is both very ordinary and relatively unique. Its ordinary character stems from the fact that, in common with every other city in the world, it is dependent on prosaic activities that are carried out by a barely visible army of low-paid workers—bus drivers, nurses, school cooks, waitresses, care workers, refuse collectors and the like. But London is relatively unique as well, not least because, in the words of the London Plan, it is ‘one of a very small number of command and control centres in the increasingly interactive network of transactions across the world economy’ (Mayor of London, 2006, 15).

Nothing better illustrates the hybrid character of London than its food system. The ordinariness of London is underlined by the fact that, like the UK in general, the quality of its mainstream food system is poor, geared as it is to processed foods high in salt, sugar and fat. However, London’s status as a world city means that its food system contains two relatively unique features: the awesome array of cuisines associated with the city’s cultural diversity and the accolade of being crowned the gastronomic capital of the world on account of its celebrated restaurants.

The birth of the London food strategy

Exclusive restaurants aside, London’s food system is increasingly perceived to be at the heart of a whole series of urban problems, which can be

summarized as follows (London Development Agency [LDA], 2006):

- *Health*: With the advent of so many diet-related diseases—including obesity, certain cancers, coronary heart disease and type-2 diabetes—the quality of food is coming under increasing scrutiny from the public health community. Childhood obesity is causing particular concern because it appears to be more prevalent in London than anywhere else in England and Wales. According to the National Child Measurement Programme, 11.3% of 4- and 5-year olds in the capital and 20.8% of 10- and 11-year olds are now suffering severe weight problems.
- *Environmental*: Londoners spend over £8 billion a year in food retail outlets and this enormous consumption activity means that the environmental consequences of the way London's food is grown, processed, transported and disposed of are profound and extensive. Indeed, the environmental impact of London's food system, which accounts for some 41% of the city's ecological footprint³ (LDA, 2006, 17), has both local and global dimensions. Locally it results in high levels of air pollution in the city as a result of road freight, while globally it contributes to the greenhouse gases emitted at various stages of the agri-food chain.
- *Economic*: The agri-food sector accounts for 8% of GDP and 12.5% of employment in the UK and the sector is equally significant in London, where it employed nearly 500,000 in 2006, making it the second largest and fastest growing manufacturing sector in the capital. Wide inequalities exist at the household level in terms of the proportion of family spending on food: whereas high-income households spend just 6% of their total spending on food, low-income households spend as much as 26%. These inequalities also affect employment, with long hours and low wages prevalent in many parts of the food economy.
- *Social and cultural*: Apart from its nutritional role in sustaining health and well being, food is also a source of personal pleasure and a means to express one's cultural identity. The phenomenal

growth of the eating out culture is especially pronounced in London, which boasts 12,000 restaurants (half the nation's total), 6,000 cafes and 5,000 bars. The food service sector that caters to this fast-moving market is remarkably under-regulated compared to the retail sector or the public catering sector, with the result that processed foods and poor-quality ingredients are most common in the eating out sector.

- *Food security*: The concept of food security assumes a number of different forms in a city like London, including the ability of the food system to withstand an emergency (like flooding, terrorist attack or disruption of oil supplies); the degree of potential self-sufficiency (which is influenced by the health of the agri-food system in the city and its regional hinterland) and the traceability of food (which is linked to the growing significance of provenance for many consumers). Food security is now assuming more significance in the light of food price increases and climate change fears.

These problems provoked a distinctive response from Ken Livingstone, the first elected Mayor, when he launched *Healthy and Sustainable Food for London* in 2006, the first holistic urban food strategy for the capital. Though it was more aspirational than operational, the London Food Strategy (LFS) was predicated on one simple proposition: that the food system was out of step with “the ambition that London should be a world-class sustainable city” (LDA, 2006, 17). Embracing eight different stages of the food chain, ranging from primary production to waste disposal, the strategy identified six priority actions: (i) ensuring commercial vibrancy; (ii) securing consumer engagement; (iii) leveraging the power of procurement; (iv) developing regional links; (v) delivering healthy schools; and (vi) reducing waste.

The success of the LFS will largely revolve around two issues: resources and governance. If the total resources behind the strategy are limited to the official budget—initially set at £4 million over 3 years—it can safely be said that this sum is too modest to realize the Mayor's urban food

vision. The architects of the strategy are fully alive to this problem. As they explicitly said:

The cost of improvements to London's food system cannot be met by the public sector alone. It will be vital to maximise the input and impact of the private sector, as well as voluntary organisations and, of course, individual consumers, on an equitable and enduring basis (LDA, 2006, 103).

Governance, too, will require concerted action at national, regional and local levels. However, this is no easy matter. Indeed, a major weakness of the strategy is that the Mayor has little or no direct control over the activities that he is seeking to influence—a point that we will illustrate in the context of school food reform.

Before examining the LFS through the prism of school food reform, it is worth clarifying its commitment to 'local food'. As mentioned above, spatial scale and social character both distinguish the London food system from the rest of the country, adding some nuances to the meaning of the 'local' in a global city. In *spatial* terms, the scale is so much greater than in other British cities that conventional definitions of the local have to be revised when applied to the capital. For example, the regulation governing farmers' markets in the UK stipulates that producers must come within a 30-mile radius of the market; for London, this rule has been extended to a 100-mile radius. The *social* character of the city also makes a difference. Given its 'world-in-a-city' population, the demand for ethnically and culturally specific food in London is much higher than elsewhere in the country. Ensuring that diverse communities have access to culturally appropriate food means, according to the LFS, "that there may be limits to the extent to which 'local' food can meet London's needs" (LDA, 2006, 30). In other words, the city's commitment to 'localization' is tempered by, and complemented with, a commitment to benign 'globalization'. As the Strategy states, the city's global purchasing power "positions London to have a positive influence on international markets" (LDA, 2006, 30). The new localism of the LFS is therefore paralleled by

a strong cosmopolitanism; in a sense, what the document proposes is an outward-looking cosmopolitan localism, rather than the kind of self-referential 'defensive localism' that has been widely criticized in the food politics literature (see, for example, Born and Purcell, 2006 and DuPuis and Goodman, 2005).

Delivering healthy schools: the scope and limits of the London food strategy

Of all the priority actions in the LFS, the most sensitive was healthy schools, largely because the poor quality of school food in the UK has recently become a politically contentious issue (Morgan and Sonnino, 2008). In this highly charged context, the LFS outlined a bold and ambitious prospectus for school food reform in the capital, as shown in Box 2.

Although the LFS calls for 'London-wide action' in school food reform, there is no city-wide mechanism for translating this rhetoric into reality because the school food service is controlled not by the Mayor but by 33 separate boroughs. The devolved (or fragmented) governance system of school food is even more pronounced than this local government structure would suggest because, under the nationally approved 'local management of schools' legislation, many schools in the capital have become self-governing entities—a status that effectively puts them beyond the control of their local boroughs. However, some London boroughs have retained more control over their local schools than others. Greenwich, with its Labour-led council's commitment to the local authority catering service, is one of them. As mentioned in Box 2, Greenwich is also one of the pioneers of school food reform in London and it serves as a good illustration of cosmopolitan localism because its public food strategy has to cater for one of the most culturally diverse populations in the world.

The best index of Greenwich's ethnic and cultural diversity is the fact that more than 100 languages are now spoken in the borough, which is a major reception area for new immigrants. Poverty, as well as cultural diversity, marks out east-end boroughs like Greenwich, where 38% of all primary school children are eligible for free school meals

Box 2. Delivering Healthy Schools in London

Schools have a fundamental role in the food system in London: they have the opportunity to provide pupils with healthy meals at least once a day; they can educate children about food, nutrition, healthy eating and the environment; they can equip children with the skills they need to make informed choices and prepare their own food; and they can equip children to educate and pass on knowledge to their parents and peers. More than any other group in London, children need, indeed are entitled to, strong guidance.

Focusing on all of these opportunities offers the scope for both immediate and longer term health, behavioural and environmental benefits. This is not an easy win or short term objective; there are indeed a number of significant barriers to overcome, including catering skills, the lack of flexibility in some existing contracts with suppliers, appropriate cooking facilities and the level of funding overall. However, the potential benefits are such that London-wide action is required now. For this reason, the following key actions are proposed:

- Support the education system in increasing the amount of time spent on cooking and food education in schools, which may include work to revise the National Curriculum as well as specific support measures for schools and teachers
- Research and promote the positive benefits of nutritious food for children, and work to secure the necessary funding and investment to secure those benefits
- Continue to improve the nutritional quality of school meals and the number of pupils eating them, targeting barriers such as training for catering staff, catering facilities, political will and overall budget allocations
- Improve children's access to healthy, quality food outside of school meals: by improving the provision of fresh fruit and access to fresh water in schools; support and pilot the introduction of green/healthy vending machines; and expand school breakfast clubs
- Increase the number of schools taking part in farm/city farm visits.

There is considerable momentum behind these issues—at both a national level and within London—that this strategy needs to capitalise and build on. For example, in London much good work has been done already in Croydon, Greenwich and Camden.

Source: LDA, 2006, 95

(a robust index of social deprivation), against a national average of 17%. Despite these social and cultural challenges, some 90% of all schools in the borough were on track to win Healthy School status (Morgan and Sonnino, 2008).

In addition to political support, another important factor in sustaining school food reform in Greenwich was the calibre of the local authority catering service, Greenwich Catering, which survived the decimation of public sector catering in the Thatcher years. As Bobbie Bremerkamp, the head of Greenwich Catering, explained:

Within Greenwich, we had very strict control. We were very fortunate. We still kept our kitchens. We still kept our skills. We still produced one proper cooked meal a day. We made sure that was on the menu.

However, no local authority could entirely escape the pressures to reduce costs during the

neo-liberal era of Thatcherism. Ms Bremerkamp recalled the ineluctable effects of these pressures:

What happened was, after every four or five years, you had to keep tendering. So every time it was tendered, the prices were driven down. So the food items were driven down. And with that the quality went down. And it got to the point that you were embarrassed by some of the things that were coming in.

Although school food reform began from within the catering service, the process accelerated dramatically when Jamie Oliver, the celebrity TV chef, selected Greenwich as the local authority laboratory to prove that school food could be good food. Despite some major hurdles—like children's apparent addiction to junk food, the scepticism of dinner ladies and the hostility of some parents, the celebrity chef abbreviated the school food reform process. As the director of Culture and Community

Services at Greenwich said: “The transformation which took place within the space of like six months would have taken us years here” (Morgan and Sonnino, 2008, 109). Despite the short-term shock of celebrity-induced change, Greenwich Council has been able to sustain the momentum of school food reform by investing in new menus, skills and equipment—an enormous achievement for a poor borough faced with rising food prices.

From a sustainability standpoint, it is instructive that the primary specifications for the new menus in Greenwich stress the health and nutritional aspects of the food, rather than local food per se. Although Greenwich Council does have a preference for purchasing local food where possible, this does not take precedence over food that is “healthy, nutritional and culturally appropriate”, a request that takes into account the extraordinary level of ethnic diversity in the borough.

Few boroughs have been able to emulate the achievements of Greenwich. Apart from the local barriers to school food reform in London—like the escalating cost of fresh ingredients, the lack of school kitchens and a weak local food infrastructure—one of the most glaring generic problems is the fact that there is no city-wide governance mechanism to drive school food reform across all 33 boroughs. This governance deficit would continue to be a problem even if the LFS were to overcome its other major problem: a woefully inadequate budget.

New mayor, new agenda? Re-calibrating the London food strategy

When Boris Johnson succeeded Ken Livingstone as Mayor of London in 2008, there were grounds for thinking that this rightward shift signalled the end of the LFS and the wider sustainability agenda of which it was a part. As well as being a climate change sceptic, the new incumbent had ridiculed school food reform, dismissing it as an unwarranted invasion of personal space on the part of the ‘nanny state’. Once in office, however, he surprised friends and foes alike by accepting large parts of the Livingstone agenda, particularly the LFS and the target of cutting London’s carbon emissions by 60% by 2025. Johnson also went further than his predecessor

by launching a climate change adaptation strategy (a legal requirement of the Greater London Authority Act), which calls for a city-wide ‘urban greening’ programme to deal with flooding, drought and heat waves.

On the food front, the new Mayor opted for a combination of continuity and change; while he retained the broad goals of the LFS, he also launched some novel schemes in keeping with his new climate-conscious credentials and food security concerns. The main food scheme launched by the Mayor during his first year in office was *Capital Growth*, which aims to create 2012 new food growing spaces by 2012, the year of the London Olympics (Sustain 2008). It is expected that a range of public and private organizations—like borough councils, schools, hospitals, housing estates, utility companies and parks—will open up under-used land for the scheme. While the principle of growing food solely for commercial or private benefit is supported, for a space to be eligible for financial support under the *Capital Growth* programme, it must also deliver a clear benefit to the community.

Laudable as it is, the *Capital Growth* programme is mostly symbolic. In fact, while it helps to promote the city as a site of food production and not just consumption, its capacity to transform the urban food system is limited by the fact that it is poorly resourced,⁴ contingent as it is on fundraising and donations of equipment and training from public and private benefactors. Such modest and insecure funding suggests that the LFS has little or no real transformational capacity. Compared to the mainstream food system, which is dominated by private sector supermarkets and food service companies, the public sector catering system cannot on its own offer a viable alternative to the industrial ethos of the large corporate players.

Supporters of the LFS, however, criticize this pessimistic view. First and foremost, they argue, the LFS continues to exist, furnishing a platform on which to build a more robust urban food strategy. Supporters also stress two other points—the local food infrastructure work and the potential of the London Olympics. Under the auspices of the

‘regional links’ priority, the local food infrastructure work is said to have the greatest potential for effecting food system reform because it involves a number of key actions:

- public sector food procurement—primarily working across five locations with schools, hospitals, prisons and universities to aggregate demand in the public sector and reduce carbon emissions by improving the efficiency of vehicle use;
- wholesale markets—four of the six London wholesale markets, including the celebrated Borough Market, now have dedicated officers to champion the use of produce from neighbouring regions in southern England;
- new food access initiatives—to promote the sale of fruit and vegetables through small retailers working in deprived areas (Reynolds, 2010).

The biggest test of this local food infrastructure will come in 2012, when London hosts the Olympic Games. One of the reasons why London won the right to host the world’s premier sporting event was because the city promised to deliver the “most sustainable games ever” and “to support consumption of local, seasonal and organic produce”. Realizing this goal may be more difficult than the organizers imagined, not least because the official sponsors of the Games—Coca Cola and McDonalds—secured the right to market their products extensively at all International Olympics Committee events and to exempt themselves from UK legal restrictions on junk food advertising (London Food Link, 2007).

Significant as it is, however, the Olympic Games is merely one part of the ever changing foodscape of London. Although the public sector is an important part of this foodscape, not least the schools and hospitals that supply 110 million meals a year in London, this is just a fraction of the estimated 8 billion meals that are consumed annually in the capital (Brook Lyndhurst, 2008). To have more traction, the LFS will need to engage more forcefully with the mainstream food system, especially with the multiple retailers and the food service sector, the private companies that exert the greatest influence over the food chain (Morgan et al., 2006).

As it is, the early experience of the LFS suggests that a sustainable urban food system is difficult to define—let alone deliver. Indeed, different sustainability considerations may actually conflict with one another, since there is no clear evidence that a local or organic ‘shopping trolley’ has a lower environmental impact than a conventional one in terms of greenhouse gas emissions. The Mayor’s food policy advisors have suggested, therefore, that the LFS needs to look to broader and more precise measures (such as food security and the wider benefits of organics and local economic regeneration) if it wants to propose a more coherent sustainable development narrative (Brook Lyndhurst, 2008). However, for this narrative to be put into practice, something needs to be done to address the strategy’s two most fundamental problems: lack of resources and a weak city-wide governance system, which means that the Mayor exerts no direct control over a food system that he officially wants to reform.

New York: the challenge of re-localization in the placeless foodscape

Agriculture plays a central role in New York State’s economy. Recent estimates suggest that approximately 25% of the State’s land (i.e. 7.5 million acres) is used by some 35,000 farms, whose products contribute more than \$25 billion to New York State’s economy. Apples are among the most famous products grown in this area of the world, but most locally produced apples are not consumed locally. In Upper Manhattan, residents find mostly Granny Smith apples from New Zealand at their local corner stores—and at a premium price (Moskin, 2009). In other areas, New Yorkers are fortunate if they even find apples; on average, in neighbourhoods like East and Central Harlem only one corner store in four sells common fruit like apples (Gordon et al., 2007).

In extreme synthesis, there are two main factors responsible for this odd situation. On the one hand, the industrialization of the food system, which was pioneered in the USA, implied that “food long ago ceased to have any meaningful connection with

place or seasonality, leaving America with a well-deserved reputation for being a ‘placeless food-landscape’” (Morgan and Sonnino, 2008, 37). On the other hand, American farm and food policy has traditionally prioritized the development of export markets for bulk commodities, neglecting local and regional markets as well as healthier food products. In simple terms, “while the federal government is a major source—and often the only source—of public funding for nutrition education, it also heavily subsidizes crops, such as corn and soy, which are turned into sugary, fatty, and processed foods. By contrast, fruits and vegetables receive very little subsidy” (Stringer, 2009, 11). Despite heated debates around the 2007 Farm Bill, it is unlikely that US farm and food policy will be radically reformed any time soon. As Beattie (2007) argues, “the fundamentalist pile-it-high philosophy that has informed US farm policy since the early 1970s looks set to endure for the next five years”.

In this context, innovative political approaches to food are emerging mostly at the state and municipal governance scale. Reacting to the atrophy of the federal approach, cities and states across the country are attempting to design and implement their own ‘sustainable’ food strategies and initiatives. The recent report on *Food in the Public Interest* (commissioned by Manhattan Borough President Scott Stringer) is an illustrative example of this trend. Indeed, the document explicitly breaks with the conventional approach, which leaves the federal government and the private sector in charge of food policy, and advocates a ‘paradigm shift’ that empowers the city and the state. Central to this process of empowerment, the report argues, is the achievement of a strategic focus “on a shared goal: to create a sustainable food system which provides economic, social, environmental, and health benefits” (Stringer, 2009, 4).

As in London, this emerging political discourse on sustainable food systems emphasizes re-localization, but in a qualified manner. In the next section, we will highlight the role attributed to local food in the context of the many initiatives that are under way to improve food access and the

eating habits of New Yorkers. Using school meals as a prism, the paper will then examine the complex meanings and implications of food re-localization in one of the most quintessential global cities in the world.

Local food and healthy eating in New York: the context

In New York State and City, local food is often mentioned in relation to healthy eating initiatives. One of the most recent examples is the ‘Healthy Food for Healthy Lives Act’, introduced by Senator Clinton in 2008, which aims “to direct the Secretary of Agriculture to provide grants to hospitals and other non-profit inpatient health care institutions, Department of Veteran Affairs medical centres, and other social service programs for the acquisition of local nutritious agricultural products”. The Act defines “locally or regionally produced agricultural product” as any product that is raised, produced, distributed and marketed in a locality or region without travelling more than 400 miles or in the State in which it is produced (S. 3588, Section 2)—a distance that is even greater of the one identified for farmers’ markets in London.

This piece of legislation is part of a wider strategy adopted by the State of New York to calibrate the growing demand and the supply of local products through procurement policies that target institutional purchasing. Indeed, in a report to the governor, the recently formed New York State Council on Food Policy provides a number of recommendations to increase local food sourcing in public institutions, especially schools. For example, “in the absence of strong national standards requiring schools to provide a healthy school environment” (New York State Council on Food Policy, 2008, 15), the Council supports the proposed Healthy Schools Act, which strives to eliminate low-cost bidding requirements for school purchases of State-grown food. As part of these efforts, in 2008 the New York State Education Department introduced the Fresh Fruit and Vegetable Program, which allocated over \$1.7 million in federal funds to 51 schools (distributed across 26 districts) to purchase, separately from other meal programs,

locally grown fresh fruits and vegetables for roughly 26,700 school children (New York State Council on Food Policy, 2008, 25).

The City of New York has demonstrated ‘unparalleled leadership’, as the Stringer (2009, 11) report emphasizes, in the implementation of healthy eating strategies. In recent years, Mayor Bloomberg has taken a number of widely discussed initiatives that have targeted the private sector, banning trans-fats from restaurants and requiring chain restaurants to post calories, for example. But something significant has been done also in the realm of public food provisioning. In 2007, the Department of Health and Mental Hygiene began to work with 1000 corner stores in New York City to encourage them to carry low-fat milk. One year later, the *Healthy Bodega* initiative was expanded to help more than 400 interested shops stock and promote fruits and vegetables and carry fresh local products from their neighbourhood’s farmers’ market. In 2008, with the *Green Carts* initiative, New York City created 1000 new permits for street vendors who exclusively sell fresh fruits and vegetables. As a response to the shocking findings of a study commissioned by the Department of Health (which shows for example, that in more deprived areas like Harlem supermarkets are 30% less common than in wealthy areas like Upper East Side and that only 3% of the bodegas carry leafy vegetables), the *Green Cart* program allows the use of the new permits only in neighbourhoods where 15% or more of the population reported having consumed no fruits or vegetables in the previous 24 hours (Council of the City of New York, 2008a). Complementing this initiative, in 2008 the Council began the technological upgrading necessary to allow New Yorkers to use their food stamps to access locally grown produce at farmers’ markets (Council of the City of New York, 2008b).

By and large, these initiatives provide a response to the increasingly urgent need to tackle the burgeoning obesity crisis that is affecting New Yorkers. Indeed, in a city where “newspaper stands sell more junk food than they do newspapers” (Stringer, 2009, 11), obesity and overweight affect more than half of the adult population and 43% of

school children. It is then not surprising that the political discourse associates local food mostly with the notion of ‘freshness’, which in turns evokes the idea of low-fat and nutritious products—such as fruit and vegetables. The Stringer report is a good example of this type of interpretation. In advocating a food policy that harnesses regional agriculture for urban consumption, the report indeed states that “locally grown and distributed food is likely to be fresher, more nutritious, [...] and less processed” (Stringer, 2009, 8).

However, in a global city like New York the concept of ‘food access’ has more complex meanings than just making healthy food available to people accustomed to a ‘junk food’ diet. In New York, obese and overweight citizens live side-by-side with roughly 1,300,000 food-insecure residents suffering from hunger or malnutrition (Stringer, 2009, 7). As the City’s Food Policy Coordinator stated:

There are two interrelated food policy issues that are really important to the city of New York: hunger, or more precisely food insecurity, and obesity. [...] There is a strong sense that poverty, food insecurity and obesity are very much related issues. [...] We are talking about hundreds of thousands of people that do not consistently have confidence that they can put food on the table.

In this context, food ‘sustainability’ and ‘localness’ have many different, at times even contradictory, meanings and implications, which raise unique challenges for policy-makers attempting to turn the rhetoric of sustainable development into reality. To make sense of these challenges, the next section of the paper will focus on school food provisioning in New York City. Indeed, the Stringer (2009, 8) report makes explicit reference to the “early model of success” provided by the Department of Education, “which has already increased regional purchasing, particularly for apples, carrots, and yogurt”. Significantly, however, Karen Karp, one of the main actors behind the success of the school food ‘model’, commented that some of the report’s recommendations on local food might be unrealistic. In

her words, “New York is a Northeastern city, but we need citrus, we need coffee beans, we need sugar all year round. It’s a bigger picture than just apples and carrots” (Moskin, 2009). These words just begin to capture some of the complexities associated with the very notion of food re-localization in the most populated, ethnically mixed and socio-economically diverse city of the USA.

Promoting re-localization through public food provisioning: the New York model

If one wants to find local apples in New York City, public schools may be a good place to visit. In 2003, the SchoolFood office purchased as much as 5.5 million pounds of New York State’s apples. One year later, the City began to source sliced apples for its schools that are grown, processed and packaged in New York. In 2006, the local sourcing strategy was further expanded to locally grown plums, peaches, nectarines, pears and yoghurt made using local milk.

These achievements should not be underestimated. Indeed, in a country like the USA, “it’s not a question of saying I believe in local products and I’ll buy them next week”, as the former Director of New York City’s School Food Office remarked. It is a question of battling “a bureaucracy that seems tilted away from local food” (Severson, 2007).

In general, American cities interested in re-localizing their school food chain have to face two main obstacles. The first has to do with the ambiguities of the general regulatory context. For many activists and experts, Section 4303 of the 2002 Farm Bill provides the statutory basis for local food procurement by stating that:

The Secretary shall encourage institutions participating in the school lunch programme under this Act and the school breakfast programme [...] to purchase, in addition to other food purchases, locally produced foods for school meal programs, to the maximum extent practicable and appropriate.

However, for the US Department of Agriculture (USDA), which administers school nutrition pro-

grams at the federal level, local food cannot be specified as such by contracting authorities. As a senior USDA official wrote in a letter to all state directors of child nutrition programmes:

Federal procurement regulations at 7 CFR 3016.60(c) clearly prohibit the use of State or local geographic preferences. All purchases made with non-profit school food service account funds are to be made competitively, consistent with Federal laws and regulations. (Garnett, 2007)

The second obstacle to school food re-localization in the USA is inherent in the functioning of the system, which allocates cash subsidies on the basis of the number of pupils participating in the nutrition programs. In a country where food corporations spend as much as \$15 billion a year directly targeting children with junk food marketing and advertising (Birchall, 2007) and where, as a result, children spend annually almost \$30 billion on unhealthy foods (Nestle, 2006), school food directors are much more likely to ensure pupils’ participation by providing foods that are appealing to them, rather than fresh and healthy products.

In addition to cash reimbursements, schools also obtain ‘commodity’ foods from USDA, which are valued at a specific cash amount per meal served. The type of commodity foods that schools can obtain depend on market availability, but not all foods are available: since commodity foods are delivered by truck, there must be enough demand from school food service directors in a particular region in order to get a specific product (Hamlin, 2006). With the exception of DoD Fresh products,⁵ most commodity foods are neither local nor healthy.

The scope for developing local food systems in New York is also limited by endogenous factors, such as the short growing season of fresh produce in the area and the limited packing and distribution capacity in the region (Market Ventures et al., 2007, 86). Moreover, many local farmers cannot afford to take on the costs of distributing food to 860,000 pupils across 1450 schools, many of which do not have the infrastructure to cook meals using fresh ingredients.

New York City has managed to overcome some of these challenges through the adoption of an inclusive and creative procurement approach. When, in 2003, New York State decided to embrace a local procurement agenda, its Department of Agriculture and Market began to work closely with New York City's SchoolFood Office to write a specification for fresh apples that identified a variety only grown in the State. Two years later, SchoolFood entered into a partnership with SchoolFoodPlus, a \$3 million collaborative initiative funded by the Kellogg Foundation, which aims "to improve the eating habits, health and academic performance of New York City public schoolchildren while strengthening the New York State agricultural economy through the procurement of local, regional produce" (Market Ventures et al., 2005, 17). One of SchoolFoodPlus' members, Karp Resources, took on the role of 'public interest broker' to act as a facilitator and deal-maker between local growers and packers and the four distributors contracted by SchoolFood. With an estimated \$123 million annually to spend on food, New York City has enormous power in influencing, at least informally, distributors' decisions as to *where* to buy the food for the schools. In commenting on New York City's procurement practice to buy lowest price, a member of the anti-hunger organization City Harvest stated:

The price issue is real but we have no history of negotiating [...] and that is another lesson learned: to talk to farmers and distributors because they have never been involved in these conversations before.

Karp continues to be instrumental in "working out the logistics of being able to get the product [...] from the grower to the distributor, cutting out that whole middle ground", as a representative of SchoolFoodPlus put it. But the grower here is not perhaps as "local" as it would be considered in many other areas of the world. In telling the story of her successful initiative to get local peaches in New York's schools, Karp said:

The Department of Agriculture works for the State government so they were not looking [...]

to any of the States in our region because they are obligated to New York State. Well, it just so happens that New Jersey is a large peach producing state [...] and they have the infrastructure in place that grades them, packs them and ships them to institutional buyers. New York does not have any of that infrastructure at all. That ended up being over \$100,000 worth of local peaches and nectarines that got into the system that were coming from Georgia or California or wherever before, but now they are coming from the region. Now they are coming from New Jersey, but I consider that the region.

This broad interpretation of 'locality' should not obfuscate the central lesson that can be drawn from the recent history of school food reform in New York City: that is the potential of city-wide action in reconnecting the city with its rural hinterland. Indeed, whereas the Stringer strategy, just like the LFS, cannot rely on appropriate governance mechanisms to deliver its vision, school meals in New York are centrally governed and financed. Clearly, world cities like New York and London will not be able to feed themselves solely through local food products, given their size and ethnic diversity. Nevertheless, in the context of the NFE there is a unique opportunity for them to become engines of rural development in their regions.

World cities and the new food equation: some conclusions

Of the many faces of the NFE, none is more compelling in human development terms than the issue of *food insecurity*. Far from being confined to the developing world, this has become a major political issue for many developed countries too. That London and New York are being forced to think anew about food security highlights the fact that world cities, despite being highly developed sites of global capitalism, have not managed to banish the spectre of hunger from their streets. Urban food security policy in these cities is beginning to focus on two key dimensions of the problem—food production and food access. On the food production side,

one can begin to discern a new planning dispensation for urban agriculture to enable the city to feed itself from within (as in London) or from its neighbouring areas (as in New York). On the food access side, New York is doing more to promote the consumption of fresh food in poor districts (through, for example, the *Green Cart* and *Healthy Bodega* schemes), though both cities have deployed the school meal service as the primary food access scheme for children.

The complexity of *sustainability* is the second key issue. With notable exceptions, the agri-food literature tends to belittle this issue by treating localization and sustainability as synonymous terms. Indeed, it may not be possible to forge a complete consensus as to what constitutes a ‘sustainable food strategy’ because sustainability is a highly contested multi-dimensional concept in which trade-offs have to be made between social, economic and ecological values (Thompson et al., 2007). The urban food strategies of London and New York illustrated these trade-offs in the way they qualified their commitment to localization. In the case of the LFS, the commitment to local food was tempered by a combination of cultural and organizational considerations: the need to provide culturally appropriate food for a cosmopolitan population and a weak infrastructure to sustain a local food economy. The commitment to local food was also qualified at the borough level in Greenwich, where the primary specifications of the school meal service were geared to healthy, nutritious and culturally appropriate food. While these cultural considerations were also present in New York, city officials felt that there were two main barriers to local food sourcing: climatic limitations, which meant that the policy preference was for regionalization rather than localization, and commodity foods, which had a privileged position in the school lunch programme because they were heavily subsidized by the federal government.

The significance of *urban governance* is the third key conclusion to emerge from this analysis. As we stated in the introduction, the most defining feature of the NFE is that governments of all ideological persuasions have recently begun to view and value food differently. In an era of rapid urbanization, this

is especially the case for urban governments. Indeed, today it is at the municipal level that the socio-economic and environmental problems associated with food insecurity become most evident. And it is at the municipal level that new solutions are beginning to be devised and implemented, as our case studies have demonstrated. Theoretically, this changing scenario is raising the need for studies that focus on the emerging role of municipal governments as food chain innovators, who are beginning to utilize their political and economic power to design new types of food systems that transcend simplistic dichotomies between local and global scale and between urban and rural development. In this context, however, the issues that need to be addressed are not just theoretical. They are also, and perhaps most importantly, practical and political, as the case of London in particular shows. Although London was the first to develop an urban food strategy, this has been stymied by the capital’s weak urban governance system. Squeezed by national government above, and by 33 local boroughs below, the London Mayor is a much weaker political figure than he might appear, and certainly much less powerful than his New York counterpart. The LFS is actually a microcosm of the shortcomings of the Mayor’s office: it aspires to create a new food system for the capital, but it manifestly lacks the power and the resources to realize this aspiration. In the case of the school food service, for example, London lacks a city-wide governance system that can address school food reform on a metropolitan scale, one reason why Greenwich is the exception not the rule. Clearly, the question of urban governance—how cities are locally governed *and* globally networked—merits much more attention in the agri-food literature not just for its potential contribution to theoretical debates about scale and power in the food system but also, from a more concrete perspective, because cities are most vulnerable to the combustible politics of the NFE.

Endnotes

¹ Here and elsewhere we refer to the FAO definition: ‘‘Food security exists when all people, at all times, have

physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life’.

² Most conventional definitions of world cities tend to agree that there are four ‘alpha world cities’, namely London, New York, Paris and Tokyo, with at least 5 million people within the administrative boundary and up to 20 million more in the surrounding city-region hinterland (Hall and Pain, 2006; Taylor, 2004).

³ The ecological footprint represents the amount of productive land and sea area needed to provide the necessary resources and absorb the waste of a human population.

⁴ In the pilot phase of the programme, the budget consists of a grant of just £50,000 from the LDA.

⁵ The programme started in 1994, when USDA and the Department of Defence’s Produce Business Unit began to pilot the procurement of fresh fruit and vegetables for schools in eight States using a portion of the states’ commodity funds. Due to the success of the initiative, DoD Fresh now operates in 43 states, which have been allocated \$50 million a year of commodity funds to procure fresh fruit and vegetables. In addition, schools are now allowed to use general funds to purchase fresh produce from DoD Fresh (Morgan and Sonnino, 2008, 51).

Acknowledgment

This paper drew in part on research funded by the Economic and Social Research Council (grant number RES-000-23-1095) in a project called ‘Delivering sustainability: the creative procurement of school food in Italy, the UK and the USA’.

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