Gendering urban food strategies across multiple scales

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Abstract

Gender and food are intertwined issues for social welfare in cities. This chapter builds on Hovorka and Lee-Smith's contribution to *Cities Farming for the Future: Urban Agriculture for Green and Productive Cities* by reviewing recent literature on urban food systems and analysing it through a gendered lens. The analysis foregrounds the intersecting politics of gender inequality and food insecurity at multiple scales of analysis. A detailed reading of the recent literature is presented at individual, household, city, nation, and global scales to highlight the variety of structural forces shaping urban food systems. The multi-scaled analysis also reveals several entry points for improving urban food systems through new policies, projects, and research. The chapter reviews the outcomes of successful projects that have constructively integrated an understanding of the link between gender and food in their program designs and execution. The political focus of the chapter's analysis of the literature reveals several challenges that remain for gender mainstreaming in urban food system projects to lead to longterm sustainable reforms to gender inequality and urban food insecurity.

1. Introduction

Gender provides a powerful lens for analysing and addressing urban food insecurity (Hovorka *et al.*, 2009). This chapter examines gender-related issues in urban food systems across multiple scales and offers strategies to integrate gender analysis in practice. The chapter builds on Hovorka and Lee-Smith's (2006) review of gender and urban agriculture literature in *Cities Farming for the Future: Urban Agriculture for Green and Productive Cities*, with two key differences in focal point. First, whereas the 2006 contribution focused on food production in urban areas, this chapter encompasses multiple aspects of urban food systems including food distribution, consumption, and livelihoods. Second, whereas the 2006 chapter was focussed on cities in developing areas, this chapter draws together research from cities of the Global North and the Global South, using gender as a unifying concept to connect extremely diverse case studies.

In adopting a comprehensive and interdisciplinary scope, this chapter draws on the concept of a 'feminist foodscapes framework' (Hovorka 2013) to emphasise the social justice questions at the heart of urban food security. The feminist foodscapes framework highlights the power imbalances that create and sustain food insecurity in urban areas. These power imbalances are evident in the structural disadvantages faced by women relative to men at multiple scales, including: the distribution of resources at the household level, access to employment, education and health care, and the protection of women's human rights. These structural issues shape men's and women's food security status differently, while also intersecting with disempowering social categories and identities based on race, class, age, religion, and sexuality. The precise causes and effects of these differences differ by context, but

the feminist perspective reveals the resonance of each case with a bigger picture of inequality and injustice. Hovorka (2013) argues that the ubiquity of food and gender difference in all societies makes the overlapping of food and gender studies particularly constructive for a social progress agenda.

The literature review provided in this chapter illuminates the ways in which gender is necessarily embedded within and across various scales of urban life: individual, household, neighbourhood, city, nation and globe. Indeed, it exposes the ways in which gender roles, responsibilities, and expectations are normalised and often the root of inequality in terms of food access and security. In foregrounding the political economic dimensions of urban food systems, the feminist foodscapes framework resonates with the growing literature of critical food studies related to urban agriculture (McClintock 2014; Tornaghi 2014), urban food marketing and distribution (Lerner and Eakin 2011; Riley 2014), and the role of the global food system (Ruel *et al.*, 2010). These increasingly prominent critical approaches draw on earlier work on the political economy of food (Sen 1981; Watts 1983), applied to the 'new food equation' of an increasingly integrated global food system, climate change, land grabs, and rapid urbanisation in the global South (Morgan 2009).

The use of the feminist foodscapes framework as an analytical framework draws the chapter's examination of urban food systems in line with important literature on gender, poverty, and development. Feminists have been very influential in debates on how to address global poverty, particularly in the context of a post-2015 agenda to replace the Millennium Development Goals (MDGs) (Sen and Mukherjee 2014; Fukuda-Parr and Orr 2014). Feminist development scholars have long argued the need to approach research, policies, and development projects in a way that simultaneously targets practical (*e.g.*, jobs, educational opportunities, and access to healthcare) and strategic (*e.g.*, legal reforms, social protection, and recognition of human rights) needs (Moser 1993; Kabeer 1994). The feminist foodscapes framework applies this duality to the analysis of food security, recognising that the practical need for people to have food in the immediate term and the strategic need to ensure that the human right to food are equally important.

This chapter seeks to contribute to academic and policy-oriented discussions about urban food systems by connecting issues at multiple scales to provide a snapshot of the complex relationship between gender and urban food systems. The following section provides an overview of issues that tie together gender and urban food security. The examples mainly draw from literature published in the past decade and serve as an update to Hovorka and Lee-Smith's 2006 contribution to *Cities Farming for the Future: Urban Agriculture for Green and Productive Cities.* The following section discusses challenges in integrating these insights into policies, research programmes, and development interventions aimed at improving the food security benefits of urban food systems generally. Gender mainstreaming has been increasingly central to food security interventions in cities (Hovorka *et al.*, 2009), and this chapter concludes with reflections on the practical benefits to food security programming, particularly in the longer term, that can result from a broad conceptualisation of the links between gender inequality and food insecurity in cities.

2. Gender and urban food systems at multiple scales of analysis

Food insecurity is increasingly widespread in cities of the Global North and South. It is a manifestation of urban poverty that links problems of income inequality, under employment,

environmental degradation, and rights to urban space. In seeking to understand this problem in general terms, and from a feminist perspective, this section provides a multi-scaled examination of diverse issues drawn from interdisciplinary perspectives that convey the richness of genderbased analyses of urban food systems. Box 1 summarises the issues examined at each scale and provides a road map for the discussion in this section. The multi-scaled analysis facilitates the integration of women's and men's daily experiences of urban food systems with the broader structures and processes that shape ideas about urban food security as a global development issue.

Scale	Topics
Individuals	Gendered cultures of consumption,
	Men and women as economic actors
	 The mobility of women's and men's bodies in relation to food access
Households	Household livelihoods
	Household food strategies
	Gender relations within urban farming households
Cities	Food deserts
	 Informal economies and informal food systems
	The provisioning of municipal services and environmental constraints
Nations	National social protection schemes
	National agricultural and urbanization policies
	Rural-urban connections and urban food security
Global	 International trade and the global food system
	The effects of global climate change
	The Millennium Development Goals for 2015

2.1. Individuals

At the smallest scale, that of individual men and women, many issues related to gender and urban food security are apparent. The body is a common scale of analysis in feminist scholarship because physiological difference is the starting point for the constellation of cultural, social, political, and economic implications of gender difference. Bodies are also at the core of food studies and the universal experience of eating to nourish and sustain bodies is at the core of food studies. This first of five scalar subsections examines three issues that elucidate the link between gender and urban food security at the scale of bodies: (1) gendered cultures of consumption, (2) men and women as economic actors, and (3) the mobility of women's and men's bodies in urban spaces.

The growing rates of obesity in cities in all parts of the world is evidence that food consumption choices are not purely practical, but situated within a cultural context that generates desire for certain types of food based on its meaning (Allen and Sachs 2007). Gender identities shape what foods are desirable and considered culturally appropriate for different people. Research in Blantyre, Malawi, for example, found that people associated some foods such as clay (*dothi*) and baobab fruit with maternity, and men's fertility was associated with other food such as fresh cassava and soaked rice (Riley 2013). These findings resonated with Hovorka's (2012) research in Botswana, where the association of men with cattle and women with chickens shaped food security strategies including production and consumption. Research in the Global North into gender consumption choices has shown that women's dominance and

food purchasing and preparation has given them a prominent role in shaping alternative food networks (Little *et al.,* 2009). Identification with a female ethic of care and community building was also reported in research on women food producers in American cities (Jarosz 2011; White 2011). These cultural dimensions of why urban women choose to produce food and why they choose to consume certain foods is less prevalent in studies based in the Global South, where economic necessity is presumed to be the main motivation. This perspective presents an exciting avenue for future research in more diverse settings.

Individual men and women have different economic opportunities and face different livelihood constraints in cities, which shape gendered outcomes for food security. In the Global South and the Global North, women face structural constraints in achieving the same economic status as men (Kabeer 2003). Women are more likely to be employed informally, which raises problems of income regularity and security; in addition to the higher likelihood that women's incomes will be insufficient meet an urban household's basic needs. Interventions such as micro-finance projects are often targeted at women because of the structural impediments they face as independent economic actors, including: difficulty in accessing credit, lower rates of literacy, and time constraints due to domestic responsibilities (Kabeer 2003; Hovorka et al., 2009). An important structural barrier for women in many places is the gender discrimination embedded in property rights. While the issue of property could also be considered at the national scale of analysis where property laws are formulated and enforced, the differential effects of these laws and practices shape food security outcomes differently for men and women. Research on gender and urban agriculture has consistently found that tenure of farmland is more often a barrier face by women than by men (Hovorka et al., 2009). Additionally, lack of secure housing tenure constrains women's options for economic independence or to generate income through rentals.

Figure 1 here

The scale of individual bodies also raises the issue of mobility for food security, an issue increasingly recognised as part of the 'mobilities turn' in social sciences (Cresswell 2010; Hanson 2010). Accessing food entails going to places where nutritious and affordable food is available (Frayne 2010). In some places, this entails going to markets on the outskirts of cities where urban residents are buying directly from rural producers (Tacoli 2007). Mobility is gendered in that women are often less mobile than men for several contextually various reasons (Uteng and Cresswell 2008; Uteng 2011). Women's responsibilities in the home are onerous and timeconsuming in many low-income urban households, which restricts the time they can spend to travel for work or food procurement (Riley and Dodson 2014). In some places, women's mobility is directly constricted by laws or customs that proscribe their presence in public spaces (Robson 2006). Public safety concerns also gender mobility, for example in places where urban violence can make it unsafe for women to travel at night. Women's movements in public space can also be the result of domestic violence in cases of husbands seeking to control their wives' movements (Uteng 2011). A focus on gendered mobilities and food security demonstrates the overlapping forces within and beyond households that influence the different possibilities for movement of women's and men's bodies in space.

2.2. Households

The household is the main social unit used in urban food security research. The household is a small social and economic unit that lends itself to comparisons across time and

space. Most studies of household food security infer from the supply of food in the household and the needs of its members if the household is food secure or food insecure. Yet feminist scholars have argued that this inference is based on a false assumption that food is shared equitably within households (Agarwal 1997; Devereux 2001). A variety of context-specific factors shape the way in which resources (including food and the means to buy and produce it) and responsibilities (including the responsibility for feeding household members) are divided among household members according to gender. This subsection examines three topics of relevance to gender and urban food security at the household scale: (1) household livelihoods, (2) household food strategies, and (3) gender relations within urban farming households.

The question of how households, especially low-income households, function economically has been taken up by the literature on livelihoods framework (Rakodi and Lloyd-Jones 2002; Foeken and Owuor 2008). The livelihoods framework highlights the full range of contributions by household members, which may be in the form of labour, money, or other resources. In a household in which the husband is employed and is the primary income earner, his wife might also be producing food in the garden, earning income through petty trading, and providing labour in food preparation, cleaning, and childcare. Income-based models often obscure non-financial contributions and focus solely on income through formal employment, which in this scenario would overemphasise the husband's contribution. Notably, research on urban livelihoods has also shown that children also contribute to households in various ways (Porter *et al.*, 2010). The livelihoods framework offers a fuller picture than income-focused measures of urban household economic status. It is crucial for capturing the value of subsistence food production, casual employment, informal training, and domestic labour within the household.

The food security status of different household types reflects the important role of gender in shaping urban food systems. The African Food Security Urban Network (AFSUN) survey of 6,453 households in eleven cities compared four household types: female-centred, male-centred, nuclear, and extended (Crush and Frayne 2010). A gender-focused analysis of the survey findings demonstrated that female-centred households were over-represented in the severely food insecure category relative to other types of households. Poverty was an important factor determining food security status, and while female-centred households were the most likely type to be poor and to be food insecure, the effect of poverty on food security status was less pronounced among female-centred households. This finding suggests that at lower levels of income, female-centred households are doing better at feeding their household heads dedicate a greater proportion of household resources to food relative to male household heads. This explanation aligns with research that has identified gendered differences in priorities for the use of household resources whereby women's greater control over the use of household resources can lead to greater food security status (Kennedy and Peters 1992; Haddad *et al.*, 1997).

The household scale of analysis has been used extensively in research on food production in cities, particularly subsistence production (Hovorka *et al.*, 2009; Mkwambisi *et al.*, 2011; Shillington 2013; Simiyu and Foeken 2013). In most urban food producing households, men and women are both highly engaged in farming-related activities, but in most households men make the final decision on what to produce and how to deploy women's labour. Simiyu and Foeken (2013) found that some women subverted this control by taking advantage of their husbands' frequent absences from home and hiding proceeds from the sale of farm products

from their husbands. Shillington (2013) argued that gendered labour in backyard fruit tree cultivation in Managua, Nicaragua, was not only economic, but also served a cultural purpose of making a home in the city. Mkwambisi, Fraser, and Dougill (2011) identified many women household heads who were also farmers in their study of urban Malawi, but female-headed farming households produced less food per hectare than male-headed farming households. Reasons included relative lack of money for inputs like seeds and fertiliser, relatively less household labour, and less capacity to develop agricultural skills because of illiteracy. Household scale case studies provide a rich resource for understanding the nexus of power, culture, and food in cities.

2.3. Cities

At the city scale, questions about planning, governance, and the effects of different built environments on people's ability to access food come into focus. Urban food security is often discussed with reference to sustainability, which can refer to overlapping objectives, including: the long-term viability of the city's economy, the vulnerability of city structures to natural hazards, the health of the city's population, and the social cohesiveness of the city (Pieterse 2011). Until recently, food has been an invisible issue for urban planners thinking about sustainability (Morgan 2009). This is partly a result of the mainstream assumption that food was primarily an agricultural, and hence a rural issue. The past decade has seen a proliferation of interest among planners, municipalities, and researchers on the issue of urban food security. Box 1 further illustrates the importance of the city scale in practical terms, as it illustrates the important contributions municipal governments can make to food security programmes focussed on gender equality. This subsection examines three issues pertinent to understanding gender and urban food security at the city scale: (1) food deserts, (2) informal economies and food systems, and (3) the provisioning of municipal services.

The concept of food deserts encapsulates widespread injustice in many post-industrial cities where the supermarket-based food distribution system does not adequately serve the needs of low-income communities (Shannon 2014). Food deserts are areas where safe and nutritious food is not readily available. As an issue arising primarily from research in cities in the Global North, it dovetails neatly with the nexus of mobilities, livelihoods and food excess emerging from research in cities of the Global South. Its framing of urban food security as a social justice issue evident in the urban geography of the city offers lessons for understanding urban food security research in the Global South, just as the livelihoods approach offers insights that can enrich the understanding of urban food security in cities of the Global North (Battersby 2012). A focus on gender equality has the potential to serve as a connective thread between these lines of theorising urban food systems because of its unifying reference to gender difference as a core cause of hunger and poverty.

In many cities of the Global South, most work, services, trade, and production takes place informally. In spite of the near ubiquity of informality in cities in developing countries, planners, urban managers and politicians often seek to put an end to these practices (Potts 2008; Riley 2014). Formality is associated with development because it is better suited to government regulation and taxation, as well as global trade and investment, and therefore to a particular ideal of urban development and urban food system (Riley and Legwegoh 2014). Yet from the perspective of many low-income urban residents and the needs of their household members, informal economies are critical for survival. This is particularly true of informal food systems,

which provide flexibility and convenience to millions of consumers who are unable to access formal food sources (Porter *et al.,* 2007). They also provide a vital source of livelihoods and income for people who cannot secure sufficient employment in the formal economic sector, the majority of whom are women (Roever 2014).

Municipal authorities can be partners rather than adversaries of informal economic actors (Tinker 1997). The construction of market facilities with piped water, sanitation facilities, and security services is one way of investing in informal sector workers and consumers (Porter *et al.*, 2007). Partnering with traders and consumers, and ensuring that the women among them have a voice, can be an important step towards empowering low-income men and women economically and politically and promoting gender equity. A similar approach is needed to address problems associated with informal food production in cities. The benefits of using urban space for food production are increasingly recognised, and the idea of a city as an agricultural site is less alien to planners and urban managers now than it was a decade ago (Hovorka *et al.*, 2009). The 13 case studies of gender-focused urban agriculture projects featured in *Women Feeding Cities* (Hovorka *et al.*, 2009) attest to the multiple possibilities for improving urban livelihoods by building on diverse experiences of implementing gender-mainstreamed urban agriculture projects. Nonetheless, challenges remain in how to best 'mainstream' gender into urban agricultural projects, especially in regards to achieving the strategic goals related to gender equality in the long term (Hovorka 2006; Lessa and Rocha 2012).

Figure of urban garden goes here

A final point on the city scale of analysis is to note the importance of equitable provision of other urban services and amenities such as clean water, adequate housing, electricity, intraurban transit, sanitation, schools and hospitals. These basic necessities are increasingly difficult to provide in part population growth usually outstrips municipal resources, but the stress on natural resources in and around cities means that environmental concerns at the city scale are central to understanding urban food systems. Inadequate or unaffordable provisioning of services and amenities can impact household food security in several ways, such as:

- Lack of affordable housing can divert scarce income to housing costs rather than food;
- Lack of clean water can compromise food safety and health;
- Inadequate transit can increase the time expense of livelihood activities;
- Poorly resourced schools and hospitals have long-term impacts on public health, economic development, and social cohesion
- Poor environmental stewardship reduces the productivity of agriculture in and around cities.

These issues often have a greater impact on women than men, in some cases making domestic tasks more onerous and in other instances removing opportunities to close the gender gaps in health, education, and economic participation. The de-prioritisation of services and amenities that could make food provisioning and preparation less onerous for women often reflects women's lack of political influence in municipal decision-making.

2.4. Nations

At the national scale (or in some cases state or provincial scale), the ideals for the recognition of human rights and gender equality formulated in international agreements are translated into the local context and government action plans. The goal of representing women's voices equally in legislatures is a key feminist goal, which is also intrinsic to democratic

values. Progress has been made worldwide and the proportion of parliamentary seats held by women increased from 14% in 2000 to 22% in 2014 (UN 2014: 23). While this figure is nowhere near parity, and there are vast differences among countries, it suggests that women are having a greater influence in political affairs than they did in the past. This progress potentially bodes well for the formulation and implementation of laws, policies, and development objectives that prioritise social justice and gender equity. Box 2 illustrates the importance of these reforms based on direct experiences implementing gender-mainstreamed urban food security programmes in Kenya. This subsection examines three national scale topics related to the gendering of urban food systems: (1) national social protection schemes; (2) national agricultural and urbanisation policies, and (3) rural-urban connections and food security.

One area of direct relevance to gender and urban food security has been the policy of social protection schemes in low-income countries (Miller *et al.*, 2011; Nino-Zarazua *et al.*, 2012). The AFSUN survey finding that female-centred households benefited more than other types of households from South Africa's social grants scheme is strong evidence that social protection has a gender-positive effect on urban food security (Dodson *et al.*, 2012). The comparison between the three South African cities surveyed, where social grants were available, and the eight cities in other countries without social grants is striking (Dodson *et al.*, 2012: 21):

The three South African cities tend to have lower LPI [Lived Poverty Index] scores than the other eight cities in the survey. The biggest gap is amongst female-centred households: in South African cities their LPI is 0.8, whereas in cities outside South Africa it is nearly double at 1.5. This almost certainly reflects the impact of social grants, and especially child grants, in South Africa.

In targeting dependents including children and retired people, the social grants are able to support households with the highest ratio of mouths to feed relative to economically productive members, which are most likely to be households headed by women. For these economically marginalised households, the stability and reliability of the income source can be as critical as the sum itself, facilitating budgeting for household needs on a monthly basis.

In their study of the gendered effects of social protection schemes in eight diverse countries (Ghana, Peru, Bangladesh, Ethiopia, India, Indonesia, Mexico, Vietnam), Holmes and Jones (2010) demonstrated that social protection schemes are not a panacea for reducing women's poverty relative to men. Gender equality was not a primary objective of most programmes, and even in cases where gender was mainstreamed into the project, problems with implementation (including gender biases and stereotypes held by officials and participants) negated the effectiveness of the schemes for addressing gender needs. By failing to include an objective of transforming gender relations at all scales, most programmes operate with a 'narrow conceptualisation of gender vulnerabilities and focus on supporting women's care and domestic roles and responsibilities in the household' (Holmes and Jones 2010: vii). In supporting women's care and domestic roles, gender inequality was often reinforced and the gendered division of labour at the heart of inequality was perpetuated rather than transformed. The design and implementation of gender sensitive social protection programmes, whether they take the form of cash or asset transfers, public works, or food subsidies, hold the potential for national or state governments to directly intervene in urban poverty and food insecurity by setting a minimum standard of living. These programmes can simultaneously address gender

inequality by lightening the burden of responsibility for feeding households from women's shoulders.

In the Global North, food and agricultural policies are increasingly central in debates over public health, environmental justice, and the nutritional appropriateness of food (Shannon 2014). Policies and development objectives formulated at the national level shape how cities are built, with consequences for gender relations and urban food systems. Urban policies in North America after World War II promoted the suburban sprawl of cities and the spatial division of male/urban/production from female/suburban/reproduction (Domosh and Seager 2001). The spread of suburban sprawl distanced people from food sources and created a new reliance on cars to access food. Doubts about the environmental sustainability of industrial agriculture and the corporate-dominated food distribution system have influenced the governments of major countries, including the US, to (slowly) start supporting alternative food networks through policies and investment (McClintock 2014). Eco-feminists have contributed to the debates by emphasising the social and cultural costs of urban consumers being alienated from the social and environmental processes of food production (White 2011). Their experiences of urban food systems are expressed in terms that link the personal need for healthy bodies and communities with the political need to re-envision the policy frameworks that create food deserts and perpetuate class and gender-based health inequalities.

National urbanisation policies in developing countries can play a key role in shaping settlement patterns, urban built environments, and the standard of living in cities (Parnell and Pieterse 2010). Many developing countries that experienced rapid population growth in the twentieth century also experienced rapid internal migration into cities at a pace that outstripped their governments' capacity to provide basic housing and municipal services (Davis 2006), such that the development of cohesive national urban food strategies was not feasible. The response by some governments was to attempt to curtail rural to urban migration, or to reserve the right to fully participate in urban civic life. China's *hukou* system, for example, prevents rural to urban migrants from accessing government services in the cities, thus preserving their 'rural' status and promoting temporary or circular migration (Fan 2008). Such policies preclude the political question of urban food security by *de jure* marginalising many of the would-be urban poor, particularly women who are more likely to face legal and economic barriers to establishing themselves formally in cities.

Circular forms of migration between rural and urban places is increasingly recognised as the norm in many developing countries (Lynch 2005). Rural-urban social and economic linkages that facilitate access to a variety of resources and opportunities at different times of the year are vital for livelihoods and urban food security (Tacoli 2007; Lerner and Eakin 2011; Agregaard *et al.,* 2012). Progress on the re-theorisation of urban livelihoods as transgressing the ruralurban divide ties into the aforementioned benefits of personal mobilities, which facilitate 'straddling' multiple places and often benefit women disproportionally in giving them opportunities to diversify their informal economic activities in reaction to their marginalisation within urban formal economies (Flynn 2005; Riley and Dodson 2014). This research is instructive for planners, researchers, and development workers to broaden their geographical frame of reference when developing urban food system improvements.

2.5. Global

Political, economic, and environmental structures and processes functioning at the global scale shape urban food systems and vulnerability to hunger. It is increasingly important to integrate the global scale in studies of food security and gender equality because of the increasing role of international economic transactions, political agreements, and social development priorities on everyday life. This subsection examines three global scale topics in relation to the feminist foodscapes framework: (1) the role of international trade, (2) the effects of global climate change, and (3) the Millennium Development Goals for 2015.

The 2007-08 global price shocks of basic food commodities exposed the vulnerability of millions of urban residents to become food insecure as a result of global scaled events (Clapp 2009; Ruel et al., 2010; Hadley et al., 2012). In many countries, urban markets rely on geographically dispersed supply chains to make food available in cities. Households that rely on their incomes to purchase food for survival (rather than drawing on a variety of livelihood strategies) were the most directly impacted when financial speculation, droughts in key food producing areas, and a rapid rise in demand for biofuels caused food prices to spike (UN 2011). The hyper integration of the food system also impacts on rural (and urban) producers, many of whom fail to compete with the economies of scale and subsidies provided to the agriculture and food industries in the global North (Weis 2007). The consequential decline of rural agricultural economies can lead to increases in rural to urban migration and more dependence on global markets for survival as domestic production declines. This trend can be particularly deleterious for women, many of whom are responsible for feeding their households even when food becomes suddenly unaffordable or unavailable. The challenges faced by migrants themselves are also gendered, and in most cases female migrants are more vulnerable to the economic marginalisation and social alienation that causes urban food insecurity.

The increasingly distantiated integration of consumers and producers in the global food system is fundamental to why the impact of global climate change is expected to be extremely profound and widespread. Local changes in temperature, water availability, the frequency of extreme weather events, and seasonality will not only have local impacts on food supplies: global integration means that production shortfalls in specific areas can reshape global supplies and trade patterns, with price shocks such as that experienced in 2007-08 becoming more frequent. In general, the negative consequences of global climate change will most severely impact people in the poorest and least developed countries. Urban residents in these countries will be among the most vulnerable to hunger in most climate change scenarios. These processes create new forms of environmental injustice that are starkly evident at the global scale where the people most severely affected are the least likely to have benefitted from industrialisation that caused global warming. The need for analysis that can support adaptive strategies for urban households is urgent (Frayne *et al.*, 2012). Integrating strategic gender needs will be key to developing and implementing durable strategies for on-going livelihood adaptation as climate change leads to unpredictable and unprecedented new circumstances.

The MDGs represent a global consensus among governments and global civil society organisations on the priorities for social development. Hunger figures prominently in the first MDG, with the target of 'halving, between 1990 and 2015, the proportion of people who suffer from hunger' (UN 2014: 8). The prevalence of undernourishment has been reduced from 23.6% in 1990-92 to 14.3% in 2011-13, but with rapid population growth the absolute number of hungry people remains high at 842 million (UN 2014: 12). Furthermore, the most rapidly

urbanising regions, sub-Saharan Africa (25%) and southern Asia (17%) have the highest portions of hungry people. Fukuda-Parr and Orr (2014) argued that the MDG hunger target has reduced the problem of hunger from one of food as a human right, as expressed in the 1996 FAO declaration, to food as a nutritional problem amenable to technological solutions of production and supply. Urban issues are under-represented in the MDGs, reduced to a conservative target for slum improvement (Cohen 2014). In light of the prolific body of research on urban food security produced in the past decade, and the rapidly growing urban populations in the Global South, the post-2015 agenda should recognise the distinct needs of urban food systems to meet the needs of urban residents. The goals for gender equality are also notably weak in the MDGs and key structural issues such as reproductive freedom and economic empowerment for women are understated relative to their importance for social development (Sen and Mukherjee 2014). Within a feminist foodscapes framework there is a discernable connection between the depoliticisation of food security and the depoliticisation of gender in the MDGs that needs to be redressed to make progress on both fronts. The global scale of analysis brings important discursive trends to the surface and highlights the pressing need to bring discourses and policies in line with the values associated with gender equality and the human right to food.

3. Action for gender equitable urban food systems

The feminist foodscapes framework not only illuminates the ways in which gender is necessarily embedded within and across various scales of urban life, it also opens up exciting possibilities for action to improve the gender equity of urban foods systems. In reiterating the central importance of strategic goals related to achieving gender equality, the feminist foodscapes framework reinvigorates the political dimensions of food activism. Hunger continues to be a serious problem for nearly a billion people in their daily lives, while millions more are highly vulnerable. Furthermore, millions of people who are not at risk of hunger are unhealthy because the food they consume does not meet their nutritional or cultural needs. The people who have the least opportunities to influence the broad social, economic and political structures that shape their urban food systems are mostly women constrained by economic marginalisation, access to fewer resources for their livelihoods, patriarchy within their households and communities, and unjust laws. Empowerment for women and men in urban communities can be conceived in terms of expanding these opportunities to change urban food systems at multiple scales.

Box 1: The Role of Municipal Government in the Musikavanhu Urban Agriculture Project in Harare, Zimbabwe

Development practitioners in the global South have observed that gender inequality is a consistent challenge to implementing urban food security programmes that promote food production by urban households (Hovorka, de Zeeuw, and Njenga 2009). The Musikavanhu Project in Harare, Zimbabwe, granted the use of vacant urban land to low-income households 'in order to maintain their food security, save money on food expenditures, and generate complementary income from regular sales' (Toriro 2009: 94). Although the project was not intended to target women farmers, 90% of farmers were women during the 2008 survey. The popularity of urban farming among women in Harare was partly a reflection of the gendered burden to feed household members during the political economic crisis taking place at the time of the survey.

An analysis of the challenges for the Musikavanhu Project to promote sustainable social change toward gender equality led Toriro (2009: 102-3) to list six ways in which the municipal government in Harare could support the project:

- 1. Creating a conducive legal framework that recognises the economic and social contributions of urban farmers and provides rights and protections to male and female urban farmers equally.
- 2. Raising awareness of gender and urban agriculture through gender sensitivity training and public awareness campaigns.
- 3. Improving land tenure through the designation of zones for urban agriculture and giving ownership or leasehold lands to women rather than granting it only to their husbands.
- 4. Stimulating adequate support services by co-funding programmes with Non-Governmental Organisations to support female farmers and by implementing tax incentives for private enterprises to donate resources to such programmes.
- 5. Providing protection against theft of crops that women are not normally equipped to protect at night because of obligations at home and safety concerns.
- 6. Giving access to free medical support to reduce the burden of caring for relatives suffering from HIV/AIDS and other health problems, thus freeing up more of women's time for agricultural activities.

These lessons for the municipal government in Harare can be transferred to other cities as they implement policies aimed at achieving food security that also enhances gender equality. It emphasises the important role of politics at the 'city' scale.

The 'five elements of mainstreaming' presented in Hovorka and Lee-Smith (2006: 131-133) warrants repeating in this chapter in light of the multiple scales approach to gendering urban food systems. The five elements are: (1) conceptual clarity, (2) identifying practical and strategic needs, (3) political will and commitment, (4) capacity building and resource allocation, and (5) scientific research.

The first element speaks to the narrow understanding of gender among actors across multiple scales, from project participants and managers to World Bank and UN employees. The overuse and oversimplification of 'gender' in policy documents and strategic frameworks can reinforce the false impression that it is relevant only to women (Hovorka and Lee-Smith 2006: 131). The research above demonstrates the need to develop gender capacity at multiple scales

in order to make the necessary connections between the power-laden fields of food and gender. For grassroots project implementation, this is a matter of engaging in critical dialogue with participants about the meaning of gender in their social context in order to make the core concept of gender equality accessible and relevant to their daily challenges. While the particular obstacles in this process will be different in different settings, for example in places with low literacy rates different means of communication will be required (Cornwall and Scoones 2011), there is a perennial need to build and reinforce capacity in this regard and it should not be overlooked in projects based in the Global North. In like manner, reinforcement of the meaning of gender and its role in shaping hunger and vulnerability is consistently required among policymakers at all scales.

The second element, to identify practical and strategic needs, has been a major theme of this chapter. The process of articulating these needs in the local context should be allotted time in the planning process, and ideally be conducted using participative approaches that include participants. Hovorka and Lee-Smith (2006: 132) note that 'identifying the type and scale of intervention (be it through programmes, planning or policies) should rely on a solid understanding of the local context and structural factors that delineate opportunities and constraints for individual producers'. The feminist foodscapes framework highlights the interconnectedness of the 'local context' with structures and processes at multiple scales, such that 'understanding the local context' goes far beyond the spaces in which project participants' daily lives take place. The process of articulating practical and strategic needs should involve a dialogue between facilitators, who are more likely to be able to comment on big picture dynamics that shape gender and urban food systems, and participants, who have vital knowledge of urban food systems based on their daily experiences living in the city. Applying a feminist foodscapes framework therefore requires a balance between these types of needs, and their related action plans and objectives, to be at the forefront of planning, implementation, and assessment of project outcomes.

The third element is 'political will and commitment amongst key stakeholders at all scales' (Hovorka and Lee-Smith 2006: 132). This element emphasises the need for leadership in forging a cohesive commitment to the goal of gender equality as a central goal of efforts to ensure urban food security. In the policy realm, gender inequity should be addressed by first seeking to understand the particular effects of existing policies on men and women. This awareness of gender difference should guide policy responses at all levels of government and actors operating at the global scale. For development projects aimed at improving urban food systems, maintaining a political will and commitment to gender equality will overlap with the integration of practical and strategic needs. Addressing structural causes of urban poverty and hunger will be key to the sustainability of these projects over the long term.

The fourth element is capacity building and resource allocation. It is related to the first element in that resources need to be devoted to achieving conceptual clarity, and these actions constitute capacity building. Hovorka and Lee-Smith (2006: 132) identify a danger of losing the focus on gender *because* of its ubiquitous relevance at multiple scales and to multiple dimensions of any project or policy, summed up in the statement: 'By making gender everybody's job, it can easily become nobody's job'. The investment of substantive resources into the gender elements of a project will demonstrate the leadership and commitment noted in the third element of political will and commitment. Investing resources into mainstreaming gender will help stakeholders at multiple scales to 'look beyond' the conceptual conflation of

gender with women and to engage in the kind of self-reflexive and critical thinking needed to overcome ingrained stereotypes and biases (Cornwall and Molyneux 2007).

Box 2: The Role of National Government in Creating the Conditions for Women and Men to Benefit from Urban Livestock Keeping in Kisumu, Kenya

Development practitioners in the global South have observed that gender inequality is a consistent challenge to implementing urban food security programmes that promote livestock keeping by urban households (Hovorka, de Zeeuw, and Njenga 2009). Urban livestock, which in the case of Kisumu, Kenya included chickens, goats, pigs, ducks and cattle in significant numbers, is a source of food and livelihood security in many households (Ishani 2009). Ishani (2009) reported on a survey conducted as part of a project aimed at improving urban household food security by supporting urban livestock keeping. The project included men and women, including many women who were also the heads of their households. Gender mainstreaming throughout the project cycle led to an increase in the sharing of household responsibilities between men and women and 'a measure of self-esteem and confidence which did not exist before' among participants (Ishani 2009: 118). Women, previously excluded from decision-making at all scales, often experienced a dramatic change in outlook: 'Women in particular have become the 'push' factors for change, and they now take the lead in the household to ensure that these changes do take place' (Ishani 2009: 119).

The project adopted a multi-stakeholder approach and the report on experiences highlighted the importance of support from central government. In the first instance, there is a need for financial, technical, and institutional resources to extend the benefits of this programme. The state plays a unique role in potentially providing a funding source available in the longer term and not vulnerable to project funding cycles. In her conclusions, Ishani (2009: 119) also argues for a scaling-up of the gender mainstreaming focus demonstrated in the project and the importance of policy reforms at local and national levels aimed at improving gender equality:

'Gender equity, however, cannot be achieved at the project level if there is a disparity in policies benefitting one sex and not the other. All policies, at the local level and at the central government level, have to be formulated in a gender-sensitive manner. Issues such as inheritance and succession, especially for women, should be of paramount importance in order for the whole of the household to benefit.

Implementing a gender-mainstreamed urban food security programme around urban livestock revealed the importance of policies and resources at multiple scales, particularly the national scale where sustainable financial resources can be mobilised and key policy reforms can be made.

The fifth element is 'scientific research on gender dynamics' (Hovorka and Lee-Smith 2006: 133). Within a project or policy formulation cycle, this research element can provide a virtuous cycle of monitoring and adjusting action plans when gender-related objectives are not being met. The ubiquity and complexity of gender difference means that even the most rigorous gender planning can have unforeseen consequences. With regular monitoring and mechanisms for on-going communication among stakeholders, developments that reinforce gender inequality (for example, by adding onerously to women's labour or disproportionally enriching men) can be re-conceived. The focus on scientific research also speaks to the important role of

the wider research community to contribute to policy formulation and programme/project development to address urban food insecurity. As the examples in this chapter demonstrate, academic researchers play central roles in identifying problems, linking issues at multiple scales, and identifying connections between practical and structural causes of gender inequality and food insecurity. In an increasingly urban world, with an increasingly integrated global food system and a persistent correlation of being female and being poor, the integration of perspectives rooted in multiple scales will play an increasingly instrumental role in understanding and overcoming global poverty.

4. Concluding thoughts

A gendered lens of analysis is fundamental to understanding food security in that gender identities and social categories shape the meaning of food, how and by whom it is consumed, and the systems of production and distribution. This chapter's gender analysis of urban food systems draws from feminist understandings of how to bring about gender equality by addressing practical and strategic needs to understand simultaneously the immediate needs of urban residents to have access to safe, nutritious, and culturally appropriate food while also recognising the bigger picture of long term sustainability of urban food systems to realise the human right to food. The chapter demonstrates that challenges and opportunities for urban food systems exist at multiple scales, and that they consistently intersect with problems related to gender inequality. Future action to improve urban food systems can refer to the five elements of gender mainstreaming for guidance. Policymakers, development workers, and researchers should also integrate into their projects an understanding of the multiple layers of policies, discourses, and social relations that contribute to shaping urban food systems. This will help to bring a balance of practical and strategic objectives of gender equality and food security in cities.

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