

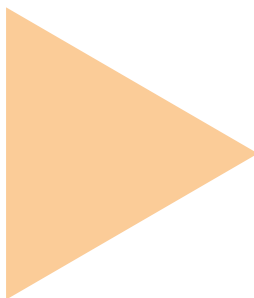
# Urban Food systems – a renewed role for local governments in Australia

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**FOOD SYSTEMS  
DISCUSSION**

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## Summary

*“How to feed cities in a just, sustainable and culturally appropriate manner in the face of looming climate change, widening inequality and burgeoning hunger is one of the quintessential challenges of the 21st century.”* Kevin Morgan (2015 p 1390).

Urbanization is one of this century’s most transformative trends, with over half the world’s human population now living in cities. City governments are increasingly aware of their potential role and responsibilities in managing the increasingly complex urban spaces in the face of rapid population growth, climate change, high ecological urban footprints, rising inequalities, and profound nutrition transitions. This profound urban shift has significant implications for governments, individuals, urban households, and rural communities.

All 17 Sustainable Development Goals (SDGs) are interconnected, and like urbanization, food is at the heart of all civilization and prosperity. According to the Food and Agriculture Organisation ([FAO 2016](#)), SDG2 (to end hunger, achieve food security and improved nutrition and promote sustainable agriculture) in a large way encapsulates the vision driving most of the [Agenda on Sustainable Development](#). Agriculture, diet, nutrition, public health and environmental sustainability are very intricately connected. This is clearly reflected in SDG2 which while promoting a global vision to end hunger, also rises to the challenge of nurturing the planet through its core targets. To tackle the multiple challenges of food and nutrition security, rising global environmental risks and climate change whilst at the same time promoting more human settlements that are inclusive, safe, resilient and sustainable (SDG11) calls for progress in virtually all SDGs. It is widely acknowledged that much of the success or failure of the SDGs will take place in cities, and SDG11 emphasizes the [transformative power](#) of urbanization for development.

Recent years have seen increased activity and international interest aimed at influencing urban development, climate, food and nutrition; the Sustainable Development Goals, the Paris Agreement on climate change, the United Nations [Decade of Action on Nutrition](#) and other innovations that are emerging from city leaders, civil society and the private sector all aiming to build sustainable, resilient and inclusive better cities. The [New Urban Agenda](#) (NUA), adopted at the Habitat III Conference (Quito, Ecuador, October 2016), is perhaps one of the most concrete and relevant initiatives to the role of cities and local government action. Bringing cities to the centre of the UN international discourse, the agreements on a set of non-binding guidelines and strategies is fundamental to achieving SDG Goal 11 on creation of cities that are inclusive, safe, resilient and sustainable. With respect to food security, the [Milan Urban Food Policy Pact](#), a voluntary international protocol, is perhaps the largest organisation of world cities focusing on the role of cities in developing sustainable food systems and promoting healthy diets. This commitment has been subscribed to by Mayors from 133 global cities. A unifying theme in these global agreements is the need to strengthen multilevel governance, build capacities of local players, and garner political support.

While food security is not as visible as other areas of the urban transition, it is nevertheless a critical dimension of sustainable cities, and one that is gaining attention. Food is intricately woven with transport and infrastructure (connecting consumers, retailers and producers), housing (access to affordable nutritious food), recreation, economy (food sector establishments and employment), as well as culture and identity. It is virtually impossible to achieve SDG11 'to make cities and human settlements inclusive, safe, resilient and sustainable' without considering food security.

Where they exist, successful interventions in urban food systems are often sporadic, non-systemic and not documented, reviewed and/or shared. These efforts will remain partial and symbolic, unless cities build their capacities to leverage the momentum from international initiatives with local partnerships to deliver sustained reforms in their food systems that are well integrated into the larger urban fabric (Pothukuchi et al. 2000; Morgan 2015). Despite recent changes, predominant constructs that support and perpetuate the conceptualisation of agriculture and food as primarily rural activities and issues persist (Schiff 2005; 2008).

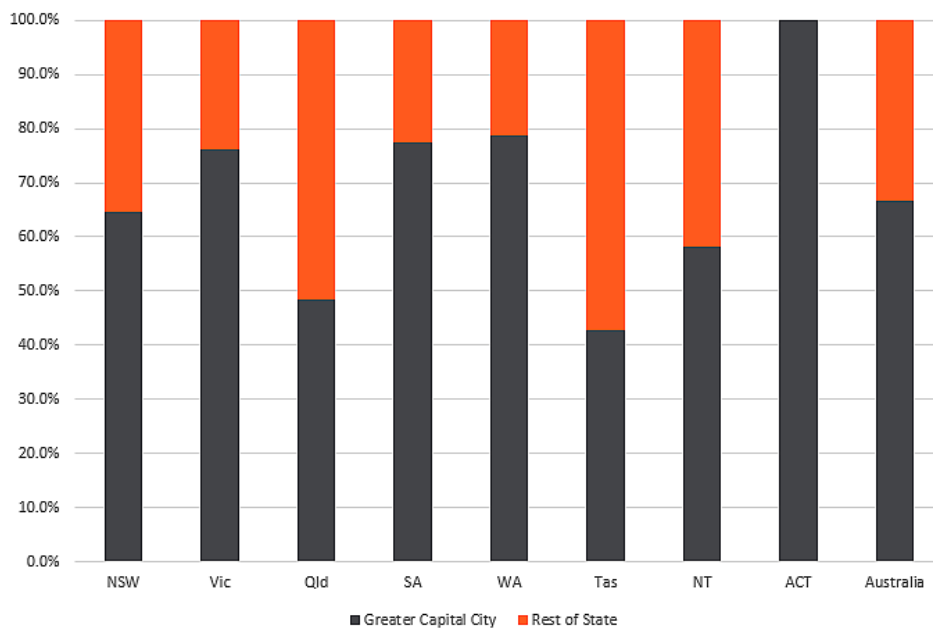
Central to urban transition is the role of local governments. City government involvements on food range from complete non-intervention to tight regulation and control through a diversity of economic, policy and legal instruments. To accelerate transition towards sustainable food systems requires a paradigm shift on the role of city governance in the urban food space, and may require different partnerships approaches. Opportunity now exists to build on the momentum of recent international initiatives to position food security within local government planning agendas. This could include embedding synergistic actions to existing land use planning, business and commerce activities, and supporting inclusive participation by a wide range of stakeholders. Such action could in turn demand significant paradigm shifts, including policy change, and importantly, innovative and collaborative pathways to start and support such transition. A large number of global cities both in developing and developed countries are already engaging in transformative systems that embrace food security within their planning blueprints.

Despite most Australians living in cities, there is considerably less attention on food within city planning domains, a loose integration of food issues in policy (despite national commitments to international agreements), and a substantial degree of incoherence on food-related initiatives in cities. As a result, the capacity to anticipate and mitigate sudden as well as incremental risks (such as the rising burden of non-communicable diseases and climate change), as well as the opportunities for growth in the urban food sector may be hindered. The manifestations of the need for change are clear, and there is no better time for action than now, riding on the momentum of international agreements which have opened up windows for transition towards more inclusive governance of urban spaces and resources. Against this background, this discussion paper seeks to highlight the unique roles that local governments in Australia could play to mobilise change that integrates food security into urban planning and to leverage on a rising number of innovative but hitherto disjointed activities. This is the first in a series of discussion papers on urban food systems in Australia, with a particular focus on the risks, opportunities and roles of local governments in driving the transition towards sustainable urban food systems in Australia.

## An urban nation

Australia is a highly urbanised country (Figure 1), with 83% of its population living in its eight greater capital cities in 2016 (ABS, 2016). Successive Australian governments have promoted varying forms of urban initiatives. In 2011, the nation welcomed the Labor’s [national urban policy](#); in 2015, the short-lived Coalition ministerial portfolio for [cities and the built environment](#), and in 2016 the [Smart Cities Plan](#).

**Figure 1:** Population split between capital cities and regional areas by state and territory (2015)



**Source:** [GLENN](#) (2016), derived from the Australian Bureau of Statistics (ABS) Regional Population Growth, Australia, 2014-15 (cat. no. 3218.0).

These initiatives are intended to increase planning and development focus on cities in a predominantly urban nation, with great emphasis on investment in technology to promote economic, social and environmental improvements. In reality some have worked, but most are not sustainable, the vast majority bearing an enduring “pilot” flavour. The same can be said of many grassroots initiatives, where there is rising albeit un-coordinated efforts to find innovative, inclusive and hopefully sustainable models of urban governance of city spaces and resources.

## A case for local government action in Australia

In this and ensuing discussion papers, we ask why cities, why now, and why food? We scope opportunities for doing business by exploring risks and opportunities by building on what has been done, what worked and what didn’t, existing and potential bottlenecks and opportunities, particularly for local governments and city councils.

Cities represent the most immediate challenges. Cities drive the majority of the world's economy, consume the majority of resources in the most concentrated way and create the majority of waste. Local governments play an important role in the lives of citizens in Australia. Local government authorities exist to provide services and amenities to local communities, and are also responsible for regulating and providing services for land and property in their district. Here are some important facts about urban Australia:

1. **Most people live in cities:** Urban issues have emerged as key features of national policy agendas. With close to [90% of Australians](#) living in urban areas (cities or towns of more than 1000 people) even policies without direct urban intent are more likely than not to have consequences on and from the urban. Food issues in Australia (and indeed globally) then have, by default assumed a significantly urban dimension. "Power now resides off the land, with retailers shaping what and how things are grown, processed and sold" (Lang 2010 p 88).
2. **Grassroots governance:** For Australia, local governments are of particular relevance in the capital cities because of the absence of metropolitan government. Being a creation of state governments, they reflect significant differences in governance across and within states but despite this, all possess the overarching roles of governance, planning, community development, service delivery, asset management and regulation (Sansom et al. 2012). Regulation for example is an important aspect of local government activity that can be harness to drive substantial change in urban foodscapes. Local government performs regulatory tasks that would be difficult for a state government to administer because of their localised and varying nature. It also confers added opportunities to influence change directly.
3. **Alternative representation:** The system of governance at the State and Federal levels in Australia is totally dependent on representative democracy. Local government provides a potential arena where direct democracy could work, through for example, public meetings and neighbourhood participation (Jones 1993). Although some scholars have argued that metropolitan planning agencies cannot be seen as promoting democratic governance (as is especially the case when state and federal governments still control the budget ([Tomlinson, 2016](#)), local governments nonetheless offer the alternative for direct democratic consensus, which could open up hitherto un-available options necessary for community development mobilization. They also have immense capacity to generate and mobilise their own funds, which can be leveraged to influence necessary change within their jurisdictions.
4. **Local governments are the closest to their communities,** and enjoy unique insights into local and community needs, ranging from provision of essential utility services and infrastructure, transport, health, education, and environmental management. Through their metropolitan-level planning strategies and community development projects, they play a pivotal role in bringing communities together. They are in a unique position to integrate food systems innovations into existing and long-

term programs, and to bridge gaps in coordination between the plethora of state and federal government programs and policies. Some local governments, especially large urban councils, are more financially independent than the states and have expansive long-term programs.

5. **Local government plans are strongly community focused**, with the strategic imperative being related to satisfying community needs (Kloot and Martin, 2000). The fact that local government's performance is managed to achieve both the strategic goals of the state as well as balancing their community's expectations and perceptions about local program success provides a missing link with higher governance jurisdictions (Brunet-Jailly et al. 2000). As well as ensuring that local communities function effectively and that they are provided with the basic services and facilities that communities expect in suburbs, towns and rural areas, local governments also have the potential to catalyse federal and state government commitments to communities (Megarrity 2011).
  
6. **Local governments often bear the formal responsibility** for activities that fundamentally impact on urban food systems such as providing infrastructure, land use planning, regulating trade and enforcing health regulations (Smit 2016), as well as others that are impacted by food (waste management, water and sanitation, and energy to mention a few).

Therefore, by focussing on cities we focus on a diversity of challenges at the same time, and in the places where they are most concentrated. We focus on a unit of governance that is able to act decisively and with understanding of local contexts. Despite the 'good' things that Australian local governments do and can do, they are often limited by pro-development (anti-green) thinking, narrow sectional issues that dictate agendas, and a lack of money for new initiatives (Geoffrey Lawrence, pers comm, March 2017).

## Food in the Australian city

The urban food system is embedded within sophisticated global commodity and finance markets, serviced by complex logistics networks linking producers, consumers and other stakeholders. For this reason, it is often taken for granted that city residents will have access to food in sufficient quantity and quality, and at the right time to meet their health, cultural, and other needs. Sophisticated global food supply chains have to a degree, weakened emphasis on local food production; but the need to balance over-dependence on international markets with local systems is increasingly evident. For instance, the global food-price crisis of 2007-08 precipitated by a complex interplay of diverse factors including distorted international trading (and consumption) patterns, drought, increasing oil prices and greater demand for biofuels (Heady and Fan 2008). The ensuing riots were a stark reminder that food is a critical pivot on which many other systems depend, and in many ways may have marked a "*turning point in the organization of the production and circulation of food on a world scale*" (McMichael 2009 p 292).

In Australia, the 2011 Queensland floods inundated agricultural land and food supply chains, isolated towns (such as Rockhampton), cut major roads and highways, and caused significant loss of life and property. They were also responsible for temporary increases in food prices, deterioration in food quality, reduced consumer access to food, and disruption to the sourcing, transportation, and distribution of food (McMahon et al 2015). Indeed, it is at the city level that the political, equity, socio-economic and environmental impacts associated with food system malfunctions first became evident during a crisis.

Despite being food secure as a country (Farmer-Bowers et al. 2012) Australian cities grapple with the full range of food-system issues such as the rising incidence of non-communicable diseases, high environmental footprints, income inequality, and excessive food waste and are exposed to both internal and external shocks such as global economic trends and climate change that could have serious implications on urban food, and subsequent ramifications in related functions. Food insecurity is experienced at unacceptable rates among indigenous, migrant, elderly and socio-economically disadvantaged populations. In Australia, some authors attest to a seemingly “complacent attitude” around urban food systems in (Burton 2014; Montague 2011). This may be the case when compared to what other global cities are doing in this domain, for example, in Canada, the USA, Brazil, Colombia, the UK. Indeed, while food may be somewhat a non-traditional policy arena for city governments, it is intricately connected with the wide range of municipal and regional policy areas such as land-use planning, infrastructure development, transport, environmental conservation, housing and economic and community development. This tight coupling of food security with all these fundamental dimensions of urbanity means that cities must contend with a host of related social, economic and environmental challenges that impact and are impacted on by food. Food, then, must be integrated within the economic, social and environmental dimensions of urban planning, and should not be separated from all these dimensions related to a life of dignity that local governments promote.

An urban food systems agenda has potential to leverage actions by planners and the broader policy community. It provides the opportunity to respond with policies and programs to the targets posed by the SDGs that consider cities as the key actors to achieve these international goals. The need to understand the key components of the food system and to prioritise actions on food in already crowded and competing departmental agendas will require broad stakeholder engagement, capacity building and political will.

#### **Common challenges to implementing urban food systems**

- Challenging political situations
- Lack of capacity
- Participation and engagement
- National policies that restrict, limit or contradict municipal authority or jurisdictions
- Lack of effective multi-sector, multi-actor and multi-level engagement mechanisms.

*Source: Milan Urban Food Policy Pact – Selected Good Practices from Cities (2009)*

Advocates are increasingly calling on local and state governments to use their urban planning powers to take a variety of health and food related issues (Budge and Slade 2009, David Lock Associates 2010). Indeed many and city governments and communities the world over including Australia have been trialling initiatives to complement state and national government efforts. In Australia, Melbourne city leads the way. As well as numerous local initiatives in and around the city, the city of Melbourne was the first to sign on to the Milan Urban Food Policy Pact, and leads the way in visioning and incorporating food in its plans, and has an overarching vision and framework to guide coordinated action and decision-making to improve its urban food system through its “*Food City*” plan. Darebin Council is another one that has committed to developing an Urban Food Production Strategy, and outlines council commitment to work with communities on local food initiatives which enhance health, wellbeing and community connectedness, improve the environment and regenerate natural resources. The Urban Food Street in the Sunshine Coast, while not as driven by city planning, is one example of the increasing number of independent grassroots community food initiatives in Australian city suburbs and that are gaining the attention and support of city planners. The Sydney Food Fairness Alliance (formed in 2005) champions for sustainable food systems in the Sydney region and broader NSW. Its vision bears a strong focus on integration, and calls for multi-dimensional strategies including institutional infrastructures, policies and changes to planning provisions, taxation, competition policy, marketing, zoning, land tenure, water sharing and infrastructure to ensure coordination and consistency of efforts across jurisdictions. The Hawkesbury Food Program in New South Wales takes a community development approach in the range of its programs to address food and nutrition issues in the Hawkesbury Local Government area. Despite a strong partnership with councils, it is reminiscent of many partnerships where local government roles are relegated to “hygiene and safety” for example. So while there is progress, success has been mixed. The complexity of the food system calls for actions that privilege systemic over individual and mechanistic approaches, and this presents one of the biggest challenges, particularly at local government level. Montague (2011) summarised her review of local government and food security in Australia by concluding that “whilst Australia has had a flowering of action, often driven by community activism or in some cases by local government, this has generally not been comprehensive, multi-level or strategic”. Although the review primarily geared towards urban agriculture, it scoped the potential of fiscal and regulatory instruments for better food system outcomes at local government level. In line with our current approach, it also reiterated Burns et al.’s (2010) call to shift from singular strategies targeting education, messaging and skills development. There is little evidence in the literature to suggest that this status quo has changed, and many initiatives remain sporadic and non-systemic, and it is difficult to track success, let alone scale up. There is increasing evidence that when city governments actively engage in the food system, they have the potential to shift the nature and function of the food system to be responsive to the needs of the urban residents to they are accountable (SACN 2015). There is a compelling case for a conscious practice and policy commitment to identify and vertical linkages (federal, state and local

governments) as well as harnessing horizontal linkages that reach out to both the private sector as well as civil society and grassroots movements.

## Opportunities

Local councils have responsibilities for land use planning schemes that duly consider the environment, settlement patterns and economic activities within their communities. Most local governments do not have clearly outlined statutory responsibilities for food.

Many cities and local governments struggle with how to incorporate food policy into their strategies and structures. Although there is no one size fits all, experiences from Europe, North America and Africa suggest that one of the most powerful tools to influence change on urban food is through trade and procurement. In planning policy, councils can protect and increase the diversity of food retail outlets so that they are accessible through infrastructure planning, urban agriculture, discouraging food waste, and facilitating entry and participation of grassroots food initiatives. Initially integrating the food system into planning programs could go a long way to augment city efforts towards sustainability, build resilience in other sectors, and overall, result in savings from waste, healthcare, water, energy and security. For this to happen, city governments need to understand their food system, the strengths and vulnerabilities, dependencies, correlation and amplification with other systems, and therefore where opportunities exist.

Being closer to communities, council is the best jurisdictional vehicle via which practical policy and planning occurs at the community level. However, this cannot be achieved without clear mandates, resources and capacities within council and communities.

## A case study of Brisbane City Council

Brisbane is the largest local government by population in Australia, servicing a population of over 1 million people, and administering the central business district, central suburbs, as well as the Brisbane metropolitan area. Created in 1926 through the amalgamation of twenty local government areas, Brisbane City Council has a distinctive political structure with a popularly elected, semi-executive Lord Mayor and 26 full-time councillors each representing a local ward, and serves about half of the effective metropolitan population. Not unlike many local governments, Brisbane City Council places significant emphasis on the housing, water, energy, and transportation needs of its community. Several of its planning blueprints impinge on dimensions that are directly related to urban food security. For instance, in the Brisbane City Plan (2014) research portfolio, the plan recognises the need to anticipate and prepare for challenges and constraints associated with peak oil and climate change, including encouraging local food production and green infrastructure (Brisbane City Plan 2014).<sup>1</sup> The South East Queensland (SEQ) Regional Plan (2009-2031) recognises the importance of urban agriculture, and has provisions that support 'initiatives that increase access to fresh food in urban environments, including provision of space for fresh food markets and community gardens' (SEQ Regional Plan 2009

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<sup>1</sup> Brisbane City Plan 2014. <https://www.brisbane.qld.gov.au/planning-building/planning-guidelines-tools/brisbane-city-plan-2014>

p 80). It also recognises the link between better access to fresh produce, and improvements in diets to reduce levels of obesity and poor health.

Brisbane's [Vision 2031](#)<sup>2</sup> emphasises access to healthy and safe food choices, as well as activities around production and consumption of food to support community connections and promote learning. Health and wellbeing is specifically highlighted as one of the four target areas towards the city's sustainability. These and other subsidiary plans demonstrate councils recognition of the role food security plays in success of its plans.

While Brisbane council is not a signatory to the Milan Urban Food Policy Pact, its planning blueprints highlighted above are testament of its alignment to the principles of inclusive, resilient, safe and diverse cities. Brisbane council is also committed to adapting to and mitigating the impacts of climate change, and is the provision of healthy, affordable food to all people, waste minimization and biodiversity conservation. A fundamental question then is whether Council is effectively equipped to achieve on these commitments, and what opportunities currently exist that council could leverage on.

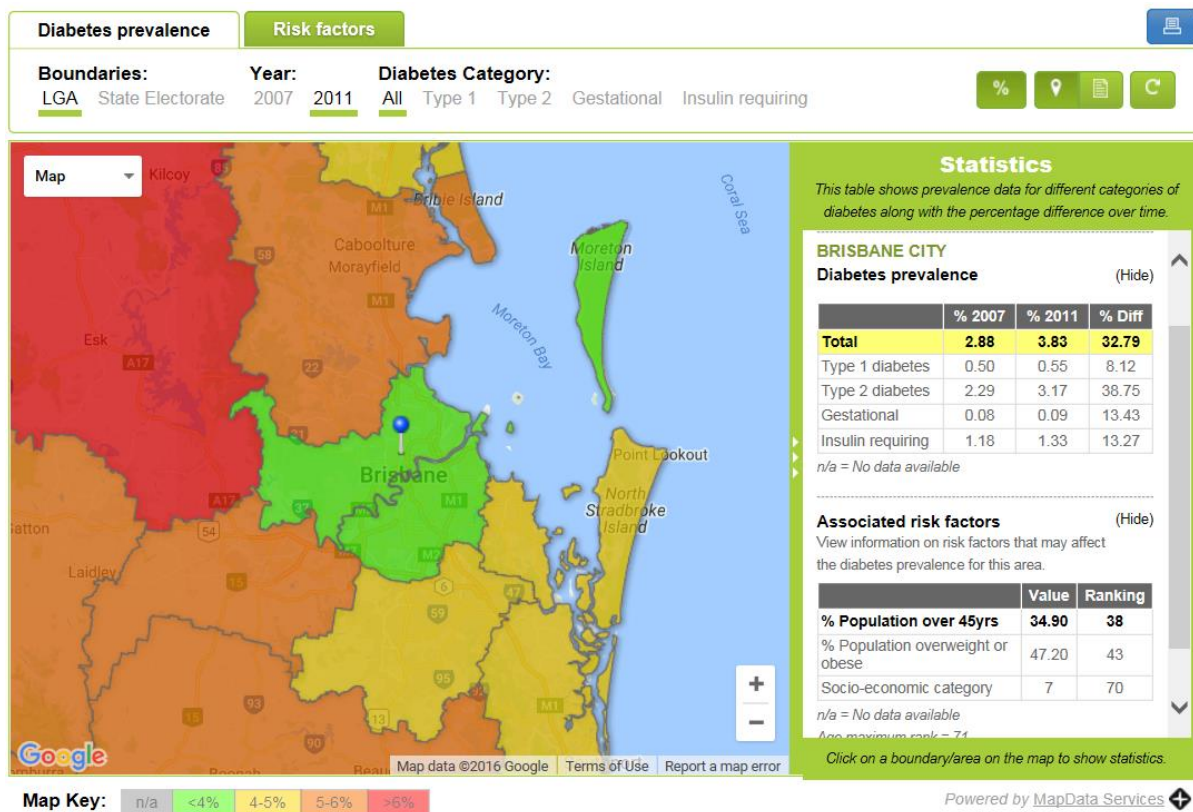
The extent to which council delivers on these planning blueprints will be influenced to a large degree on how well council performs in dimensions directly impacting on its urban food systems. The following risks highlight this point:

- **Rapid population growth:** South-East Queensland will experience significant population growth into the foreseeable future. In 2015, the population in the rest of Queensland (outside of Greater Brisbane) grew by 1.0%, to reach 2.47 million. This was [the fastest growth rate](#) of all state regions, ahead of New South Wales (0.8%) and Victoria (0.6%). A large part of this growth will spill into the urban areas, and the responsibility for provisioning for them is absorbed by Council. The growth will also likely impact and/or shrink agricultural production areas.
- **The health and budgetary burden of non-communicable diseases:** The Australian [National Health Survey \(2014-15\)](#) (ABS, 2015a) reported that 63.6% of Queenslanders were overweight or obese. The rise of chronic non-communicative diseases such as obesity and diabetes, is fuelled, to a great extent by food systems; the consumption of highly processed, energy-dense and nutrient poor foods has increased, especially among the urban poor. This challenge extends beyond health to jurisdictions of town planning, architecture, commerce and industry, and culture (Armstrong et al. 2007). The extract from the Australian Diabetes Map (Figure 1) shows the rising diabetes prevalence rates in Brisbane between 2007 and 2011.

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<sup>2</sup> Brisbane Vision 2031.

[https://www.brisbane.qld.gov.au/sites/default/files/Brisbane\\_Vision\\_2031\\_full\\_document.pdf](https://www.brisbane.qld.gov.au/sites/default/files/Brisbane_Vision_2031_full_document.pdf)



**Figure 1:** Prevalence and trends of diabetes in Brisbane  
 Source: <http://apps.nowwhere.com.au/DiabetesQLD/EpidemicViewer/>

The Australian Bureau of Statistics further reported that Queenslanders consumed a higher (37% of total energy) than national average (35% of total energy) of 'discretionary foods'<sup>3</sup>. (ABS 2015b).

- **Food insecurity:** Although Australia has a high level of food security (adequate, safe, high quality food made up of domestic production and imports), about 5% of Australians experience food insecurity (Ramsey et al. 2012). In Queensland, this is higher, at around 5.2%. Urban food systems have significant impacts on health inequities, and among the urban poor, obesity can coincide with micronutrient deficiency (Alves et al. 2011; Hawkes 2006). Ramsey et al. (2012), have reported that in [disadvantaged](#) suburbs of Brisbane city, for individuals aged over 20 years, approximately one in four households was food insecure. As in many global cities this was attributable to among others, greater reliance on cash income, limited opportunities to grow part of their food, greater labour-force participation of women and changes in lifestyle and consumption patterns associated with the nutrition transition (Ruel et al. 2010). When food price or income shocks occur, poor households adopt a series of coping strategies to protect their basic needs often switching to cheaper and often

<sup>3</sup> The Australian Dietary Guidelines describes discretionary foods as being: "foods and drinks not necessary to provide the nutrients the body needs, but that may add variety. However, many of these are high in saturated fats, sugars, salt and/or alcohol, and are therefore described as energy dense. They can be included sometimes in small amounts by those who are physically active, but are not a necessary part of the diet". NHMRC 2013, Australian Dietary Guidelines, Canberra: National Health and Medical Research Council. <https://www.nhmrc.gov.au/guidelines-publications/n55>

less preferred or lower quality foods. As well, specific nutrient deficiencies have been identified among Indigenous, migrant, and elderly populations (Ramsey et al. 2012). Unequal access to dietary diversity, calories, and culturally appropriate foods contributes to diet-related health inequities (Dixon et al. 2017) as well as other food systems outcomes (environmental and economic). Food insecurity can be both a precursor to, and a by-product of, chronic disease and poverty among urban populations (Lindberg et al. 2015).

- **Information gaps and granularity of measures:** The array of socioeconomic and other factors in food and nutrition security in the urban areas are seriously under-researched. For instance, monitoring of food insecurity in Australia in general does not occur frequently, or at a resolution that can adequately capture some of the intricacies of the food and nutrition environments at household level. When it does occur, it is more likely than not to underestimate the prevalence of food and nutrition insecurity (and related drivers). Follow up on research findings also tends to be sporadic. For instance, a Brisbane Food Study of 2005 found no relationship between area socioeconomic characteristics and dietary behaviours or location of food shops. The study did not show why lower income households were less likely to purchase fruits and vegetables or why adults in the lowest income quintile consumed significantly less fruit vegetables (Winkler et al. 2006). A 2011 study of 1000 households from the most disadvantaged 5% of Brisbane areas revealed a higher burden in related consequences of food insecurity, including a higher incidence of poor health and an increase in the risk of depression. Other under-researched dimensions include institutional food including aged-care facilities despite the high percentage of the aging population in cities.
- **Food waste and high environmental footprints from food:** - Studies from NSW<sup>4</sup> show that Australians discard up to 20% of the food they purchase and the average Australian household throws out \$1036.00 of food annually. More than 20% of Brisbane's<sup>5</sup> household waste is food. A strategy to improve Queensland's performance with respect to waste was published by the Queensland Department of Environment and Resources (DERM) in December 2010. The report noted that Queensland is "one of largest generators of waste in Australia" with an estimated 32 million tonnes of waste produced by households and businesses every year<sup>6</sup>.
- **Market power in the food system:** The retail and food sector is the largest employer in the Australian economy. Promoting and maintaining competition in the supermarket and grocery retail industry has potential to improve economic efficiency, broaden consumer choice and improve quality. The duopoly enjoyed by Coles and Woolworths controlling [over two-thirds](#) of the food retail market is of concern to many stakeholders (Bariacto et al. 2014). The decline in

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<sup>4</sup> <http://www.foodwise.com.au/foodwaste/food-waste-fast-facts/>

<sup>6</sup> <https://www.environment.gov.au/system/files/resources/128a21f0-5f82-4a7d-b49c-ed0d2f6630c7/files/food-waste.pdf>

the number of independent grocery stores over the past decades has arguably moderated competition in the grocery industry which has potentially added to food price inflation. These supermarkets have enormous power in the relationship with their suppliers over the bargaining of terms and conditions, which affect small as well as large suppliers. Despite their market power, the two retail giants Coles and Woolworths (which control close to 80% of the grocery market up from 30% in 1975) together with ALDI, only employ 43 per cent of all grocery employees. In contrast, independent retailers with a 20 per cent market share employ 57 per cent of the [nation's grocery staff](#).

As well as the ethical need for greater diversity to reduce market entry barriers by other players, growing literature (Crush 2016; Rischke et al. 2015) suggests that supermarkets have important negative dietary implications, and the precise impacts depend on their location, the prices they charge, the promotional strategies they use, and the nutrition-related activities they implement. As well as their ability to determine and control a significant proportion of the food grown, imported, (and consumed) in cities, they also contribute to food waste significantly, and have been accused of [pushing the cost of food waste](#) onto suppliers and charities. As Crush (2016) concludes, research evidence on the role of supermarkets on urban food security is scattered, longitudinal studies that track the dynamics are especially thin if at all present, in countries where supermarkets are well-entrenched as the default urban food sources such as Australia.

- **Natural disasters and the cost of response:** It is at the municipal level that the socio-economic and environmental problems associated with food systems first become evident. The Australian food supply chain is resilient in the face of localised or regional threats – but is potentially vulnerable in large scale events or the combinations of events that affect multiple links of the supply chain (Bartos, 2012). Research shows that in the event of the latter, the food industry would “exhibit limited willingness” to contribute to the broader welfare objectives. There is also lack of clarity in various parts of government on the practical limits of the industry capacity to maintain supply in crises.



**Above:** The January 2011 floods devastated Brisbane's biggest fresh fruit and vegetable market at Rocklea. The 77-hectare site was completely inundated with flood water, resulting in a \$100 million damage bill. Photo: Glenn Hampson

- **Gentrification and its impact on food systems** - Brisbane has been promoted as “Australia’s ‘New World City’ with a growing economy, globally connected and increasingly integrated to the Asia Pacific region and knowledge-based growth driven by technologically, environmentally and culturally progressive investment” (*Jensen 2011, p.21*). Within this context, specific types of dwellings such as studio and one-bedroom apartments are targeted to provide affordable housing, and the City of Brisbane has undertaken many urban renewal projects that have led to gentrification in its inner city, but few precautions have been taken to avoid the displacement of low-income households (Darchen and Ladouceur, 2013; Walters and McCrear, 2014; Iotti et al. 2015). Research by the Australian Housing and Urban Research Institute (Pawson et al. 2015) found that concentrations of social disadvantage were being pushed further towards city peripheries. Recognising the importance of housing affordability closer to the fringe, the report notes that this outward movement of social disadvantage poses new challenges as these areas are already often poorly resourced in terms of accessible jobs, transport, facilities, infrastructure and services. The implications for food security (such as social networks disruptions, spatial changes in access to food and constraining domestic production opportunities) as a result of these processes have not been reported anywhere.
- **The rise of food movements:** As a reaction to imperfections in the dominant food systems, there are a growing number of informal, localised and community-based social practices based around food appearing in Australian cities (Lyons et al. 2013). These initiatives are crafting new ways of engaging with the food system and calling for a re-organisation of roles and scope of participation by various stakeholders in city food. The number and diversity of models emerging within the city promotes social, environmental and economic resilience, while engaging a wide

audience. They also represent a creative source of ideas on the edge that provide potential food system innovation. Besides their complementary role in food and nutrition security, local food initiatives have intrinsic value in raising food literacy and healthy food consumption through active community participation. They are a significant sign of emerging urban foodscapes of citizen empowerment, and one which city governments stand to benefit from if they can harness and foster connections with them, as opposed to traditional paradigms pitting them as resistance movements.

It seems imperative that council engages in specific actions that better position urban food security to better contribute towards delivering on its commitments. We can learn from good practice in global cities that have integrated urban food systems (Jegou et al. 2016) into their planning blueprints, and working with diverse stakeholder groups to plan for and improve their food systems. The [Milan Urban Food Policy Pact](#) classifies good practice urban food initiatives under six thematic clusters, which include (inter alia) governance, sustainable diets, equity, food production, supply and distribution, and food waste. These themes can be useful in guiding prioritizing and allocating resources to different food system initiatives.

Bristol was the first UK city to establish a Food Policy Council and while there is no one size fits all approach to urban food systems, there is much to learn from its approach for a resilient food plan (Carey 2013), which was guided by a robust set of research questions to map its food system and identify threats and opportunities. The following set of related questions may be important in bringing this to bear for Australian cities, and more specifically, Brisbane:

- What is the structure of the city's food system?
- What are the likely impacts of the rapid population growth in the greater capital city region?
- What are the implications of the rapid gentrification and growth nodes on the city's food systems?
- What are the negative fallouts from the city's food system? (Social, e.g. ethics, fairness and inequalities; environmental, e.g. energy and water use; economic e.g. fairness and competition; health e.g. the burden of non-communicable diseases).
- To what extent is the current food supply system resilient to internal and external shocks?
- Which areas of the city and which groups of the city residents would be most adversely affected by vulnerabilities in the food supply system?
- What opportunities do the city's decision makers and key stakeholders have in shaping the urban food system? In this regard;
  - Are the urban planners structurally and technically empowered to plan for food?
  - What are the cross-cutting functions across existing city departments and how can resources be leveraged?
  - What are the most crucial policy challenges that have direct impacts on the local food system?

## Conclusion

To recap, this discussion paper sought to unpack the improved roles that local governments in Australia could play in food systems, and to explore some of the risks and opportunities that may impinge on city blueprints for development. We cast this in the background of heightened international and local initiatives, whose momentum cities can draw from to nudge and navigate the necessary changes.

For cities to be inclusive, resilient and to develop sustainably, (SDG 11), policymakers need to embrace inclusive approaches. They need sound, timely and relevant data. Political will is paramount. Stakeholder engagement is crucial in order to leverage on efforts made from existing actors and create synergistic effects by linking different stakeholder groups. Strengthening horizontal partnerships with local businesses, social enterprises, research and academia, civil society groups, and fostering vertical integration with state and federal governments can go a long way in building sustainable urban food systems. Inevitably, developing a comprehensive urban food system may be challenging, but food is such an important urban issue and threats to food systems have potential to complicate or even compromise city's efforts in most dimensions of urban development, sustainability and resilience included. With the majority of people now living in cities and the heightened focus on cities including for the first time, a Sustainable Development Goal on cities (SDG 11), cities have an excellent opportunity to use this momentum to transform their urban food systems. Navigating and re-fashioning urban food systems is no simple matter. It will require balancing priorities of local governments, expanding and deepening stakeholder engagement, and where possible, revamping and re-investing in traditional fundamentals such as education and urban planning. We use Brisbane city council to demonstrate the potential risks and opportunities for integrating an urban food systems agenda within its plans, and pose a set of questions that could guide a process to highlight the potential risks, gains and finally, opportunities to do that.

This is the first in a series of discussion papers on urban food systems specifically focusing on city and local governments in Australia that aim to build on the current global and national momentum on cities. We focus attention on specific opportunities that Australian cities can seize to position food to contribute solutions to the intricate challenges facing Australian cities. Subsequent papers address the policy and regulatory frameworks in Australian local governments, public health and urban planning. The common thread through these is the overarching role of sound science and meaningful engagement and collaboration at local government level to improve food system outcomes in Australian cities. And there is no better time to act than now.

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