



**Submission to the Parliamentary Inquiry into  
Food Security in Australia**

***The Canberra Region Food Collaborative***

***8 December 2022***

Auspiced by Regional Development Australia (ACT)



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## Recommendations

### **The Local Food System**

Local food systems must be shored up and a focus given to supporting sustainable producers closer to or inside the cities. This will help smooth the expected disruptions to food supply set to become more intense as time goes by. Shorter supply chains will supplement but will not replace the national and global food supply.

### **A parliamentary inquiry**

Like other essential services there should be bipartisan support for creating an efficient, affordable and effective local food system. The NSW - [NSW Parliamentary Inquiry into Food Production and Supply](#) provides a helpful model and should be duplicated nationally with a Federal Inquiry into local food systems.

### **National funding program**

There needs to be a direct support for a massive expansion in urban agriculture and regional/peri-urban food production, manufacture, storage, procurement, skills, public education & Transport & Logistics solutions. The market failure and structural adjustment arguments in favour of direct intervention are self-evident.

### **Policy approach**

We suggest a System-Wide City-Region framework approach be adopted, which has already proven to be remarkably robust overseas and lends itself to greater responsiveness to changing threats and risks.

Leading food cities around the world have generally established cross portfolio food units to assist all of government coordination and sufficient authority on food sustainability issues. The same should be encouraged across Australia.

Support the development of independent brokers trusted by stakeholders to develop and implement collaborative frameworks which best suit a particular city-region, and which help ensure local ownership and control. These are particularly important given the large diverse number of stakeholders in city-region food systems.

### **Public education, investment attraction, procurement & planning**

A national public education campaign is necessary to encourage more local and sustainable food purchasing and production.

A legislative agenda to enshrine food workers as essential workers and to firm up our commitment to adequate food as a human right.

Better city design and 'food friendly' urban development supporting local sustainable food production and retail solutions

Food procurement is arguably the easiest way for ensuring expanded investment in local sustainable food systems.



## Who we are

Regional Development Australia (RDA) ACT is an independent NFP with a Board/Committee of nine local leaders, focused on economic development. We are part of a national network of 52 Regional Development Australia organisations, largely funded by the Australian Government through the Department of Infrastructure, Transport, Regional Development, Communications and the Arts. Our charter is to secure more investment and jobs for our region, aligning our work with the ACT Government priorities. Our industry focus is on the agrifood industry in the Canberra Region.

We have launched a new initiative called the Canberra Region Food Collaborative (CRFC)<sup>1</sup> <https://www.agrifood-hub.com/>. The CRFC is an independent NFP broker in the local food system, working to ensure Canberra's food security, resilience, economic diversity, emissions and inclusion objectives. It seeks to assist the ACT Government implement its Food & Fibre Strategy and ensure the importance of food is recognised in the achievement of the ACT's wellbeing objectives.

The CRFC provides an organising principle for establishing an integrated City-Region food system for Canberra, the ACT and surrounding region. The CRFC does not produce, transport or sell food. It assists enterprises, through 'soft infrastructure' throughout the supply chain to do so. It focuses on food produced in or within 250 kms of the city and encourages the sourcing of food from further afield produced with sustainable practices.

These enterprises span the full gamut of stakeholder groups including:

- Individual food and beverage businesses such as farmers and manufacturers
- Food cooperatives, farmers markets, food service and institutional care providers
- Service providers such as retailers, e-commerce platforms, training providers, providers, researchers, schools, technology providers and transport & logistics entities.
- Social enterprises engaged with the food system to further sustainability and inclusive objectives including food relief; nutrition; food waste and ethical production practices

Our governance structure is composed of a CRFC Steering Group and individual stakeholders' group advisory panels formed where required. The Steering Group is Chaired by the Chair of the Regional Development Australia (ACT). Decisions of the Steering Group require ratification by the RDA board where there are resourcing implications for RDA ACT. The same will apply should the ACT Government fund any aspects of the CRFCs operations.

The CRFC seeks to assist all practitioners of sustainable food provision to provide united consistent messaging to government on issues of mutual concern- 'one voice'. We embrace the full spectrum of food production approaches provided they are genuinely on the journey to more sustainable, ethical and nutritious production. We are technology agnostic and will show no favoritism assisting all comers

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<sup>1</sup> The CRFC is a program designed by and owned by Regional Development (ACT).



within our resources and expertise. Where we cannot help, we will find people and programs which can, focusing on local expertise.

The CRFC provides the following services subject to available resources:

- Investment attraction and facilitation
- Events and networking opportunities
- 'One voice' or specific issue Government engagement
- Assistance with tenders and grant applications
- Programs to assist training & skills, product innovation & export
- Stakeholder steering groups coordination & secretariat.
- Newsletters and information sharing.
- community & industry engagement

## Introduction

We welcome the opportunity to provide our views on this most important pressing issue for the Australian community and the economy.

The current food security situation is dire. It is not set to improve but will get considerably worse. Our international and national food supply chains are reeling from all manner of threats. Existing food relief organisations will be completely overwhelmed as climate and other systemic challenges increase in intensity and frequency in coming decades.

We must prepare our local food systems for this challenge.

We offer a local solution which carries with it a major social and economic opportunity with outcomes in better health, greater inclusion, jobs generation, lower emissions, economic diversity and enhanced wellbeing.

Ironically the local food sector has been overlooked in the national food dialogue for decades; relegated to the realm of the hobbyist. Meanwhile it has been quietly building itself up with expertise, scale, new technologies and innovation combined with tested traditional approaches and expanding geographic reach. It is testament to the tenacity of the Australian character faced with adversity. It's in the best tradition of 'mateship' looking to ensure our neighbors are ok and that everyone has, not just enough food to eat, but that what we have is affordable, delicious, and nutritious.

It was this sector which had to step up, with national highways blocked, to feed local communities and suburbs as they reeled from floods and fires. The need for greater sovereign food production and



processing capacity is not only a national need, it is also local: our town and cities and regions around them. Government assistance is key.

Its time has come.

It is the City-Region food system composed of urban and peri-urban food production accompanied by regional food producers directly supplying our urban complexes. It is also enterprises pursuing regenerative, sustainable and ethical production practices to produce better quality, affordable and nutritious food – supplying cities from further afield. This is the short supply chain called for by thought leaders – but until now relatively hard to implement and stymied by all manner of transport & logistics challenges, regulation and planning and zoning restrictions. None of these issues is insurmountable provided governments truly recognise the opportunity and the threat.

Most other cultures in the world and many of their cities have fostered or are moving at a rapid pace to shore-up local food supply. This will not replace national and international supply but provide a crucial foil for helping protect against instability and shortages that are coming.

## Feast or Famine?

The following two statements which are both true also reveal a dichotomy in the Australian food system. We invite the Inquiry to contrast the statement that:

*'Australia is one of the most food secure nations in the world, with access to a wide variety of healthy and nutritious foods....Australia produces much more food than it consumes, exporting around 70% of agricultural production<sup>2</sup>.'*

With:

*'Food shortages have plagued the food system since the start of Covid; food crop failures from floods and the breakdown of supply chains during the fires. In addition, Australia has a strikingly high level of food insecurity measured at the household level – now being exacerbated by food grocery price inflation – nutrition levels are also poor. Many Australians are food insecure.<sup>3</sup>*

Food relief is no substitute for the creation of neighborhood, backyard, urban and peri urban food production. The dignity of purchasing and/or growing your own food rather than having to rely on charity is obvious. Moreover, we need to respect and support all manner of food enterprises that will and do fill the gap and create new opportunities. Australia needs to be very disciplined in its use of food

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<sup>2</sup> [Department of agriculture and food security](#)

<sup>3</sup> Dr Amy Carrad, Victualis Dinner presentation 2022: *The cost of a healthy diet in all Australian states and territories is out of reach for a lot of people. In 2019, a healthy diet for a household of 2 adults and 2 children cost almost \$300 per week, or about 31% of the national poverty line. The poverty line – set at 50% of median household income – is the line below which people's income does not enable them to afford an acceptable standard of living*

relief. In the same way as food aid in foreign aid circles is carefully calibrated, delivered and then turned off so as not to stifle private food providers who want to serve the market. Local food systems need to be given priority.

## KEY ISSUES FOR CONSIDERATION

- Classic market failure in food supply *where the price of food does not reflect its climate impacts and costs but also the various structural and system-wide issues prevent entrepreneurs, enterprises and investors fully accessing and developing the local and urban market and latent demand -urban planning being one of these challenges.*
- The need for stronger national and local food production ‘sovereignty’. *The Ukraine war and various supply chains impacts, and strategic threats means that there is an urgent need to bring more value add onshore as well as ensure national and local access to our own food sources with export never at the expense of variety and affordability to Australian consumers. We should not repeat the mistakes in food which have been made in LNG which has brought us much higher prices for our own plentiful resources (putting aside the emissions challenge)*
- The City Region Food Systems (CRFS) approach offers concrete policy and program opportunities within which developmental issues can be addressed and through which rural and urban areas and communities in a given city region can be directly linked. *Improved city region food systems will help achieve better economic, social and environmental conditions in both urban and nearby rural areas. See City Region Food Systems section.*
- Regardless of what model is adopted, RDA (ACT) offers up the Canberra Region Food Collaborative (CRFC) approach as a concrete means of executing an operational plan for local food buffer strategies. [CANBERRA REGION FOOD COLLABORATIVE - Home \(agrifood-hub.com\)](http://agrifood-hub.com)
- The growing importance of short supply chains for food supply: *the classic lean and just in time models of food processing and manufacture are vulnerable to a variety of external impacts. The literature around shorter supply chains is well established. However, they are hard to realise and need different forms of Government intervention and support. Accessing smaller quantities of food products in regional areas is a logistical and costs challenge for traditional transport models. See Transport and Logistics section.*
- Evidence from other jurisdictions, both in Australia and overseas, shows that a systems -based approach is needed to maximise benefits. *There are complex feedback loops within the food system and the broader community. These include everything from water and energy, business competitiveness, sustainability, investment, social disadvantage, health, nutrition and liveability. See Systems section.*
- The right to food is recognized in the 1948 Universal Declaration of Human Rights as part of the right to an adequate standard of living and is enshrined in the 1966 International Covenant on Economic, Social and Cultural Rights. *Australia needs to consider stronger ways of enshrining the Right to an adequate standard of living, including food, water and housing and taking this obligation more seriously – in the cities but also in the most remote settlements of the country.*
- Local food systems as a jobs and economic diversification driver: *local food systems revolving around farmers markets, community gardens small urban farms and artisan food producers are*



*usually labour intensive and can help generate jobs or at least replace some jobs in the food supply chain that are currently located in a distant location.*

- Local food systems have tended to be treated with some derision as being too small scale and more the province of hobbyists to make a meaningful contribution to scale food supply. *This is no longer the case particularly as more consumers indicate a preference for these food sources through purchase patterns seen at these types of production and retail enterprises. They can achieve significant scale including using new intensive technologies e.g. green houses and vertical farms and new business models such as the collateralization of smaller quantities of specific products grown across multiple locations. (See local food system developments section)*
- Planning needs to allow for dedicated locations be identified and set aside as food precincts be they for the purposes of production, agrifood tourism, innovation, social enterprise, or training. These would become centres of gravity and scale for urban food. In addition, allowing collateralisation of all types and locations of small plots for food production will also be important. *The Planning process also needs to help create a vision for the leaders in the built environment targeting developers, architects, and landscape architects to integrate urban sustainable food opportunities inside new developments. We understand that while existing legislation/regulation is helpful, the approval process is often narrow and disincentivising for innovation in the food space. (See built environment section)*
- Consumer sentiment wanting more local, sustainable, and affordable food. *While the main supply chains do have various threats, they remain the key means of feeding the large numbers of the predominantly urban population of the earth. Apart from certain smaller intendant food retailers serving higher income consumer segments the largest food retailers struggle to meets a large unexploited market opportunity positioned between higher priced farmers markets products and the lower priced lower quality products available in major retailers. Emerging food enterprises are tapping this market with direct to door sales often through farmer cooperatives and e-commerce platforms where food is hubbed, packed and transported often through local volunteers. (See market section below)*
- Food is grown through a variety of means and locations to spread climate impacts and diversify risk climate impacts on the supply chain. *Local food systems are among the various means of risk spreading both for government charged with guaranteeing essential services*
- Nutrition is being increasingly linked to availability of fresher more nutrient dense foods. Nutritionists are becoming champions of local food systems *and better ways of growing food that do less environmental damage and promote regenerative and more sustainable practices. This links with the demonstrable positive impacts of better food on better health outcomes and 'food as medicine' movements. (See Nutrition section)*
- While the economic arguments are strong in terms of ROI for well-conceived government and private investment – the need to position food in public policy considerations as an essential service, alongside water and energy, is the most decisive argument in its favour. In reviewing what leading 'food' cities are already doing in this sphere – *it is evident that building up of local and easily accessible regional high quality food buffers with a short supply chain is now becoming strategically essential.*



- There is very strong investment interest in the sector – including in areas such as Controlled Environment Agriculture (CEA). *Huge differences in scale, approaches and technology means that policy needs to open enough to encourage all manner of food projects. The harsher climatic conditions on the way mean that a national strategy supporting city region systems needs to be flexible and adapt to the challenges ahead for food supply.*
- Government support needed in the form of a more integrative national food policy and a national program of support: *Supporting a massive expansion of urban agriculture and regional-peri-urban food production, manufacture storage skills, public education and T& L. Government support for various export and industrial food production hubs need to be extended to various hybrids which include local and urban food production. A City-region approach lends itself best to Government assistance using a systems-based approach heavy on continuous community and stakeholder consultation. Ref NSW Parliamentary Inquiry*
- Of many policy levers which government can use to assist local food security, food procurement is arguably the easiest to deliver. While costs and availability are challenges for food service, international experience shows it can be done with major economic and social benefits. *‘Farm to institution’ programs should be supported throughout Australia through partnerships and engagement with industry, governments at all levels, community, and philanthropy. This policy is already consistent with government procurement policy including that relating to climate change. However, its needs to become more activist.*
- The need for local food buffers to meet gaps in food supply from various impacts. *The FAO has called on all cities which can, to create local food buffers. Many cities in the world including those signatories to various food compacts such as the Milan Food Declaration are already moving on this. These include Sydney and Melbourne. This commitment needs to be replicated across every city in Australia and much more support given*
- While a key issue in all Australian cities and the focus of much community concern the march of new suburbs continues largely unabated across a declining area of highly productive farmlands. This is arguably the single biggest threat to city-region food systems and a major vulnerability and risk for securing better local food supplies. *Developments in the Sydney basin for example are seeing large horticultural operations selling up to developers. Significant parts of the Majura Valley in the ACT, one of the ACTs few areas with more fertile soils, could potentially be swallowed up by various developments. Legislation to restrict or at least create compromises on the style and appropriateness of development which can still incorporate food production is needed.*

## Market Opportunity & Economic Impact

The modern food higher income consumer is demanding this style of food. They crave a connection to the food they eat and those that have produced it. Conversely those with low incomes are relegated to ‘food swamps’ on the periphery of our cities condemned to fast food with low nutritional value that reinforces a sense of hopelessness and poor health outcomes.



The economic opportunity in this underserved market is huge – existing as it does in the large gap between high prices farmers’ market produce and the low prices relatively lower nutrition products delivered at scale by the major food retailers.

A summary of some key research evidence on the economic impact local and city-region food systems is at **Attachment A**. United States Department of Agriculture has been particularly active in this space over the last decade. We would also refer the Inquiry to the numerous research studies conducted by the leading Australian-based urban agriculture organization Sustain: <https://sustain.org.au/>

## Price and Equity

A key issue raised by welfare economists and social entrepreneurs is food affordability. This goes to the larger issue of whether local food, regardless of policy change or strategy will likely remain the preserve of only those with higher incomes. Price remains the dominant determinant of food purchasing patterns for most people, although they may supplement their purchases with a few products from a farmers’ market.

Our research suggests that the price of fresh food products in farmers markets is not as high as assumed – in fact when observed in August 2021 in the ACT for a set of commonly purchased products it was only 11% above the comparable offering in the mainstream supermarkets. People would buy more of the farmers market style produce if they could – indicating significant unmet demand.

Moreover, if sufficient producers scale-up, they will be able to supply product of high quality and better prices. E-Commerce providers claim that there is enough room for many more suppliers to make much more revenue in the market provided they can get visibility. Research evidence we have reviewed shows that these types of changes do not come at the expense of existing retailers/farmers markets. The market for better and more accessible affordable food will expand with benefits throughout the supply chain for all participants.

## Why does the sector need support?

- *Food is an essential service, and it can be made available in a way which benefits the community more.*
- *Local systems commonly need initial government support then become self-reliant.*
- *There is a classic market failure in the SME sector on which the local food system depends – largely driven by information asymmetry.*
- *The food sector is subject to massive structural adjustment pressures requiring government intervention.*
- *There is a need for an information broker to coordinate and build a network, without which many new investment opportunities will not be realized.*

Apart from the essential services elements of food, research suggests that urban agriculture cannot meet important and ambitious food justice, social capital, and job creation goals without outside funding *at least in the preliminary stages*. There are various significant initiatives already in play in the ACT. However, efforts are not coordinated, assistance is sporadic and based largely on people’s good will. There is a classic market failure in information which prevents people from accessing the right information to make the right decisions and to identify and develop opportunities and partnerships.

*'As international supply chains are strained ... relocalizing food production or seeking a better balance between imported and locally produced food, is a sound strategy for building robustness and resilience. While some have advocated for industrial food production techniques as the best way to boost food production at home, this approach is limited because it is inaccessible to the poorest of the poor due to cost; often requires purchased external agricultural inputs that are similarly subject to supply chain disruptions; and may be unsustainable in terms of waste and environmental impacts'<sup>4</sup>*

## Local Government

Generally local and state governments are not well prepared for this challenge. Research by Sydney University into local government commitment to local sustainable food systems – showed many are becoming active but effort remains fragmented with poor coordination.

The Victoria Urban Ag report is here: <https://sustain.org.au/projects/growing-edible-cities-and-towns/>

<https://bit.ly/FSpolicyAUS>

<https://law-food-systems.sydney.edu.au/>

Case study – [Greater Bendigo's Food System Strategy 2020-2030](#)

Case study Cardinia Shire [Cardinia Food Circles Project - Cardinia Shire Council](#)

### **Food as connection, inclusion not only sustenance**

As important as they are, the Food System is more than broad-acre farms, large agribusinesses and manufacturers feeding vast populations. It's also as much about people and connection.

- It's the elderly person whose few joys left in life are a well-prepared meal that is appetizing and nutritious in an aged care facility in Parramatta.
- It's a green-house sitting on top of a shopping Centre – with its produce on sale in the shops and cafes below.
- It's the young person in Springvale who through exposure to a lively interaction with food at his school maintains his own garden patch and patronizes a new fresh and local food supplier in Dandenong
- It's a bee hotel - supporting all manner of pollinators and set amid a new micro forest in a previously cemented precinct in inner city Brisbane.
- It's the five-star chef's hat restaurant supporting local food producers and gathering all manner of good things from her own garden

<sup>4</sup> (Moseley, 2017; Gengenbach et al., 2018). [Impacts of COVID-19 on food security and nutrition: developing effective policy responses to address the hunger and malnutrition pandemic \(fao.org\)](#)

- It's the new urban 'Agtechers' – a vertical farm producing leafy greens in a basement with a strange pink light, using a fraction of the water of traditional farming and entirely pesticide free.
- It's the young passionate women urban farmers producing a huge yield of tonnes of vegetables each year from a small plot of land in inner city Brunswick or Canberra.
- It's a busy family that takes time on Sunday to meet and eat together each week - sharing stories of the week over good food and wine
- It's a hospital that built a food garden on its roof top which has seen its recovery mental health outcomes improve dramatically.
- It's the farmer driving three hours to the farmers market with the product of his small olive grove, sold out in three hours.
- It's a group of disabled young people finding work in a catering company or café - building a career in food services – when we just can't find enough workers from traditional resources.

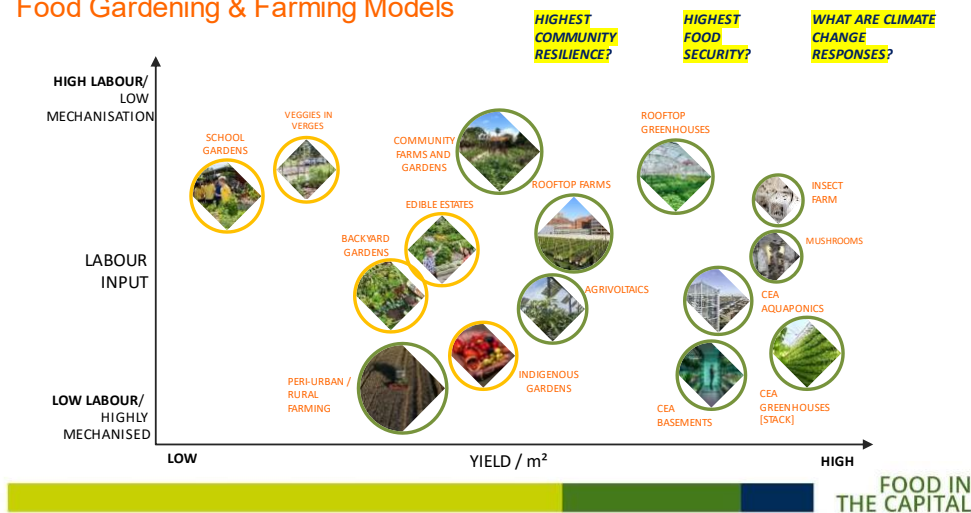
It's a design- based revolution sweeping the forward-thinking cities of the world. It's a soft revolution coming to your neighbourhood. And just in time.

## The Built Environment

At any one-time Australia's cities have less than five days supply of perishable food in the supply chain, making our food supply extremely vulnerable to extreme weather events [Hughes et al. 2015].

Our cities need to be encouraging ways of growing more food inside cities through planning and development which allow for food to be produced between, under and on top of buildings. Digby Hall of Climatewise design provides a useful measure of the types of urban models and where they are positioned.

### Food Gardening & Farming Models





## agrihoods



<https://www.ariadenver.com/>

FOOD IN  
THE CAPITAL

Horticulture Innovation has undertaken a key study into urban CEA: [Hort Innovation | Feasibility study into opportunities for high-technology horticulture production in urban environments \(HA19005\)](#)

<https://www.frasersproperty.com.au/Living-Building-Challenge/home>



Case Study Arup Singapore [Circular bites: reworking our urban food ecosystems for city-wide resilience](#)

*In September 2020, the UN Food and Agriculture Organization said it is essential to build more resilient local food systems as the pandemic “has put local food systems at risk of disruptions along the entire food chain.” The report documents pandemic-related challenges and lessons from a global survey conducted in April and May that drew 860 responses. “The clear message is that, in order to cope with shocks such as COVID-19, cities with suitable socio-economic and agroclimatic conditions should adopt policies and programmes to empower local producers to grow food and promote short food chains to enable urban citizens to access food products,” the report concluded. “Cities have to diversify their food supplies and food sources, reinforcing local sources where possible, but without shutting off national and global supplies.’*

## Parallelism with Renewable energy sector

Food is an essential service alongside energy and water and deserves the same government support especially at the local level.

The evolution of local food systems tracks very closely to the renewable energy sector where consumers want system disaggregation: relying less on the largest retailers/supply chain and securing more agency in their power/food use and how it is generated.

The need for food production and sales disaggregation in the physical environment mirrors that we are seeing in the energy sector with decentralisation and creation of microgrids. A microgrid (local food enterprises/coop/urban farm) is a self-contained grid that uses renewable energy (solar or Agri-Technology), batteries for energy storage and generators (farms) to produce power (food). Microgrids (local food systems) can complement the national grid (food supply chain) or work independently from it, providing communities with access to more sustainable and resilient energy (food) supplies. With the latest technology innovations - such as 5G connectivity, IoT systems and AI - we can connect, monitor and manage the renewable (city-region food systems) sources and ensure a more efficient, reliable and sustainable microgrid infrastructure (local food system).

Directing funds to storage projects such as big batteries and pumped hydro will build investment flows to accelerate transition to clean energy. The same principle applies to the food system. Various jurisdictions are (re)building bigger dams and large batteries. This needs to be extended to big local food buffers as well. A “local food capacity investment scheme” would underwrite larger developments while smaller grants schemes could cover the myriad of small projects. In some international cities a percentage of capital value from new development are hypothecated to soil regeneration and local food projects.

Case study Mirvac [Urban farm pops up in Sydney bank headquarters](#)

## Supply chain distribution effects

Organizations like the Australian Logistics Council have struggled to address the regional access issue. Current business models and vehicle fleets struggle to access regions costs effectively. However, there



are new models emerging which are likely to change that calculation e.g. EV and drones among other technologies.

Canberra is a classic example of a food vulnerable city, but it is not alone. Over 95% of its food stuffs are sources from Sydney and much further afield. Obviously the longer the supply chain the higher the risk of various events impacting on it and the higher the cost of landing food considering fuel and other costs. Grocery prices are high and the overall quality of fruit and vegetables on offer at supermarkets is of low quality.

As mentioned elsewhere when fires and floods have impacted certain regions, it has most often been the local food producers who have had to step up, when B-Doubles could not access the road system safely to restock the major supermarkets.

### 'Last Mile' logistics

If there is one single challenge which enterprises identify as an impediment to selling more directly into cities it is the difficulty of transporting and storing produce. Some producers use their own light trucks to bring produce to market or in the back of the family Ute or sedan. This clearly limits capacity as to how much they can sell, and it also might impinge on food safety.

Sourcing ingredients is also a challenge -with most falling back on mainstream supply lines and providores to assist them. Other enterprises are nurturing sustainable supply chains of low volume high value inputs such as grains for baking and brewing, grapes, meat and general ingredients. Overtime some of these inputs could be sourced closer to or inside cities as demand rises and business opportunities are identified.

This relates to a broader structural issue in transport and logistics – where there is a lack of regional connectivity to mainstream food supply chains. This partly relates to a lack of volume and freight consolidators; driven in-turn by the difficulty of making money on smaller volumes located at a distance from the main food supply routes.

The development of the E-Commerce platforms organically leads to grass-roots responses to this market need e.g., one farmer taking it upon herself to focus on pick-up of food from different locations and getting it to town or a consolidation location. The Open Food network is trialling some innovative approaches to this difficult challenge. Solutions to food distribution may also be found among our local food retailers such as independent grocers who source from multiple locations/producers and have honed their approaches for maximum efficiency.

As the scale and number of producers and clients expands in these local systems – so does the need for more sophistication. This is expensive and will need significant investment that is beyond the means of most NFPs and small enterprises which make up the sector. Governments need to invest in non-proprietary digital infrastructure. In Europe, Government has supported creation of highly integrated online systems with sophisticated software to support sales platforms but also connectivity across local food systems. This should be considered seriously in Australia.

**Case Study:** Belgium [EcoFoodMap Leuven: mapping the food system in and around Leuven - EIT Food](#)

<b>E-Commerce – for local food systems</b>
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To be able to sell, enterprises need to be visible. There is an expanding variety of food sales platforms. All tend to create an ecosystem around local food with consolidation in particular locations on certain days when produce is brought in and boxed for direct sales. In some locations around the world, farmer cooperatives in local food systems have developed their own online sales/distribution systems. In our view these types of initiatives need to be supported – letting producers and consumers make the choice about which service suits them best. Help in locating and making various locations/buildings available for food consolidation purposes would be beneficial.

Case Study Box Divvy [Home](#) | [BOX DIVVY](#)

Care Study Food Markies [Buy or sell neighbourhood food - Food Markies](#)

Case Study [Open Food Network](#)

## Training & Skills

Research shows less than 50% of urban farmer start-ups have any prior experience or formal training in agriculture. As more food start-ups emerge the need for training to build skills will become more important. In the urban area this will include knowledge in relation to permits, soil-testing and any limitations as to what might be grown or sold.

An ACT-based Churchill Fellow Fiona Buining of Ainslea city farm is studying models for urban farms training/skills centres and business incubators leading to vocational pathways. Her findings will be very useful in identifying a range of city-based models which are working overseas which are adaptable to the Australian context.

Major city schools have very limited focus on career opportunities in the agrifood industry, apart for hospitality/food service let alone local food systems. The opportunities in agrifood careers need to be highlighted and the various pathways to the many well-paid satisfying jobs. A focus on the centres such as those proposed by Buining – could also help build city-based motivated workforce which can later find themselves in rural and regional areas, helping alleviate the staffing crisis there

More support for STEM focused on food/farming/horticulture would be helpful in this respect. The work for the Kitchen Garden Foundation bringing a more comprehensive, imbedded food culture approach to traditional food technology curricula in schools needs more support.

Given the seasonal and part time nature of many jobs in the supply chain – skills and training programs which are flexible enough to accommodate this are needed. RDA ACT is testing a number of approaches including creating a mobile local food labour pool, tapping those people who have disengaged from job search. This involved life skills, skills sets and micro-credentialling to help people be as work ready and as productive as possible.

## Nutrition & Health

The health benefits of good varied fresh food are well established. Nutritionists are increasingly vocal in calls for establishing local food systems. Diet human health and environmental sustainability are intimately linked. The absence of globally agreed scientific targets for healthy diets and sustainable food production is hindering global food system transformation. This could be done locally instead. In the case of the ACT, the University of Canberra is undertaking pathbreaking research in the nutrition and local food system sphere <https://www.canberra.edu.au/about-uc/faculties/health/future-of-food>

A great deal of research is being focused in recent years on the nutritional outcomes of food systems and the benefits of local food hubs. Climate change is set to affect the availability of food, its price and its nutritional content. The mental health benefits of food production and better diets is also increasingly well documented. The ETA Lancet Commission Report is seen as a benchmark document for local food and improved diet.

Case study [EAT-Lancet Commission Summary Report - EAT \(eatforum.org\)](#)

We think there is scope for government support for research into multiple areas of benefit to local food systems, regarding nutrition and health outcomes. It will require a combination of disciplines to adequately analyse.

Case study NE Victoria [Healthy food systems - Gateway Health](#)

## City-Region Approach & Measuring progress

### Stakeholder engagement

International experience shows that developing an effective food strategy for a City-Region takes time. While we have grouped stakeholders into around 9 clusters for practicality the actual number of distinct groups stands at around 72 according to one leading international food city. Some groups interest will overlap, others not. The message in this complexity – with so many distinct groups – is taking sufficient time to engage meaningfully through time in an ongoing co-design process.

### Systems Approach

Food systems are by their nature complex and interconnected with multiple drivers, outcomes, and stakeholders. We therefore cannot understand the optimal interventions and policies without a systems approach that facilitates collaboration between experts in food production, logistics, information management, the environment, water, climate, nutrition and agriculture.

A systems thinking approach is recommended because linear thinking of a traditional food sector development strategy runs the risk of addressing symptoms, not causes. A decision to decrease food waste, for example, might focus on behavior changes by restaurants but cannot address the root cause in poor food valuation by consumers; factors encouraging overproduction and sub-cost pricing; portion control in food service etc. A system's approach allows for much more strategic interventions maximizing efficiency and cost-effectiveness.



A [City Region Food Systems](#) (CRFS) approach aims to foster the development of resilient and sustainable food systems within urban centres, peri-urban and rural areas surrounding cities by strengthening rural-urban linkages. CRFS are differentiated from existing approaches to thinking about food including alternative food networks, short food supply chains, urban-rural linkages, sustainable food systems, foodsheds, bioregions, territorial development, and integrated policy frameworks. CRFS embody these and transcend them by taking *a systems approach to food to establish a way of building systems taking into account complexity*.

#### Case Study - [FAO City Region Food Systems](#)

The literature and lived experience of City Region food systems is very well established and there are number of highly skilled international and national organisations operating in that space. Well tested frameworks for establishing them and networking with other cities are widely available.

The new Milan Urban Food Policy Pact (MUFPP) Monitoring Framework Handbook and Resource Pack, developed by RUAF and FAO offers a set of tools and resources that help any city to develop a way of measuring progress of their own priorities against clear baselines. It provides practical steps, simple tools, tips and resources. The purpose of the monitoring framework is to make it easier for cities to both identify priorities and keep track of and report on yearly achievements. [The Milan Urban Food Policy Pact Monitoring Framework Handbook and Resource Pack - Milan Urban Food Policy Pact](#)

### Independent brokers

Providing support and coordination for the urban food systems in association with other business and community groups fit well within the broader suite of services already being provided by the national RDA network. Other regions and cities may have other potential brokers. What is important is that these enterprises are independent, do not have a financial interest and are recognised as independent knowledge experts by business.

*‘Creating a more sustainable and resilient local food system will require more than just supporting individual businesses. Innovation is a risky business and benefits from the exchange of ideas, learning and innovation networks. In many successful collaborative approaches, it is important to acknowledge the role of an independent facilitator and the importance of creating conditions within which to build good dialogue and seek mutually beneficial solutions’.* Hochberg et al. (2009)

## Conclusion

Taking advantage of their natural and built advantages, we have an unprecedented opportunity to renew our cities and ride a social movement and a technological/design-based wave sweeping the world. Moreover, our Food Security is threatened by a combination of factors likely to continue decades into the future including climate change, strategic disputation, and technical supply chain factors.

The strong potential of this sector is supported by the presence of a highly motivated, socially conscious, well-educated, and relatively high-income population pockets within all cities. Of course, a city-region sustainable food push also needs to be inclusive of all income groups and cultural and linguistic backgrounds and be as responsive to centres of high unemployment and disadvantage.



The economic, health and environmental arguments are strong for well-conceived government and private investment in local sustainable food systems. In reviewing the world 'food' cities it is evident that building up of local and accessible local food buffers with a shorter supply chain is strategically essential. We need much more local food to support our traditional supply chains to prevent food shortages and to smooth out further periods of disruption.

There is very strong investment interest in sustainable food production – from micro-local enterprises and concepts through to large projects. To realise the opportunity will require policy certainty, active investment attraction and a low-cost, predictable, facilitative regulatory environment.

Our core premise is that in urban food, sustainability, good business, and social impact can operate in a productive harmony. The timing is right for a concerted approach to building a local and regional food production system.

Food is the forgotten part of the Water, Renewable Energy Soil nexus necessary for creating a truly sustainable City. Done well, sustainable food will not only good for business, tourism, exports and jobs but will directly address liveability, human health and inclusion policy objectives.

Across the world, City, Urban and Rural food strategies are being developed to accommodate community-based farming, food business incubation through to striking vertical farms, high-tech green houses, roof top farms, aquaculture, food waste capture/reduction and clean energy integration. The planning system must be flexible enough to make this possible. Zoning restrictions include arcane definitions limiting food production and which take no account of huge technology and design progress

RDA developed the *Proposal for Sustainable Urban Food in the ACT (2019)* with the assistance of a wide range of organisations in Canberra who had been involved in urban sustainable food space for many years. This report and our subsequent submission *Proposal for Establishing a City-Region Food System (February 2021)* have highlighted several issues and concepts that need to be factored into developing and implementation of a sustainable city-region food system. We refer the Parliamentary Inquiry to this document. <https://www.agrifood-hub.com/sustainableurbanfood.html>

## ATTACHMENT A

### **Evidence of the economic impact on the local food system**

#### ***Input-Output modelling***

The United States Department of Agriculture has invested in excess of \$1 billion in local food systems in the USA over the last decade. To estimate the economic impact and ROI they have developed a tool kit and calculator based on Input-Output methodology and multipliers. <https://www.ers.usda.gov/topics/food-markets-prices/local-foods/>



Unlike Australia, the US Department of Agriculture is now mainstreaming and assisting urban food systems, based on their now proven economic contribution. We expect the CRFC will, by garnering the data, produce the evidence sufficient to shift the Federal agenda towards sustainable urban food with much greater emphasis

A replicable empirical framework for assessing the economic impact of local food hubs has been developed by several organizations in recent years. Among these an Input-Output (by parts) approach estimated the multiplier effects of a change in final demand for food hub products. This focused on one food hub within New York which had attracted \$4 million in funding from local government.

They estimated a gross output multiplier of 1.75 (every dollar invested produces \$1.75 dollars in additional output) and an employment multiplier of 2.14 (for every food job created a further 2 jobs are created). Using customer surveys, they also estimated that every \$1 increase in final demand for food hub products generates only a \$0.11 reduction in purchases in other sectors.

The results of the survey of hub customers provide evidence that there are opportunities for expansion in the food hub sector, primarily through improved logistics (e.g., lower minimum order sizes and increased frequency of deliveries) and expanded product offerings. Their findings demonstrate that policies that increase final demand for food hub products will have an overall positive economic impact on the community even when opportunity costs are considered (e.g. diversion of purchases from other sectors or producers in the region).

Research in 2020 by Griffith University of alternative food networks operating in Brisbane and Melbourne indicate improved access to healthy food, fairer conditions for farmers, reduction of food loss/waste, increased environmental protection, and facilitation of climate change adaptation<sup>19</sup>.

When further assessing the evidence for a range of commonly associated benefits of CRFS Jennings, S. et al. (2015) found that 'in terms of evidence, the impacts of improved CRFS on regional economic growth were amongst the most consistently high scoring of all the proposed benefits.' The specific benefits assessed were regional growth; rural income and jobs; and economic viability, entrepreneurship and innovation. The interventions connected with these benefits are largely concerned with short supply chains, with policies promoting improved physical infrastructure (e.g. rural roads, market places), and the enabling environments to support them. The New Economics Foundation's (NEF) examine the local multiplier effect. This found a £3 in social return on every £1 invested in Food for Life Catering Mark (a UK based food service local food procurement program), with most of the benefit experienced by local businesses and local employees. New research focusing on the Soil Association's Food for Life multi-setting programmes and considering value created for health, education, and environment in addition to economy demonstrates a social return of UK pound £4.41 for every £1 invested (Soil Association, 2016).

New York State analysis in 2004 estimated that 'if New York food producers—both farmers



and food manufacturers—captured just 10% of NYS consumer food expenditures, they would increase NYS food system revenues by over USD \$8 billion. If New Yorkers increased consumer food expenditures by 10% for food produced by New York farmers and another 10% for food manufactured in New York, that money could fuel local and regional economic development by generating \$16.5 billion in total income and over 17,000 jobs through regional multiplier effects.

MacRae’s (2015) research in Ontario, Canada provides another example that illustrates the potential impact of CRFS by demonstrating the modelled impact that a 10% substitution of imported fruit with increased local production would have. He reports that ‘The Ontariowide impacts would be Canadian Dollar \$130 million in GDP, an additional 1,837 FTE jobs and an extra \$37.8 million in total taxes. Similar effects are documented in an Ontario case study.

Funding for Vertical Farms and similar urban food technologies continues to boom, despite some notable early phase start-up failures, and indicates what the market views as the best prospects. Funding for Midstream Tech and Innovative Food, especially in alternative proteins, has accelerated significantly, bolstered by Covid-19’s threat to food supply chains and negative impact on the meat industry. Locally produced food offers significant cost benefits and supports food security, with a Melbourne study on community grocers showing they are able to reduce the cost of food by 41%, and offer important community benefits, supporting social cohesion.

By sourcing food grown regeneratively and locally where appropriate, and making the most of food and waste, cities could generate benefits worth USD 2.7 trillion a year by 2050. The city of Brussels, for example, stands to gain over USD 130 million per year by producing 30% of its food locally using regenerative practices, halving food waste, and converting half of all remaining organic waste into high quality compost.