

Australian local government policies on creating a healthy, sustainable, and equitable food system: analysis in New South Wales and Victoria

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The food system can be defined as “[t]he web of actors, processes and interactions involved in growing, processing, distributing, consuming and disposing of foods...”.^{1(p3)} Sustainable food systems are those that deliver “food security and nutrition for all in such a way that the economic, social and environmental bases to generate food security and nutrition for future generations are not compromised”.^{2(p1)} Sustainable diets are “protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable; nutritionally adequate, safe and healthy; while optimizing natural and human resources”.^{3(p7)} However, contemporary food systems are creating profoundly negative and interrelated impacts on population health, environmental sustainability and social equity.⁴⁻⁶ While comprehensive action by all levels of government is needed to address these challenges, this paper explores the role of Australian local governments (LGs) in creating a healthy, sustainable and equitable food system.

International research maps the growing uptake of local food system policies, their expansion into novel issues such as food system resilience (noting critiques of this term based on how it obscures the fundamental causes of food system stresses),⁷ and the use of new governance tools in policy development and implementation.⁸ The latter includes Food Policy Councils, which

Abstract

Objective: To analyse local government (LG) policies concerned with creating a healthy, sustainable and equitable food system.

Methods: All relevant policies on LG websites were identified and analysed against a framework of 34 recommendations for LG action on food system issues.

Results: A total of 13 of 207 (New South Wales 128, Victoria 79) LGs had dedicated food system policies. Most actions on food system issues were in general (non-food specific) policies. Most LGs acted on food safety, sustainable local food production, food waste, drinking water access and food system-related education. Few used economic measures to support the consumption of healthier foods, restricted unhealthy food advertising, developed and implemented dietary guidelines in LG-managed settings or influenced the opening of unhealthy/healthy retail food outlets.

Conclusions: LGs undertook a range of actions relevant to creating a healthy, sustainable and equitable food system. Strategic opportunities for LGs include regulating the sale and marketing of unhealthy food and ensuring policy coherence.

Implications for public health: LGs can be supported to act further on food system issues, including through ‘joined-up’ state and federal policies. Further research should address how relevant LG policies can be developed, implemented and monitored effectively to address the complex challenges created by contemporary food systems.

Key words: food systems, local government, policy, health, sustainability

bring together a range of community and non-government stakeholders to undertake diverse policy-related tasks.^{8,9} Globally, initiatives such as the *Milan Urban Food Policy Pact*¹⁰ have created an international platform for collaboration between municipal governments on creating a sustainable, resilient and inclusive food system. In Australia, some LGs have also introduced innovative food system policies, as with City of Canada Bay’s (NSW) *Sustainable Food Strategy*.¹¹ However, these are still rare, and

existing research suggests that Australian LG engagement with food system issues varies considerably.¹²⁻¹⁴

Australian LGs are granted powers and functions under a wide range of state laws, including two basic functions under local government legislation: provision of goods and services to their communities (e.g. sports facilities, public land, and waste management) and regulation of certain activities (e.g. those related to water supply or sewerage).¹⁵ Other key functions include

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local planning (in accordance with state planning instruments),¹⁶ food safety and public health.¹⁷ However, state and federal laws and policies do not explicitly grant LGs a mandate to act on food systems, except for food safety.¹⁸ State planning legislation typically limits the extent to which LGs can consider diet-related health in planning decision making.¹⁶ LGs have very limited abilities to raise revenue, and no jurisdiction over matters such as broadcast advertising or taxation, both being under federal control. Thus, significant policy levers for improving diet-related health (e.g. taxes on sugary beverages) are unavailable to Australian LGs. Perhaps due to these constraints, studies suggest that many LGs do not view food systems as a priority, and/or lack the necessary financial and technical resources for food system policy making.¹⁹

Despite these constraints, Australian LGs can play an important role in creating a healthy, sustainable and equitable food system. In recent years, state legislation has devolved a wider range of powers and functions to Australian LGs, expanding their scope of operations.¹⁵ For example, state public health acts empower LGs in Victoria, WA, and SA (but not NSW) to create public health plans, which can be used to address diet-related health and associated food system issues. The Victorian *Public Health and Wellbeing Plan 2019-2023* also recognises climate change as a threat to health,²⁰ and the Victorian *Climate Change Act 2017*²¹ requires LGs to consider climate change when preparing a municipal public health plan. LGs have responsibility for other policy areas through which they can address food system challenges (e.g. land-use planning, transport and community services).^{12,14,22} LGs also have unique insights into local and community needs, enabling them to respond with targeted, place-based measures.¹⁴ Finally, they offer opportunities for community participation to support deliberative forms of food system governance unavailable at state and federal levels.¹⁴

Over the past decade, there has been a renaissance in research on the role of Australian LGs in creating a healthy, sustainable, and equitable food system. Recent studies explore the extent to which LGs address health and sustainability issues in specific policy documents such as public health plans^{13,23} (and the barriers and enablers to doing so),²⁴ and analyse food or nutrition policy making processes adopted by LGs,^{25,26} as well as the interrelationships between health and environmental

concerns.²⁷ However, most studies consider health or environmental issues in discrete silos^{22,28} and focus on urban LGs to the exclusion of non-metropolitan areas. This study aims to systematically document LG actions that contribute to a healthy, sustainable and equitable food system, via an analysis of policies available on the websites of LGs in Australia's two most populous states (NSW and Victoria).

Methods

Framework of recommended policy actions

The methodology was based on a pilot study undertaken for this project²⁹ that developed a set of recommendations for LG action on creating a healthy, sustainable and equitable food system. These recommendations were adopted and modified into the final framework used in this study (Supplementary Material). The Framework categorises the recommendations into the domains of: Policy Development/Implementation within LG; Health and Wellbeing; Sustainability and Environments; Economic Development; Food Waste; Food Quality and Safety; Social Policy; and Planning Frameworks. This study focused on specific policy actions concerned with creating a healthy, sustainable and equitable food system, and excluded the domain of Policy Development/Implementation within LGs.

Sample, search criteria and eligibility criteria for policy documents

The study included all LGs within the Australian states of NSW (n=128)³⁰ and Victoria (n=79).³¹ Policy documents were collected from each LG's website between July 2019 and June 2020. For NSW LGs, the key documents (herein 'core' documents) were those required as part of the Integrated Planning and Reporting Framework, i.e. the *Community Strategic Plan, Delivery Program, Operational Plan* and most recent *Annual Report*. For Victoria, the equivalent documents collected were the *Council Plan, Strategic Resource Plan, Municipal Public Health and Wellbeing Plan* and most recent *Annual Report*. Additionally, the policy and strategy register on each LG's website was searched to identify relevant policy documents (herein 'other' documents) from a range of areas spanning the entire food system from production through to waste, such as: food/nutrition/health/wellbeing; agriculture/

gardening; environment/sustainability/waste management; economy/tourism/events; recreation/open space/transport; food safety; social/cultural services; and land-use planning/growth management/housing. For LGs without a dedicated documents register, search terms were entered into the homepage search bar: food, nutrition, meal, healthy eating, cook, agriculture, farm, crop, livestock, market, garden, drink, fountain, bubbler, compost, plastic, affordable housing, breastfeeding.

Included were current formal, written documents that set out government objectives and actions for a particular area/topic and contained material relevant to the Framework. Excluded were webpages, media releases, meeting minutes, lists of events and workshops, reports and discussion papers lacking action plans, reports with recommendations undertaken by a consultancy agency that had not been formally adopted, templates and forms, and general guidance information. Also excluded, to contain the scope of the project, were regional policy documents and the main LG planning instruments (local environment plans and development control plans in NSW and planning schemes in Victoria).

Analysis procedures

A copy of each document was uploaded into NVivo 12 Plus qualitative analysis software³² and analysed using a coding schema based on the Framework. New nodes were developed for actions not captured by the Framework. Two researchers completed the initial website searching and coding; one (AC) completed the NSW LGs and the other (IAB) the Victorian LGs. To standardise coding procedures, both researchers independently performed these tasks for two LGs and resolved any inconsistencies. Throughout the subsequent coding, the two researchers discussed any queries and recorded all decisions, consulting a third researcher (BR) when needed. One researcher (AC) reviewed all the coded material to ensure consistency between states. Chi-squared tests of independence examined the actions of LGs in each state and of LG geographical classifications (metropolitan [i.e. urban: n=34 NSW; n=32 Victoria] or non-metropolitan [i.e. regional and rural: n=94 NSW; n=47 Victoria]) against each recommendation in the Framework.

Results

Local government documents

A total of 2,266 documents were included in the analysis: 1,268 (56%) from NSW and 998 (44%) from Victoria (Supplementary Material), with 430 and 242 core documents from NSW and Victoria, and 838 and 756 other documents, respectively.

Food system policies/strategies

Supplementary Table 2 includes the total number of LGs acting on each recommendation in the Framework, as well as the number of LGs in NSW compared to Victoria, and in metropolitan versus non-metropolitan areas. Only 13/207 LGs (6.8%) had a dedicated food system policy, comprising two metropolitan NSW LGs (1.6%) and 11 Victorian LGs (13.9%), of which eight were metropolitan and three non-metropolitan. These LGs were: from NSW: Blacktown and Canada Bay; and from Victoria: Cardinia, Ballarat, Darebin, Greater Bendigo, Greater Geelong, City of Melbourne, Yarra, Hume, Manningham, Moreland and Mornington Peninsula. Metropolitan LGs were more likely than non-metropolitan LGs to have a food system policy ($\chi^2=12.96$, $p<0.000$). Greater Bendigo's (Victoria, regional LG) *Food System Strategy*³³ (2020) is one example of a dedicated policy, which embeds the One Planet Living Principles³⁴ into a 10-year vision. The policy aims to increase accessibility and affordability of safe, nutritious and culturally appropriate food and drinks; the growth, sale and consumption of local, healthy food through land-use planning, education and food hubs; sustainable land use and cultural practices in partnership with Traditional Custodians; and to reduce food waste going to landfill by redirecting food to relief organisations and increasing organic waste collection.

Commonly and infrequently addressed areas

Nearly all LGs ($n=200$, 96.6%) acted on food quality and safety. Supporting sustainable local food production was the next most commonly addressed recommendation ($n=191$, 92.3%), followed by food waste ($n=185$, 89.4%), education/events on food system issues ($n=179$, 86.5%), supporting access to safe drinking water ($n=178$, 86.0%) and supporting local food initiatives for economic development ($n=174$, 84.1%). Actions supporting home and community gardening and animal husbandry

– ranging from the keeping of backyard chickens and bees to industry-scale livestock business – were very common (each $n=167$, 80.7%). Approximately three-quarters of all LGs supported vulnerable populations directly through programs such as charitable meals ($n=152$, 73.4%), or indirectly through affordable housing policies ($n=149$, 72.0%).

Recommendations with the least LGs taking action included: provision of pregnancy dietary advice ($n=3$, 1.4%); economic measures to encourage affordability/consumption of healthier foods and discourage consumption of unhealthier foods ($n=3$, 1.4%); restricting unhealthy food in LG-controlled vending machines ($n=4$, 1.9%); restricting advertising of unhealthy food ($n=7$, 3.4%); developing/implementing dietary guidelines for external (non-LG managed/owned) settings ($n=14$, 6.8%); and encouraging new fresh food outlets and discouraging unhealthy food outlets ($n=16$, 7.7%).

Differences between states and geographical classifications

The chi-squared tests of independence revealed significant differences between the states in the extent of LG action against the Framework of recommendations and between geographical classification and actions against the Framework (Supplementary Material). The proportion of Victorian LGs taking action was greater than the proportion of NSW LGs for all but five of the 34 Framework recommendations (Supplementary Material). Major differences included: promoting/supporting breastfeeding (NSW: 12.5%, Victoria: 54.4%); sustainable water management in food production (NSW: 29.7%, Victoria: 63.3%); partnerships with sport clubs (non-LG owned) to provide healthy food choices (NSW: 1.6%, Victoria: 31.6%); healthy/sustainable LG food procurement (NSW: 28.9%, Victoria: 58.2%); supporting nutrition in vulnerable populations (NSW: 62.5%, Victoria: 91.1%); and encouraging existing food retailers and caterers to sell healthy, sustainable and affordable food (NSW: 3.9%, Victoria: 31.6%). For 22 of the 34 Framework recommendations, the proportion of metropolitan LGs acting was greater than the proportion of non-metropolitan LGs. The largest differences were healthy food retail accessibility (metropolitan: 68.2%, non-metropolitan: 26.2%); affordable housing (metropolitan: 95.5%, non-metropolitan: 61.0%); and food production on land owned by

LG (metropolitan: 90.9%, non-metropolitan: 59.6%).

Results by Framework domain and recommendation

The following section of the results provides quantitative and qualitative descriptions of each domain of the Framework, except for planning.

Health and wellbeing

The top three areas of LG action to promote diet-related health were education/events on food system issues (86.5% of total LGs); supporting access to safe drinking water (86%); and supporting nutrition in vulnerable populations (73.4%), see Table 1. In relation to creating/implementing healthy and sustainable food procurement policies (40.1%), Victorian LGs were guided by the Victorian Government's *Healthy Choices Guidelines*,³⁵ whereas NSW lacked a similar state-level framework. Additionally, many Victorian LGs had a policy to support organisations and businesses (outside LG) to meet the targets in the Victorian *Healthy Choices Guidelines*,³⁵ while similar action was rare in NSW. LGs in both states reported policy actions related to supporting access to safe drinking water; however, Victorian LGs focused on public-place drinking water fountains while NSW LGs articulated responsibilities for water utilities and infrastructure through policies addressing water quality/safety, security, availability, affordability and taste.

Sustainability and environment

The three recommendations related to sustainability and environment that were acted on by the greatest number of LGs were supporting sustainable local food production (92.3% of total LGs); supporting home/community gardening (80.7%); and supporting animal husbandry (80.7%), see Table 2. The data under 'Sustainable local food production' relate predominantly to farming and agriculture, while smaller-scale (non-commercial) food production is under 'Food production on LG land', and 'Home and community gardening'. Where instances of home/community gardening were linked explicitly to sustainability practices (e.g. using organic methods), these were also coded to 'Sustainable local food production'.

LGs took responsibility for protecting land for food production and reducing land-use conflicts, particularly in non-

Table 1: Number and percentage of LGs acting on recommendations in the domain of Health and Wellbeing.					
Recommendation	Total LGs n (%)	NSW n (%)	Victoria n (%)	Metropolitan n (%)	Non-metropolitan n (%)
Education/events on food system issues	179 (86.5%)	103 (80.5%)	76 (96.2%)	65 (98.5%)	114 (80.9%)
Example actions	<ul style="list-style-type: none"> • Activity types: festivals; information material; cross-promotion of non-LG initiatives; classes/workshops; demonstrations; tours • Topics: waste; food growing; food safety; nutrition/healthy eating; sustainability; and social services (e.g., food vouchers/food relief guides) • Settings: Childcare services, schools, libraries, community gardens, religious sites, open spaces, community centres, aged care/health facilities, supermarkets 				
Access to safe drinking water	178 (86.0%)	115 (89.8%)	63 (79.7%)	58 (87.9%)	120 (85.1%)
	<ul style="list-style-type: none"> • Install drinking water fountains • Responsibility for water utilities/infrastructure • Drinking water quality/safety policies • Water carting policies • Water security, availability, affordability, taste 				
Nutrition in vulnerable populations	152 (73.4%)	80 (62.5%)	72 (91.1%)	59 (89.4%)	93 (66.0%)
	<ul style="list-style-type: none"> • Populations: seniors; people with a disability; children; Aboriginal and Torres Strait Islander people; people experiencing homelessness; migrants; low socioeconomic communities; women's groups/services • Actions: Provide Meals on Wheels/home support services; support charitable food services; provide grocery shopping assistance; encourage food donation; gardening/cooking programs; research food access needs; healthy eating/nutrition training for staff working with vulnerable people 				
Traditional food cultures	92 (44.4%)	57 (44.5%)	35 (44.3%)	41 (62.1%)	51 (36.2%)
	<ul style="list-style-type: none"> • Aboriginal and Torres Strait Islander: bush tucker education and gardens; farmer education on Traditional Custodians' agricultural practices; tourism; festivals; cottage bush food businesses; encouraging restaurants to use native foods/ingredients • Festivals/events celebrating diverse cultures • Multicultural 'Starting Your Own Food Business' workshops • Open space for ethnic groups to grow preferred foods 				
Healthy/sustainable LG food procurement policies	83 (40.1%)	37 (28.9%)	46 (58.2%)	38 (57.6%)	45 (31.9%)
	<ul style="list-style-type: none"> • Create catering/procurement policies (or implement existing guidelines) for meetings, events, childcare, aged care • Include health, fair trade, organic, locally grown, animal ethics, cultural food traditions, dietary requirements 				
Accessible healthy food retail	82 (39.6%)	40 (31.3%)	42 (53.2%)	45 (68.2%)	37 (26.2%)
	<ul style="list-style-type: none"> • Zoning/planning prioritises fresh food outlet accessibility in close proximity to residences • Locate supermarkets in activity centres/near public transport interchanges • Map food deserts • Use (Vic) Food Sensitive Planning and Urban Design Framework • Improve walkability and cyclability • Create "30 minute" neighbourhoods where residents can access food retail within 30 minutes by active transport • Accessible built environment and store layout 				
Breastfeeding	59 (28.5%)	16 (12.5%)	43 (54.4%)	24 (36.4%)	35 (24.8%)
	<ul style="list-style-type: none"> • LG-operated childcare policies: educate staff/parents; provide places for mothers to express; include fathers in discussions • Promote Australian Breastfeeding Association programs • Breastfeeding friendly workplace protocols • Signpost breastfeeding facilities • Advocate for breastfeeding in public places 				
Healthy eating by LG staff	34 (16.4%)	15 (11.7%)	19 (24.1%)	13 (19.7%)	21 (14.9%)
Encourage existing retailers/caterers to sell healthy, sustainable and affordable food	30 (14.5%)	5 (3.9%)	25 (31.6%)	15 (22.7%)	15 (10.6%)
Partner with sport clubs to provide healthy choices	27 (13.0%)	2 (1.6%)	25 (31.6%)	6 (9.1%)	21 (14.9%)
Encourage opening of new fresh food outlets; discourage unhealthy outlets	16 (7.7%)	3 (2.3%)	13 (16.5%)	9 (13.6%)	7 (5.0%)
	<ul style="list-style-type: none"> • Advocate for state government planning schemes to reduce fast food outlets • Increase fresh food outlets as townships expand 				
Dietary guidelines for external settings	14 (6.8%)	3 (2.3%)	11 (13.9%)	3 (4.5%)	11 (7.8%)
	<ul style="list-style-type: none"> • Implement existing guidelines (e.g., Australian Dietary Guidelines) • Healthy catering guidelines for workplaces • Healthy food donation guidelines for food relief agencies 				
Restrict unhealthy food advertising; increase healthy food promotion	7 (3.4%)	1 (0.8%)	6 (7.6%)	3 (4.5%)	4 (2.8%)
Restrict unhealthy food in vending machines under LG control	4 (1.9%)	1 (0.8%)	3 (3.8%)	1 (1.5%)	3 (2.1%)
Pregnancy dietary advice	3 (1.4%)	1 (0.8%)	2 (2.5%)	3 (4.5%)	0 (0.0%)
Use economic measures to encourage affordability/consumption of healthier foods; discourage less healthy foods	3 (1.4%)	1 (0.8%)	2 (2.5%)	2 (3.0%)	1 (0.7%)

Note: LG: local government, NSW: New South Wales

metropolitan areas. This was articulated in key 'core' documents (*Community Strategic Plan [NSW]*, *Council Plan [Victoria]*), and in land-use planning (e.g. green wedge, growth management, rural lands and rates policies), economic development, destination management and environmental/sustainability plans. Preservation of agricultural land was framed in terms of the ability of local food production to contribute to local, regional and national food security and to ensure a stable food supply.

Twenty-six NSW LGs had a community garden policy (20.3%; 15 metropolitan, 11 non-metropolitan), compared with eight Victorian LGs (10.1%; 7 metropolitan, 1 non-metropolitan). LGs linked home and community gardening to climate resilience,

food security, increased social connectedness and shortened food supply chains/reduced food miles.

Non-metropolitan LGs placed greater emphasis on the coherence and functionality of food distribution systems compared to metropolitan LGs. The value of local and short food supply chains was a focus for their environmental (reduced food miles), economic (keeping profits in the community) and social (linking consumers directly to producers) benefits.

Economic development

Most LGs supported local food initiatives (84.1% of total LGs), most commonly through food- and agriculture-related tourism (Table 3). Support for local producers was the

second-most addressed recommendation (78.7%), particularly in non-metropolitan food-growing regions where agriculture is a key industry. For example, Edward River Council's (NSW) *Agribusiness Masterplan*^{36(p4)} speaks of "prospering in the new normal", articulating seven key platforms encompassing innovation, sustainability, workforce development, water management, attracting capital for growth, business transition and positive community attitudes. Public food markets (55.66%; the least-actioned recommendation in this domain) related primarily to farmers' markets. A few LGs referred to supporting community groups to establish local food co-ops, community grocers and rural produce stores selling locally grown food.

Table 2: Number and percentage of LGs acting on recommendations in the domain of Sustainability and Environment

Recommendation	Total LGs n (%)	NSW n (%)	Victoria n (%)	Metropolitan n (%)	Non-metropolitan n (%)
Sustainable local food production	191 (92.3%)	115 (89.8%)	76 (96.2%)	53 (80.3%)	138 (97.9%)
Example actions					
Home/community gardening	167 (80.7%)	96 (75.0%)	71 (89.9%)	65 (98.5%)	102 (72.3%)
Animal husbandry	167 (80.7%)	92 (71.9%)	75 (94.9%)	47 (71.2%)	120 (85.1%)
Food production on LG land	144 (69.6%)	78 (60.9%)	66 (83.5%)	60 (90.9%)	84 (59.6%)
Strengthen food chain connections/distribution	131 (63.3%)	78 (60.9%)	53 (67.1%)	36 (54.5%)	95 (67.4%)
Food supply/food system resilience	115 (55.6%)	70 (54.7%)	45 (57.0%)	29 (43.9%)	86 (61.0%)
Sustainable water management in food production	88 (42.5%)	38 (29.7%)	50 (63.3%)	25 (37.9%)	63 (44.7%)
Local, sustainable food processing	45 (21.7%)	32 (25.0%)	13 (16.5%)	7 (10.6%)	38 (27.0%)
Agrobiodiversity/wild foods	24 (11.6%)	9 (7.0%)	15 (19.0%)	10 (15.2%)	14 (9.6%)

Note: LG: local government, NSW: New South Wales

Food waste

Most LGs (89.4%) acted on food waste, reflecting the fact that waste management is a well-established LG responsibility, supported by state policies and dedicated funding. LG actions focused on diverting food waste from landfill rather than preventing waste creation, through measures such as workshops on compost or worm farming, rebates to subsidise the cost of equipment, and resources to encourage community members and schools to compost food waste. LGs without a kerbside service that included the collection of food waste encouraged composting, as food waste in household bins would otherwise go to landfill. Some LGs role modelled composting at LG-managed buildings and offices and promoted existing local, national and international food waste campaigns (e.g. Love Food Hate Waste).³⁷ A range of measures also aimed to reduce food-related packaging waste, from beeswax wrap-making workshops to event policies prohibiting single-use plastics.

Food quality and safety

Almost all LGs (96.6% in total) took action on food quality and safety, reflecting their statutory obligations under the respective

state Food Acts. Environmental Health Officers undertook enforcement and compliance activities such as inspecting food premises and education on the requirements of food safety regulation and safe food handling procedures. LGs also implemented food hygiene and safety scoring programs (e.g. Scores on Doors in NSW and Best Bites in Victoria),^{38,39} which publicly identify the extent to which food retailers comply with food safety regulations.

Social policy

The Framework of recommendations included affordable housing as an ‘upstream’ social policy measure that could reduce food insecurity.⁴⁰ We identified 72% of LGs acting on affordable housing, including through stand-alone policies and land-use and built environment planning documents. Specific actions included development and zoning controls to retain affordable housing stock (including that owned by LGs), and measures targeting the housing construction sector. Also common was education, incentives or requirements to incorporate affordable housing in new developments, and levying contributions for affordable housing (e.g. under NSW State Environmental Planning

Policy No. 70 – Affordable Housing).⁴¹ Other actions included partnerships with agencies, organisations (e.g. Housing Trusts) and the private sector, participation in regional affordable housing alliances, and advocating to state government to mandate the provision of affordable housing in planning policies.

The analysis also identified three food system actions undertaken by LGs not in the Framework: i) providing public, open-space communal infrastructure for food preparation and consumption (e.g. picnic areas); ii) supporting coastal and riparian commercial and recreational fishing and other forms of aquaculture; and iii) providing publicly accessible kitchen facilities in LG-managed buildings (e.g. community halls and sport clubs).

Discussion

Australian LGs in NSW and Victoria perform a wide range of actions contributing to a healthy, sustainable and equitable food system. The most undertaken actions align with LG obligations under state laws and policies to enforce food safety regulation and manage (food) waste and public lands

Table 3: Number and percentage of LGs acting on recommendations in the domain of Economic Development.

Recommendation	Total LGs n (%)	NSW n (%)	Victoria n (%)	Metropolitan n (%)	Non-metropolitan n (%)
Local food initiatives for economic development	174 (84.1%)	107 (83.6%)	67 (84.8%)	53 (80.3%)	121 (85.8%)
	Example actions				
	<ul style="list-style-type: none"> • Food/agriculture-related tourism (e.g., food trails, on-farm cooking classes, farm stays, paddock to plate initiatives) • Aboriginal and Torres Strait Islander cultures food tourism (e.g., bush tucker tours, traditional fishing, camp cooking, Brewarrina Fish Traps) • Food truck markets • Label locally produced foods at markets/events • Buy local campaigns • Encourage local retailers, cafes, restaurants to stock/cook with local food products • Permit roadside stalls for farm-gate sale without development application 				
Local food producers	163 (78.7%)	99 (77.3%)	64 (81.0%)	28 (42.4%)	135 (95.7%)
	<ul style="list-style-type: none"> • Support administrative/business development: digital skills workshops, financial counselling, industry expos • Value adding opportunities • Enable access to local/regional/export markets • Build agribusiness clusters/precincts • Support farmers to secure staff • Environmental sustainability education: weed management, soil/water health, biodiversity management, on-farm “green” economy activities • Support infrastructure: livestock saleyards, internet/mobile phone coverage, road/rail infrastructure • Support Centres of Excellence, agricultural research stations • Encourage trials/uptake of farming innovations 				
Food-related job creation	134 (64.7%)	81 (63.3%)	53 (67.1%)	36 (54.5%)	98 (69.5%)
Public food markets/ distributors	115 (55.6%)	59 (46.1%)	56 (70.9%)	48 (72.7%)	67 (47.5%)
	<ul style="list-style-type: none"> • Permits for farmers’ markets on LG/public land • Streamline application processes for market organisers • Assist organisers to apply for grant funding • Provide small financial contributions to markets • Aid promotion/marketing • Establish/support community groups to establish local food co-ops, community grocers, rural produce stores 				

Note: LG: local government, NSW: New South Wales

(enabling urban agriculture). Conversely, areas where LGs are less active reflect the limitations on LGs under relevant state legislation (using economic measures to encourage affordability/consumption of healthier foods, restricting advertising of unhealthy foods, and encouraging new fresh food outlets). For example, state planning acts typically do not include public health as a statutory objective,¹⁶ and planning frameworks do not allow LGs to refuse development approval on the basis of the healthiness of food being offered by a retail outlet,^{42,43} or to diversify the mix of (healthy and unhealthy) food retail outlets.⁴³ Some LGs advocated to state government to amend state planning schemes so as to reduce exposure to fast-food outlets, suggesting that legislative change at the state level would support LGs to implement zoning restrictions 'on the ground'.

LGs undertake a range of actions on food system challenges, but this study identified few examples of comprehensive food system policies that address health, sustainability and equity in an integrated way, and joined LGs' actions in areas such as food production, consumption, sale, marketing and disposal.⁴⁴ Generally, LGs' actions on food system challenges were scattered throughout various non-food specific policies, and could thus be strengthened by ensuring coherent, strategic and coordinated action on diet-related health and food system sustainability and equity, potentially through a comprehensive food system policy. Examples of such policies were found in Blacktown (NSW), and Melbourne, Cardinia, and Moreland (Victoria), among other LG areas. The creation of food system policies is also an opportunity for community and/or civil society participation in food system governance at the local level, either through processes of consultation or through a formal structure such as a Food Policy Council.¹⁴

The number of NSW compared to Victorian LGs acting on the Framework recommendations was significantly different. Victorian LGs were more likely to act on all but five of the 34 recommendations, and more likely than NSW LGs to adopt comprehensive food system policies. This may relate to differences in relevant Victorian and NSW state legislation and policy, especially in the fields of public health and climate change (noted above), although this could be explored in future research. In addition, Healthy Together Victoria (a 2011–2016 prevention initiative funded under the

previous National Partnership Agreement on Preventive Health) included a focus on healthy eating and provided targeted funding to 14 LG areas,⁴⁵ while the Victorian Health Promotion Foundation (VicHealth) has a long history of supporting LG action on diet-related health, including providing \$5 million to eight LGs to address food security as part of its 2005–2010 *Food for All* program.⁴⁶ In 2021, VicHealth launched a Local Government Partnership⁴⁷ with a specific focus on building local government capacity in relation to food system policy making. The technical and financial resources VicHealth provides to Victorian LG action on food system issues is not present in NSW. Additionally, Victorian state planning policy specifies that 80–90% of households should be within 1km of a town centre of sufficient size to allow for the provision of a supermarket.⁴⁸ NSW does not have a similar state-level policy,⁴⁸ and this may explain why a far greater proportion of Victorian LGs acted on healthy food retail accessibility compared with NSW LGs.

There were pronounced differences in the actions taken on food system challenges by non-metropolitan compared to metropolitan LGs. This likely reflects their different constituencies, and potentially the (usually) larger populations and more substantial resourcing of metropolitan compared to non-metropolitan LGs. Non-metropolitan LGs were more active in supporting food producers and sustainable local food production, reflecting the presence of arable land, as well as the importance of the agricultural sector for the economies of regional areas. They were less likely to address housing affordability, which could reflect the lower cost of housing in regional areas.⁴⁹ Accessibility to healthy food retail was another area less actioned by non-metropolitan LGs, despite people living in rural areas having poorer access to affordable, nutritious food, and being more likely to experience obesity and non-communicable diseases.⁵⁰ However, metropolitan LGs experience development and densification at a greater rate than regional areas, and subsequently may prioritise access to healthy food retail services to a greater extent.⁵¹

Limitations

The data collection and analysis period span the onset and continuation of the COVID-19 pandemic. To ensure consistency with LG websites searched before the coronavirus outbreak and those searched during, policies and strategies created in response to the pandemic were omitted.

This study was limited to identifying the number of LGs taking action against each recommendation in the Framework but does not evaluate or compare the quality of these actions through detailed content analyses (see, for example, Beaudry, McKay & Haines 2021).²³ Additionally, it captured only policy documents publicly available through LGs' websites and actions mentioned in the included policies, but excluded documents not publicly available, as well as actions that LGs may be taking that fall outside those documents. This research does not indicate the extent to which included policies/policy actions were prioritised, funded or implemented, meaning that it is not necessarily an indication of action 'on the ground', or of policy impact in addressing food system issues (also a limitation of international research on LG food policy making).^{8,52} These are important directions for future research.

Conclusion

LGs in NSW and Victoria undertake a wide range of actions relevant to creating a healthy, sustainable and equitable food system, particularly in relation to enforcing food safety regulation, promoting sustainable local food production, reducing food waste, providing safe drinking water and educating and informing the community on food system issues. Significant differences were found between LGs in NSW and those in Victoria, and between metropolitan and non-metropolitan LGs, with the latter more likely than metropolitan LGs to be supporting local food growers and sustainable food production, but less likely to be acting on housing affordability and access to healthy food retail. Opportunities exist for strategic, 'joined-up' food policy making at the LG level, and for LGs to learn from those few who have already adopted such policies. Further research is required to understand the impact of different state government directives and supports on LGs' food-related actions, as well as exploring LG action on food systems in the Australian states and territories not included in this research. Irrespective of jurisdiction, there is scope for more Australian LGs to adopt comprehensive, dedicated food system strategies that address health, sustainability, economic development and equity in an integrated way. State governments should also consider how they can support LGs in undertaking food systems work, including through enabling policy and legislation, and

dedicated funding. This research is unique in its inclusion of all LGs in two Australian states, as well as the inclusion of the large absolute number and different types of LG policies. It sets the stage for further research on how policies to address food system challenges are implemented by LGs 'on the ground', and what policies could be identified as 'best practice' for creating a healthy, sustainable and equitable food system.

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Supporting Information

Additional supporting information may be found in the online version of this article:

Supplementary Table 1: Framework of recommended policy actions for Australian local governments on food system issues.

Supplementary Table 2: Complete results from local government food system policy mapping (all local governments, comparisons by state, comparisons by geographical area).