

Committee on Environment and Planning



LEGISLATIVE
ASSEMBLY

Food production and supply in NSW



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The motto of the coat of arms for the state of New South Wales is “Orta recens quam pura nites”. It is written in Latin and means “newly risen, how brightly you shine”.

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Membership

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Chair's foreword

Food insecurity and a lack of equal access to nutritious food were raised by many stakeholders who took part in our inquiry. Food insecurity is a complex issue, which particularly impacts disadvantaged people, culturally and linguistically diverse communities, regional and remote communities, and Aboriginal and Torres Strait Islander peoples.

There is no overarching government plan to address issues with food security and food supply in NSW. We heard that we need a more cohesive approach to our food system, through an overarching government food system plan and a food system council to oversee this plan and coordinate responses to problems in the food system. We also heard that local government could play a bigger role in broader food system planning, and this should be supported in our planning laws.

Food insecurity was made worse by the COVID-19 pandemic. A key lesson from the pandemic was the importance of food relief, as we experienced disruptions to our food supply chains. We found that food insecurity and increasing demand for food relief mean that more ongoing funding is needed for food relief programs.

Food supply disruptions caused by crises can drive food insecurity, particularly in remote communities. Food relief responses should be integrated into our crisis preparation frameworks to ensure coordinated responses to food supply problems during crises. We also heard that Aboriginal community representation on local emergency management committees could improve responses to food supply issues, particularly in remote communities.

An alarming amount of food is wasted in NSW. Reducing food waste would lower emissions and help to meet the state's zero emissions targets. A stronger food waste strategy addressing all aspects of the food system in NSW is needed to meet the state's waste reduction goals.

Households account for around a third of food waste in NSW. Initiatives such as wide-ranging consumer education campaigns and school-based education could reduce household food waste. We also heard that local councils will need more funding to implement food and garden organics collection by the 2030 deadline outlined in the Government's Waste and Sustainable Materials Strategy.

Food rescue is a cost-effective way to redirect surplus food, reduce food insecurity and deliver social and environmental benefits. Increasing the amount of food that is rescued and redistributed could assist food relief organisations to meet growing demand and help meet NSW's food waste reduction targets. Our recommendations aim to address barriers that limit the amount of food that is rescued by food relief organisations, including high transport costs and gaps in the cold chain.

Community gardens and urban agriculture are vital ways for local communities to access fresh produce, particularly for culturally and linguistically diverse, Aboriginal and regional and remote communities. They can provide food security and health and wellbeing improvements and educate communities about food production. These projects should be supported in our planning system, particularly community traditional food gardens in rural and remote Aboriginal communities.

The inquiry also considered food production, with a focus on future-proofing our food production and supply chain to strengthen food security. As a result of urbanisation, much of our population is disconnected from the food production and supply systems. School education about how food is produced and its impacts on our health and the environment, delivered through hands-on learning using school gardens, is needed to improve food literacy.

We heard that a changing climate will significantly disrupt our food production and supply systems, contributing to greater food insecurity. Food production is already shifting towards more sustainable practices, and this should be supported in our planning and regulatory frameworks. Consumers are increasingly concerned about the sustainability of the food they are purchasing. Sustainability food labelling would assist them in making more informed food choices.

Consumer trends also indicate decreasing meat consumption. The NSW Government can capitalise on the expected growth of the plant-based protein market by continuing to support the growth of the sector located in NSW. The traditional 'bush foods' market is also growing, but Aboriginal and Torres Strait Islander peoples are underrepresented in the industry, which is benefiting from traditional knowledge of Country. We support the growth of this industry led by Aboriginal and Torres Strait Islander peoples and the protection of their traditional knowledge.

We heard that our food production and supply systems face serious workforce challenges. These complex challenges require a broader long-term strategy, coupled with more immediate action to address worker shortages, to ensure the ongoing viability of food production businesses in NSW.

We have made a number of recommendations in this report that aim to address issues in the NSW food system. We have an opportunity to tackle food insecurity and food waste in NSW. This will bring significant environmental, social and health benefits by reducing our emissions, capitalising on opportunities to bolster the local food economy, and improving the health and wellbeing of our communities.

We thank the stakeholders who made submissions and participated in the inquiry by appearing at our public hearings and engaging with us at our site visit and a private briefing. I also thank past and current Committee members for their hard work throughout this inquiry, and Committee staff for supporting us in our work.

Alex Greenwich MP
Chair

Summary

A food system plan with central oversight

We found that the approach to our food system is siloed and disjointed, with various government agencies responsible for separate policies. There is no overarching government plan or strategy to address issues with food security and food supply, and access to nutritious food. There is also no lead agency that is responsible for addressing problems in our food system.

Growing food insecurity and a lack of equal access to nutritious and healthy food were raised by many stakeholders who took part in our inquiry. Some of these issues already existed and were exacerbated by the COVID-19 pandemic, highlighting problems in our food system. This includes food insecurity in remote Aboriginal communities, and workforce shortages in some food production sectors.

To help address these issues, we have recommended that a food system plan be implemented. The plan should cover strategies to address food insecurity; equitable access to nutritious food; food production, including urban agriculture; any changes needed to planning and development frameworks; and integration with local government and service providers.

We have also recommended that a food system council be created to oversee the implementation of and reporting on the plan, as well as coordinate responses to problems in the NSW food system. We heard that these reforms would enable a more coherent and cohesive approach to problems in our food system.

Data on food insecurity and food waste

The NSW Government doesn't consistently collect reliable data on food insecurity which makes it hard to identify and address systemic factors that drive food insecurity. We have recommended that the Government introduces regular, comprehensive food security and nutrition surveys of a diverse representation of our community, including culturally and linguistically diverse groups and Aboriginal and Torres Strait Islander communities, and in schools. The results from the surveys should be publicly reported on.

We also heard that better data is needed on food waste and have recommended the Government introduce a food waste reporting system. Reporting across the food supply chain would help to provide data, which can inform strategies for tackling food waste in each part of the supply chain.

The role of local governments in addressing food system issues

Local governments played a part in providing food relief during the pandemic and have the capacity to play a bigger role in food system planning for their communities. However, there isn't a standard requirement for local councils to develop a food system policy. Inquiry participants told us that this has contributed to the development of 'food swamps' and 'food deserts'.

Gaps in planning legislation also limit local governments' ability to address health and wellbeing issues in their communities. We have recommended that local governments should be able to consider community health and wellbeing when making planning decisions.

Ongoing funding for food relief

Food insecurity grew during the COVID-19 pandemic, and there was an increase in demand for food relief. The NSW Government provided emergency funding for organisations like Foodbank and OzHarvest, allowing them to distribute more food hampers and donated food. However, we heard that growing levels of food insecurity and the rise in demand for food relief mean that more ongoing funding needs to be dedicated to food relief programs.

Integrating food relief into crisis preparation

The COVID-19 pandemic demonstrated the disruptions that can occur to food supply during crises, particularly in remote communities. We consider that food relief responses need to be integrated into NSW crisis preparation frameworks to ensure coordinated responses to food supply problems during crises. We also found that Aboriginal community representation on local emergency management committees could help to improve the response to food supply issues, particularly in remote communities.

Stronger measures to prevent food waste

Reducing the amount of food wasted in NSW would lower emissions and help us to meet our zero emissions targets. However, we heard that the NSW Government's waste management strategies and policies lack interim targets and don't address food waste in a comprehensive way. We consider that a stronger food waste strategy with clear targets and actions for all elements of the food system is needed. Existing waste reduction programs should be expanded and given more funding to be more effective.

We consider that the Government should provide more support for business and industry to reduce food waste. We heard about voluntary programs that have helped businesses to identify ways to cut their waste.

Information sharing can help participants in the food industry to find ways to redirect and reduce wasted food. We have recommended that the Government develops a platform to encourage participants in the food chain to reduce surplus and wasted food.

Inquiry participants told us that supermarket requirements for the appearance of fruit and vegetables increase food waste. We heard that aesthetic standards can lead to a significant amount of edible produce being ploughed back into the paddock. This is a waste of farmers' resources and reduces their incomes. We recommend that supermarkets' ability to require aesthetic standards for produce should be limited so that less produce is wasted.

Rescuing more food

An alarming amount of food is wasted in NSW. Much of this food is edible and could be rescued, helping to feed people who are experiencing food insecurity. We heard that the high cost of transport and gaps in the cold chain contribute to food waste. We have recommended that the Government implements trials of regional food rescue hubs and conducts research on addressing gaps in the cold chain. These measures could increase the amount of surplus food that is rescued.

It can be cheaper for farmers to plough surplus produce back into the paddock than donate it due to high transport costs. Introducing tax credits at the federal level could encourage farmers and logistics companies to donate surplus food. We recommend that the NSW Government advocates for reform at the federal level to allow farmers and businesses to claim back the cost of donating food.

We found that food rescue is a cost-effective way to rescue surplus food and help reduce food insecurity. Increasing the amount of food that is rescued and redistributed could help charities to meet the growing demand for food relief, while also meeting our targets to reduce food waste. This would have both social and environmental benefits. We consider that more funding should be provided to the food rescue sector so that it can expand its operations.

Reducing food wasted by households

Households are responsible for around a third of food waste. The Environment Protection Authority's 'Love Food Hate Waste' campaign aims to reduce food wasted by households. However, we heard that it has limited reach and recognition, compared with a similar, more well-resourced campaign run in the United Kingdom. We consider that a wide-ranging consumer education campaign is needed to increase awareness of household food waste and ways to prevent it. The campaign should seek to engage with young people on social media and digital platforms.

We also heard that children and young people can have a positive influence by encouraging their families to change their habits and reduce food waste. We recommend that school-based education programs on food waste be expanded to help increase students' awareness of reducing food waste.

Under the Government's Waste and Sustainable Materials Strategy all councils must implement kerbside food and garden organics collection (FOGO) for households by 2030. Currently around 30 per cent of NSW local councils offer this service to households, and the Government has provided funding to help with the implementation of FOGO. However, inquiry participants told us that local councils will need significantly more funding to overcome barriers and meet the 2030 target. We have recommended that the Government provides more funding to councils to help them implement FOGO.

Better awareness of food literacy and sustainability

There is a lack of knowledge in the community about how our food is produced. We have recommended that the Department of Education reviews school curricula to increase students' food literacy, including through experiential learning programs. We heard that school gardens in particular can provide hands-on food education for students.

Labelling systems like the Health Food Rating help consumers make informed choices when they buy food. We heard that there are many industry-produced eco-labels, which can confuse consumers. A clear, standardised label on food packaging would help consumers understand the sustainability of their food choices. As food labelling is governed at the federal level, we have recommended that the Government advocates for the development of a sustainability labelling system for packaged food through the Food Ministers Forum.

Encouraging urban agriculture and community gardens/farms

Community and urban agriculture projects are vital sources of access to fresh produce, particularly for culturally and linguistically diverse, Aboriginal, and regional and remote communities. Inquiry participants told us that they contribute to food security, improve health and wellbeing and are educational tools for their local communities.

However, we heard that community members who want to set up community gardens or urban agriculture projects can face barriers in planning frameworks. We have recommended planning reforms to better support community and urban agriculture projects on Crown lands and rooftop spaces.

Inquiry participants also told us that the limited amount of productive agricultural land in NSW is increasingly threatened by development. We consider that these sites should be identified and preserved for food production under planning policies.

Supporting Aboriginal food production and community traditional foods gardens

Aboriginal and Torres Strait Islander peoples have ongoing connections to Country, including through traditional foods systems. We heard that their food sovereignty and traditional knowledge has been appropriated in the growing traditional foods market. A very small proportion of this industry is run by Aboriginal and Torres Strait Islander peoples.

We consider that Government strategies and legislative reforms are needed to promote the Aboriginal and Torres Strait Islander-owned traditional foods industry and protect traditional knowledge. Our view is that Aboriginal and Torres Strait Islander peoples should lead the traditional foods industry and ownership of traditional knowledge should be protected.

Food security is a serious issue in rural and remote Aboriginal communities. Community traditional foods gardens can help address food insecurity and allow Aboriginal peoples to care for Country. Rural and remote communities need Government support to develop and maintain these gardens.

Commercial food production in a changing climate

We heard that a changing climate and environment will significantly disrupt our food production and supply systems. This can contribute to greater food insecurity. We found that water resources, which are critical to food security, are vulnerable to the impacts of a changing environment and must be effectively managed.

Existing practices in our food production and supply systems can contribute to environmental damage and greenhouse gas emissions. We recommend that planning and regulatory frameworks be reviewed to ensure they promote sustainable practices in the food production and supply chains.

Supporting farmers to diversify and adapt to the transition to renewable energy

Renewable energy infrastructure will increasingly compete for land in our regions, and the benefits and opportunities of the transition to renewable energy could be better communicated to primary producers. We recommend that land use offices be established to help businesses adapt to and benefit from the renewable energy transition. We also found that planning frameworks should support diversified uses of farmland such as agritourism activities.

Strengthening the plant-based protein manufacturing industry

We heard that consumer trends indicate decreasing meat consumption and a growth in the consumption of plant-based alternative proteins. A plant-based protein industry in NSW could capitalise on the growing demand for alternative proteins and deliver economic benefits. We recommend that the Government continues to identify ways to support the sector's growth.

Addressing workforce challenges in the food production sector

The food production, processing and supply sectors face complex, long-term workforce challenges. A broader long-term workforce strategy is needed to address these challenges. We heard that worker shortages are a persistent issue, particularly in the horticulture sector. We consider that better coordination and promotion of seasonal work opportunities could help to manage workforce demands during critical harvest periods.

Findings and recommendations

Recommendation 1 _____ 1

That the NSW Government develops a comprehensive Food System Plan for NSW, with clear objectives and measurable targets. The Plan should address the food system as a whole, and include:

- Strategies to address food insecurity.
- Promoting equitable access to nutritious food.
- Consideration of food production, including urban agriculture.
- Any required changes to planning and development frameworks.
- Points of integration with local government and service providers.

Recommendation 2 _____ 1

That the NSW Government creates a Food System and Security Council responsible for implementing and reporting on the NSW Food System Plan, and acting as a single coordinating body to address issues in the NSW food system. Membership of the Council should include:

- government departments
- non-government organisations
- food producers
- public health experts
- Aboriginal and Torres Strait Islander communities and culturally and linguistically diverse groups
- social service providers.

Recommendation 3 _____ 6

That the NSW Government conducts regular and comprehensive food security and nutrition surveys from a diverse representation of local communities across NSW, including Aboriginal and Torres Strait Islander communities and culturally and linguistically diverse groups, and in schools, and reports publicly on the data collected.

Recommendation 4 _____ 6

That the Department of Communities and Justice publishes its report on the Review of NSW Government Food Relief Programs

Recommendation 5 _____ 8

That the NSW Government introduces a food waste reporting system across the NSW food supply chain, and the Department of Primary Industries uses this data to identify key areas of food waste and develop strategies to address the issue.

Recommendation 6 _____ 9

That the NSW Government works with local councils to develop and implement strategies to improve local food systems, and provides appropriate funding as required.

Recommendation 7 _____ 10

That the *Public Health Act 2010* be amended to require local government areas to develop, implement and report on dedicated local food system policies.

Recommendation 8 _____ 12

That the Department of Planning and Environment begins consulting on introducing planning instruments that enable local governments to consider the community's health and wellbeing when determining development applications.

Finding 1 _____ 15

The COVID-19 pandemic has had a significant impact on the number of people accessing food relief across NSW.

Recommendation 9 _____ 17

That the NSW Government introduces ongoing funding programs for food relief organisations.

Finding 2 _____ 21

Aboriginal community representation on local emergency management committees could improve the response to food supply issues during crises, particularly in remote communities.

Recommendation 10 _____ 22

That the NSW Government integrates food relief responses as a key part of crisis preparedness planning frameworks.

Finding 3 _____ 24

Reducing food waste will have a positive impact on reducing emissions. This will help achieve the state's target to achieve net zero emissions by 2050.

Recommendation 11 _____ 24

That the Department of Planning and Environment develops a food waste strategy with clear targets and concrete actions for all parts of the food system.

Recommendation 12 _____ 24

That the Department of Planning and Environment extends and expands the Waste Less Recycle More policy and increases funding for the policy.

Recommendation 13 _____ 26

That the NSW Government funds the development and trialling of regional food rescue hubs for storage and redistribution.

Recommendation 14	26
That the NSW Government partners with industry to conduct research to identify and respond to gaps in the cold chain.	
Finding 4	28
Food rescue models are cost effective and have positive returns for communities and retailers. They also reduce the environmental impact of food waste.	
Recommendation 15	28
That the NSW Government provides more funding to the food rescue sector to increase the amount of food that is rescued and donated.	
Recommendation 16	30
That the NSW Government develops a platform for participants in the food supply chain to share information and promote strategies and opportunities to reduce and redirect wasted or surplus food.	
Recommendation 17	32
That the NSW Government advocates for reform at the federal level to enable farmers and logistics companies to claim the cost of transporting donated surplus food as tax credits.	
Recommendation 18	33
That the NSW Government adopts policies in consultation with industry and farmers to limit the ability of major retailers to impose aesthetic standards for produce, leading to significant food waste.	
Recommendation 19	34
Without limiting recommendation 18, that the Department of Planning and Environment supports voluntary programs that engage businesses and industry to reduce food waste.	
Recommendation 20	36
That the Department of Planning and Environment develops and implements a comprehensive consumer education campaign aimed at encouraging households to reduce and prevent food waste at home, including engaging with young people through digital platforms and social media.	
Recommendation 21	37
That the Department of Education expands school-based education programs that focus on reducing food waste.	
Recommendation 22	39
That the Department of Planning and Environment increases funding to support local government implementation of food and garden organics waste collection.	
Recommendation 23	42
That the Department of Education reviews school curricula to increase students' food literacy, including through experiential learning programs.	

Recommendation 24	42
That the Department of Education continues to provide funding to develop school garden programs in NSW primary and secondary schools.	
Recommendation 25	45
That the NSW Government advocates through the Food Ministers' Meeting for the development of a sustainability labelling system for packaged food.	
Finding 5	47
Community gardens and local agriculture projects are important sources of fresh produce, particularly for regional and remote, culturally and linguistically diverse, and Aboriginal communities.	
Recommendation 26	50
That the Department of Planning and Environment amends planning frameworks to facilitate the allocation of underused Crown land for urban and community agriculture projects.	
Recommendation 27	50
That the Department of Planning and Environment amends planning frameworks to facilitate urban food production using rooftop spaces in high-density urban environments.	
Recommendation 28	52
That the Department of Planning and Environment conducts a survey of productive peri-urban and urban agricultural land and works with local councils to promote agriculture and food production activities on these sites.	
Recommendation 29	54
That the NSW Government consults with Aboriginal Community Controlled Organisations and Indigenous Corporations to develop a strategy that sets out priorities and a framework to grow the Aboriginal and Torres Strait Islander-owned traditional foods industry.	
Recommendation 30	54
That the NSW Government consults with Aboriginal and Torres Strait Islander peoples to develop legislation and strategies to protect the intellectual property of Aboriginal and Torres Strait Islander peoples and their knowledge of traditional foods and land management.	
Recommendation 31	58
That the NSW Government consults with Aboriginal peoples and Aboriginal Community Controlled Organisations to develop initiatives that fund and support community traditional foods gardens in rural and remote communities.	
Finding 6	61
Changes to the environment can significantly disrupt supply chains and food production, which contributes to food insecurity.	
Finding 7	62

Access to enough safe water is critical to food production and food security. Water resources are vulnerable to changes in the environment and must be effectively managed.

Recommendation 32 _____ 63

That the Department of Planning and Environment reviews planning and regulatory frameworks to promote sustainable practices in the food production and supply chains.

Recommendation 33 _____ 66

That the Department of Planning and Environment creates land use offices in food production regions to help businesses adapt to and benefit from the renewable energy transition.

Finding 8 _____ 67

Agritourism is a way for farmers to innovate and diversify their businesses. It is important that planning frameworks support farmers who wish to use their land for agritourism activities.

Recommendation 34 _____ 69

That the NSW Government continues to investigate opportunities to promote the growth of the plant-based protein manufacturing industry in NSW.

Recommendation 35 _____ 71

That the NSW Government consults with experts and stakeholders from industry and regional communities to develop a long-term food workforce strategy. The strategy should promote and facilitate the uptake of skilled careers in agriculture and related food production and supply industries across NSW.

Recommendation 36 _____ 73

That the Department of Primary Industries sets up a Help Harvest NSW network to help employers coordinate and promote work opportunities mapped to supply and demand cycles in specific regional areas.

Chapter One – Food system planning and coordination

A comprehensive food system plan with central oversight

Summary

The current approach to food systems in NSW is siloed and there is no lead agency with clear responsibility for addressing issues in the food system. A food system plan with supporting legislation is needed.

Recommendation 1

That the NSW Government develops a comprehensive Food System Plan for NSW, with clear objectives and measurable targets. The Plan should address the food system as a whole, and include:

- **Strategies to address food insecurity.**
- **Promoting equitable access to nutritious food.**
- **Consideration of food production, including urban agriculture.**
- **Any required changes to planning and development frameworks.**
- **Points of integration with local government and service providers.**

Recommendation 2

That the NSW Government creates a Food System and Security Council responsible for implementing and reporting on the NSW Food System Plan, and acting as a single coordinating body to address issues in the NSW food system. Membership of the Council should include:

- **government departments**
- **non-government organisations**
- **food producers**
- **public health experts**
- **Aboriginal and Torres Strait Islander communities and culturally and linguistically diverse groups**
- **social service providers.**

- 1.1 Our response to food system issues is siloed, with many different departments implementing separate policies. We consider that New South Wales needs a

comprehensive food system plan and a lead agency to address food system issues.

NSW lacks a comprehensive food system plan

- 1.2 A food system is a complex web of participants, processes and interactions, which grow, process, distribute, consume and dispose of foods.¹
- 1.3 The Charles Perkins Centre Food Governance Node told us that our food system is shaped by many different drivers, including environmental factors, available technology and infrastructure, political and economic factors, traditions and culture, and demographic factors like population growth and urbanisation.²
- 1.4 Inquiry participants observed that the food system can be broken down into three core elements:
- **Food supply chain:** activities and participants involved in food production, storage, processing, packaging and selling.
 - **Food environment:** the physical, economic, political and socio-cultural context in which consumers engage with the food system to make decisions about acquiring, preparing, and consuming food.
 - **Consumer behaviour:** the selection, purchase, preparation, cooking and eating of food is influenced by individual and interpersonal factors such as taste preferences, values, convenience, and traditions.³
- 1.5 The Committee agreed that food choices can be heavily influenced by people's religious beliefs.
- 1.6 Several submissions stated that NSW does not have a comprehensive plan to address issues in the food system.⁴
- 1.7 Food insecurity was a regular theme in submissions. The Heart Foundation told us that the level of food insecurity in NSW is 'concerningly high'.⁵ The City of Sydney Council noted that the COVID-19 pandemic exacerbated pre-existing food insecurity issues.⁶
- 1.8 Inquiry participants told us that in examining food insecurity we should consider both the quantity and nutritional quality of food that is available, accessed and consumed by people in NSW.⁷

¹ [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 3.

² [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 3.

³ [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 3; [Submission 59](#), Australian Food Sovereignty Alliance, p 14.

⁴ [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 7; [Submission 56](#), Foodswell Limited, p 3; [Submission 70](#), OzHarvest, p 10; [Submission 75](#), Aboriginal Health and Medical Research Council of NSW, p 5.

⁵ [Submission 28](#), The Heart Foundation, p 1.

⁶ [Submission 24](#), City of Sydney Council, p 8.

⁷ [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 2; [Submission 25](#), The George Institute for Global Health, p 5; [Submission 23](#), Public Health Association of Australia, pp 4, 5.

- 1.9 We heard that food insecurity disproportionately affects people with a disability, on low incomes or with poor mental or physical health, those living in a rural or remote area, Aboriginal and Torres Strait Islander peoples, or those who hold a pension card or health care concession card.⁸ Food insecurity and food relief is discussed in detail in chapter 2.
- 1.10 The Charles Perkins Centre Food Governance Node, and other inquiry participants, outlined the benefits of adopting a food systems lens to address these issues.⁹ They argued that using a food systems lens will enable the Government to target its intervention. They also said that adopting a food systems lens will help agencies to see the interconnections between issues, enabling them to be addressed in a coordinated way instead of through departmental or policy silos.¹⁰
- 1.11 Dr Sarina Kilham spoke about how the siloed nature of current food planning and responsibility in NSW has led to a situation where 'everyone is responsible and no-one is responsible at the same time'.¹¹
- 1.12 Several inquiry participants called on the NSW Government to develop and adopt a comprehensive food system plan to ensure the state has a coherent approach to food system issues.¹²
- 1.13 The Aboriginal Health and Medical Research Council of NSW (AHMRC) told us that a standalone food security strategy is needed, stating that NSW needs 'a coordinated and multi-pronged approach to food system resilience. This should include action on diet-related health, environmental sustainability and equity building under a social policy lens'.¹³
- 1.14 Dr Belinda Reeve noted that responsibility for different aspects of food production, supply, retail, and consumption are 'dispersed throughout different departments' and called for 'a comprehensive food and nutrition plan or policy that would join together all the different work that different government departments are doing in this space'.¹⁴
- 1.15 Inquiry participants specified that the food system plan must consider all elements of the food system, set clear time-bound goals and targets and address

⁸ [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 6; [Submission 24](#), City of Sydney Council, p 7; [Submission 75](#), Aboriginal Health and Medical Research Council of NSW, p 2.

⁹ [Submission 14](#), The Charles Perkins Centre Food Governance Node, pp 3-4; [Submission 59](#), Australian Food Sovereignty Alliance, p 14; [Submission 24](#), City of Sydney Council, pp 4, 6, 23; [Submission 56](#), Foodswell Limited, pp 2-3.

¹⁰ [Submission 14](#), The Charles Perkins Centre Food Governance Node, pp 3-4; [Submission 59](#), Australian Food Sovereignty Alliance, p 14.

¹¹ Dr Sarina Kilham, Lecturer in Agricultural Extension and Rural Sociology, Charles Sturt University, [Transcript of evidence](#), 9 May 2022, p 22.

¹² [Submission 13](#), Dr Amy Carrad, pp 1-2; [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 7; [Submission 24](#), City of Sydney Council, p 25; [Submission 56](#), Foodswell Limited, p 3; [Submission 59](#), Australian Food Sovereignty Alliance, p 17; [Submission 65](#), Food Fairness Illawarra, p 6; [Submission 69](#), Cancer Council NSW, p 6; [Submission 70](#), OzHarvest, p 10; [Submission 75](#), Aboriginal Health and Medical Research Council of NSW, p 5.

¹³ [Submission 75](#), Aboriginal Health and Medical Research Council of NSW, p 5.

¹⁴ Dr Belinda Reeve, Senior Lecturer, University of Sydney Law School, and Co-founder, Food Governance Node, Charles Perkins Centre, [Transcript of evidence](#), 9 May 2022, p 18.

the underlying drivers that create an unsustainable, unhealthy and inequitable food system.¹⁵

- 1.16 The AHMRC said that a food security strategy should cover a range of issues including:
- underlying structural issues such as poverty and housing
 - supply chain vulnerabilities
 - food system resilience in the face of natural disasters and other crises (including the role of food relief)
 - the impact of environmental challenges on the food system
 - the role of culture in the food system (embedding cultural knowledge and practices)
 - policies to support healthy food choices.¹⁶

- 1.17 The AHMRC also noted that in 2022 the Canadian government developed the Food Policy for Canada – a roadmap for a sustainable, healthy food system, with a focus on Indigenous food systems. Implementation of the policy includes establishing a Food Policy Advisory Council and \$134.4 million investment to support food policy priorities.¹⁷

NSW needs central oversight of our food system

- 1.18 The Sax Institute highlighted the lack of agency oversight and a policy home for coordination and ongoing policy discussion. They noted that this limits the ability of organisations, such as local health districts, to understand and address the issues affecting Aboriginal communities.¹⁸
- 1.19 Many inquiry participants called for the NSW Government to establish a group or council to oversee the food system and food security.¹⁹ In general, they argued a council should enable diverse representation from a cross section of food system stakeholders.²⁰ It could include representatives from government departments, public health experts, urban planning and food relief organisations, farmers and

¹⁵ [Submission 13](#), Dr Amy Carrad, p 1; [Submission 14](#), The Charles Perkins Centre Food Governance Node, pp 4, 7; [Submission 59](#), Australian Food Sovereignty Alliance, p 17; [Submission 65](#), Food Fairness Illawarra, p 6.

¹⁶ [Answers to supplementary questions](#), Aboriginal Health and Medical Research Council, pp 2-3.

¹⁷ [Answers to supplementary questions](#), Aboriginal Health and Medical Research Council, p 3.

¹⁸ [Submission 63](#), The Sax Institute, pp 4-5.

¹⁹ [Submission 13](#), Dr Amy Carrad, p 3; [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 8; [Submission 18](#), Dr Sarina Kilham, Lecturer in Agricultural Extension and Rural Sociology, Charles Sturt University, p 3; [Submission 51](#), Sustain: The Australian Food Network, p 26; [Submission 59](#), Australian Food Sovereignty Alliance, p 28; [Submission 65](#), Food Fairness Illawarra, pp 2, 6; [Submission 68](#), Dietitians Australia, p 5; [Submission 69](#), Cancer Council NSW, p 2; [Submission 23](#), Public Health Association of Australia, p 5; [Submission 58](#), Right to Food Coalition, p 5.

²⁰ [Submission 13](#), Dr Amy Carrad, p 5; [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 2.

people with experience of food insecurity.²¹

1.20 Submissions argued that NSW food council members' diverse experience can help to:

- Build capacity and programming across the food system and all its participants.
- Understand and consider the experience of individuals who have or are experiencing food insecurity.
- Ensure NSW policy, legislation, services and projects represent the needs of low-socioeconomic groups.
- Develop relationships with key government departments so that the Council's work is translated into government policy and action.²²

1.21 The Charles Perkins Centre Food Governance Node argued that the Council's mandate should be legislated. This would give it clear authority and capacity to effect change across the NSW food system, and appropriate funding to fulfil its mandate.²³

Tasmania's Food Security Council

1.22 Tasmania was the first Australian state or territory to develop a food security strategy, a food security council, and food and nutrition policy. The Tasmanian Food Security Council (the Council) and Tasmanian Food Security Fund (the Fund) were created in response to recommendations in *A Social Inclusion Strategy for Tasmania*.²⁴

1.23 The Council was tasked with developing a state-wide food security strategy and advising how the Fund should be allocated.²⁵ The Council's membership included a Social Inclusion Commissioner as Chair and a Director of Population Health as Deputy Chair. Up to seven community members were appointed by the Premier, representing key stakeholders across food production, distribution and consumption.²⁶

1.24 Money from the Fund was invested in eight community projects, seven of which were innovative responses to improve food supply and food access. The final

²¹ [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 8; [Submission 59](#), Australian Food Sovereignty Alliance, p 28; [Submission 68](#), Dietitians Australia, p 5; [Submission 23](#), Public Health Association of Australia, pp 5-6.

²² [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 8; [Submission 51](#), Sustain: The Australian Food Network, p 10.

²³ [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 8; also [Submission 68](#), Dietitians Australia, p 5; [Submission 23](#), Public Health Association of Australia, p 6.

²⁴ Tasmanian Government, Tasmanian Food Security Council, viewed 21 September 2022; Tasmanian Food Security Council, [Food for all Tasmanians: A food security strategy](#), 2012, foreword, p 6, viewed 21 September 2022.

²⁵ Tasmanian Food Security Council, [Food for all Tasmanians: A food security strategy](#), 2012, p 6, viewed 21 September 2022.

²⁶ Department of Premier and Cabinet, [Tasmanian Food Security Council Terms of Reference](#), p 3, viewed 28 September 2022.

project aimed to improve monitoring and measurement of food security in Tasmania. Examples of funded projects included:

- a school garden program
- cooking clubs for parents and children to cook low-cost nutritious food
- community organisations working with schools to promote health and wellbeing in the classroom
- self-funding fruit and vegetable stalls
- social groups that brought older, socially isolated people together to enjoy affordable healthy meals and listen to guest speakers talk about issues to improve health.²⁷

1.25 The Council stopped operating in February 2012 and its food security strategy *Food for all Tasmanians* was launched in March 2012. The strategy focused on increasing access and supply of affordable and nutritious food and community driven approaches to food security for Tasmanians most at risk. It identified four priorities to address food insecurity at a local level:

- increasing food access and affordability
- building community food solutions
- regional development and supporting food social enterprises
- planning for local food systems.²⁸

Better data and information on food security

Summary

The NSW Government doesn't collect data on food insecurity. This makes it hard to determine and address systemic factors driving food insecurity.

Recommendation 3

That the NSW Government conducts regular and comprehensive food security and nutrition surveys from a diverse representation of local communities across NSW, including Aboriginal and Torres Strait Islander communities and culturally and linguistically diverse groups, and in schools, and reports publicly on the data collected.

Recommendation 4

That the Department of Communities and Justice publishes its report on the

²⁷ Tasmanian Food Security Council, [Food for all Tasmanians: A food security strategy](#), 2012, pp 27, 31-32, viewed 21 September 2022.

²⁸ Tasmanian Food Security Council, [Food for all Tasmanians: A food security strategy](#), 2012, p 6, viewed 21 September 2022; Tasmanian Government, [Tasmanian Food Security Council](#), viewed 30 September 2022.

Review of NSW Government Food Relief Programs.

- 1.26 We heard that there is insufficient data on food insecurity in NSW and that this limits agencies' ability to identify and respond to food system issues.
- 1.27 Some submissions reported deficiencies in current food insecurity data. Both Dr Amy Carrad and Food Fairness Illawarra stated that data on food consumption, food security, food accessibility and food affordability in NSW is outdated and inadequate.²⁹
- 1.28 The Macquarie University Planetary Health and Equity Research Network argued that the lack of consistent and reliable food insecurity data makes it difficult to identify the true extent of food insecurity in NSW.³⁰
- 1.29 Dr Carrad told us that national nutritional data is not specific enough for food system participants to pinpoint what is happening at the local level, for example, by local government area.³¹ The City of Sydney also stated that data at a local government level would help improve councils' understanding of community and inform planning decisions.³²
- 1.30 The Heart Foundation highlighted that unlike Queensland, Western Australia and the Northern Territory, New South Wales does not conduct regular food basket surveys. Dr Kathy Chapman, NSW & ACT General Manager at the Heart Foundation, explained that this survey data is important and would assist in planning and programs to address food security.³³
- 1.31 To improve data on food insecurity, inquiry participants recommended that the government:
- Commits to ongoing and rigorous monitoring and research to understand the extent of food insecurity through qualitative and quantitative studies on all aspects of the food system.³⁴
 - Implements new, comprehensive monitoring and surveillance systems to collect data on food insecurity, diet-related health and food system functioning.³⁵
 - Regularly monitors and publicly reports on the cost of healthy foods and the availability and quality of fresh fruit and vegetables.³⁶

²⁹ [Submission 13](#), Dr Amy Carrad, p 3; [Submission 65](#), Food Fairness Illawarra, p 3.

³⁰ [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 4.

³¹ Dr Amy Carrad, Researcher, urban farm volunteer and fair food advocate, [Transcript of evidence](#), 9 May 2022, p 19.

³² [Submission 24](#), City of Sydney Council, p 8.

³³ [Submission 28](#), The Heart Foundation, p 3; Dr Kathy Chapman, NSW & ACT General Manager, Heart Foundation, [Transcript of evidence](#), 21 March 2022, p 25.

³⁴ [Submission 13](#), Dr Amy Carrad, p 6; [Submission 28](#), The Heart Foundation, p 3; [Submission 65](#), Food Fairness Illawarra, p 6.

³⁵ [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 11; [Submission 58](#), Right to Food Coalition, pp 3, 5.

³⁶ [Submission 28](#), The Heart Foundation, p 3.

- Publishes food security data the on the HealthStats NSW website.³⁷
- 1.32 The NSW Government stated that it plans to collect data on region-specific food security issues affecting Aboriginal communities across NSW. They noted that long term, place-based, locally driven initiatives will be needed to ensure Aboriginal and Torres Strait Islander communities achieve sustainable food security.³⁸
- 1.33 We heard that the Government has conducted a review of food relief programs. Ms Philippa Welman, Director, Partnerships, Department of Communities and Justice (DCJ), confirmed that the department has recently reviewed NSW Government food relief programs. This review aimed to determine the baseline level of demand for food relief in NSW, and whether current NSW Government food relief arrangements are equipped to respond to current and future demand.³⁹
- 1.34 The Department told us that it is still deciding how much of this report to release and who it will be released to.⁴⁰ We recommend that it publishes the report of this review.

Stronger data on food waste in the food supply chain

Summary

Better data is needed on food waste. This will help with the development of strategies to tackle food waste in each part of the food supply chain.

Recommendation 5

That the NSW Government introduces a food waste reporting system across the NSW food supply chain, and the Department of Primary Industries uses this data to identify key areas of food waste and develop strategies to address the issue.

- 1.35 Mr Christopher McElwain noted that a scandalous amount of food is wasted in every sector of the food system (farms, food distribution centres, supermarkets, restaurants, prisons, households). He wrote that around 312 kilograms of food per person per year is wasted across Australia.⁴¹ Mr McElwain also explained that the current quantification of wasted food within Australia is still in its infancy, much of the data is not robust, and estimates for some sectors are unreliable or unavailable.⁴²
- 1.36 The NSW Government submission stated that the recent NSW Waste and Sustainable Materials Strategy 2041 includes a new food waste reporting

³⁷ [Submission 24](#), City of Sydney Council, p 8.

³⁸ [Submission 17](#), NSW Government, p 9.

³⁹ Ms Philippa Welman, Director, Partnerships, Department of Communities and Justice, [Transcript of evidence](#), 9 May 2022, p 28.

⁴⁰ [Answers to supplementary questions](#), Department of Communities and Justice, 31 May 2022, p 2.

⁴¹ [Submission 10](#), Mr Christopher McElwain, p 4.

⁴² [Submission 10](#), Mr Christopher McElwain, p 5.

requirement. The Strategy includes a planned requirement for large supermarkets to report on their food donations.⁴³ We note that the Strategy does not specify an implementation date for this reporting requirement. Government strategies to tackle food waste are discussed in detail in chapter 3.

- 1.37 Mr McElwain strongly recommended the Strategy's reporting requirement be expanded to include all medium and large businesses dealing with food and that the Government implement a compulsory reporting scheme. As stated by Mr McElwain 'if you want to manage a problem, you have to measure it'.⁴⁴
- 1.38 In addition to advocating for improved data collection, Mr McElwain highlighted the importance of properly segmenting the NSW food system data, for example by sector or sub-sector, to properly identify food waste hotspots and tailor solutions for specific food types or groups of participants.⁴⁵
- 1.39 OzHarvest explained the benefits of sharing food waste data. They noted that if data identifying points of surplus food was shared, governments and industry would be able to use existing capacity to transport rescued food to those in need.⁴⁶
- 1.40 The Committee noted that there are a number of charities across NSW that support communities through food relief.
- 1.41 In response to the lack of waste data, submissions called on the Government to:
- Adopt legislation to require large and medium food businesses and government bodies to report on their wasted food and steps taken to reduce this waste and divert it from land fill.⁴⁷
 - Include reporting requirements in the Department of Primary Industries' agricultural research funding, to cover the levels and causes of wasted food by sub-sector and how natural disasters have impacted pre- and post-harvest food waste.⁴⁸

Local governments to develop food system policies

Summary

There isn't a standard requirement for NSW local councils to develop a food system policy. This has contributed to the development of 'food swamps' and 'food deserts'.

Recommendation 6

That the NSW Government works with local councils to develop and implement strategies to improve local food systems, and provides appropriate funding as

⁴³ [Submission 17](#), NSW Government, p 11.

⁴⁴ Mr Christopher McElwain, UNSW Law and Justice, [Transcript of evidence](#), 21 March 2022, p 17.

⁴⁵ [Submission 10](#), Mr Christopher McElwain, p 6.

⁴⁶ [Submission 70](#), OzHarvest, p 7.

⁴⁷ [Submission 10](#), Mr Christopher McElwain, p 3.

⁴⁸ [Submission 10](#), Mr Christopher McElwain, p 3.

required.

Recommendation 7

That the *Public Health Act 2010* be amended to require local government areas to develop, implement and report on dedicated local food system policies.

Local governments play an important role in local food system issues

- 1.42 We heard that local governments play a significant role in responding to food insecurity, especially during crises such as the COVID-19 pandemic. Sustain: The Australian Food Network stated that 'local governments contribute to food security and equitable access to food by seeking to increase local food production, distribution and consumption'. They also contribute by providing or supporting community programs like school breakfast programs, community gardens and farmers markets.⁴⁹
- 1.43 Local Government NSW (LGNSW) explained that despite emergency food relief not being a core responsibility of local governments, the sector and community groups often step up as a provider of last resort, when other spheres of government fall short.⁵⁰ For example, in response to COVID-19, the City of Sydney provided more than \$3.3 million in funding and donations to support emergency food relief.⁵¹
- 1.44 We heard from Dr Carrad that local governments are 'optimally placed to respond to the needs of their communities'.⁵² Dr Nick Rose, Executive Director, Sustain: The Australian Food Network, echoed this and highlighted that local governments play a key role in networking, facilitating and enabling in their communities.⁵³
- 1.45 Dr Reeve argued that the potential within local governments is underused and that comprehensive reform is needed at the state level to activate this potential. Dr Reeve said that this will empower local governments to contribute to wide-ranging and lasting improvements to NSW's food system.⁵⁴

Most local governments lack food system policies

- 1.46 In spite of the important role local councils could play, we heard that few have a dedicated food system policy. Sustain told us that a recent policy mapping study examined over 2000 policy documents from all 128 local governments in NSW and 79 local governments in Victoria. It found that only two local governments in NSW had dedicated food system policies compared to 11 in Victoria. The study also found that most local governments addressed food system issues in their

⁴⁹ [Submission 51](#), Sustain: The Australian Food Network, pp 12-14.

⁵⁰ [Submission 9](#), Local Government NSW, p 7.

⁵¹ [Submission 24](#), City of Sydney Council, p 6.

⁵² [Submission 13](#), Dr Amy Carrad, p 3.

⁵³ Dr Nick Rose, Executive Director, Sustain: The Australian Food Network, [Transcript of evidence](#), 25 March 2022, p 17.

⁵⁴ [Submission 15](#), Dr Belinda Reeve, p 8.

non-food policies, such as education, food waste and food production policies.⁵⁵

- 1.47 The City of Sydney noted that some councils use their public health plans to address food security and diet-related health issues.⁵⁶
- 1.48 Inquiry participants noted that Victoria, South Australia and Western Australia require local government to adopt public health plans.⁵⁷ The *Public Health Act 2010* does not contain such a requirement. Dietitians Australia wrote that this restricts local governments' financial and technical capacity to address this serious public health issue.⁵⁸
- 1.49 Several submissions recommended that the NSW Government follow the example of other jurisdictions and legislate a requirement for councils to develop a local public health and wellbeing plan.⁵⁹
- 1.50 The Charles Perkins Centre Food Governance Node argued that without this legislation, councils have limited ability to develop policies and programs addressing diet-related health issues.⁶⁰
- 1.51 Dr Carrad wrote that significant funding is needed to support councils to develop food system policies and programs. Both the City of Sydney and the Charles Perkins Centre Food Governance Node echoed this sentiment.⁶¹
- 1.52 The case study below illustrates the benefits of local government food strategies.

Case study 1: Cardinia Shire's Community Food Strategy Plan⁶²

The Cardinia region is around 55 kilometres away from the Melbourne CBD and is a supplier of greater Melbourne's food bowl. It provides the second highest share of agricultural production value across local government areas.

In line with the *Victorian Public Health and Wellbeing Outcomes Framework and Plan Melbourne 2017– 2050*, the Cardinia Shire's *Liveability Plan 2017 – 29* identified seven top health priorities for its community. Food was identified as one of the policy areas for improving neighbourhood liveability and the *Cardinia Shire's Community Food Strategy* (the Strategy) was created to address this.

⁵⁵ [Submission 51](#), Sustain: The Australian Food Network, pp 10-11; A Carrad, I Aguirre-Bielschowsky, B Reeve, N Rose, KE Charlton, [The role of Australian local governments in creating a healthy, sustainable, and equitable food system: Results of a policy mapping study in New South Wales and Victoria](#), report, University of Sydney, Sydney, 2021, p 18.

⁵⁶ [Submission 24](#), City of Sydney Council, p 24.

⁵⁷ [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 9; [Submission 24](#), City of Sydney Council, p 24; [Submission 68](#), Dietitians Australia, p 10.

⁵⁸ [Submission 68](#), Dietitians Australia, p 10.

⁵⁹ [Submission 13](#), Dr Amy Carrad, p 1; [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 9; [Submission 65](#), Food Fairness Illawarra, p 5; [Submission 23](#), Public Health Association of Australia, p 6.

⁶⁰ [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 9.

⁶¹ [Submission 13](#), Dr Amy Carrad, p 2; [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 8; [Submission 24](#), City of Sydney Council, p 40.

⁶² Cardinia Shire Council, [Cardinia Community Food Strategy and Action Plan 2018 – 26](#), February 2019, pp 6, 14, 16, 20, 28, viewed 21 September 2022.

Community consultation took place between February and September 2018 via a series of 'Kitchen Table Talks' led by local community members. This aimed to foster shared ownership of the Strategy. The Strategy was also influenced by contributions from organisations, research and reviews of food strategies and policies in other local governments, state, national and global areas. The Strategy's vision was 'a healthy, delicious, sustainable and fair food system for all Cardinia Shire residents'.

Five strategies were identified:

1. Protecting and using fertile land as a source of fresh food for current and future generations.
2. Growing a vibrant local food economy that supports local farmers and food businesses and increases access to affordable, local and healthy food.
3. Enhancing food knowledge, skills and culture in schools, workplaces, clubs and the wider community.
4. Reducing and diverting food waste and reusing water to grow food.
5. Building capacity across the community to lead, participate in and support food system work.

An action plan with outcomes, measures and a long-term evaluation framework will be reviewed annually and include reporting on progress.

Local governments considering community health and wellbeing in planning decisions

Summary

Gaps in planning legislation are limiting local governments' ability to prevent the development of 'food swamps' and 'food deserts'. Legislation needs to be improved to enable councils to address these issues.

Recommendation 8

That the Department of Planning and Environment begins consulting on introducing planning instruments that enable local governments to consider the community's health and wellbeing when determining development applications.

- 1.53 We heard that gaps in planning legislation are allowing 'food swamps' and 'food deserts' to develop in our communities. This is negatively impacting public health and social outcomes. Food swamps are areas with a large proportion of unhealthy food outlets. Food deserts are areas with limited access to affordable, nutritious food. We heard that food swamps tend to develop in areas of socioeconomic disadvantage, in the outskirts of growing cities and in more regional areas.⁶³
- 1.54 Access to affordable, healthy food is important to overall health outcomes. The

⁶³ [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 10; [Submission 25](#), The George Institute for Global Health, p 6; [Submission 23](#), Public Health Association of Australia, p 7; [Submission 58](#), Right to Food Coalition, p 4.

Heart Foundation and Cancer Council NSW told us that access to affordable and nutritious food is important to maintain a healthy weight and reduce the risk of developing a chronic disease and some cancers. The Heart Foundation also observed that hospitalisation and death due to cardiovascular disease is higher in regional, rural and remote NSW, which is partly linked to the accessibility of healthy foods.⁶⁴

The issue of food swamps and food deserts

- 1.55 The George Institute for Global Health explained that poor diets are not solely driven by affordability, personal choice or dietary preferences. They said that unhealthy diets are 'driven by food environments in which the production and promotion of unhealthy products are prioritised'.⁶⁵
- 1.56 The George Institute observed that 'the food that is available, chosen and consumed is heavily influenced by the contexts in which people engage with food systems', especially in food swamps and food deserts.⁶⁶
- 1.57 A 2019 Cancer Council NSW survey found participants reported more places near their homes sold sugar sweetened beverages and fast-food than places that sold fresh fruit and vegetables.⁶⁷
- 1.58 A study by the Sax Institute examined Aboriginal communities' knowledge and beliefs about food insecurity. People surveyed spoke about physical, economic and social barriers stopping them from accessing affordable and nutritious food. Local government action to ensure access to healthy food was highlighted:
- Accessible healthy food shops were seen as a dwindling resource. People described how many local shops had closed in the suburbs where most Aboriginal families live and that there had been a lack of ongoing commitment from their local councils to ensure adequate infrastructure in terms of healthy food supply and availability in their communities.⁶⁸
- 1.59 We heard that the *Planning and Environment Act 1987* does not include food systems or health promotion as an objective. Sustain told us that this means councils are unable to consider these factors when assessing whether to approve or refuse a development application for a fast-food restaurant for an appropriately zoned location. As such, councils are limited in their ability to address the issue of 'food swamps'.⁶⁹
- 1.60 As a result, several submissions called for the planning framework and legislation to be amended. These submissions recommended amendments giving councils the ability to refuse or approve food outlets based on healthiness and preventing

⁶⁴ [Submission 28](#), The Heart Foundation, pp 2, 3; [Submission 69](#), Cancer Council NSW, p 4.

⁶⁵ [Submission 25](#), The George Institute for Global Health, p 6.

⁶⁶ [Submission 25](#), The George Institute for Global Health, p 6; also [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 10.

⁶⁷ [Submission 69](#), Cancer Council NSW, p 5.

⁶⁸ [Submission 63](#), The Sax Institute, pp 3-4, 5.

⁶⁹ [Submission 51](#), Sustain: The Australian Food Network, p 24.

'food swamps' developing.⁷⁰

- 1.61 During our inquiry the Government released the NSW Healthy Eating and Active Living Strategy 2022-2032 (the Strategy). The Strategy highlights the importance of built environments in a comprehensive approach to supporting healthy eating and active living, noting that 'the environments where we live, work, play and age strongly influence our choices.'⁷¹
- 1.62 The Strategy notes that the food environment 'includes the foods that are available, how much they cost and how they are marketed. Places that offer more appealing, affordable and healthy food and drink options support people to make healthy eating choices'.⁷²
- 1.63 The Strategy contains actions that aim to encourage healthy built environments, including to 'provide local and statewide input into planning of new residential areas and redesign of old ones, using the Healthy Built Environment Checklist.' The Healthy Built Environment Checklist covers prioritising healthy food outlets through easy access to healthy foods and decreased access to unhealthy foods.⁷³
- 1.64 We consider that enabling local government to consider community health when making planning decisions would be consistent with the Strategy, and would help meet its aim to provide environments that support healthy eating and active living.

⁷⁰ [Submission 13](#), Dr Amy Carrad p 2; [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 10; [Submission 24](#), City of Sydney Council, p 26; [Submission 51](#), Sustain: The Australian Food Network, p 25; [Submission 65](#), Food Fairness Illawarra, p 5; [Submission 58](#), Right to Food Coalition, p 4; [Submission 23](#), Public Health Association of Australia, p 7.

⁷¹ NSW Health, [NSW Healthy Eating and Active Living Strategy 2022-2032](#), p 19.

⁷² NSW Health, [NSW Healthy Eating and Active Living Strategy 2022-2032](#), p 19.

⁷³ NSW Health, [NSW Healthy Eating and Active Living Strategy 2022-2032](#), p 21; NSW Ministry of Health, [Healthy Built Environment Checklist](#), 2020, p 88.

Chapter Two – Food insecurity and food relief

The need for food relief grew during the pandemic

Summary

Food insecurity grew during the COVID-19 pandemic, causing an increase in demand for food relief.

Finding 1

The COVID-19 pandemic has had a significant impact on the number of people accessing food relief across NSW.

- 2.1 We heard that COVID-19 has worsened food insecurity in New South Wales. Stakeholders cited Foodbank's 2021 Hunger report, which found that in the previous year one in six adults in NSW and the ACT hadn't had enough to eat, and 371,618 children had gone hungry. According to the report, one in three people who struggled to meet their food needs were new to the situation, and 64 per cent of food insecure Australians had a job.⁷⁴
- 2.2 The Macquarie University Planetary Health and Equity Research Network observed that Foodbank Hunger reports have shown an increase in people experiencing food insecurity over the past four years, rising from 17 per cent in 2017 to 28 per cent in 2021. The Network noted that food insecurity has long term effects on physical and mental health.⁷⁵
- 2.3 Foodbank told us that the main reason for food insecurity is often financial. In the 2021 Food Hunger report, the top two reasons people gave for not having enough food were an unexpected expense or large bill, and that they or their household were on a low income or pension.⁷⁶
- 2.4 Ms Lauren Flaherty, Strategy Advisor in Social Strategy and Communications at City of Sydney Council, said that 'the increase in cost of living, the lack of social and affordable housing and ... the inadequacy of income support payments, such as JobSeeker, to meet daily needs are some of the key causes of food insecurity.'⁷⁷ Sustain argued that people on income support live below the poverty line, leading to food insecurity.⁷⁸
- 2.5 Difficulty with accessing affordable, healthy food due to isolation, geography, distance and/or transport were other factors contributing to food insecurity.

⁷⁴ [Submission 67](#), Foodbank NSW & ACT Limited, pp 10-11; [Submission 24](#), City of Sydney Council, p 7; [Submission 51](#), Sustain: The Australian Food Network, p 7; [Submission 59](#), Australian Food Sovereignty Alliance, p 25.

⁷⁵ [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 3.

⁷⁶ [Submission 67](#), Foodbank NSW & ACT Limited, p 11. Almost half of food insecure Australians who had been accessing JobSeeker or JobKeeper said they were not coping well since those payments were wound back.

⁷⁷ Ms Lauren Flaherty, Strategy Adviser – Social Strategy and Communications, City of Sydney Council, [Transcript of evidence](#), 21 March 2022, p 35.

⁷⁸ [Submission 51](#), Sustain: The Australian Food Network, p 7.

Foodbank said that this is especially relevant in rural and remote areas, where low incomes, high food prices and limited food choices are more likely. They also noted that the cost of long-distance freight impacts in these areas.⁷⁹

- 2.6 Rising transport and fuel costs particularly affected Aboriginal communities in rural and remote areas. The New South Wales Aboriginal Land Council (NSWALC) told us that 'Aboriginal households which already are forced to travel long distances to reach food stores were particularly impacted by the costs of travel as stores ran out of stock.'⁸⁰
- 2.7 The NSWALC said that border closures and restrictions meant some communities couldn't travel to the nearest supermarket to buy food. During the 2021 Delta outbreak, the NSW Government funded the delivery of food and emergency relief boxes; the NSWALC delivered 5,596 boxes across the state.⁸¹
- 2.8 We also heard that Aboriginal and Torres Strait Islander peoples are disproportionately affected by food insecurity and related health conditions. Dietitians Australia observed that over one in five Aboriginal and Torres Strait Islander adults reported that they had experienced food insecurity in a recent health survey.⁸²
- 2.9 The NSW Government said that the Australian Bureau of Statistics and other health data shows that Aboriginal and Torres Strait Islander communities are five to seven times more likely to be at risk of experiencing food insecurity than their non-Indigenous peers. Regional and remote communities are at greatest risk of food insecurity.⁸³
- 2.10 The Macquarie University Planetary Health and Equity Research Network told us that low-income, under-employed, regional, remote and refugee households are most affected by food stress and food insecurity in Australia. Within this population, women are 1.5 times more likely to experience food stress and insecurity than men.⁸⁴
- 2.11 Demand for food relief grew during the pandemic. According to OzHarvest, NSW had a high need for food relief before COVID-19 – one in five people faced food insecurity in 2019. This dramatically increased during the pandemic, and DCJ provided funding of \$20 million over two years to OzHarvest to distribute food to charity agencies.⁸⁵
- 2.12 OzHarvest told us that 'need remains high as vulnerable households and

⁷⁹ [Submission 67](#), Foodbank NSW & ACT Limited, pp 10-11; Ms Simone Sherriff, Research Officer, SEARCH Program, Research Assets Division, Sax Institute, [Transcript of evidence](#), 9 May 2022, pp 11-12.

⁸⁰ [Submission 21](#), New South Wales Aboriginal Land Council, p 3.

⁸¹ [Submission 21](#), New South Wales Aboriginal Land Council, p 3; Mr Yuseph Deen, CEO, New South Wales Aboriginal Land Council, [Transcript of evidence](#), 25 March 2022, p 12; Ms Simone Sherriff, Research Officer, SEARCH Program, Research Assets Division, Sax Institute, [Transcript of evidence](#), 9 May 2022, pp 10-11.

⁸² [Submission 68](#), Dietitians Australia, p 8.

⁸³ [Submission 17](#), NSW Government, p 8.

⁸⁴ [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 3. Food stress occurs when households are required to spend over 25 per cent of their disposable income on groceries.

⁸⁵ OzHarvest, [NSW Government funding request](#), 4 May 2022, p 1.

industries struggle to recover from Covid, exacerbated by the increased cost of living and recent floods.⁸⁶

- 2.13 Sustain said that the pandemic had 'exposed vulnerabilities and gross inequalities' within Australia's food system, and caused 'unprecedented demand for food relief'.⁸⁷
- 2.14 Sustain cited Foodbank's report of a 47 per cent increase in demand for emergency food relief during the first year of the pandemic and noted statistics indicating that almost half of people who access food relief rely on it regularly or very regularly to eat.⁸⁸
- 2.15 We heard that local government played an important role in food relief during the pandemic. LGNSW told us that councils took action to ensure the most vulnerable members of their communities had access to food, partnering with community organisations to make food hampers and essential goods available.⁸⁹

Ongoing funding for food relief organisations

Summary

Growing levels of food insecurity and the rise in demand for food relief mean that more ongoing funding needs to be dedicated to food relief programs.

Recommendation 9

That the NSW Government introduces ongoing funding programs for food relief organisations.

- 2.16 While additional short-term funding during the pandemic helped food relief organisations meet COVID-related demand, food insecurity is increasing, and a higher level of ongoing funding is needed. Ongoing recurrent funding would allow organisations like Foodbank and OzHarvest to expand their food relief services, and offer programs like School Breakfast 4 Health more widely.
- 2.17 OzHarvest told us that they need \$2.5 million each year to maintain their services in NSW. This amount would cover half of OzHarvest's operating expenses and ensure continuing services for 700 charities who rely on OzHarvest to supply their food programs. A further \$1 million each year would enable OzHarvest to rescue more food and meet additional need. With this funding, OzHarvest could eliminate its waiting list of charities seeking food and deliver two million more meals.⁹⁰
- 2.18 We heard that providing \$3.5 million in annual funding to OzHarvest would have a \$31.5 million social return on investment. It would cover the delivery of seven

⁸⁶ OzHarvest, [NSW Government funding request](#), 4 May 2022, p 1.

⁸⁷ [Submission 51](#), Sustain: The Australian Food Network, p 5.

⁸⁸ [Submission 51](#), Sustain: The Australian Food Network, pp 6, 7.

⁸⁹ [Submission 9](#), Local Government NSW, p 7.

⁹⁰ OzHarvest, [NSW Government funding request](#), 4 May 2022, p 1.

million meals and save 23 million kilograms of CO2 emissions each year.⁹¹

- 2.19 Foodbank told us that ongoing funding would assist with buying and storing products for emergency food relief hampers, and meeting rising transport costs. Mr John Robertson, CEO of Foodbank, observed that transport costs had risen by 10 per cent in the previous three months due to the price of fuel. Since June 2021, Foodbank have shipped around 160 000 emergency relief hampers with the help of NSW Health and Resilience NSW.⁹²

Challenges faced by food relief providers

- 2.20 We heard that the lack of ongoing Government funding for food relief organisations makes it difficult to maintain their work.
- 2.21 OzHarvest told us that they can't raise the funding needed to continue existing food rescue services. Before the pandemic, OzHarvest was funded by corporate and individual donations, but these income sources have been 'suppressed by pandemic-related uncertainty'.⁹³
- 2.22 OzHarvest said that DCJ funding for food relief was due to end on 30 June 2022, when they expected 180 agencies to return to their waitlist. Ms Welman, Director of Partnerships at DCJ, clarified that funding for the Food Program will continue until June 2023. DCJ has reviewed the NSW Food Program, including the business case for ongoing funding for food relief, but the outcome of the review has not been released.⁹⁴ We discuss the publication of the Government's review of food relief programs in chapter 1.
- 2.23 The Macquarie University Planetary Health and Equity Research Network observed that food relief providers 'play a crucial role in addressing food insecurity, however, they frequently report having to turn people away due to insufficient food and resources'. They noted that in 2019 less than two in five charities felt that they could meet the needs of the people they assisted.⁹⁵
- 2.24 We heard that research on community food provisioning initiatives found that food providers face many challenges, including difficulties providing fresh food, having enough food to meet demand, the rising cost of fresh food and freight, the reliability of food donations, and obtaining enough food with limited financial resources.⁹⁶
- 2.25 Foodbank said that the pandemic adversely affected the capacity of food relief organisations to help those experiencing food insecurity. Food donations dropped due to panic buying, supermarkets accepted lower standards for fresh

⁹¹ OzHarvest, [NSW Government funding request](#), 4 May 2022, p 1.

⁹² Mr John Cameron Robertson, CEO, Foodbank NSW & ACT Limited, [Transcript of evidence](#), 21 March 2022, p 2. Foodbank's hampers contain around 14 kilograms of food, including pasta, rice, pasta sauce, tuna, Weet-Bix, UHT milk, tea and coffee.

⁹³ OzHarvest, [NSW Government funding request](#), 4 May 2022, p 1.

⁹⁴ OzHarvest, [NSW Government funding request](#), 4 May 2022, p 1; [Answers to supplementary questions](#), Department of Communities and Justice, 31 May 2022, p 2; Ms Philippa Welman, Director, Partnerships, Department of Communities and Justice, [Transcript of evidence](#), 9 May 2022, p 26.

⁹⁵ [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 3.

⁹⁶ [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 3.

produce, food production was affected, and outlets closed. Volunteer numbers dropped, and staff costs increased. Foodbank also noted that there were extra business costs involved in trying to keep workers safe.⁹⁷

Benefits of food relief

- 2.26 Inquiry participants told us of the benefits of food relief. Foodbank said that while it may not 'cure' food insecurity it 'can help people through their worst times, alleviating worries and enabling them to focus on other things'. They outlined the benefits of receiving food relief: feeling less hungry; lower anxiety and improved mental and physical health and stamina; better wellbeing and overall health through improved nutrition; and improved productivity and an ability to focus and concentrate better.⁹⁸
- 2.27 Foodbank also noted that food relief improves children's ability to learn and interact at school, which can impact their whole lives. Foodbank runs the School Breakfast 4 Health program. The program provides students with a regular, nutritious breakfast at school. In 2020-21, 350 schools gave students breakfast under the program. Foodbank hopes to add another 250 schools in less advantaged areas by the end of 2022-23, with Government assistance.⁹⁹
- 2.28 OzHarvest pointed to the wider social benefits of food relief: 'food relief services prevent people from falling into a deeper level of vulnerability, thereby reducing the burden on social security, education, healthcare, and justice systems. They also underpin community resilience.'¹⁰⁰
- 2.29 OzHarvest rescues food that is destined for landfill and delivers it to charities at no cost. It is the 'cheapest form of food relief: for every \$1 invested, OzHarvest can deliver 2 meals'. OzHarvest's food rescue delivers a social return on investment of nine dollars for every dollar invested.¹⁰¹

Food relief doesn't address the causes of food insecurity

- 2.30 We note that inquiry participants observed that food relief does not address the causes of food insecurity.¹⁰² The Government said that while food relief gives people who are food insecure a short-term way to address their need for food, it 'does not address the root causes of food insecurity'.¹⁰³
- 2.31 Dr Carrad told us that progress on food waste and losses 'must be matched by advanced progress on household food insecurity so that those who are ... reliant on food charity are able to purchase their own food with dignity when supplies

⁹⁷ [Submission 67](#), Foodbank NSW & ACT Limited, p 12; Mr John Cameron Robertson, CEO, Foodbank NSW & ACT Limited, [Transcript of evidence](#), 21 March 2022, p 4.

⁹⁸ [Submission 67](#), Foodbank NSW & ACT Limited, pp 11-12; [Submission 23](#), Public Health Association of Australia, p 6.

⁹⁹ [Submission 67](#), Foodbank NSW & ACT Limited, pp 9, 11-12.

¹⁰⁰ OzHarvest, [NSW Government funding request](#), 4 May 2022, p 1.

¹⁰¹ OzHarvest, [NSW Government funding request](#), 4 May 2022, p 1.

¹⁰² [Submission 58](#), Right to Food Coalition, p 4; [Submission 17](#), NSW Government, p 8; [Submission 21](#), New South Wales Aboriginal Land Council, p 3.

¹⁰³ [Submission 17](#), NSW Government, p 8.

through food charity are reduced.¹⁰⁴

- 2.32 The Public Health Association of Australia (PHAA) observed that while emergency food relief 'offers a vital immediate response to the serious public health issue of food insecurity, it is not a substitute for whole community or public policy level solutions to address the root cause of food insecurity.'¹⁰⁵
- 2.33 Food Fairness Illawarra said that the response to food insecurity shouldn't be dominated by emergency food relief. They supported an approach that 'has the dignity of all people at heart and allows them to grow their own food as well as obtain it by socially and economically acceptable means'.¹⁰⁶

Government funding for food relief during the pandemic

- 2.34 Inquiry participants noted that both state and federal governments funded additional food relief during the pandemic. We heard that DCJ provided OzHarvest with \$20 million in NSW Food Program grants between March 2020 and June 2022 to meet increased need. Funding was used to distribute purchased food via hampers, cooked meals and to top-up food rescue.¹⁰⁷
- 2.35 Foodbank said that all levels of government provided extra funding during the pandemic. The NSW Government provided substantial additional funding and arranged emergency hampers. In 2019-20, Foodbank NSW and ACT supplied 20 000 hampers, this grew to just under 90 000 in 2020-21. During the first seven months of 2021-22, 169 000 hampers were distributed, along with Foodbank's other food programs. DCJ provided over \$35 million in the 2021-22 financial year to support food relief activities by OzHarvest and Foodbank.¹⁰⁸
- 2.36 The NSW Government outlined funding for food relief during COVID-19:
- \$40 million to support food relief, helping to provide over 65 million meals to vulnerable people by 1 December 2021, including those in isolation under health orders, international students, and those homeless or at risk of homelessness.
 - \$5.5 million for the Emergency Relief and NGO Support Grant Program for Temporary Visa Holders and Asylum Seekers, helping to alleviate severe food insecurity for those experiencing financial hardship.
 - Empowering and Supporting Local Communities grants and COVID-19 grants for organisations distributing emergency food hampers to vulnerable community members and families, enabling access to culturally appropriate food.
 - Aboriginal Community Response Grants to Aboriginal Community Controlled

¹⁰⁴ [Submission 13](#), Dr Amy Carrad, p 5.

¹⁰⁵ [Submission 23](#), Public Health Association of Australia (PHAA), p 6.

¹⁰⁶ [Submission 65](#), Food Fairness Illawarra, p 2.

¹⁰⁷ OzHarvest, [NSW Government funding request](#), 4 May 2022, p 2.

¹⁰⁸ [Submission 67](#), Foodbank NSW & ACT Limited, p 12; Mr Gavin Peek, Director, Partnerships, Department of Communities and Justice, [Transcript of evidence](#), 9 May 2022, p 28.

Organisations (ACCOs) to implement local solutions supporting the health and wellbeing of Aboriginal people impacted by COVID-19, including local food relief programs.

- Extreme Hardship Support Payments to temporary and provisional visa holders and undocumented migrants who couldn't earn an income and weren't eligible for income support (over \$10 million in payments by 1 December 2021, in partnership with the Australian Red Cross).¹⁰⁹

2.37 DCJ told us that in 2022-23, as part of the NSW Food Program, it has committed \$614 836 to Foodbank and \$94 198 to St Vincent De Paul Food Barn for the cost of transporting food and food products. DCJ will also provide \$5.5 million to Foodbank NSW and ACT and \$1.1 million to OzHarvest to meet higher demand for food relief that began during COVID-19, through:

- chilled deliveries to regional areas
- work with regional/remote Aboriginal communities
- pop-up fresh food markets in regional/remote areas
- rescued food supermarket in Waterloo
- increased food rescue volumes in urban and regional areas.¹¹⁰

2.38 We acknowledge the extra funding provided by the NSW Government during the pandemic. However, we consider that more ongoing funding is needed for food relief.

Integrating food relief into crisis preparation

Summary

Food relief responses should be integrated into NSW crisis preparation frameworks to ensure coordinated responses to food supply problems that can arise during crises. Aboriginal community representation on local emergency management committees could help to improve the response to food supply issues in remote communities during crisis situations.

Finding 2

Aboriginal community representation on local emergency management committees could improve the response to food supply issues during crises, particularly in remote communities.

¹⁰⁹ [Submission 17](#), NSW Government, p 9.

¹¹⁰ [Answers to supplementary questions](#), Department of Communities and Justice, p 1; Ms Philippa Welman, Director, Partnerships, Department of Communities and Justice, [Transcript of evidence](#), 9 May 2022, p 26.

Recommendation 10

That the NSW Government integrates food relief responses as a key part of crisis preparedness planning frameworks.

- 2.39 We consider that it is vital that food relief be better integrated into the state's crisis planning frameworks. COVID-19 has shown that it is critical to plan coordinated responses to food supply disruptions that can arise in a crisis situation.
- 2.40 We heard that coordinated food relief and food insecurity responses are needed for both urban and remote areas. The City of Sydney recommended that 'emergency food relief responses are undertaken in parallel with the development of informed strategic responses to improving food insecurity in NSW'. The Council supported a disaster risk reduction strategy that would enhance the resilience of urban food systems, including communities most affected by climate change and chronic food insecurity.¹¹¹
- 2.41 The City of Sydney noted that through the work of Resilient Sydney and Resilience NSW, local and state governments have 'recognised the importance of emergency preparedness and disaster risk reduction planning for the Sydney metropolitan area and throughout NSW'.¹¹²
- 2.42 However, we heard that there are gaps in our understanding of the infrastructure and services needed to provide food to Sydney. The City of Sydney observed that the Resilient Sydney Strategy 'outlines the lack of understanding of the risks and interdependencies of the infrastructure and essential services that we rely on to provide food to the Sydney Metropolitan Area'.¹¹³
- 2.43 The City of Sydney said that the emergency food relief effort during the pandemic provided 'significant learnings ... that could inform future emergency preparedness planning and protocols'.¹¹⁴
- 2.44 Inquiry participants highlighted gaps in the emergency response to food supply issues in remote communities during COVID-19. The Dharriwaa Elders Group (DEG) and Walgett Aboriginal Medical Services (WAMS) pointed to the inability of emergency response systems to assist Walgett's sole supermarket, despite requests to the Local Emergency Management Committee (LEMC).¹¹⁵
- 2.45 Walgett's supermarket was affected by staff and stock shortages during the COVID-19 waves in late 2021 and early 2022. DEG and WAMS responded by providing meat and grocery vouchers and some drinking water deliveries to households that were short of food and water. DEG also asked IGA to set up regular home deliveries and seek assistance from the SES and police through the

¹¹¹ [Submission 24](#), City of Sydney Council, p 15.

¹¹² [Submission 24](#), City of Sydney Council, p 15. Resilient Sydney is a program for metropolitan Sydney to build the capacity of individuals, communities, institutions, businesses, and systems to survive, adapt and thrive in the face of chronic stresses and acute shocks.

¹¹³ [Submission 24](#), City of Sydney Council, p 15.

¹¹⁴ [Submission 24](#), City of Sydney Council, p 15.

¹¹⁵ [Submission 27](#), Dharriwaa Elders Group and Walgett Aboriginal Medical Service, p 7.

LEMC, however 'the supermarket and emergency responders could not provide this to the extent needed.'¹¹⁶

- 2.46 DEG and WAMS concluded that 'volunteers and food charities cannot be relied upon in emergency food security crises which we anticipate will increase with Climate Change until local food systems are secured.' They added that emergency human resources and oversight are needed to support food retailers during an emergency affecting food and drinking water security.¹¹⁷
- 2.47 Another gap is the lack of Aboriginal representation on local emergency management committees. DEG and WAMS told us that they were only included on the COVID-19 LEMC by invitation, as ACCOs are not prescribed members under the legislative framework for emergency responses. This means that 'Aboriginal organisations are present in the LEMC at the personal discretion of the LEOCON [Local Emergency Operations Controller], usually a senior member of NSW Police'.¹¹⁸
- 2.48 This is concerning, given the important role played by ACCOs in raising and responding to food supply crises during COVID-19. We heard that DEG and WAMS 'raised the alarms about the food needs of the Walgett community both in the LEMC and to our NSW MP Roy Butler'.¹¹⁹
- 2.49 It's important that local ACCOs be included in the Government's emergency responses to food security crises. DEG and WAMS told us that they had to seek food security assistance through the networks they established outside governments.¹²⁰

¹¹⁶ [Submission 27](#), Dharriwaa Elders Group and Walgett Aboriginal Medical Service, p 7.

¹¹⁷ [Submission 27](#), Dharriwaa Elders Group and Walgett Aboriginal Medical Service, p 8.

¹¹⁸ [Submission 27](#), Dharriwaa Elders Group and Walgett Aboriginal Medical Service, pp 7-8.

¹¹⁹ [Submission 27](#), Dharriwaa Elders Group and Walgett Aboriginal Medical Service, p 8.

¹²⁰ [Submission 27](#), Dharriwaa Elders Group and Walgett Aboriginal Medical Service, pp 7-8.

Chapter Three – Food waste and food rescue

Stronger food waste policies

Summary

Reducing food waste will help NSW reach its zero emissions target. A stronger food waste strategy with targets and actions for all elements of the food system is needed in NSW. Existing waste reduction programs should be expanded and given more funding to be more effective.

Finding 3

Reducing food waste will have a positive impact on reducing emissions. This will help achieve the state's target to achieve net zero emissions by 2050.

Recommendation 11

That the Department of Planning and Environment develops a food waste strategy with clear targets and concrete actions for all parts of the food system.

Recommendation 12

That the Department of Planning and Environment extends and expands the Waste Less Recycle More policy and increases funding for the policy.

- 3.1 We consider that stronger food waste strategies and policies are needed to meet our target to halve food waste by 2030. To be more effective, the strategies need to have clear targets and concrete actions that cover all of our food system. More funding is needed to broaden the Waste Less Recycle More policy and improve its efficacy. Stronger action to reduce food waste will help us meet our zero emissions target.

Impact and opportunities of food waste

- 3.2 Inquiry participants told us about the magnitude of food waste and its impact. We heard that around 7.6 million tonnes of food is wasted every year in Australia, costing our economy \$36.6 billion. This amounts to 312 kilograms of food per person yearly. NSW accounts for 1.5 million tonnes, or 20 per cent, of food wasted in Australia.¹²¹
- 3.3 We heard that the surplus food we send to landfill in a year in NSW could feed every person in the state for six months.¹²²
- 3.4 Food waste creates greenhouse gas emissions and wastes resources. Producing

¹²¹ [Submission 10](#), Mr Christopher McElwain, pp 4-5. For comparison, Australia's defence force budget for 2019-20 was \$38.7 billion; [Submission 68](#), Dietitians Australia, p 12; [Submission 59](#), Australian Food Sovereignty Alliance, p 58.

¹²² Ms Sarah Flomersfeld, New South Wales Operations Lead, OzHarvest, [Transcript of evidence](#), 21 March 2022, p 1.

and disposing of food wasted in Australia generates 17.5 million tonnes of carbon dioxide equivalent emissions annually; equal to the annual emissions from Australia's highest emitting coal fired power station. Wasted food in Australia uses around 2600 gigalitres of water during its lifecycle, and the land used to grow wasted food covers over 25 million hectares – larger than the state of Victoria.¹²³

- 3.5 OzHarvest spoke of the many potential benefits of addressing food waste: developing new sectors and food waste technology; more efficient and profitable businesses; and lower waste management costs for local government. They also noted the improved social and economic outcomes through greater food security, residents saving billions of dollars and lowering the environmental impact of food production and waste management.¹²⁴

Government strategies and initiatives

- 3.6 The Government told us that 'NSW is leading Australia in food waste policy and action' and outlined policies and initiatives to reduce food waste:

- Waste Less, Recycle More (\$105.5 million since 2013) to reduce food waste and increase recycling through organics programs, including expanding collection services for households and business, developing new processing infrastructure, increasing food donation, reducing food waste and ensuring strong markets for the recycled product.
- Love Food, Hate Waste NSW education platform to help households and business reduce food waste and save money. Through digital platforms, partnerships, grants and national collaboration, the program educates communities on environmental impacts of food waste and how to reduce it.
- Waste and Sustainable Materials Strategy 2041 (\$69 million over five years from 1 July 2022) requires source separated organics collection for all households by 2030, larger food waste generating businesses to source separate food waste by 2025, and large supermarkets to report on food donation. Goals are recovering 80 per cent of all waste by 2030, net zero emissions from organics waste in landfill and halving food waste by 2030.¹²⁵

- 3.7 However, we heard that current Government strategies are inadequate to meet waste reduction targets. Inquiry participants supported a stronger emphasis on saving food, and a holistic approach to tackling waste in the food system.

- 3.8 Mr McElwain said that if current policies and regulations are not changed, NSW will not reach its targets. He noted that the Waste and Sustainable Materials Strategy doesn't refer to national waste targets and lacks interim targets. It also has no proposals for action on saving food, as it only focuses on the problem of

¹²³ [Submission 10](#), Mr Christopher McElwain, p5; [Submission 70](#), OzHarvest, p4; [Submission 68](#), Dietitians Australia, p 11; [Submission 59](#), Australian Food Sovereignty Alliance, p 58.

¹²⁴ [Submission 70](#), OzHarvest, p 2.

¹²⁵ [Submission 17](#), NSW Government, p 11; Ms Amanda Kane, Organics Manager, Circular Economy Programs, Engagement, Education and Programs Division, NSW Environment Protection Authority, [Transcript of evidence](#), 9 May 2022, p 27.

wasted food. LGNSW also noted that avoidance is the most effective action in the waste hierarchy.¹²⁶

- 3.9 Mr McElwain said that the food waste strategy needs to provide solutions for every sector to meet the target to halve the per capita level of waste across Australia by 2030.¹²⁷
- 3.10 We heard that Victoria's food strategy is the most comprehensive state strategy in Australia. Mr McElwain told us that this strategy adopts the national target to halve food waste by 2030 and focusses on interventions to save food, rather than better managing wasted food. He noted that Victoria's strategy analyses food system hotspots for wasted food and the impact of this waste. It prioritises action that will save 700 000 tonnes of food, aiming to save a quarter of the food Victoria currently wastes.¹²⁸

Measures to rescue more food

Summary

The Government should implement ways to improve food rescue, including trials of regional food rescue hubs and research on addressing gaps in the cold chain.

Recommendation 13

That the NSW Government funds the development and trialling of regional food rescue hubs for storage and redistribution.

Recommendation 14

That the NSW Government partners with industry to conduct research to identify and respond to gaps in the cold chain.

- 3.11 We recommend that the Government funds measures to rescue more food, focusing on addressing challenges in transport and the cold chain.¹²⁹ Implementing ways to rescue more food would assist food relief organisations and could improve food security. It would also have environmental benefits, as less surplus food would end up in landfill.
- 3.12 NSW Farmers told us that 'a large proportion of losses occur when perishable goods enter the cold chain', with around 25 per cent of fresh produce (fruit and vegetables) lost due to long distances between farms and wholesalers, traffic and road closures, and challenges with reducing and maintaining the core temperature of produce.¹³⁰

¹²⁶ [Submission 10](#), Mr Christopher McElwain, pp 10, 11; [Submission 9](#), Local Government NSW, p 9.

¹²⁷ Mr Christopher McElwain, UNSW Law and Justice, [Transcript of evidence](#), 21 March 2022, p 17.

¹²⁸ [Submission 10](#), Mr Christopher McElwain, p 18.

¹²⁹ Australian food cold chain council, [Cold Chain](#), viewed 30 September 2022. The cold chain refers to managing the temperature of perishable products to maintain quality and safety from slaughter, harvest or manufacture through the distribution chain to the consumer. The cold chain ensures that perishable products are safe and high quality when they are consumed.

¹³⁰ [Answer to question on notice](#), NSW Farmers, p 1.

- 3.13 OzHarvest echoed this point and spoke of the significant logistical barriers that farmers face in getting edible food off their farms. OzHarvest outlined the complexities of cold chain supply, with multiple links and gaps between farmers and consumers. They noted that journeys have varying extreme temperatures, long distances and human error. Fruit and vegetable losses caused by poor cold chain infrastructure and education are costly and have a significant impact on NSW's food security.¹³¹
- 3.14 OzHarvest emphasised the need to better understand elements of the cold chain, including 'interactions between sectors that cross the cold chain, precisely where most food is wasted, barriers to collaboration exist, and inhibiting or enabling policy and legislation.'¹³²
- 3.15 Ms Sarah Flomersfeld, OzHarvest's NSW Operations Lead, told us that funding the transport of chilled products, and a deeper understanding of cold chain is key to food rescue: 'having a deeper look at our cold chain and how we can improve that is going to be the key to unlocking this food waste and food rescue opportunity.'¹³³
- 3.16 Foodbank also raised the challenges with transporting chilled produce. Foodbank's CEO Mr Robertson spoke of the impact it has on his organisation's ability to transport protein products to regional and rural areas: 'we get a lot of protein that is donated to us, like chicken, red meat, fish and those sorts of things. Our ability to distribute that outside the metropolitan area is all but non-existent.'¹³⁴
- 3.17 The Government acknowledged the difficulties with transporting food relief, particularly in crisis situations like COVID-19. Mr Gavin Peek, Director, Partnerships at DCJ, told us that getting chilled products and fresh food to remote and non-metropolitan communities 'was a big issue'. He noted that during lockdowns it is difficult to get food relief to people who can't go to a central point or leave their homes. This is particularly challenging in regional areas.¹³⁵
- 3.18 One way to address challenges with transporting chilled or frozen produce is improving regional storage. OzHarvest highlighted the need for storage capacity in regional areas for chilled food. Ms Flomersfeld said that while ambient produce can be sent out immediately, transporting chilled or frozen food is more complex. She noted that 6000 frozen meals in Foodbank's warehouse were to be transported to Lismore to help people on the Northern Rivers. However, the lack of storage means 'there is no point sending them there because there is nowhere

¹³¹ [Submission 70](#), OzHarvest, p 6.

¹³² [Submission 70](#), OzHarvest, p 6.

¹³³ Ms Sarah Flomersfeld, New South Wales Operations Lead, OzHarvest, [Transcript of evidence](#), 21 March 2022, p 3.

¹³⁴ Mr John Cameron Robertson, CEO, Foodbank NSW & ACT Limited, [Transcript of evidence](#), 21 March 2022, p 3.

¹³⁵ Mr Gavin Peek, Director, Partnerships, Department of Communities and Justice, [Transcript of evidence](#), 9 May 2022, p 32.

that we can store them in a large capacity that is chilled.¹³⁶

- 3.19 We heard that regional food hubs would increase the amount of food rescued by food relief organisations. OzHarvest supported the trialling of regional food hubs to 'bring together food in one place, sort it and also redistribute it regionally'.¹³⁷ They called for investment in regional infrastructure to centralise the collection of surplus or off-specification produce and food waste, noting that it would unlock a significant amount of rescued food.¹³⁸
- 3.20 OzHarvest observed that redistributing surplus food close to its source would give regional and remote communities access to increased and regular food relief. They noted that 'these communities are already extremely vulnerable, often feel forgotten and are highly affected by natural disasters and climate change.'¹³⁹
- 3.21 We heard that regional food hubs would also create an opportunity for local employment and give primary producers an alternate revenue stream through the sale of surplus food to be repurposed.¹⁴⁰
- 3.22 Foodbank told us they are looking at setting up regional food hubs for their produce. During the pandemic they worked with Resilience NSW and the Rural Fire Service to locate emergency hampers in remote locations. Some hampers sent to flooded areas were stored in the regions.¹⁴¹

More funding for the food rescue sector

Summary

Food rescue is a cost-effective way to rescue surplus food and help reduce food insecurity. More funding should be provided to the food rescue sector to enable it to expand its operations.

Finding 4

Food rescue models are cost effective and have positive returns for communities and retailers. They also reduce the environmental impact of food waste.

Recommendation 15

That the NSW Government provides more funding to the food rescue sector to increase the amount of food that is rescued and donated.

- 3.23 Increasing funding for the food rescue sector would help boost the amount of surplus food that is rescued and donated. This could reduce food waste and

¹³⁶ Ms Sarah Flomersfeld, New South Wales Operations Lead, OzHarvest, [Transcript of evidence](#), 21 March 2022, p 3.

¹³⁷ Ms Sarah Flomersfeld, New South Wales Operations Lead, OzHarvest, [Transcript of evidence](#), 21 March 2022, p 6.

¹³⁸ [Submission 70](#), OzHarvest, p 6.

¹³⁹ [Submission 70](#), OzHarvest, p 6.

¹⁴⁰ [Submission 70](#), OzHarvest, p 6.

¹⁴¹ Mr John Cameron Robertson, CEO, Foodbank NSW & ACT Limited, [Transcript of evidence](#), 21 March 2022, p 3.

improve food security, as well as lowering emissions.

- 3.24 We heard that the Government's programs have provided \$6 million to 60 projects that are diverting about 11 000 tonnes of surplus food from landfill to redistribution through rescue charities, the equivalent of 22 million meals.¹⁴²
- 3.25 However, a very small amount of wasted food is rescued. Only 0.2 per cent of Australia's surplus food is donated, with the bulk of it going to landfill. OzHarvest told us that food rescue operations currently focus on retail collection, mainly in major metropolitan areas. They observed that 'there are huge opportunities to rescue greater volumes of food across the supply chain, and closer to the source across all regions of NSW'.¹⁴³
- 3.26 OzHarvest spoke of the many benefits and opportunities of scaling up food rescue. They said that it would offer 'a proven and cost-effective solution to reducing food waste and improving food security, which could provide enough food for the entire NSW charity sector at low cost'.¹⁴⁴
- 3.27 They noted that 10 per cent of Australia's target to halve food waste by 2039 could be met through a ten-fold increase in the food rescue and relief sector. Scaling up food rescue would allow more food to be rescued across the food supply chain, especially rescuing surplus food from farms. It would also have economic, social and environmental benefits.¹⁴⁵
- 3.28 We heard that food waste is responsible for eight to ten per cent of global greenhouse gas emissions, and each kilogram of food rescued by OzHarvest saves up to 6.6 kilograms of carbon dioxide emissions. Food rescue also provides a food waste solution for businesses.¹⁴⁶
- 3.29 Foodbank noted that their rescue operations redirect or repurpose 37 million kilograms of food and groceries that would otherwise end up in landfill, saving more than 81 million kilograms of carbon dioxide emissions every year.¹⁴⁷
- 3.30 Ms Flomersfeld told us that we have 'untapped opportunity for using food waste to become an economic driver for New South Wales'. She highlighted the potential to create new industries and jobs, and the need to address climate change, hunger and food insecurity.¹⁴⁸
- 3.31 OzHarvest called for investment in the food rescue sector's capacity to accept a higher volume and wider range of donations, along with incentives for

¹⁴² Ms Amanda Kane, Organics Manager, Circular Economy Programs, Engagement, Education and Programs Division, NSW Environment Protection Authority, [Transcript of evidence](#), 9 May 2022, p 27; [Submission 17](#), NSW Government, p 12.

¹⁴³ [Submission 70](#), OzHarvest, p 5.

¹⁴⁴ [Submission 70](#), OzHarvest, p 4.

¹⁴⁵ [Submission 70](#), OzHarvest, pp 4, 5.

¹⁴⁶ OzHarvest, [NSW Government funding request](#), 4 May 2022, p 1.

¹⁴⁷ [Submission 67](#), Foodbank NSW & ACT Limited, p 15.

¹⁴⁸ Ms Sarah Flomersfeld, New South Wales Operations Lead, OzHarvest, [Transcript of evidence](#), 21 March 2022, p 1.

participating businesses.¹⁴⁹

- 3.32 Inquiry participants supported funding for food rescue and waste charities. Mr McElwain said that organisations like OzHarvest, Foodbank and Second Bite are 'doing the most important job, getting food out of our bins and into human mouths, but it is a very small part of what needs to be done'. He noted that while Government funding has increased and food waste charities have expanded greatly in the past ten years, a very low proportion of food is being redirected.¹⁵⁰
- 3.33 Ms Amanda Kane, Organics Manager, Circular Economy Programs, with the NSW Environment Protection Authority (EPA) told us that the Government's programs aim to support the food rescue sector to increase its capacity to handle more food through grants for infrastructure – like vans, fridges and freezers to enable more food to be collected, stored, and redistributed. A food donation education grant program has been run since 2017, aiming to support charities to network to improve efficiency, pool resources and increase donations from donors.¹⁵¹

Using technology to reduce wasted or surplus food

Summary

The Government should develop a platform to encourage participants in the food chain to reduce surplus and wasted food.

Recommendation 16

That the NSW Government develops a platform for participants in the food supply chain to share information and promote strategies and opportunities to reduce and redirect wasted or surplus food.

- 3.34 We heard that information sharing can help participants in the food industry to find ways to redirect and reduce wasted food.
- 3.35 OzHarvest highlighted the need to bridge the gap between producers, logistics companies and food rescue. They told us that information sharing is a major barrier to rescuing more food from primary producers.¹⁵²
- 3.36 OzHarvest said that the Government and industry need to collaborate to build a platform for data sharing across the food supply chain, to show food surplus and demand. This could help logistics companies identify opportunities to transport food rescue donations.¹⁵³
- 3.37 The City of Sydney supported improving access for the hospitality sector to local

¹⁴⁹ [Submission 70](#), OzHarvest, p 5.

¹⁵⁰ Mr Christopher McElwain, UNSW Law and Justice, [Transcript of evidence](#), 21 March 2022, pp 17-18.

¹⁵¹ Ms Amanda Kane, Organics Manager, Circular Economy Programs, Engagement, Education and Programs Division, NSW Environment Protection Authority, [Transcript of evidence](#), 9 May 2022, p 27; [Submission 17](#), NSW Government, p 12.

¹⁵² [Submission 70](#), OzHarvest, p 7; Ms Sarah Flomersfeld, New South Wales Operations Lead, OzHarvest, [Transcript of evidence](#), 21 March 2022, p 6.

¹⁵³ [Submission 70](#), OzHarvest, p 7; Ms Sarah Flomersfeld, New South Wales Operations Lead, OzHarvest, [Transcript of evidence](#), 21 March 2022, p 6.

producers and food rescue platforms to supply in-season produce and shorten supply chains.¹⁵⁴

- 3.38 Foodbank told us about a collaboration with Y Waste, the NSW EPA and the Royal Melbourne Institute of Technology to develop an app facilitating the discounted sale of end-of-day food from quick-serve restaurants. Y Waste began working with Foodbank in 2018 to extend the app to supply free meals to people in need. We heard that the project will contribute to reducing the amount of short-life prepared food going to waste from quick-serve restaurants, and increase food for food relief.¹⁵⁵
- 3.39 Another way to redirect surplus food is helping farmers to sell excess produce. NSW Farmers told us that 'it is important to support opportunities for grower solutions and innovation on farm'.¹⁵⁶
- 3.40 They pointed to opportunities to transform and mitigate food waste on farms, for example by using fruit and vegetables that don't meet market standards or aren't fit for consumption as potential livestock feed. NSW Farmers also suggested finding alternative markets for surplus and lower quality produce, such as preserved food products and bioenergy. They said that 'Government investment should be aimed at supporting and incentivising producers to develop value add or new market opportunities'.¹⁵⁷
- 3.41 We heard that local markets could help farmers sell excess produce, while creating tourism and providing an extra income for farmers. Slow Food Australia told us that there should be support for regular local markets in regional communities, where farmers can sell excess or biodiverse produce. They said that Maitland City Council has promoted and supported local markets. The markets have had many benefits, including creating food tourism and jobs, giving the local population an opportunity to buy fresh local produce, and encouraging young people to take up farming.¹⁵⁸

Tax credits to cover the cost of transporting donated food

Summary

The cost of transporting donated food is a barrier to food donation and rescue. Introducing tax credits at the federal level could encourage farmers and logistics companies to donate surplus food.

¹⁵⁴ [Submission 24](#), City of Sydney Council, p 28.

¹⁵⁵ [Submission 67](#), Foodbank NSW & ACT Limited, p 15.

¹⁵⁶ [Answer to supplementary question](#), NSW Farmers, p 1.

¹⁵⁷ [Answer to supplementary question](#), NSW Farmers, p 1.

¹⁵⁸ Ms Amorelle Dempster, Member of the Slow Food International Council, Slow Food Australia, [Transcript of evidence](#), 25 March 2022, pp 16-17; [Submission 26](#), Slow Food Hunter Valley, p 1.

Recommendation 17

That the NSW Government advocates for reform at the federal level to enable farmers and logistics companies to claim the cost of transporting donated surplus food as tax credits.

- 3.42 We heard that tax credits for transporting donated food would be another way to encourage farmers and logistics companies to donate excess food.
- 3.43 A significant amount of food waste is created by farms. We heard that 392 900 tonnes of food waste in NSW is generated by farms/primary production. Of this only 3 300 tonnes (0.8 per cent) is rescued.¹⁵⁹
- 3.44 Foodbank told us that food donations have stagnated and incentives are needed to make it more attractive to food businesses to donate surplus food rather than dumping it.¹⁶⁰
- 3.45 Inquiry participants supported tax incentives to allow farmers to donate food and claim the cost of transport as a tax credit. We heard that high transport costs mean that it is cheaper to plough food into the paddock than donate it. Tax incentives would also encourage logistics companies to transport food and claim it as a tax credit.
- 3.46 OzHarvest told us that a tax incentive for farmers and logistics companies would reduce the financial burden of donating surplus food and boost participation by farmers and logistics companies. They supported federal tax reforms to encourage farmers and logistics companies to donate and transport surplus food.¹⁶¹
- 3.47 Foodbank has advocated for change to Australia's taxation legislation to encourage food donations. They are working with KPMG and the Fight Food Waste Cooperative Research Centre (CRC) on a pilot that aims to prove the effectiveness of encouraging the food industry to donate food via the tax system. The project is funded by the NSW EPA, the Queensland Department of Environment and Science, and the CRC.¹⁶²
- 3.48 Mr Robertson told us that transport costs from the farm to food relief charities should be treated similarly to tax credits for research and development. He observed that it is 'cheaper to dump than donate', noting that 'once a [berry] punnet gets to a particular price, it is not economical for them to harvest, pack and transport, so they literally just plough it back into the paddock'.¹⁶³
- 3.49 Foodbank recommended that, in the absence of tax incentives, the NSW Government works with food charities to help them make food donation more

¹⁵⁹ [Submission 70](#), OzHarvest, p 6; [Submission 68](#), Dietitians Australia, p 12.

¹⁶⁰ [Submission 67](#), Foodbank NSW & ACT Limited, p 15.

¹⁶¹ [Submission 70](#), OzHarvest, pp 6-7; Ms Sarah Flomersfeld, New South Wales Operations Lead, OzHarvest, [Transcript of evidence](#), 21 March 2022, p 5.

¹⁶² [Submission 67](#), Foodbank NSW & ACT Limited, p 15; Fight Food Waste CRC, [A case for tax reform to increase food donation by business](#), viewed 12 September 2022.

¹⁶³ Mr John Cameron Robertson, CEO, Foodbank NSW & ACT Limited, [Transcript of evidence](#), 21 March 2022, p 5.

convenient and cost-effective for food businesses. They suggested funding transport between food donors and Foodbank.¹⁶⁴

Limiting supermarkets' use of aesthetic standards on produce

Summary

Supermarket requirements for the appearance of fruit and vegetables increase food waste. These standards should be limited so that less produce is wasted.

Recommendation 18

That the NSW Government adopts policies in consultation with industry and farmers to limit the ability of major retailers to impose aesthetic standards for produce, leading to significant food waste.

- 3.50 We heard that cosmetic standards for fruit and vegetables cause food waste. We consider that retailers' ability to impose these standards should be limited, to reduce food waste.
- 3.51 NSW Farmers told us that more flexibility with product specifications relating to 'aesthetic concerns as opposed to food safety' is a key target area to lower food waste quantities and costs across the supply chain.¹⁶⁵ The City of Sydney said that supermarkets and grocers should be encouraged to relax rules on specifications for fruit and vegetables.¹⁶⁶
- 3.52 NSW Farmers explained that retailers and processors have specifications for fresh produce, which play a part in ensuring that food is fit for consumption. However, they noted that imposing largely cosmetic specifications, such as product weight, shape, size and imperfections, contributes substantially to food waste in the supply chain. Specifications contribute to food waste of fruit and vegetables as they are unlikely to have an alternative market. For meat products, specifications mean that farmers get a lower price for their produce.¹⁶⁷
- 3.53 NSW Farmers observed that this has an impact on food security and hinders farm businesses that spend resources to grow produce. It also reinforces 'unrealistic consumer expectations' of the appearance of fresh fruit and vegetables. While retailers have begun to stock imperfect produce, this is a small proportion of produce sold at the retail level.¹⁶⁸
- 3.54 The Australian Food Sovereignty Alliance observed that aesthetic produce standards don't impact 'the quality, taste and edibility of the produce at all but impact significantly on the unnecessary waste produced and result in producers bearing that cost or receiving significantly less for a product that is not materially different'. The Alliance recommended that aesthetic standards be removed from

¹⁶⁴ [Submission 67](#), Foodbank NSW & ACT Limited, pp 7, 15.

¹⁶⁵ [Answer to supplementary question](#), NSW Farmers, p 1.

¹⁶⁶ [Submission 24](#), City of Sydney Council, p 28.

¹⁶⁷ [Answer to supplementary question](#), NSW Farmers, p 1.

¹⁶⁸ [Answer to supplementary question](#), NSW Farmers, p 1.

contracts between producers and retailers.¹⁶⁹

- 3.55 Mr McElwain told us that 'the actions of large supermarket chains results in large amounts of wasted food in primary production'. One element of this is the imposition of cosmetic and quality specifications for fresh fruit and vegetables.¹⁷⁰
- 3.56 We heard that a 2011 study of banana production in North Queensland found that 10 to 30 per cent of edible bananas were discarded on the farm, with 78 per cent caused by failure to meet supermarket specifications. A 2017 study of tomato production in South-East Queensland found that of the total amount of wasted tomatoes on two farms, 86.7 per cent of waste during harvesting and 68.7 per cent of waste during packing was caused by not meeting product specifications.¹⁷¹
- 3.57 Mr McElwain said that these rules mean that nutritious food never leaves the farm and is ploughed into the soil or composted.¹⁷²

Helping business and industry to reduce food waste

Summary

The Government should provide more support for businesses and industry to reduce food waste. Voluntary programs can help businesses to identify strategies to cut waste.

Recommendation 19

Without limiting recommendation 18, that the Department of Planning and Environment supports voluntary programs that engage businesses and industry to reduce food waste.

- 3.58 Inquiry participants supported programs to engage businesses in reducing food waste. OzHarvest called for support for 'voluntary commitment programs that engage business to reduce food waste, including partnering with food rescue organisations and signing up to the Australian Food Pact established by Stop Food Waste Australia'.¹⁷³
- 3.59 The City of Sydney recommended that networks between business and food donation organisations and charities be improved, especially at a local neighbourhood level. The Council also supported education to build businesses' capability to avoid food waste and stressed the need to focus on awareness of waste avoidance.¹⁷⁴

¹⁶⁹ [Submission 59](#), Australian Food Sovereignty Alliance, pp 59-61.

¹⁷⁰ [Submission 10](#), Mr Christopher McElwain, p 7.

¹⁷¹ [Submission 10](#), Mr Christopher McElwain, p 7; [Submission 70](#), OzHarvest, p 6.

¹⁷² [Submission 10](#), Mr Christopher McElwain, p 7.

¹⁷³ [Submission 70](#), OzHarvest, p 5. The [Australian Food Pact](#) is a voluntary agreement that brings organisations together to make our food system more sustainable, resilient, and circular. It is a commitment by businesses who grow, make and sell food to develop solutions and implement change, focusing on prevention, reuse (donation), and food chain transformation and innovation.

¹⁷⁴ [Submission 24](#), City of Sydney Council, p 28.

- 3.60 We heard about the City of Sydney's work to help businesses reduce food waste. Love Food Sydney was run between 2019 and 2021, supported by the EPA's Love Food Hate Waste program. It provided online training and free consultant support to business to address their waste. The program guided business through a waste audit followed by an action plan to address spoilage, preparation, and plate waste. Strategies were aligned with the waste hierarchy, with avoidance taking priority.¹⁷⁵
- 3.61 Inquiry participants told us that to reduce food waste, there needs to be a cultural change in the way producers, suppliers and consumers think about food. Sustain said that 'resourcing, grants and incentives are important to support households, communities and businesses to embrace what is a major cultural shift in dealing with food and packaging waste'.¹⁷⁶
- 3.62 Mr Robertson observed that 'a business' waste for us is a potential donation of food that we can effectively redistribute'. He said that a 'range of initiatives could be undertaken to encourage businesses and people to think that waste is not waste in the sense that, "Well, it is no good, so it goes in the bin."¹⁷⁷
- 3.63 There was support for the EPA's work to help business reduce waste. OzHarvest told us that the EPA had funded them to work closely with major supermarket chains to teach them how to waste less and give more food to OzHarvest, while ensuring that surplus food is properly handled. Ms Flomersfeld said that it was 'a great investment from EPA and made a big difference in our ability to rescue food and get it to people who are vulnerable'.¹⁷⁸
- 3.64 Mr McElwain outlined the EPA's Bin Trim program, which provides free and low-cost expertise to small and medium-sized businesses on reducing the amount of waste they create, including wasted food. The program also subsidises the cost of installing new equipment to help with waste minimisation and diversion programs. Bin Trim has reached over 36 000 businesses across NSW, diverting about 115 kilotons of waste from landfill.¹⁷⁹

Reducing food wasted by households

Consumer education campaign for households

Summary

An extensive consumer education campaign is needed to increase awareness of household food waste and ways to prevent it.

¹⁷⁵ [Submission 24](#), City of Sydney Council, p 28.

¹⁷⁶ [Submission 51](#), Sustain: The Australian Food Network, p 14.

¹⁷⁷ Mr John Cameron Robertson, CEO, Foodbank NSW & ACT Limited, [Transcript of evidence](#), 21 March 2022, p 6.

¹⁷⁸ Ms Sarah Flomersfeld, New South Wales Operations Lead, OzHarvest, [Transcript of evidence](#), 21 March 2022, p 6.

¹⁷⁹ [Submission 10](#), Mr Christopher McElwain, p 11.

Recommendation 20

That the Department of Planning and Environment develops and implements a comprehensive consumer education campaign aimed at encouraging households to reduce and prevent food waste at home, including engaging with young people through digital platforms and social media.

- 3.65 A significant amount of wasted food is created by households. We recommend that the Department of Planning and Environment (DPE) implements an extensive education campaign for consumers to increase awareness of food waste and how to prevent it. We heard that current campaigns have the potential to reduce food waste, but have had limited reach. Any social media campaigns should be developed in consultation with young people.
- 3.66 Inquiry participants told us that one third of national food waste comes from households. We heard that this amounts to 2.5 million tonnes of food waste, which costs NSW households \$2000 to 2500 each year. Seventy per cent of food wasted by households is edible.¹⁸⁰
- 3.67 We heard that consumer education campaigns could help address this problem. OzHarvest noted that historic Australian campaigns like Slip Slop Slap and Keep Australia Beautiful not only changed individual behaviour, they also changed culture. These campaigns 'combined mass media messaging with school-based education programs that embed long-term, generational change'.¹⁸¹
- 3.68 OzHarvest said that campaigns should target households and young people who cause the most food waste to go to landfill, as this is the most effective way to embed long-term behavioural change.¹⁸²
- 3.69 We heard that the EPA's Love Food Hate Waste education program needs more funding to increase its recognition and efficacy. Mr McElwain told us that the program has had a low impact, and most households are not aware of its existence. A 2017 survey on Love Food Hate Waste found that only four per cent of respondents recognised the program.¹⁸³
- 3.70 Mr McElwain pointed to encouraging signs, with the survey finding that 54 per cent of those who were aware of the program were motivated to take one or more actions to reduce the amount of food they wasted. He noted that the Love Food, Hate Waste Facebook page has 53 000 followers.¹⁸⁴
- 3.71 Mr McElwain argued that the program needs significantly more funding to promote awareness and solutions to the public, stating that 'we have the tool in

¹⁸⁰ [Submission 70](#), OzHarvest, p 4; [Submission 9](#), Local Government NSW, p 1.

¹⁸¹ [Submission 70](#), OzHarvest, p 8; Ms Sarah Flomersfeld, New South Wales Operations Lead, OzHarvest, [Transcript of evidence](#), 21 March 2022, p 6.

¹⁸² [Submission 70](#), OzHarvest, p 8.

¹⁸³ [Submission 10](#), Mr Christopher McElwain, p 12; Mr Christopher McElwain, UNSW Law and Justice, [Transcript of evidence](#), 21 March 2022, p 16.

¹⁸⁴ [Submission 10](#), Mr Christopher McElwain, p 12.

New South Wales; we just need to invest in it'.¹⁸⁵

- 3.72 He recommended a multi-year, expanded Love Food, Hate Waste program focusing on priority target households and schools, and teaching food businesses to save money by saving food, making better use of food rescue charities and diverting waste from landfill. The expanded campaign should adopt the techniques, scale and prominence of the UK's Love Food Hate Waste campaign.¹⁸⁶
- 3.73 The UK's campaign ran from 2007 and 2014 on a regional level aimed at households. It was mainly promoted through radio, newspaper, magazine, transit and internet advertising, with less social media and no paid television advertising. Mr McElwain said that the most effective element was regional campaigns with media promotion and events like roadshows, combined with supermarkets giving information to thousands of customers. UK households reduced the amount of food they wasted by 15 per cent between 2007 and 2012.¹⁸⁷
- 3.74 Mr McElwain stated that an expanded education campaign should be tied in with the wider roll out of food and garden organic waste (FOGO) collection, to teach people about how to use it correctly.¹⁸⁸ We discuss the implementation of FOGO in the following section.

School-based education

Summary

School-based education campaigns on food waste should be expanded to help increase awareness of reducing food waste.

Recommendation 21

That the Department of Education expands school-based education programs that focus on reducing food waste.

- 3.75 Inquiry participants supported school education campaigns to better educate children about reducing food waste. We heard that improving food waste awareness in schools can be an effective way to reach parents.
- 3.76 OzHarvest called for funding to expand school-based education programs to reduce food waste, reaching every school in NSW. They highlighted the important role schools play in influencing behaviour and creating long-term change:

Schools are a gateway to the nation's households and have the potential to directly influence behaviour when it comes to shopping and food waste. Building knowledge

¹⁸⁵ [Submission 10](#), Mr Christopher McElwain, p 12; Mr Christopher McElwain, UNSW Law and Justice, [Transcript of evidence](#), 21 March 2022, p 16.

¹⁸⁶ [Submission 10](#), Mr Christopher McElwain, pp 2-3.

¹⁸⁷ [Submission 10](#), Mr Christopher McElwain, pp 12-13. In a 2021 survey, 33 per cent of UK households reported recalling the Love Food, Hate Waste logo and 41 per cent recalled a Love Food, Hate Waste campaign or source of information.

¹⁸⁸ Mr Christopher McElwain, UNSW Law and Justice, [Transcript of evidence](#), 21 March 2022, p 16; [Submission 10](#), Mr Christopher McElwain, pp 2-3.

and awareness through schools and school children is where the seeds are planted for generational behaviour change, taking action on food waste both at school and at home can have immediate and long-lasting results.¹⁸⁹

- 3.77 Dr Cathy Sherry observed that a lack of understanding about food production contributes to food waste: 'we do not interact with food systems in a particularly informed way, which affects food security, food waste ... a lot of my experience of that comes from teaching students and seeing how little even the very well educated public in Australia understands about the production of food'.¹⁹⁰ We discuss improving food literacy as part of school curricula in chapter 4.
- 3.78 The Department of Education told us about existing school programs covering sustainability and food waste. For example, we heard that Dapto High School has a range of programs including:
- Food waste from the curriculum kitchens and canteen is distributed to the school's chickens and held in compost bins. Worm juice is used on food gardens or sold to students and staff.
 - The school has started planning a 'Food Forest'. The farm will plant lemons, mandarins, oranges, mulberries, and avocados in spring.
 - At the end of lunch each day the Principal distributes unsold canteen food.
 - Avoiding food waste is part of the school's broader sustainability push; the school has recycled almost 200 000 containers.¹⁹¹
- 3.79 A case study of OzHarvest's FEAST program for schools is below.

Case study 2: OzHarvest FEAST program¹⁹²

FEAST (Food Education and Sustainability Training) is a program for Year 5 and 6 students to encourage kids to eat healthily, minimise food waste and share the message with their communities.

Teachers are trained by OzHarvest, via a training day or online module, to deliver the program over seven to ten weeks. Schools have access to lesson plans, videos, recipes, worksheets and ongoing support. The program can be adapted to suit a school's needs and financial support is available for eligible schools. Three hundred and thirty teachers and 212 schools have enrolled in the program.

FEAST was developed using evidence-based behaviour change practices and is aligned to the Years 5-8 Australian Curriculum.

¹⁸⁹ [Submission 70](#), OzHarvest, p 9.

¹⁹⁰ Dr Cathy Sherry, Associate Professor, UNSW Law and Justice, [Transcript of evidence](#), 21 March 2022, p 14.

¹⁹¹ [Answers to supplementary questions](#), Department of Education, p 3.

¹⁹² OzHarvest, [About FEAST](#), viewed 30 September 2022; [Submission 70](#), OzHarvest, p 9.

More funding for local government to introduce food and garden organics collection

Summary

Local councils need more funding to implement food and garden organics collection by 2030.

Recommendation 22

That the Department of Planning and Environment increases funding to support local government implementation of food and garden organics waste collection.

- 3.80 Targets under the Waste and Sustainable Management Strategy require councils to separately collect food and garden organics by 2030. We heard that local councils will need significant funding to implement kerbside food and garden organics (FOGO) waste collection.
- 3.81 Food waste makes up a large part of municipal waste, which could be diverted through FOGO collection. Households create around a third of food waste in Australia. The Macquarie University Planetary Health and Equity Research Network told us that bin audits show that 40 to 60 per cent of waste sent to landfill is organic waste.¹⁹³
- 3.82 The Network said that 'FOGO municipal composting systems are an important service that can be provided to households to reduce the environmental impacts of food waste'.¹⁹⁴
- 3.83 The City of Sydney told us of the benefits of FOGO, noting that it saves landfill space, reduces greenhouse emissions, and provides beneficial outputs such as compost or fertiliser, and green energy.¹⁹⁵
- 3.84 The NSW Government said that 83 of 128 councils in NSW have a green lid bin service for organics, and 43 have FOGO services. Since 2013, the Government has provided \$25.8 million to introduce new collection services, resulting in almost 70 per cent of households having an organics service (up from 55 per cent in 2011) and recovering 180 000 more tonnes of organics waste a year.¹⁹⁶
- 3.85 LGNSW said that the transition to meet the targets set out in the Waste and Sustainable Management Strategy will take time and require policy and regulatory certainty. They noted barriers that will need to be overcome, including:

¹⁹³ [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 4; [Submission 24](#), City of Sydney Council, p 26. Food waste is the largest single material stream in the City of Sydney's residential red lid rubbish bins, making up between 34 per cent and 42 per cent of bin contents.

¹⁹⁴ [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 4.

¹⁹⁵ [Submission 24](#), City of Sydney Council, p 26.

¹⁹⁶ [Submission 17](#), NSW Government, pp 11-12.

- higher costs versus benefits
- contractual issues
- contamination issues
- lack of community or elected official support
- high transport costs
- capacity of processing infrastructure
- lack of strategically placed transfer stations in metropolitan Sydney
- capacity and financial sustainability of markets for compost products.¹⁹⁷

- 3.86 Inquiry participants raised the need for more funding for local councils to implement FOGO collection. Northern Beaches Council told us that the Government needs to facilitate and financially support collection systems and infrastructure to process substantial volumes of food waste. They said that significant funding should be provided to enable onsite worm farms/composting for houses, and for councils to establish and run FOGO, including trials.¹⁹⁸
- 3.87 LGNSW noted that the Government has committed \$65 million over five years from 2023 to support the rollout of new collection services, developing more processing capacity and an education campaign to help households adjust to the changes. While welcoming the funding, LGNSW said that 'local government is concerned it will not be nearly enough to deliver the change'.¹⁹⁹
- 3.88 LGNSW cited modelling indicating that it will cost metropolitan councils an average of \$15.54 million each in the first year to introduce FOGO. The EPA's Organics Collection Grant program offers a maximum of \$760 000 per council, when the Government's \$65 million funding is distributed between councils that haven't adopted FOGO.²⁰⁰
- 3.89 Noting this, LGNSW recommended that the Government 'commit adequate funding to ensure no significant cost increase for ratepayers, with an emphasis on avoiding food waste first, then the collection and recovery of food waste'.²⁰¹
- 3.90 We heard that funding has helped support the implementation of FOGO. Mr McElwain told us that the \$105.5 million Organics Infrastructure fund (under Waste Less, Recycle More) aims to increase FOGO recycling or support businesses to reduce wasted food. Mr McElwain said that the program has been successful in supporting the creation of additional FOGO recycling infrastructure.²⁰²

¹⁹⁷ [Submission 9](#), Local Government NSW, pp 9-10.

¹⁹⁸ [Submission 30](#), Northern Beaches Council, p 3.

¹⁹⁹ [Submission 9](#), Local Government NSW, p 10.

²⁰⁰ [Submission 9](#), Local Government NSW, p 10.

²⁰¹ [Submission 9](#), Local Government NSW, p 10.

²⁰² [Submission 10](#), Mr Christopher McElwain, p 14.

- 3.91 Mr McElwain stated that Waste Less, Recycle More has been 'moderately effective' in increasing the amount of FOGO waste recycled, with 60 new or enhanced organics collection services. However, he cautioned that 'levels of recycling municipal solid waste, of which organic waste makes up the largest part, have stalled in recent years in NSW'.²⁰³
- 3.92 We heard about local councils' work to support the reduction of food waste. Northern Beaches Council is developing a waste strategy that will cover the treatment of organics, and options for separation of waste to reach the Government's 2030 target. The Council provides online resources and workshops on reducing food waste. They also offer \$90 vouchers for residents to use towards worm farms, compost bins, and training at their Kimbriki waste site.²⁰⁴
- 3.93 The City of Sydney runs community education initiatives, including an online service for residents to ask council staff about how to avoid and reduce waste, and recycle more. The Council also provides tips on reducing food waste at home through news channels and social media. In 2021 the Council engaged with over 15 schools, giving advice on reducing single use plastics, avoiding food waste and recycling.²⁰⁵
- 3.94 A case study of the City's food scraps collection trial is below.

Case study 3: City of Sydney food scraps collection trial²⁰⁶

In October 2018 the City approved a food scraps collection and recycling trial to be run over 12 months, starting in July 2019 with around 300 houses and 100 apartment buildings. By end of November 2021, 1010 houses and 202 apartment buildings were taking part in the trial – more than 15 200 households. After nearly two and a half years of operation, the City had collected and recycled more than 790 tonnes of food scraps from participating properties. Expansion of the trial is planned to test the scalability of operating systems.

The collected food scraps are taken to the EarthPower anaerobic digestion facility in Camellia in Western Sydney for recovery. The food scraps are pulped and put in a chamber without oxygen, where the food is broken down by microorganisms, producing biogas and a nutrient-rich sludge. The gas is converted to green electricity and the sludge is dried and granulated to produce fertiliser.

²⁰³ [Submission 10](#), Mr Christopher McElwain, p 14.

²⁰⁴ Mr Yianni Mentis, Executive Manager, Environment and Climate Change, Northern Beaches Council, [Transcript of evidence](#), 9 May 2022, p 15.

²⁰⁵ [Submission 24](#), City of Sydney Council, p 27.

²⁰⁶ [Submission 24](#), City of Sydney Council, p 26.

Chapter Four – Community based food production

Better education on food literacy and sustainability

School curricula should aim to improve students' food literacy

Summary

Food education should be taught in schools to improve food literacy and encourage healthy food behaviours. School gardens provide hands-on food education for students.

Recommendation 23

That the Department of Education reviews school curricula to increase students' food literacy, including through experiential learning programs.

Recommendation 24

That the Department of Education continues to provide funding to develop school garden programs in NSW primary and secondary schools.

- 4.1 We recommend that food literacy be increased in our school curricula for all students, including through experiential learning programs such as school gardens.
- 4.2 Stakeholders raised the importance of including food education in our school curricula, in light of declining knowledge about food production in the community.²⁰⁷
- 4.3 We acknowledge that the syllabuses developed by the NSW Education Standards Authority include 'sustainability' as a learning priority across the curriculum. Food-related topics are also included in syllabuses for various secondary school subjects.²⁰⁸ However, we consider broader education on how food is produced and its impacts on our health is critical for improving our food literacy and awareness of sustainability.
- 4.4 Stakeholders highlighted a range of benefits for the community of food education in schools.²⁰⁹ Slow Food Australia told us that food education in schools can convey messages about eating more fruit and vegetables, not wasting food and eating locally grown food. It can also communicate the importance of sustainable food production.²¹⁰
- 4.5 Mr McElwain highlighted that schools can influence behaviours and create

²⁰⁷ [Submission 61](#), Slow Food Australia, p 2; [Submission 59](#), Australian Food Sovereignty Alliance, p 27.

²⁰⁸ [Answers to supplementary questions](#), Department of Education, pp 1-2.

²⁰⁹ [Submission 61](#), Slow Food Australia, p 2; [Submission 30](#), Northern Beaches Council, p 2; Mr Yuseph Deen, Chief Executive Officer, New South Wales Aboriginal Land Council, [Transcript of evidence](#), 25 March 2022, p 14.

²¹⁰ [Submission 61](#), Slow Food Australia, p 2.

generational change as gateways into students' households.²¹¹

- 4.6 Ms Jenny Bradley, Chair of the Innovation and Technology Working Group and the Sheepmeat Committee at NSW Farmers, spoke about the importance of food literacy from a farmer's perspective. Ms Bradley highlighted that farmers are under growing pressure to meet certain ethical standards. Farmers bear the price risk to meet these standards, at potentially no additional profit. She called for education for the community to learn about farming practices and the bigger food production and supply picture.²¹²
- 4.7 Ms Annabel Johnson, Head of Policy and Advocacy at NSW Farmers, told us there is a lot of misunderstanding about how food is produced, despite community interest in agriculture and farming.²¹³
- 4.8 Inquiry participants noted the importance of education on growing and cooking food and making healthy, sustainable choices to be included in school curricula from a young age. Some participants also called for further education programs.²¹⁴
- 4.9 Dr Sherry told us that teaching students to grow and cook food could increase food literacy.²¹⁵
- 4.10 We heard that this education can and should be coupled with hands-on experience with food growing and production.²¹⁶ Professor Karen Charlton, member of Dietitians Australia's Food and Environment Interest Group, stressed that experiential programs build children's connections to food growing. This improves their food literacy and promotes healthier diets. These programs allow children to cook healthy meals and experience both small-scale and commercial food production.²¹⁷
- 4.11 An industry stakeholder told us that exposure to commercial food production may help build their future workforce.²¹⁸ Murray Irrigation highlighted anecdotal feedback that successful new industry entrants often had past positive

²¹¹ Mr Christopher McElwain, UNSW Law and Justice, [Transcript of evidence](#), 21 March 2022, p 16.

²¹² Ms Jenny Bradley, Chair, Innovation and Technology Working Group and Chair, Sheepmeat Committee, NSW Farmers, [Transcript of evidence](#), 21 March 2022, p 8.

²¹³ Ms Annabel Johnson, Head of Policy and Advocacy, NSW Farmers, [Transcript of evidence](#), 21 March 2022, p 11.

²¹⁴ [Submission 70](#), OzHarvest, p 3; Dr Cathy Sherry, Associate Professor, UNSW Law and Justice, and Mr Christopher McElwain, UNSW Law and Justice, [Transcript of evidence](#), 21 March 2022, p 16; Professor Karen Charlton, Member, Food & Environment Interest Group, Dietitians Australia, [Transcript of evidence](#), 21 March 2022, pp 27, 29-30; Associate Professor Andrew McGregor, Member, Macquarie University Planetary Health and Equity Research Network, [Transcript of evidence](#), 25 March 2022, p 10.

²¹⁵ Dr Cathy Sherry, Associate Professor, UNSW Law and Justice, and Mr Christopher McElwain, UNSW Law and Justice, [Transcript of evidence](#), 21 March 2022, pp 14, 16.

²¹⁶ [Submission 59](#), Australian Food Sovereignty Alliance, p 27; Professor Karen Charlton, Member, Food & Environment Interest Group, Dietitians Australia, [Transcript of evidence](#), 21 March 2022, pp 27, 30; Ms Amorelle Dempster, Member of the Slow Food International Council, Slow Food Australia, and Dr Nick Rose, Executive Director, Sustain: The Australian Food Network, [Transcript of evidence](#), 25 March 2022, p 20.

²¹⁷ Professor Karen Charlton, Member, Food & Environment Interest Group, Dietitians Australia, [Transcript of evidence](#), 21 March 2022, pp 27, 30.

²¹⁸ Mr Gus Dannoun, Executive Manager, Seafood Trading, Sydney Fish Market, [Transcript of evidence](#), 25 March 2022, p 5.

experiences on a farm.²¹⁹ Ms Johnson argued that on-farm experiences could instil children with a passion for agriculture careers and potentially lead to them seeking a career in agriculture.²²⁰

- 4.12 Stakeholders highlighted that community and school gardens can provide this experiential learning.²²¹ Dr Rose, Executive Director of Sustain, said that school gardens and community agriculture projects engage school children in horticulture and develop their food literacy. He referred to successful examples that have been run in NSW and Victoria.²²²
- 4.13 Mr Robertson, from Foodbank, emphasised the key role schools played during COVID-19 in connecting communities. In particular during COVID-19, when Foodbank relied on schools to continue to provide breakfasts to children in their homes instead of at school.²²³
- 4.14 School garden programs already exist in some NSW public schools. However, we heard that funding is a barrier for some schools.²²⁴
- 4.15 School Infrastructure NSW's 'Sustainable Schools Grants' program is a four-year grants program open to all preschools and public schools operated by the Department of Education. It allows schools to apply for up to \$15 000 in grant funding to deliver sustainability-focused projects which link to the NSW curriculum. Past projects that have received grant funding have included Glenroi Heights Public School's garden upgrade project led by students.²²⁵
- 4.16 We are pleased to hear that schools can access government funding for school garden projects through grant programs like Sustainable Schools Grants. We consider school gardens programs should be expanded to all primary and secondary schools and recommend that the Department of Education continues to help schools fund these programs.

A standardised food sustainability labelling system

Summary

Labelling can help consumers make informed choices at the point of purchase. There are many industry-produced eco-labels, which can confuse consumers. A clear, standardised label could help consumers understand the sustainability of their food choices.

²¹⁹ [Answers to questions on notice](#), Murray Irrigation, p 1.

²²⁰ Ms Annabel Johnson, Head of Policy and Advocacy, NSW Farmers, [Transcript of evidence](#), 21 March 2022, p 11.

²²¹ [Submission 30](#), Northern Beaches Council, p 5; Dr Nick Rose, Executive Director, Sustain: The Australian Food Network, [Transcript of evidence](#), 25 March 2022, p 20.

²²² Dr Nick Rose, Executive Director, Sustain: The Australian Food Network, [Transcript of evidence](#), 25 March 2022, p 20.

²²³ Mr John Cameron Robertson, Chief Executive Officer, Foodbank NSW & ACT Limited, [Transcript of evidence](#), 21 March 2022, p 4.

²²⁴ [Answers to supplementary questions](#), Department of Education, p 3; Ms Amorelle Dempster, Member of the Slow Food International Council, Slow Food Australia, and Dr Nick Rose, Executive Director, Sustain: The Australian Food Network, [Transcript of evidence](#), 25 March 2022, pp 19-20.

²²⁵ NSW Department of Education, [Sustainable Schools Grants](#), viewed 6 October 2022.

Recommendation 25

That the NSW Government advocates through the Food Ministers' Meeting for the development of a sustainability labelling system for packaged food.

- 4.17 We heard that food labels help people to make informed food choices.²²⁶ We agree that clear labels help inform consumers about the nutrition of food at the point of purchase, especially for processed and shelf stable food products.
- 4.18 A number of submissions called on the Government to develop a sustainability food labelling/certification scheme.²²⁷ We heard from Associate Professor Andrew McGregor, from the Macquarie University Planetary Health and Equity Research Network, that there is a huge and growing demand from consumers around the environmental impacts of foods. Dietitians Australia highlighted that there is no labelling system to identify the overall environmental sustainability of foods at point of purchase.²²⁸
- 4.19 However, providing information on food packaging alone is not enough. Dr Carrad told us that we also need to be able to interpret the information provided.²²⁹ The Macquarie University Planetary Health and Equity Research Network told us that around 57 industry-produced eco-labels are used in Australia. Associate Professor McGregor described the outcome of this as 'just a level of confusion, a level of greenwashing'.²³⁰
- 4.20 We were referred to the Health Star Rating system as a model for standardised sustainability labelling. The Health Star Rating is a front-of-pack food label rating overall healthiness from half to five stars. This system was jointly developed by federal and state and territory governments.²³¹
- 4.21 Inquiry participants referred to the Health Star Rating System, including industry representative body the Australian Beverages Council who expressed support for this system.²³² Dietitians Australia noted the Health Star Rating system supports Australian consumers to identify healthier food options.²³³
- 4.22 However, Associate Professor McGregor acknowledged that it is difficult to

²²⁶ [Submission 68](#), Dietitians Australia, p 13; Mr Geoff Parker, Chief Executive Officer, Australian Beverages Council, [Transcript of evidence](#), 25 March 2022, p 24.

²²⁷ [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 6; [Submission 62](#), Vegan NSW, p 10.

²²⁸ Associate Professor Andrew McGregor, Member, Macquarie University Planetary Health and Equity Research Network, [Transcript of evidence](#), 25 March 2022, p 9; [Submission 68](#), Dietitians Australia, p 13.

²²⁹ [Submission 13](#), Dr Amy Carrad, p 5.

²³⁰ [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 6; Associate Professor Andrew McGregor, Member, Macquarie University Planetary Health and Equity Research Network, [Transcript of evidence](#), 25 March 2022, p 9.

²³¹ Commonwealth of Australia, [Health Star Rating – About Health Star Ratings](#), viewed 1 September 2022.

²³² Associate Professor Andrew McGregor, Member, Macquarie University Planetary Health and Equity Research Network, and Mr Damian Maganja, Research Associate, Food Policy Division, The George Institute for Global Health, [Transcript of evidence](#), 25 March 2022, pp 9-10; Mr Geoff Parker, Chief Executive Officer, Australian Beverages Council, [Transcript of evidence](#), 25 March 2022, p 24.

²³³ [Submission 68](#), Dietitians Australia, p 13.

determine sustainability because of high variability in food production systems.²³⁴ We heard a range of views about how a sustainability food labelling system should be developed.²³⁵

- 4.23 The Australian Beverages Council described labelling as 'an increasingly complex and problematic' issue. They highlighted the costs and administrative burden of implementing labelling changes.²³⁶ To boost industry support for a sustainability labelling system, Associate Professor McGregor suggested that government subsidise the costs of certifying or implementing sustainability food labels to assist with the cost burden.²³⁷
- 4.24 Associate Professor McGregor and Mr Damian Maganja highlighted that there may be varying levels of support from the food industry to adopt sustainability labelling. Associate Professor McGregor said that this will depend on industries' environmental impacts. He noted that industries with less impacts will be highlighted through sustainability labelling and will likely increase their market share.²³⁸
- 4.25 We note that the existing Health Star Rating is voluntary for manufacturers and retailers.²³⁹ The Australian Beverages Council supported maintaining this voluntary approach.²⁴⁰
- 4.26 We acknowledge the challenges of a sustainability labelling scheme. The evidence we received did not put forward a clear model for sustainability labelling, reflecting the complexity of this issue. However, we agree there is a need for standardised government-regulated sustainability labelling. We believe government can engage with stakeholders to develop an evidence-supported labelling system.
- 4.27 The Australian Food Sovereignty Alliance noted that food nutritional labelling is governed at a federal level through Food Standards Australia New Zealand (FSANZ).²⁴¹ FSANZ is responsible for developing the Food Standards Code, which sets out labelling and other information requirements for food packaging. Responsible authorities at each level of government enforce the Code, including

²³⁴ Associate Professor Andrew McGregor, Member, Macquarie University Planetary Health and Equity Research Network, [Transcript of evidence](#), 25 March 2022, p 9.

²³⁵ [Submission 68](#), Dietitians Australia, p 13; [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 6; [Submission 62](#), Vegan NSW, p 10.

²³⁶ [Submission 60](#), Australian Beverages Council Ltd., p 10.

²³⁷ Associate Professor Andrew McGregor, Member, Macquarie University Planetary Health and Equity Research Network, [Transcript of evidence](#), 25 March 2022, p 10.

²³⁸ Associate Professor Andrew McGregor, Member, Macquarie University Planetary Health and Equity Research Network, and Mr Damian Maganja, Research Associate, Food Policy Division, The George Institute for Global Health, [Transcript of evidence](#), 25 March 2022, p 10.

²³⁹ Commonwealth of Australia, [Health Star Rating – Frequently asked questions](#), viewed 1 September 2022.

²⁴⁰ Mr Geoff Parker, Chief Executive Officer, Australian Beverages Council, [Transcript of evidence](#), 25 March 2022, p 24.

²⁴¹ [Submission 59](#), Australian Food Sovereignty Alliance, p 67.

the NSW Food Authority.²⁴²

- 4.28 While FSANZ develops the Food Standards Code, the Food Ministers' Meeting is a forum for lead ministers from across governments. The Food Ministers develop the overarching policy guidelines that FSANZ has to have regard to when setting food standards (including food labelling).²⁴³
- 4.29 We note that the Food Ministers' Meeting is also responsible for the Health Star Rating system.²⁴⁴ We recommend that the Government advocates for sustainability food labelling through the Food Ministers' Meeting.

Encouraging urban agriculture and community gardens/farms

Community gardens and urban agriculture increase access to fresh produce

Summary

Community gardens and urban agriculture projects are important sources of access to fresh produce, particularly for culturally diverse, Aboriginal, and regional and remote communities. They contribute to food security, improve health and wellbeing and are educational tools.

Finding 5

Community gardens and local agriculture projects are important sources of fresh produce, particularly for regional and remote, culturally and linguistically diverse, and Aboriginal communities.

- 4.30 During the inquiry we heard about the many benefits of community and urban agriculture projects, increasingly reflected in research. The National Pandemic Gardening Survey 2020 indicated that edible gardens can and do improve food security, wellbeing and mental health particularly for low-income households.²⁴⁵
- 4.31 Small-scale local food production can have many health benefits. We heard that community gardens have been found to improve participants' consumption of nutritious food. We also heard that engaging in community gardening can reduce depression, anxiety and body mass index, and improve individuals' life satisfaction and sense of community. We were referred to surveys where a majority of community gardeners reported substantial improvements to their mental health and wellbeing.²⁴⁶
- 4.32 Community gardens also play an important educational role in the local community, in light of declining food literacy discussed earlier in this chapter.²⁴⁷

²⁴² Food Standards Australia & New Zealand, [Food Standards Code](#), viewed 1 September 2022; Food Standards Australia & New Zealand, [Food enforcement contacts](#), viewed 1 September 2022; Food Standards Australia & New Zealand, [New South Wales](#), viewed 1 September 2022.

²⁴³ Food Standards Australia & New Zealand, [The Food Ministers' Meeting](#), July 2021, viewed 1 September 2022.

²⁴⁴ Commonwealth of Australia, [Health Star Rating – Governance](#), viewed 1 September 2022.

²⁴⁵ [Submission 24](#), City of Sydney Council, p 20; [Submission 31](#), Community Gardens Australia, p 2; [Submission 51](#), Sustain: The Australian Food Network, p 9.

²⁴⁶ [Submission 51](#), Sustain: The Australian Food Network, p 9; [Submission 31](#), Community Gardens Australia, p 1.

²⁴⁷ [Submission 31](#), Community Gardens Australia, pp 1-2; [Submission 30](#), Northern Beaches Council, p 2.

Community gardens can teach participants how to grow and cook food through participation and on-site workshops.²⁴⁸

- 4.33 We heard that community gardening can also lead to greater respect for the efforts and contributions of households and community members to food security, and increased food literacy and food growing skills.²⁴⁹ Dr Sherry and Community Gardens Australia highlighted a benefit of getting individuals involved in gardening, noting that people who invest their time and energy in growing their own food tend not to waste it.²⁵⁰ Green Connect told us that community and urban agriculture projects can reduce spoilage of food by avoiding long supply chains, and enable recycling of food and waste.²⁵¹
- 4.34 The City of Sydney told us that growing food in urban environments demonstrates a more sustainable future and is an emerging method to reduce urban heat island effects. Cities will have to play a greater role in ensuring food security as climate disruption and related issues occur.²⁵²
- 4.35 Dr Sherry said that while urban agriculture cannot feed a city, it could be an important supplementary food source, particularly for fruit and vegetables in times of crisis.²⁵³
- 4.36 Community gardens contribute to food security by offering wider access to locally grown fresh produce to the community, reducing costs of fresh produce, and mitigating some problems of supply chains.²⁵⁴
- 4.37 Access to free or low-cost fresh fruit and vegetable through local community agriculture is important for low-income households. Community Gardens Australia highlighted DCJ's Community Greening program, which provides food growing spaces for 100 000 residents in social housing estates. Residents reported feeling and eating healthier as a result of the program.²⁵⁵
- 4.38 The issue of access to fresh produce is particularly critical for remote Indigenous communities.²⁵⁶ Mr Yuseph Deen, CEO of the NSWALC, told us the 'tyranny of distance' is the greatest food security issue for rural and remote communities. Even where these communities can access fresh fruit and vegetables, it is often too expensive. This was worsened by supply chain disruptions and panic buying during the pandemic.²⁵⁷
- 4.39 Local small-scale food production can be tailored to meet the dietary needs of a

²⁴⁸ [Submission 30](#), Northern Beaches Council, p 2; [Submission 51](#), Sustain: The Australian Food Network, p 13.

²⁴⁹ [Submission 51](#), Sustain: The Australian Food Network, p 13; [Submission 64](#), Green Connect, p 1.

²⁵⁰ [Submission 5](#), Dr Cathy Sherry, p 9; [Submission 31](#), Community Gardens Australia, pp 4, 8.

²⁵¹ [Submission 64](#), Green Connect, p 1.

²⁵² [Submission 24](#), City of Sydney Council, p 20.

²⁵³ [Submission 5](#), Dr Cathy Sherry, pp 1-3.

²⁵⁴ [Submission 31](#), Community Gardens Australia, p 2; [Submission 64](#), Green Connect, p 1.

²⁵⁵ [Submission 31](#), Community Gardens Australia, p 3; NSW Government, [Community Greening](#), viewed 11 October 2022.

²⁵⁶ [Submission 31](#), Community Gardens Australia, p 3.

²⁵⁷ Mr Yuseph Deen, Chief Executive Officer, New South Wales Aboriginal Land Council, [Transcript of evidence](#), 25 March 2022, p 14; [Submission 31](#), Community Gardens Australia, p 12.

community. They can be a source of 'culturally acceptable' food for culturally and linguistically diverse (CALD) communities. Community Gardens Australia highlighted a number of community garden projects serving the unique needs of their CALD communities. They told us about other projects focused on people with disabilities and refugees, to demonstrate how community gardens can be inclusive places for marginalised groups.²⁵⁸

- 4.40 There are also many successful examples of traditional Aboriginal foods gardens developed by ACCOs for their local communities.²⁵⁹ These examples and their unique significance in rural and remote Aboriginal communities are discussed later in this chapter.
- 4.41 The benefits of community gardens and local agriculture projects are illustrated in the case studies below.

Case study 4: The Amazing Northern Multicultural Service's Community Garden²⁶⁰

What started as a project to grow some of the foods they missed from home has turned into an opportunity for employment, learning new skills, a sense of community and purpose, and a source of revenue for migrants.

The suburb of Davoren Park in north Adelaide has a large number of CALD communities with many on low incomes. COVID-19 meant many in the community faced loss of casual employment, isolation and disadvantage.

The Community Garden, established in August 2016 by Amazing Northern Multicultural Services (ANMS) flourished as a space for people to connect and keep active. Its focus on growing seasonal plants, vegetables and herbs, especially rarer crops such as maize, roselle and African eggplant which are not easy to find in Australia, has appealed to African, Middle Eastern and Asian communities.

A mix of individuals including refugees oversee the garden. The growing level of interest in the broader community, where supply cannot meet the demand for produce, means ANMS will expand its garden and growing space.

Case study 5: North West Disability Services' The Secret Garden & Nursery²⁶¹

The Secret Garden and Nursery is located on five acres in the grounds of the University of Western Sydney in Richmond, NSW. The whole of the community are welcome to access and use the gardens, have a picnic, meet farmyard animals and shop at the nursery to support community programs held at the gardens.

The not-for-profit community garden has training and education in growing fruit and vegetables, gardening, permaculture and animal husbandry, with a focus on engaging with children and people with a disability. The Food for Thought program, managed by North West Disability Services, gives people with mental health issues

²⁵⁸ [Submission 31](#), Community Gardens Australia, p 4.

²⁵⁹ [Submission 31](#), Community Gardens Australia, p 3; Ms Naomi Lacey, President, Community Gardens Australia, [Transcript of evidence](#), 21 March 2022, p 23.

²⁶⁰ [Submission 31](#), Community Gardens Australia, p 3; C Campbell, [Community garden started by refugees in Adelaide attracting interstate interest](#), *ABC.net.au*, 6 May 2020, viewed 16 September 2022; Amazing Northern Multicultural Services, [ANMS Community Garden](#), viewed 16 September 2022.

²⁶¹ [Submission 31](#), Community Gardens Australia, p 3; North West Disability Services (NWDS), [The Secret Garden](#), viewed 16 September 2022.

and other disabilities a safe supportive environment to learn and gain horticultural skills.

Planning frameworks should support community and urban agriculture

Summary

Community members attempting food growing initiatives can face barriers in planning frameworks, particularly in urban environments. There should be planning reforms to better support community and urban agriculture projects on Crown lands and rooftop spaces.

Recommendation 26

That the Department of Planning and Environment amends planning frameworks to facilitate the allocation of underused Crown land for urban and community agriculture projects.

Recommendation 27

That the Department of Planning and Environment amends planning frameworks to facilitate urban food production using rooftop spaces in high-density urban environments.

- 4.42 We recommend that the Department of Planning and Environment amends planning frameworks to allow underused Crown land to be used for community and urban agriculture projects, and rooftop gardens in high-density urban environments.
- 4.43 ARUP called for planning reforms to remove barriers faced by urban and community agriculture projects. We heard that agriculture projects like rooftop and community gardens can be held back by planning rules and regulations.²⁶²
- 4.44 Several inquiry participants called for the state's planning legislation and instruments to better recognise and support different types of urban and community food production.²⁶³
- 4.45 The City of Sydney identified a number of reforms to include a greater consideration of food production in planning decisions, such as in region and district plans and when considering state renewal projects. They also said food production could be included in Plans of Management for Crown lands and zones incorporating urban food production in Local Environment Plans (LEPs).²⁶⁴
- 4.46 We heard that a key barrier to urban agriculture projects is access to land. Dr Rose noted that there are many vacant unused sites banked in cities and recommended reforms to allow temporary land uses of these sites for food

²⁶² [Submission 52](#), ARUP, pp 2-3; Ms Kylie Flament, General Manager, Green Connect, [Transcript of evidence](#), 21 March 2022, p 20.

²⁶³ [Submission 52](#), ARUP, pp 2-3; [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 10; [Submission 18](#), Dr Sarina Kilham, p 3; Dr Nick Rose, Executive Director, Sustain: The Australian Food Network, [Transcript of evidence](#), 25 March 2022, p 21; [Submission 23](#), Public Health Association of Australia, p 7.

²⁶⁴ [Answer to question on notice](#), City of Sydney Council, 21 April 2022, pp 1-2.

production.²⁶⁵ Other stakeholders also called for planning reforms to allow underused land and public spaces to be used for food production.²⁶⁶

- 4.47 The case study below demonstrates how limited spaces can be transformed for food growing.

Case study 6: University of New South Wales Urban Growers²⁶⁷

Launched in 2019, the University of New South Wales Urban Growers are staff and students who create and manage food growing spaces across the campuses. Growing food using limited spaces like gaps between buildings and on and inside buildings, can help clean the air, reduce energy costs, offset urban heat islands and increase ecological, cultural, and social wellbeing.

The group has identified benefits including teaching opportunities, hands-on learning, research and community healing and wellbeing.

- 4.48 Dr Sherry also spoke of the need to incorporate food growing spaces in our high-density urban environments. She acknowledged the challenges of lack of space and difficult growing conditions in these environments. However, growing food on rooftop spaces could provide fresh produce, use the lowest value land in our cities, and increase food literacy of city residents.²⁶⁸ The potential of rooftop garden enterprises is shown in the case study below.

Case study 7: Brooklyn Grange Farm, New York²⁶⁹

The Brooklyn Grange is a business that operates rooftop farms across various boroughs in New York City, which equate to the world's largest rooftop soil farms. Operating since 2010 and located over 5.6 acres of rooftop, the farms produce over 45 000 kilograms of organically-grown produce every year. The food is sold at farmers' markets and stores.

A focus of Brooklyn Grange is to make locally grown food available to all, through a sliding scale Community Supported Agriculture program allowing people to pay what they can afford. Their Equitable Distribution Program works with community-based organisations to send at least 30 per cent of produce to disadvantaged community members for free.

Brooklyn Grange also hosts educational programs, workshops and events to promote access to locally grown produce and sustainable living to communities in New York City with sliding-scale tickets for participants.

- 4.49 We heard that education programs, incentives or mandates could be provided to planners and building developers so they include food growing spaces in designs

²⁶⁵ Dr Nick Rose, Executive Director, Sustain: The Australian Food Network, [Transcript of evidence](#), 25 March 2022, p 21.

²⁶⁶ [Submission 14](#), The Charles Perkins Centre Food Governance Node, p 10; [Submission 15](#), Dr Belinda Reeve, p 3; [Submission 59](#), Australian Food Sovereignty Alliance, p 63.

²⁶⁷ [Submission 5](#), Dr Cathy Sherry, p 1; UNSW Sydney, [UNSW Urban Growers \(UUG\)](#), viewed 16 September 2022.

²⁶⁸ [Submission 5](#), Dr Cathy Sherry, pp 4-5; Dr Cathy Sherry, Associate Professor, UNSW Law and Justice, [Transcript of evidence](#), 21 March 2022, pp 15-16.

²⁶⁹ Dr Cathy Sherry, Associate Professor, UNSW Law and Justice, [Transcript of evidence](#), 21 March 2022, p 15; Brooklyn Grange Farm, [About Brooklyn Grange](#), viewed 16 September 2022.

and construction.²⁷⁰ Planning reform could also encourage new developments to provide spaces or facilities for urban food production.²⁷¹

- 4.50 Local councils play a significant role in facilitating the development of urban and community food production. As an example, Northern Beaches Council has approved a vertical farm under an existing LEP.²⁷² However, some stakeholders gave anecdotal evidence of difficult council approval processes deterring people from setting up community gardens.²⁷³
- 4.51 Food Fairness Illawarra told us that introducing appropriate State Environmental Planning Policies could empower local councils to adopt policies that prioritise urban agriculture activities.²⁷⁴ Northern Beaches Council called for 'horticulture and aquaculture' to be included as permissible uses for industrial zones.²⁷⁵ We also heard that a Ministerial Direction could mandate local councils to better consider urban food production in their land use planning processes.²⁷⁶

Preserving productive peri-urban and urban agricultural lands

Summary

The limited amount of productive peri-urban and urban agricultural land in NSW is increasingly threatened by development. These sites should be preserved for food production under planning policies.

Recommendation 28

That the Department of Planning and Environment conducts a survey of productive peri-urban and urban agricultural land and works with local councils to promote agriculture and food production activities on these sites.

- 4.52 It is important that we preserve productive peri-urban and urban agricultural land in NSW. We recommend that the Department of Planning and Environment conducts a survey of these sites and works with local councils to promote agriculture and food production on these sites.
- 4.53 LGNSW told us that there are many benefits to retaining land close to our population centres for agriculture and food production. Growing fresh food near these centres would reduce the travel distance of our supply chains. This could reduce food spoilage and greenhouse gas emissions, and buffer cities against supply chain disruptions.²⁷⁷ Peri-urban agriculture fringes could also buffer some

²⁷⁰ [Submission 5](#), Dr Cathy Sherry, p 8; [Submission 65](#), Food Fairness Illawarra, p 3.

²⁷¹ [Answer to question on notice](#), City of Sydney Council, 21 April 2022, p 1.

²⁷² Mr Yianni Mentis, Executive Manager, Environment & Climate Change, Northern Beaches Council, [Transcript of evidence](#), 9 May 2022, p 14.

²⁷³ Ms Kylie Flament, General Manager, Green Connect, [Transcript of evidence](#), 21 March 2022, p 20; Ms Naomi Lacey, President, Community Gardens Australia, [Transcript of evidence](#), 21 March 2022, p 21.

²⁷⁴ [Submission 65](#), Food Fairness Illawarra, p 3.

²⁷⁵ Mr Yianni Mentis, Executive Manager, Environment & Climate Change, Northern Beaches Council, [Transcript of evidence](#), 9 May 2022, p 14.

²⁷⁶ [Answer to question on notice](#), City of Sydney Council, 21 April 2022, p 1.

²⁷⁷ [Submission 9](#), Local Government NSW, p 14; [Submission 17](#), NSW Government, p 10.

climate change impacts including reducing the urban heat island effect.²⁷⁸

- 4.54 Peri-urban food production also offers job opportunities in agriculture and food processing.²⁷⁹ Greater Sydney Parklands told us its peri-urban farming precinct, the Horsley Park Precinct, shows how urban agriculture can be an 'appropriate interim land use' for Crown lands and provide employment pathways.²⁸⁰
- 4.55 A number of stakeholders raised concern about food security due to the significant loss of productive agricultural land in NSW. Our peri-urban and urban agricultural land is increasingly threatened by urban sprawl and development.²⁸¹ We heard that building on this land destroys its agricultural productivity as productive soil takes many years to form.²⁸² It can also risk water catchments.²⁸³
- 4.56 Mr Michael Toby, Corporate Affairs Manager of Costa Group, a grower and marketer of fresh produce, stressed the need for buffer zones between homes and agricultural enterprises. He told us that residential development in Coffs Harbour has caused issues from homes being located next to an existing farm.²⁸⁴
- 4.57 Sustain said that encroachment of development on farmland has also driven up land prices, making them unaffordable for primary producers. This pushes farmland even further away from population centres, which then accelerates the speed of urban sprawl.²⁸⁵
- 4.58 During the inquiry we heard that there is no clear identification of where 'best use' agricultural lands are located in NSW. Inquiry participants called on the Government to map agricultural lands to identify sites to be preserved for food production.²⁸⁶ We consider that a survey of productive agricultural lands is critical to inform land use decisions.
- 4.59 The Government told us that the NSW Agriculture Commissioner has recommended an Agricultural Land Use Planning Strategy be developed, and the Government is considering this recommendation. The Government also noted that it released a draft State Significant Agriculture Land Map in 2021 for community feedback.²⁸⁷
- 4.60 Many stakeholders supported planning reforms to protect productive peri-urban

²⁷⁸ [Submission 9](#), Local Government NSW, p 14.

²⁷⁹ [Submission 9](#), Local Government NSW, p 14; [Submission 17](#), NSW Government, p 11.

²⁸⁰ [Submission 7](#), Greater Sydney Parklands, pp 3, 4.

²⁸¹ [Submission 51](#), Sustain: The Australian Food Network, p 4; [Submission 5](#), Dr Cathy Sherry, p 6; Dr Cathy Sherry, Associate Professor, UNSW Law and Justice, [Transcript of evidence](#), 21 March 2022, p 15; [Submission 59](#), Australian Food Sovereignty Alliance, p 38; [Answer to question on notice](#), City of Sydney Council, 21 April 2022, p 2; [Submission 9](#), Local Government NSW, p 14.

²⁸² [Submission 5](#), Dr Cathy Sherry, p 6.

²⁸³ [Submission 52](#), ARUP, p 7; [Submission 56](#), Foodswell Limited, p 4.

²⁸⁴ Mr Michael Toby, Corporate Affairs Manager, Costa Group, [Transcript of evidence](#), 9 May 2022, p 2; [Submission 19](#), Costa Group, p 3.

²⁸⁵ [Submission 51](#), Sustain: The Australian Food Network, p 4.

²⁸⁶ [Submission 56](#), Foodswell Limited, p 4; [Submission 52](#), ARUP, p 8; [Submission 59](#), Australian Food Sovereignty Alliance, p 9.

²⁸⁷ [Submission 17](#), NSW Government, p 13.

and urban agricultural land from further development encroachment.²⁸⁸ Some stakeholders called for legal protections or specialised zoning in planning instruments like State Environment Planning Policies.²⁸⁹

- 4.61 We heard that local councils share this concern, particularly those with peri-urban fringes or significant agricultural industries. Councils enact policies and initiatives to preserve productive agricultural lands and support agricultural activities.²⁹⁰ However, the City of Sydney said that appropriate state planning legislation could better support councils to protect their productive land.²⁹¹
- 4.62 The NSW Government told us that it recognises the importance of preserving productive agricultural land near cities. We heard that the Government supports peri-urban food production precincts in Western Sydney and provides biosecurity programs to support peri-urban agricultural enterprises.²⁹² While we were encouraged to hear this, we received evidence that showed significant food production could be lost if peri-urban and urban agricultural lands are not preserved.²⁹³ We recommend more government support for local councils to prioritise agriculture activities on these sites.

Supporting Aboriginal and Torres Strait Islander food production

Aboriginal and Torres Strait Islander peoples should lead the traditional foods industry and ownership of traditional knowledge should be protected

Summary

Aboriginal and Torres Strait Islander peoples have ongoing connections to Country, including through traditional foods systems. Their food sovereignty and traditional knowledge has been appropriated in the growing traditional foods market. Government strategies and legislative reforms are needed to promote the Aboriginal and Torres Strait Islander-owned traditional foods industry and protect traditional knowledge.

Recommendation 29

That the NSW Government consults with Aboriginal Community Controlled Organisations and Indigenous Corporations to develop a strategy that sets out priorities and a framework to grow the Aboriginal and Torres Strait Islander-owned traditional foods industry.

Recommendation 30

That the NSW Government consults with Aboriginal and Torres Strait Islander peoples to develop legislation and strategies to protect the intellectual

²⁸⁸ [Submission 59](#), Australian Food Sovereignty Alliance, p 39; [Answer to question on notice](#), City of Sydney Council, 21 April 2022, p 2; [Submission 52](#), ARUP, p 8; [Submission 9](#), Local Government NSW, p 14.

²⁸⁹ [Submission 52](#), ARUP, p 8; [Submission 59](#), Australian Food Sovereignty Alliance, p 12.

²⁹⁰ [Submission 15](#), Dr Belinda Reeve, p 4.

²⁹¹ [Answer to question on notice](#), City of Sydney Council, 21 April 2022, p 2.

²⁹² [Submission 17](#), NSW Government, pp 10-11.

²⁹³ [Submission 59](#), Australian Food Sovereignty Alliance, p 38.

property of Aboriginal and Torres Strait Islander peoples and their knowledge of traditional foods and land management.

- 4.63 We consider that there is a need for a strategy to grow the traditional foods market as an Aboriginal-led and Torres Strait Islander-led industry. We recommend that the NSW Government works with Aboriginal Community-Controlled Organisations and Indigenous Corporations to implement a strategy that sets out priorities and a policy framework to achieve this goal.
- 4.64 We recognise the significance of traditional food systems to Aboriginal and Torres Strait Islander peoples' connection to Country and the importance of protecting their traditional knowledge from misappropriation. We support calls for more government action to protect the intellectual property of this knowledge and ensure the industry is led by Aboriginal and Torres Strait Islander peoples.
- 4.65 Aboriginal and Torres Strait Islander peoples have a continuing connection to Country that has endured over millennia. Country includes both land and water systems and is an integral part of their cultural heritage. As part of this connection to Country, Aboriginal and Torres Strait Islander peoples have longstanding traditional land management practices.²⁹⁴
- 4.66 We heard that traditional food systems are an integral aspect of Aboriginal and Torres Strait Islander heritage. The City of Sydney told us that traditional foods provide nutrients, are a means for connecting with Country and integral to many cultural practices.²⁹⁵
- 4.67 However, inquiry participants said that colonisation has disrupted the food sovereignty of Aboriginal and Torres Strait Islander peoples.²⁹⁶ Access to traditional lands has become limited over time. The DEG and WAMS told us that 'as access to Country diminishes, so does the knowledge of living in it'.²⁹⁷
- 4.68 Despite this disruption, the market for traditional foods is growing and is valued at \$20 million annually. However, the NSWALC told us that Aboriginal and Torres Strait Islander peoples make up only one to two per cent of that market.²⁹⁸
- 4.69 Inquiry participants called for government support of the Aboriginal-led traditional foods industry. We heard that these businesses provide employment and economic opportunities for Aboriginal and Torres Strait Islander peoples while helping to maintain traditional cultural practices and the passing down of knowledge.²⁹⁹

²⁹⁴ [Submission 25](#), The George Institute for Global Health, p 11; [Submission 24](#), City of Sydney Council, p 37; [Submission 68](#), Dietitians Australia, p 8.

²⁹⁵ [Submission 24](#), City of Sydney Council, p 11.

²⁹⁶ [Submission 59](#), Australian Food Sovereignty Alliance, pp 19, 21; [Submission 25](#), The George Institute for Global Health, p 11; [Submission 24](#), City of Sydney Council, p 11.

²⁹⁷ [Submission 27](#), Dharriwaa Elders Group and Walgett Aboriginal Medical Service, p 4; [Submission 30](#), Northern Beaches Council, pp 6-7.

²⁹⁸ [Submission 21](#), New South Wales Aboriginal Land Council, p 4; Mr Yuseph Deen, Chief Executive Officer, New South Wales Aboriginal Land Council, [Transcript of evidence](#), 25 March 2022, p 12; [Submission 68](#), Dietitians Australia, p 8.

²⁹⁹ [Submission 24](#), City of Sydney Council, pp 38-39; [Submission 21](#), New South Wales Aboriginal Land Council, p 5.

- 4.70 Mr Deen told us that traditional food businesses are a sustainable way for Aboriginal peoples to 'engage with culture, enhance food security, and potentially improve environmental outcomes'.³⁰⁰
- 4.71 The City of Sydney spotlighted several Aboriginal and Torres Strait Islander-led businesses like IndigiGrow, discussed in the case study below.³⁰¹

Case study 8: IndigiGrow³⁰²

IndigiGrow is a social enterprise from First Hand Solutions Aboriginal Corporation whose priority is to give Aboriginal people an opportunity to reconnect to traditional culture and enter all parts of the supply chain.

The IndigiGrow program is 100 per cent Aboriginal-owned and aims to provide positive cultural and environmental projects. This includes growing and protecting native plants and edible bush foods, particularly Eastern Suburbs Banksia Scrub, which is critically endangered with only 2.8 per cent of the original 5300ha on Sydney's coastline remaining.

Traditional knowledge is shared with younger Aboriginal staff, particularly the seven apprentices, to ensure cultural knowledge is 'understood, protected, and respected'. IndigiGrow also engage with the wider community to educate people on appreciating native plants and foods, and break down cultural barriers.

IndigiGrow have a nursery and bushfood farm at La Perouse Public School in Sydney's eastern suburbs. There will be a future educational garden, focussing on Eastern Suburbs Banksia Scrub, where the school has a small remnant patch of this endangered plant.

- 4.72 The Australian Food Sovereignty Alliance urged government support for the Statement from the National Indigenous Bushfood Symposium (National Indigenous Bushfood Statement). The symposium aimed to increase Aboriginal and Torres Strait Islander participation in the traditional foods industry.³⁰³
- 4.73 The National Indigenous Bushfood Statement stressed that the bush foods industry is built on 'Indigenous ancestral knowledge'. It sets out key actions to support the Aboriginal-led and Torres Strait Islander-led traditional foods industry.³⁰⁴
- 4.74 The National Indigenous Bushfood Statement also asserted the sovereignty of Aboriginal and Torres Strait Islander peoples over their traditional knowledge systems.³⁰⁵ Many inquiry participants agreed that Aboriginal and Torres Strait Islander peoples should have ownership over their traditional knowledge of

³⁰⁰ Mr Yuseph Deen, Chief Executive Officer, New South Wales Aboriginal Land Council, [Transcript of evidence](#), 25 March 2022, p 12.

³⁰¹ [Submission 24](#), City of Sydney Council, p 38.

³⁰² [Submission 24](#), City of Sydney Council, p 38; IndigiGrow, [What We're All About](#), viewed 16 September 2022.

³⁰³ [Submission 59](#), Australian Food Sovereignty Alliance, p 23; Indigenous Land and Sea Corporation, [Bushfood Symposium](#), viewed 12 September 2022.

³⁰⁴ First Nations Bushfood & Botanical Alliance Australia, [National Indigenous Bushfood Statement](#), viewed 12 September 2022.

³⁰⁵ First Nations Bushfood & Botanical Alliance Australia, [National Indigenous Bushfood Statement](#), viewed 12 September 2022.

Country that is protected in law.³⁰⁶

- 4.75 Northern Beaches Council told us that traditional foods were highly restricted and regulated in traditional cultural practices.³⁰⁷ The NSWALC stressed that supporting the growth of Aboriginal-led businesses requires legislative and policy reforms that 'recognise, respect and protect legal rights to Country and knowledge'.³⁰⁸
- 4.76 The NSW Government said that it is working with Aboriginal Land Councils and communities to run programs to promote Aboriginal food production. These programs are aimed to support existing and new Aboriginal businesses, including traditional food businesses. The Government said that the programs 'reinforce' the intellectual property rights of Aboriginal peoples to traditional foods and medicine. The Government is also developing an accredited 'Australian Native and Bush Food Units/Skillset'.³⁰⁹
- 4.77 We are encouraged by the Government's initiatives to increase participation of Aboriginal-led businesses, particularly in the traditional foods industry. However, we consider the underrepresentation of Aboriginal and Torres Strait Islander peoples in the traditional foods market is a serious problem.
- 4.78 A number of stakeholders stressed that any reform must be developed in consultation and collaboration with Aboriginal and Torres Strait Islander peoples.³¹⁰ The NSWALC said that community ownership provides accountability and autonomy while also ensuring community support and commitment.³¹¹
- 4.79 Ms Flaherty, from the City of Sydney, stressed that the Government should work with ACCOs as 'equal partners'.³¹² Engagement with ACCOs when beginning projects could help develop culturally supportive methods to improve retention and skills development of Aboriginal employees.³¹³
- 4.80 The Australian Food Sovereignty Alliance recommended that the NSW Government develop an aligned strategy, using the Victorian Traditional Owner Native Food and Botanical Strategy (the VTO Strategy) from the Federation of Victorian Traditional Owners Corporations as a model.³¹⁴
- 4.81 The VTO Strategy aims to strengthen and restore 'Traditional Owner leadership'

³⁰⁶ [Submission 51](#), Sustain: The Australian Food Network, pp 21-22; [Submission 59](#), Australian Food Sovereignty Alliance, pp 21-23; [Submission 13](#), Dr Amy Carrad, p 2; [Submission 65](#), Food Fairness Illawarra, p 2; [Submission 24](#), City of Sydney Council, p 37.

³⁰⁷ [Submission 30](#), Northern Beaches Council, p 7.

³⁰⁸ [Submission 21](#), New South Wales Aboriginal Land Council, p 4; Mr Yuseph Deen, Chief Executive Officer, New South Wales Aboriginal Land Council, [Transcript of evidence](#), 25 March 2022, p 12.

³⁰⁹ [Submission 17](#), NSW Government, pp 7, 20-21.

³¹⁰ [Submission 13](#), Dr Amy Carrad, p 2; [Submission 65](#), Food Fairness Illawarra, p 2; [Submission 68](#), Dietitians Australia, p 5; [Submission 24](#), City of Sydney Council, pp 37, 39; [Submission 21](#), New South Wales Aboriginal Land Council, p 4.

³¹¹ [Submission 21](#), New South Wales Aboriginal Land Council, p 4.

³¹² Ms Lauren Flaherty, Strategy Advisor – Social Strategy and Communications, City of Sydney Council, [Transcript of evidence](#), 21 March 2022, p 39.

³¹³ [Submission 21](#), New South Wales Aboriginal Land Council, p 5.

³¹⁴ [Submission 59](#), Australian Food Sovereignty Alliance, p 23.

of Victoria's traditional foods and botanicals industry. It sets out principles and priorities and a policy and practice framework to achieve these goals. The strategy was developed with support from the Victorian Government.³¹⁵

Supporting Aboriginal peoples to maintain community traditional food gardens

Summary

Community traditional foods gardens allow Aboriginal peoples to care for Country. Rural and remote communities need support to develop and maintain these gardens.

Recommendation 31

That the NSW Government consults with Aboriginal peoples and Aboriginal Community Controlled Organisations to develop initiatives that fund and support community traditional foods gardens in rural and remote communities.

- 4.82 Community gardens in rural and remote communities can be a key way for Aboriginal and Torres Strait Islander peoples to access traditional foods. We recommend that the NSW Government consults with Aboriginal peoples and Aboriginal Community Controlled Organisations to fund and support these gardens.
- 4.83 We heard that Aboriginal and Torres Strait Islander peoples in small rural and remote communities supplement their diets with traditional foods and medicines. Engaging in traditional food gathering and hunting practices can also improve their wellbeing.³¹⁶
- 4.84 We discussed the important role that community gardens play in facilitating access to fresh produce earlier in this chapter. This is particularly the case for Aboriginal communities who live in rural and remote areas.
- 4.85 The AHMRC told us that community gardens can increase fresh produce intake in Aboriginal communities by removing barriers due to transport costs. These gardens have been found to improve the nutrition of Aboriginal communities, and can be tailored to meet the dietary needs of different Aboriginal communities.³¹⁷
- 4.86 The AHMRC credited the success of these gardens in part to their community ownership and leadership, which promotes self-determination and food sovereignty.³¹⁸ The NSW Government also acknowledged that sustainably achieving food security for Aboriginal and Torres Strait Islander households 'will

³¹⁵ Federation of Victorian Traditional Owner Corporations, [Victorian Traditional Owner Native Food and Botanicals Strategy](#), p 4, viewed 12 September 2022; Ms Mary-Anne Thomas MP, Minister for Regional Development and Ministry for Agriculture, [Traditional owners strengthening native food industry](#), 15 April 2021, viewed 22 September 2022.

³¹⁶ [Submission 51](#), Sustain: The Australian Food Network, pp 21-22.

³¹⁷ [Answers to questions on notice](#), Aboriginal Health and Medical Research Council of NSW, p 2; [Submission 75](#), Aboriginal Health and Medical Research Council of NSW, p 4.

³¹⁸ [Submission 75](#), Aboriginal Health and Medical Research Council of NSW, p 4.

require long term, place-based, locally driven initiatives'.³¹⁹

- 4.87 We heard that many local councils across NSW have developed traditional foods gardens. Inquiry participants drew our attention to a number of community gardens, which are improving access to locally grown foods.³²⁰
- 4.88 These gardens can embed cultural elements and teach about Aboriginal and Torres Strait Islander peoples' traditional knowledge and continuing connection to Country, sometimes in partnership with local Aboriginal and Torres Strait Islander peoples.³²¹ The case studies below demonstrate the benefits of community traditional foods gardens.

Case study 9: Koori Community Kitchen and Garden and the Good Tucker All Round program³²²

Airds in western Sydney is a disadvantaged suburb. It has a large Aboriginal community, with many in the community facing food insecurity.

The Koori Community Kitchen project was established in 2009 by the Tharawal Aboriginal Corporation. It provides weekly sessions with a community dietician and Health Promotions Officer. The kitchen is a relaxed, welcoming environment for connecting with the community while learning and sharing their knowledge and skills in healthy food preparation, nutrition, food budgeting and healthier choices on a limited income. The program invites participants to try new and different foods. Taking home the food that is prepared allows other family members to try new foods.

The community kitchen runs alongside the Koori Community Garden. It encourages people to meet new people, socialise and learn gardening and growing skills. The vegetables grown in the garden are used in the community kitchen.

In 2011, the Tharawal Aboriginal Corporation also launched the Good Tucker All Round program to improve the nutrition of Aboriginal families. It delivers boxes of fresh fruit and vegetables at low cost to local Aboriginal and Torres Strait Islander peoples. Participating in the program requires an annual Aboriginal Health Check.

Case study 10: Kareela Ngura project³²³

Kareela Ngura (Country of Trees and Water) is a women's traditional food project in Terara on the South Coast of NSW. It provides a culturally safe space for Aboriginal women to reclaim their land, Care for Country and continue traditional knowledge of growing and tending to plants on Country. It enables Aboriginal women to learn and impart their knowledge of traditional food systems in the community, along

³¹⁹ [Submission 17](#), NSW Government, p 9.

³²⁰ [Submission 31](#), Community Gardens Australia, pp 3-4; Ms Simone Sherriff, SEARCH Program, Research Assets Division, The Sax Institute, [Transcript of evidence](#), 9 May 2022, pp 12-13.

³²¹ [Submission 15](#), Dr Belinda Reeve, p 5; [Submission 51](#), Sustain: The Australian Food Network, p 21; [Answers to questions on notice](#), Aboriginal Health and Medical Research Council of NSW, p 2.

³²² Ms Simone Sherriff, SEARCH Program, Research Assets Division, The Sax Institute, [Transcript of evidence](#), 9 May 2022, pp 12-13; [Answers to questions on notice](#), Aboriginal Health and Medical Research Council of NSW, p 2; Tharawal Aboriginal Corporation, [Tharawal Koori Community Kitchen and Garden](#), viewed 16 September 2022; Tharawal Aboriginal Corporation, [Tharawal Healthy Lifestyles – Good Tucker All Round](#), viewed 16 September 2022.

³²³ [Submission 31](#), Community Gardens Australia, p 12; Waminda, [Kareela Ngura](#), viewed 16 September 2022.

with the important role of women in food, medicine, healing, sharing stories, and ceremonies creating and strengthening songlines.

It forms part of the South Coast Women's Health and Welfare Aboriginal Corporation's culturally safe space giving Aboriginal women and their families an opportunity to belong and receive tailored care and support for health and wellbeing.

Case study 11: Walgett Community Garden³²⁴

The remote town of Walgett in northern NSW has a strong Aboriginal community. The Walgett Aboriginal Medical Service hosts a community garden as part of the Healthy for Life Program. Established in 2020 as a water-efficient micro-farm, it is a drought-proof garden.

The garden is cared for and maintained by a local Aboriginal woman as a full-time gardener. Fresh fruit, vegetables and herbs are produced in the garden, mostly grown from seedlings and transferred into garden plots. They are then provided to members of the community who are elderly and/or have chronic disease.

- 4.89 Despite past success, the AHMRC highlighted that local food programs established by ACCOs are limited by short funding cycles and this is a consistent barrier for these programs.³²⁵ Ms Simone Sherriff, Research Officer for the SEARCH Program at the Sax Institute, told us they had also received feedback that while people supported initiatives to grow fresh produce, issues remain around access to suitable space and 'accountability, who is going to look after it, and start it up'.³²⁶
- 4.90 The AHMRC called for government investment in long term community-led food growing initiatives.³²⁷ We agree that dedicated government support is needed in this space.

³²⁴ [Submission 27](#), Dharriwaa Elders Group and Walgett Aboriginal Medical Service, p 9; [Submission 31](#), Community Gardens Australia, p 3; Walgett Aboriginal Medical Service Limited, [Community Garden](#), viewed 16 September 2022.

³²⁵ [Submission 75](#), Aboriginal Health and Medical Research Council of NSW, p 4; [Answers to questions on notice](#), Aboriginal Health and Medical Research Council of NSW, p 2.

³²⁶ Ms Simone Sherriff, SEARCH Program, Research Assets Division, The Sax Institute, [Transcript of evidence](#), 9 May 2022, p 11.

³²⁷ [Submission 75](#), Aboriginal Health and Medical Research Council of NSW, p 4; [Answers to questions on notice](#), Aboriginal Health and Medical Research Council of NSW, p 2.

Chapter Five – Commercial food production

A changing climate and environment will disrupt food production and supply

Summary

A changing climate and environment will significantly disrupt our food production and supply systems. This can contribute to greater food insecurity.

Finding 6

Changes to the environment can significantly disrupt supply chains and food production, which contributes to food insecurity.

- 5.1 The wide-ranging impacts of a changing climate and environment were recognised by inquiry participants. The NSW Government told us that climate change will have 'pervasive and long-term implications for NSW with significant impacts on social, economic, ecological and cultural values, such as our food production and supply systems'.³²⁸
- 5.2 We were referred to a number of academic studies modelling the impacts of climate change on our ecosystems, food production and food security.³²⁹
- 5.3 Many submissions stressed that climate change will negatively impact our food production and supply systems and therefore food security. The Macquarie University Planetary Health and Equity Research Network warned that climate change will impact 'all aspects of food security, including food production, food distribution networks, access to food and human health'.³³⁰
- 5.4 We heard that our food systems are vulnerable to disruptions and damage caused by extreme weather events. Climate change is predicted to increase the frequency and severity of extreme weather patterns, including droughts, floods, cyclones and bushfires. The City of Sydney noted the associated increase in biosecurity risks as climate change may facilitate the spread of diseases.³³¹
- 5.5 The economic costs of these disruptions are significant. Sustain highlighted a Climate Council report, which estimated that extreme weather events had cost the Australian economy \$35 billion over the past decade.³³²

³²⁸ [Submission 17](#), NSW Government, p 17.

³²⁹ [Submission 76](#), Animal Liberation, pp 11-13.

³³⁰ [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 5; [Submission 68](#), Dietitians Australia, p 4; [Submission 24](#), City of Sydney Council, p 31; [Submission 57](#), Murray Irrigation Limited, p 9; [Submission 17](#), NSW Government, p 17; [Submission 73](#), NSW Farmers, p 12; [Submission 76](#), Animal Liberation, pp 11-13.

³³¹ [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 5; [Submission 24](#), City of Sydney Council, p 31; [Submission 73](#), NSW Farmers, p 12; [Submission 76](#), Animal Liberation, p 11.

³³² [Submission 51](#), Sustain: The Australian Food Network, p 6.

- 5.6 We heard that climate change is also predicted to increase variability in our temperatures and rainfall. This could reduce the quality and seasonal yield of our food crops, decreasing agricultural productivity.³³³
- 5.7 Animal Liberation highlighted a study estimating a reduction in wheat production of four to five million tonnes with every degree rise in global temperatures.³³⁴ Rising temperatures also have negative implications for human health and food prices, due to increased risk of food spoilage and contamination.³³⁵
- 5.8 Farmers are at the coalface of environmental change. They are already having to manage the impacts of climate change.³³⁶ Dr Kilham told us that the Australian Department of Agriculture, Water and Environment estimated climate change has reduced average annual broadacre farm profits by 22 per cent since 2000.³³⁷

Water resources are vulnerable to a changing environment

Summary

Being able to access enough safe water is critical to food production systems and food security. Water resources are vulnerable to the impacts of a changing environment and must be effectively managed.

Finding 7

Access to enough safe water is critical to food production and food security. Water resources are vulnerable to changes in the environment and must be effectively managed.

- 5.9 Water is a scarce and valuable resource, particularly in Australia as it is the driest continent.³³⁸ Water access and availability is inseparable from food security.
- 5.10 Access to enough safe water is critically important to the health of individuals and communities. The George Institute for Global Health highlighted the important link between water access and health, particularly for Aboriginal and Torres Strait Islander communities.³³⁹
- 5.11 DEG and WAMS have long recognised the links between good nutrition, access to safe drinking water and the high incidence of chronic disease in their Aboriginal community.³⁴⁰
- 5.12 The NSW Government told us that the NSW Water Strategy 'recognises that

³³³ [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 5; [Submission 73](#), NSW Farmers, p 12; [Submission 76](#), Animal Liberation, pp 12-13; [Submission 24](#), City of Sydney Council, p 31.

³³⁴ [Submission 76](#), Animal Liberation, p 13.

³³⁵ [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 5.

³³⁶ [Submission 73](#), NSW Farmers, p 12; [Submission 18](#), Dr Sarina Kilham, p 2.

³³⁷ [Submission 18](#), Dr Sarina Kilham, p 2.

³³⁸ [Submission 56](#), Foodswell Limited, p 5; [Submission 77](#), Nature Conservation Council of NSW, p 1; [Submission 76](#), Animal Liberation, pp 11-12.

³³⁹ [Submission 25](#), The George Institute for Global Health, p 5.

³⁴⁰ [Submission 27](#), Dharriwaa Elders Group and Walgett Aboriginal Medical Service, p 2.

water is essential for the health and wellbeing of all NSW citizens, the preservation of the state's natural environment and the prosperity of our economy'.³⁴¹

- 5.13 Climatic changes put greater pressure on our scarce water resources. We received evidence of climate modelling indicating water bodies and flows will be further degraded by the impacts of climate change.³⁴² We heard that these impacts mean less fresh water will be available. This will increase pressure from competing demands for water access.³⁴³
- 5.14 DEG and WAMS described the ecological and social consequences of the rivers at Walgett drying up in recent years. This included biodiversity loss in local river species and inability to grow plant foods. We also heard that the rivers' food-generating capacity had not recovered.³⁴⁴
- 5.15 Stakeholders stressed the importance of ongoing sustainable management of our water resources.³⁴⁵ We are pleased to hear the NSW Government is taking action through the NSW Water Strategy and is reviewing water allocation and sharing in response to new climate data. They are also improving measures for drought planning, preparation and resilience,³⁴⁶ and to address flooding. We encourage continued investment and monitoring of water resources and ongoing engagement with stakeholders.

Supporting sustainable practices in the food production system

Summary

Existing practices in our food production and supply systems can contribute to environmental damage and greenhouse gas emissions. Food producers, processors and suppliers should be supported to adopt more sustainable practices.

Recommendation 32

That the Department of Planning and Environment reviews planning and regulatory frameworks to promote sustainable practices in the food production and supply chains.

- 5.16 The way we grow and produce our food significantly impacts the environment. We heard that planning laws and regulations could hinder commercial food producers and suppliers transitioning to more sustainable practices. We recommend that the Department of Planning and Environment reviews existing

³⁴¹ [Submission 17](#), NSW Government, p 16.

³⁴² [Submission 77](#), Nature Conservation Council of NSW, pp 1, 4; [Submission 52](#), ARUP, p 8; [Submission 57](#), Murray Irrigation Limited, p 2; [Submission 17](#), NSW Government, p 19.

³⁴³ [Submission 77](#), Nature Conservation Council of NSW, p 4; [Submission 76](#), Animal Liberation, pp 11-12; [Submission 17](#), NSW Government, p 19; [Submission 57](#), Murray Irrigation Limited, p 7.

³⁴⁴ [Submission 27](#), Dharriwaa Elders Group and Walgett Aboriginal Medical Service, p 3.

³⁴⁵ [Submission 77](#), Nature Conservation Council of NSW, p 1; [Submission 27](#), Dharriwaa Elders Group and Walgett Aboriginal Medical Service, p 3.

³⁴⁶ [Submission 17](#), NSW Government, p 19.

planning and regulatory frameworks to identify and remove these barriers.

- 5.17 Many stakeholders raised concerns that existing practices in commercial food production industries, particularly agriculture, are contributing to environmental damage and climate change.³⁴⁷
- 5.18 While we received various estimates on how much of our greenhouse gas emissions come from food production,³⁴⁸ stakeholders agreed that our food production and agricultural systems are major drivers of climate change.³⁴⁹ Animal agriculture was highlighted by inquiry participants as a substantial contributor to greenhouse gas emissions, particularly methane.³⁵⁰
- 5.19 Land clearing and land use changes in the agricultural industry were also identified as drivers of biodiversity loss and carbon emissions in Australia.³⁵¹ We accept that existing practices in commercial food production are contributing to climate change, particularly in agriculture.
- 5.20 We heard various suggestions to make farming practices more environmentally sustainable. Some stakeholders advocated for biodiverse farming and a move away from monoculture practices.³⁵² The Nature Conservation Council called for crop cultivation planning to be informed by available environmental data.³⁵³
- 5.21 Other stakeholders supported regenerative agriculture for climate change adaptation and increased carbon storage in soils and vegetation.³⁵⁴ We heard calls for a transition to regenerative soil fertility and renewable energy, and measures to restore soil health and maintain native vegetation.³⁵⁵
- 5.22 We heard that the food production system is already moving towards more sustainable practices. The Australian Food Sovereignty Alliance said that there has been a shift towards new farming methods that increase productive capacity

³⁴⁷ [Submission 51](#), Sustain: The Australian Food Network, p 3; [Submission 30](#), Northern Beaches Council, p 5; [Submission 68](#), Dietitians Australia, p 4; [Submission 76](#), Animal Liberation, p 36; [Submission 24](#), City of Sydney Council, p 31; [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 5.

³⁴⁸ [Submission 51](#), Sustain: The Australian Food Network, p 3; [Submission 68](#), Dietitians Australia, p 4; [Submission 76](#), Animal Liberation, p 37; Ms Kate Wilson, Executive Director, Climate Change and Sustainability, Office of Energy and Climate Change, NSW Treasury cluster, [Transcript of evidence](#), 9 May 2022, p 27.

³⁴⁹ [Submission 51](#), Sustain: The Australian Food Network, p 3; [Submission 30](#), Northern Beaches Council, p 5; [Submission 68](#), Dietitians Australia, p 4; [Submission 76](#), Animal Liberation, pp 1, 36-37; [Submission 24](#), City of Sydney Council, p 31; [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 5.

³⁵⁰ [Submission 76](#), Animal Liberation, pp 37-38; [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 5; [Submission 20](#), Vegan Australia, pp 2-3; Mr Yianni Mentis, Executive Manager, Environment & Climate Change, Northern Beaches Council, [Transcript of evidence](#), 9 May 2022, p 16; Ms Kate Wilson, Executive Director, Climate Change and Sustainability, Office of Energy and Climate Change, NSW Treasury cluster, [Transcript of evidence](#), 9 May 2022, p 27.

³⁵¹ [Submission 51](#), Sustain: The Australian Food Network, p 3; [Submission 30](#), Northern Beaches Council, p 5; [Submission 76](#), Animal Liberation, pp 36-37.

³⁵² [Submission 59](#), Australian Food Sovereignty Alliance, p 31; [Submission 61](#), Slow Food Australia, p 1.

³⁵³ [Answer to question on notice](#), Nature Conservation Council, p 2.

³⁵⁴ [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 5; [Submission 56](#), Foodswell Limited, p 7.

³⁵⁵ [Submission 56](#), Foodswell Limited, pp 5, 9; [Submission 59](#), Australian Food Sovereignty Alliance, p 15.

while reducing environmental impacts.³⁵⁶

- 5.23 Ms Kate Wilson, Executive Director of Climate Change and Sustainability in NSW Treasury's Office of Energy and Climate Change, agreed that the food production sector 'offers the greatest opportunities for removing carbon from the atmosphere', though it must still address its significant greenhouse gas emissions.³⁵⁷
- 5.24 Mr Scott Hansen, Director General of the Department of Primary Industries (DPI), stressed that work is underway to make the livestock industry carbon neutral, with emissions dropping by 57 per cent since 2005. He noted the industry's interest in sequestering carbon in production systems and broad support for carbon neutrality.³⁵⁸
- 5.25 The NSW Government outlined projects and programs that aim to assist primary industries to manage climate change impacts and reduce their carbon emissions. The Government also highlighted engagement with local and state government asset managers to develop NSW Regional Vulnerability Assessments. This process, along with ongoing regional engagement, informs the development of Regional Plans for NSW. The plans will continue to inform local strategic planning statements of local government, particularly for land use planning and agriculture.³⁵⁹
- 5.26 We are encouraged by the Government's significant investment to address the impacts of climate change and variability on our food production systems. However, we heard from inquiry participants that planning laws and regulations can discourage commercial food producers to adopt more sustainable practices.
- 5.27 The Australian Food Sovereignty Alliance recounted anecdotal evidence from their research of obstacles and regulatory burdens faced by farmers.³⁶⁰ Mr Toby, Corporate Affairs Manager of Costa Group, told us the planning framework needs to 'keep pace' by recognising more efficient forms of agriculture as they develop, particularly for intensive horticulture. Current planning laws recognise more traditional forms of agriculture that occur within soil.³⁶¹

Supporting farmers in the transition to renewable energy

Summary

Renewable energy infrastructure will increasingly compete for land in our regions. The benefits and opportunities of the renewable energy transition could be better communicated to primary producers.

³⁵⁶ [Submission 59](#), Australian Food Sovereignty Alliance, p 45.

³⁵⁷ Ms Kate Wilson, Executive Director, Climate Change and Sustainability, Office of Energy and Climate Change, NSW Treasury cluster, [Transcript of evidence](#), 9 May 2022, p 31.

³⁵⁸ Mr Scott Hansen, Director General, Department of Primary Industries, [Transcript of evidence](#), 9 May 2022, pp 31-32.

³⁵⁹ [Submission 17](#), NSW Government, pp 17-19.

³⁶⁰ [Submission 59](#), Australian Food Sovereignty Alliance, p 30.

³⁶¹ Mr Michael Toby, Corporate Affairs Manager, Costa Group, [Transcript of evidence](#), 9 May 2022, p 1.

Recommendation 33

That the Department of Planning and Environment creates land use offices in food production regions to help businesses adapt to and benefit from the renewable energy transition.

- 5.28 We consider that regionally-located land use offices would be effective for meaningful engagement with farmers about our renewable energy transformation. We support NSW Farmers' recommendation for the government to create land use offices to support regional food producers in the renewal energy transition.
- 5.29 The transition of our economy to renewable energy is accelerating. The NSW Net Zero Plan Stage 1: 2020-2030 (Net Zero Plan) is the foundation for the Government's climate change action over the next decade. The plan and its policies will support initiatives targeting a diverse range of industries. Through the Net Zero Plan, the Government expects to attract up to \$37 billion in private investment. A significant part of this investment is expected to be spent in the regions, including by developing Renewable Energy Zones (REZs).³⁶²
- 5.30 NSW Treasury's Office of Energy and Climate Change works closely with the DPI on climate mitigation. Ms Wilson highlighted the Primary Industries Productivity and Abatement Program. This program involves both changing farming systems, and new products and opportunities to reduce greenhouse gas emissions.³⁶³
- 5.31 We commend the NSW Government's ongoing commitment to achieving the state's goal of net zero greenhouse gas emissions by 2050.³⁶⁴ However, we heard concerns about the pace of this renewable energy transition in our regions.
- 5.32 NSW Farmers identified renewable energy development as a growing competing interest for land use in regional NSW. They expressed concern that a shift to renewable energy generation could contribute to the loss or fragmentation of agricultural land.³⁶⁵
- 5.33 Ms Johnson, Head of Policy and Advocacy at NSW Farmers, stressed the need to understand the impact of REZs on agricultural businesses. She also raised questions about opportunities for local food manufacturing around REZs.³⁶⁶
- 5.34 Despite these concerns, NSW Farmers acknowledged that primary producers could benefit from renewable energy generation and storage technologies. They stressed the importance of ongoing government support for research and development on climate change adaptations.³⁶⁷
- 5.35 While we acknowledge the concerns raised about REZs, the renewable energy

³⁶² [Submission 17](#), NSW Government, p 17.

³⁶³ Ms Kate Wilson, Executive Director, Climate Change and Sustainability, Office of Energy and Climate Change, NSW Treasury cluster, [Transcript of evidence](#), 9 May 2022, p 27.

³⁶⁴ [Submission 17](#), NSW Government, p 17.

³⁶⁵ [Submission 73](#), NSW Farmers, pp 6, 11.

³⁶⁶ Ms Annabel Johnson, Head of Policy and Advocacy, NSW Farmers, [Transcript of evidence](#), 21 March 2022, p 9.

³⁶⁷ [Submission 73](#), NSW Farmers, pp 12-13.

transition is a critical goal for the state, and we consider that development of REZs is an important part of the Net Zero Plan. However, we believe the benefits and importance of REZs and the overarching climate change action plan need to be better communicated to primary industries in our regions.

- 5.36 Ms Bradley, Chair of the Innovation and Technology Working Group and the Sheepmeat Committee at NSW Farmers, proposed installing land use offices 'to aid farmers in the renewable energy transition'. NSW Farmers argued rural land use officers can enhance communication and stakeholder engagement around land use issue management.³⁶⁸

Planning frameworks that allow farmers to diversify their businesses

Summary

Diversification of traditional business models can assist the ongoing viability of farms, particularly smaller enterprises. Agritourism is an important way of diversifying farmers' income streams. Planning frameworks should support farmers carrying out agritourism.

Finding 8

Agritourism is a way for farmers to innovate and diversify their businesses. It is important that planning frameworks support farmers who wish to use their land for agritourism activities.

- 5.37 Inquiry participants recognised the importance of diversification for farming businesses' ongoing viability and resilience.³⁶⁹ Ms Johnson from NSW Farmers said that the association supported diversification measures for agricultural businesses, including agritourism. She told us that 'there is a real opportunity to look at what agritourism offers'.³⁷⁰
- 5.38 Agritourism activities can include farm experiences, cellar doors, roadside stalls, fruit picking and farm stay accommodation.
- 5.39 We heard broad support for agritourism as an important way for farmers to diversify their businesses while maintaining the food growing value of agricultural lands.³⁷¹ Professor Charlton described agritourism as a 'win-win situation' by bringing tourism and visitors into the regions and providing farmers with additional income. Dr Rose also noted that agritourism is important for diversification for farmers, particularly those transitioning away from past

³⁶⁸ Ms Jenny Bradley, Chair, Innovation and Technology Working Group and Chair, Sheepmeat Committee, NSW Farmers, [Transcript of evidence](#), 21 March 2022, p 8; [Submission 73](#), NSW Farmers, p 12.

³⁶⁹ Ms Annabel Johnson, Head of Policy and Advocacy, NSW Farmers, and Dr Cathy Sherry, Associate Professor and Mr Christopher McElwain, UNSW Law and Justice, [Transcript of evidence](#), 21 March 2022, pp 10, 18-19; [Submission 4](#), Ballina Shire Council, pp 2, 3; [Submission 9](#), Local Government NSW, p 13.

³⁷⁰ Ms Annabel Johnson, Head of Policy and Advocacy, NSW Farmers, [Transcript of evidence](#), 21 March 2022, p 10.

³⁷¹ Ms Annabel Johnson, Head of Policy and Advocacy, NSW Farmers, and Professor Karen Charlton, Member, Food & Environment Interest Group, Dietitians Australia, [Transcript of evidence](#), 21 March 2022, pp 10, 31; Dr Nick Rose, Executive Director, Sustain: The Australian Food Network, [Transcript of evidence](#), 25 March 2022, p 18; [Submission 4](#), Ballina Shire Council, p 3.

sources of agriculture that are no longer financially viable.³⁷²

- 5.40 We also received evidence highlighting the value of food production sectors for local tourism. Mr Gus Dannoun from Sydney Fish Market highlighted the role of Sydney Fish Market as 'a drawcard for more tourism'. Northern Beaches Council also submitted that the Council's tourism strategy identified food and beverage sectors as an important part of the visitor economy for the area.³⁷³
- 5.41 A number of witnesses noted that planning reforms could facilitate agritourism.³⁷⁴ Ms Gabrielle Cusack from Murray Irrigation emphasised that farming communities are already across the opportunities presented by agritourism. She told us that they would welcome opportunities to grow the sector, including planning initiatives to facilitate agritourism.³⁷⁵
- 5.42 LGNSW called for greater flexibility for local government planning decisions in state planning frameworks. They told us that planning 'must cater for the continued diversification and evolution of agricultural uses'.³⁷⁶ Ms Johnson also noted that there is an opportunity to change the state's planning system to facilitate agritourism.³⁷⁷
- 5.43 We note that the DPE recently announced planning reforms to facilitate agritourism activities to commence from December 2022, following exhibition of the proposed changes. These reforms include clearer definitions and new terms in planning policies relevant to agritourism. They would also allow agritourism activities without the need for approval, as exempt development or through a fast-tracked approval process.³⁷⁸
- 5.44 A 2021 report by the NSW Agriculture Commissioner noted that these reforms have the potential to address issues raised during consultation, support the growth of regional economies and assist the ongoing viability of smaller farming businesses. However, the report cautioned that agritourism activities could introduce further land use conflicts for agricultural lands.³⁷⁹
- 5.45 We acknowledge the concerns raised by the Agriculture Commissioner. However, we consider that agritourism is a way for farmers to diversify their businesses and access additional income sources. We are encouraged by the planning reforms to

³⁷² Professor Karen Charlton, Member, Food & Environment Interest Group, Dietitians Australia, [Transcript of evidence](#), 21 March 2022, p 31; Dr Nick Rose, Executive Director, Sustain: The Australian Food Network, [Transcript of evidence](#), 25 March 2022, p 18.

³⁷³ Mr Gus Dannoun, Executive Manager, Seafood Trading, Sydney Fish Market, [Transcript of evidence](#), 25 March 2022, p 6; [Submission 30](#), Northern Beaches Council, p 4.

³⁷⁴ Mr Yuseph Deen, Chief Executive Officer, and Dr Nick Rose, Executive Director, Sustain: The Australian Food Network, [Transcript of evidence](#), 25 March 2022, pp 13-14, 18.

³⁷⁵ Ms Gabrielle Cusack, Executive General Manager – Shareholder Relations, Murray Irrigation, [Transcript of evidence](#), 25 March 2022, p 33.

³⁷⁶ [Submission 9](#), Local Government NSW, pp 12-13.

³⁷⁷ Ms Annabel Johnson, Head of Policy and Advocacy, NSW Farmers, [Transcript of evidence](#), 21 March 2022, p 10.

³⁷⁸ NSW Planning Portal, [Agritourism](#), viewed 5 October 2022; NSW Department of Planning, Industry and Environment, [Agritourism and small-scale agriculture development](#), March 2021, p 3, viewed 5 October 2022; NSW Department of Planning and Environment, [Agritourism](#), viewed 7 October 2022.

³⁷⁹ NSW Agriculture Commissioner, [Improving the Prospects for Agriculture and Regional Australia in the NSW Planning System - a report by the NSW Agriculture Commissioner](#), July 2021, p 22, viewed 5 October 2022.

support agritourism activities.

Strengthening the plant-based protein manufacturing industry

Summary

Consumer trends indicate decreasing meat consumption and increasing consumption of plant-based alternative proteins. Strengthening the plant-based protein manufacturing industry could deliver economic benefits given rising consumer demand.

Recommendation 34

That the NSW Government continues to investigate opportunities to promote the growth of the plant-based protein manufacturing industry in NSW.

- 5.46 There is potential to establish a strong plant-based protein industry in NSW. We recommend that the NSW Government continues investigating opportunities to promote the growth of the plant-based protein manufacturing industry in NSW.
- 5.47 Food Frontier told us that 'alternative proteins' are a growing sector globally. This includes plant-based alternatives to meat and dairy products and 'cellular agriculture' products such as cultivated meat and dairy products created through precision fermentation.³⁸⁰ NSW Farmers agreed that plant-based food products are expected to grow in popularity over the coming decades.³⁸¹
- 5.48 Inquiry participants told us that research indicates a significant number of Australians are actively reducing or eliminating meat consumption from their diets.³⁸² Food Frontier told us that the growth in plant-based 'meats' is responding to this increasing consumer demand. Their economic modelling found that sales of plant-based meat products in Australia grew 46 per cent over the 2020 Financial Year.³⁸³
- 5.49 We heard a number of reasons why Australian consumers are broadly reducing their meat consumption, including wanting to reduce their environmental footprint and having a healthier lifestyle.³⁸⁴ Several submissions highlighted a connection between meat production and consumption and poor environmental and health consequences.³⁸⁵
- 5.50 Australians may be consuming more plant-based proteins to meet dietary nutrition recommendations. Food Frontier highlighted health advice drawing a link between the development of non-infectious diseases and a diet high in meat

³⁸⁰ [Submission 29](#), Food Frontier, p 1.

³⁸¹ [Submission 73](#), NSW Farmers, p 17.

³⁸² [Submission 20](#), Vegan Australia, p 13; [Submission 29](#), Food Frontier, pp 1-2; [Submission 53](#), Society for Immortality Research Ltd, p 1.

³⁸³ [Submission 29](#), Food Frontier, pp 1-2.

³⁸⁴ [Submission 20](#), Vegan Australia, p 13.

³⁸⁵ [Submission 20](#), Vegan Australia, pp 8, 12; [Submission 24](#), City of Sydney Council, p 31; [Submission 76](#), Animal Liberation, pp 37-38, 42; [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, pp 5-6; [Submission 29](#), Food Frontier, pp 2-3; [Submission 72](#), Mrs Paula Gilbard, pp 3-5.

consumption.³⁸⁶ The Macquarie University Planetary Health and Equity Research Network highlighted a number of diets incorporating environmental concerns alongside dietary guidelines. These diets commonly recommended increasing plant-based foods and decreasing processed and animal-based foods.³⁸⁷

- 5.51 We heard calls for the Government to begin a phaseout of animal agriculture and encourage a transition to plant-based diets.³⁸⁸ This was also reflected by members of the public who provided written submissions to the inquiry.³⁸⁹
- 5.52 While we accept that reducing meat consumption can have health and environmental benefits, we also consider traditional animal agriculture remains an important part of NSW's food systems and economy.
- 5.53 We agree with Food Frontier that the plant-based protein industry can co-exist with traditional livestock industries and complements existing protein sectors.³⁹⁰ We support ongoing growth of the plant-based protein market in light of consumer trends and growing demand.
- 5.54 Inquiry participants called on the NSW Government to invest and support the growth of the plant-based protein sector.³⁹¹ We heard several governments around the world are developing policies and investing in their domestic alternative protein manufacturing industry.³⁹²
- 5.55 Stakeholders told us that there is an economic case for strengthening the plant-based protein industry in NSW.³⁹³ Despite the industry's immaturity, NSW accounted for 68 per cent of the overall economic contribution of the plant-based meat sector in 2020. Food Frontier told us that economic modelling projects that plant-based meat products could make nearly \$3 billion in sales and create 6000 full-time jobs in Australia by 2030.³⁹⁴
- 5.56 We were referred to plans to build plant protein manufacturing facilities in South Australia, partly funded by the federal and South Australian governments. Mr Greg McFarlane, Director of Vegan Australia, told us that this project is a good example of how governments can 'boost' the emerging plant-based protein industry.³⁹⁵

³⁸⁶ [Submission 29](#), Food Frontier, p 2.

³⁸⁷ [Submission 54](#), Macquarie University Planetary Health and Equity Research Network, p 6.

³⁸⁸ [Submission 20](#), Vegan Australia, pp 2, 12.

³⁸⁹ [Submission 32](#), Ms Carole Meade; [Submission 35](#), Mrs Kim McDonald; [Submission 37](#), Ms Neena Love; [Submission 38](#), Mr Raymond Kennedy; [Submission 41](#), Ms Jessica Saad; [Submission 42](#), Mr Mark Berriman; [Submission 44](#), Ms Jane Harman; [Submission 46](#), Ms Vanessa Cullen; [Submission 50](#), Dr Elizabeth Nelson; [Submission 74](#), Ms Jennifer Farmer.

³⁹⁰ [Submission 29](#), Food Frontier, p 7.

³⁹¹ [Submission 20](#), Vegan Australia, pp 1, 11; [Submission 76](#), Animal Liberation, p 53; [Submission 29](#), Food Frontier, pp 7, 8; [Submission 68](#), Dietitians Australia, p 6.

³⁹² [Submission 29](#), Food Frontier, pp 3-4, 5.

³⁹³ [Submission 76](#), Animal Liberation, p 53; [Submission 29](#), Food Frontier, pp 4-5.

³⁹⁴ [Submission 29](#), Food Frontier, pp 2, 5.

³⁹⁵ Mr Greg McFarlane, Director, Vegan Australia, [Transcript of evidence](#), 25 March 2022, p 28; The Hon Angus Taylor MP, [Transforming SA into a powerhouse in plant protein manufacturing](#), media release, 1 March 2022,

- 5.57 The Government told us it has supported the 'activation' of a plant-based protein industry in regional NSW and attracting investment to enable the industry.³⁹⁶
- 5.58 The Parkes Special Activation Precinct aims to offer investors, businesses and the community 'the Central West's newest and most advanced enterprise precinct, producing high value food and manufacturing products for global and national markets'. The precinct has been identified as suitable for the development of plant-based protein, being 'ideally positioned to capitalise on one of NSW's most productive agricultural areas'.³⁹⁷
- 5.59 We acknowledge the NSW Government's commitment to supporting the state's plant-based protein industry, and encourage it to continue promoting the growth of the sector.

A strategy to address workforce challenges in the food production sector

Summary

Food production, processing and supply sectors face long-term and complex workforce challenges. A long-term workforce strategy is needed to address these challenges.

Recommendation 35

That the NSW Government consults with experts and stakeholders from industry and regional communities to develop a long-term food workforce strategy. The strategy should promote and facilitate the uptake of skilled careers in agriculture and related food production and supply industries across NSW.

- 5.60 During the inquiry we heard about a number of long-term workforce challenges facing industries across our food production and supply chain. These challenges are complex and will require broad, whole-of-government responses. We recommend that the NSW Government develops a long-term workforce strategy to promote and facilitate the uptake of skilled careers in agriculture and related food production and supply industries.
- 5.61 A long-term trend highlighted by inquiry participants was the declining and ageing workforce across a number of food production and supply industries.³⁹⁸
- 5.62 Demographic figures indicate the average age of Australian farmers is close to 60 years.³⁹⁹ Sustain said that this is compounded by declining family farm successions in Australia, and a lack of new/first generation farmers. The

viewed 5 September 2022; Government of South Australia Department for Trade and Investment, [Plant protein transforming Australia's food industry](#), media release, 1 March 2022, viewed 5 September 2022.

³⁹⁶ [Submission 17](#), NSW Government, p 10.

³⁹⁷ Regional Growth Development Corporation NSW, [Parkes Special Activation Precinct Plan \(Stage 1\)](#), p 9, viewed 27 September 2022; Regional Growth Development Corporation NSW, [Plant-based protein in Parkes](#), p 1, viewed 27 September 2022.

³⁹⁸ [Submission 59](#), Australian Food Sovereignty Alliance, p 55; [Submission 55](#), Sydney Fish Market, p 2; Ms Berbel Franse, Coordinator, Food Fairness Illawarra, [Transcript of evidence](#), 9 May 2022, p 6.

³⁹⁹ [Submission 59](#), Australian Food Sovereignty Alliance, p 55; [Submission 51](#), Sustain: The Australian Food Network, p 4; [Submission 18](#), Dr Sarina Kilham, p 2.

Australian Food Sovereignty Alliance told us that these long-term trends indicate that there is an urgent need to develop a younger workforce for the food production and distribution industries to continue operating uninterrupted.⁴⁰⁰

- 5.63 Inquiry participants observed that access to capital and land is another serious workforce challenge. High land prices are a major barrier to entry for the next generation of farmers. High maintenance costs of farmland, the capital investment needed for infrastructure and equipment, and changes to loan schemes are additional financial barriers. These cost hurdles can be unattainable and discourage those who would be interested in entering the sector, despite available loan and assistance schemes.⁴⁰¹
- 5.64 Northern Beaches Council told us that high costs of living and low housing affordability for essential workers on the Northern Beaches is worsening existing worker shortage problems in food supply.⁴⁰² We heard that housing shortages particularly affect regional NSW. Rental and home prices are increasing faster in regional areas and low rental vacancy rates are impacting the availability and affordability of accommodation.⁴⁰³
- 5.65 Regional housing issues were intensified by the COVID-19 pandemic, which drove an influx of people to regional areas.⁴⁰⁴
- 5.66 A further contributing factor raised during the inquiry was the issue of working conditions. The Australian Food Sovereignty Alliance noted that fair working conditions on large farms and in processing facilities has been under scrutiny, with concerns about inadequate pay and working conditions for Pacific Islander people and backpackers.⁴⁰⁵
- 5.67 Stakeholders agreed that the future of work across food production and supply industries will require a multiskilled workforce. However, while many opportunities are available, regional employers struggle to attract professional and skilled workers to agriculture and related industries.⁴⁰⁶
- 5.68 Sydney Fish Market told us that other industries in food production and the supply chain also experience similar challenges.⁴⁰⁷ Murray Irrigation drew attention to broader factors influencing the ability to attract workers to agriculture industries, including the social isolation characteristic of farm work, and limited amenities and services in regional and remote towns due to their low population growth.⁴⁰⁸
- 5.69 Some industry stakeholders called for support to improve awareness of food

⁴⁰⁰ [Submission 51](#), Sustain: The Australian Food Network, p 4; [Submission 59](#), Australian Food Sovereignty Alliance, p 55.

⁴⁰¹ [Submission 59](#), Australian Food Sovereignty Alliance, p 55; [Submission 73](#), NSW Farmers, p 15.

⁴⁰² [Submission 30](#), Northern Beaches Council, p 6.

⁴⁰³ [Submission 19](#), Costa Group, p 4; [Submission 73](#), NSW Farmers, p 14.

⁴⁰⁴ [Submission 19](#), Costa Group, p 4.

⁴⁰⁵ [Submission 59](#), Australian Food Sovereignty Alliance, p 55

⁴⁰⁶ [Submission 73](#), NSW Farmers, pp 14-15; [Submission 57](#), Murray Irrigation Limited, p 12.

⁴⁰⁷ [Submission 55](#), Sydney Fish Market, p 5.

⁴⁰⁸ [Submission 57](#), Murray Irrigation Limited, p 12.

production and supply careers.⁴⁰⁹ NSW Farmers called on the NSW Government to develop a 'dedicated strategy' that promotes agriculture careers and commit funding to necessary skill development. They referred to the NSW Women in Trades Strategy as a model for this workforce strategy.⁴¹⁰

- 5.70 We note that there are a number of NSW Government initiatives aimed at addressing workforce shortages and long-term challenges of building the future skilled workforce. These include the 20 Year Economic Vision for Regional NSW: Refresh, a plan for long-term, sustainable economic growth in regional NSW, which includes attracting more skilled workers, and the AgSkilled 2.0 program to support food producers to train workers particularly in new technologies. Specialised education and training in agriculture and land management is also delivered at publicly funded institutions including TAFE NSW.⁴¹¹
- 5.71 We are pleased by the Government's commitment to addressing the long-term workforce challenges in our food production and supply industries. While we are encouraged by targeted initiatives to train workers for the future and drive regional development, we consider the long-term and complex interactions between these challenges requires a broader strategic response. We support calls for a dedicated government workforce strategy for our food industries, which is informed by research and community consultation.

Coordination to address worker shortages

Summary

Worker shortages are a persistent issue across the food production and supply industries, particularly in the horticulture sector. Better coordination and promotion of seasonal work opportunities could help manage workforce demands during critical harvest periods.

Recommendation 36

That the Department of Primary Industries sets up a Help Harvest NSW network to help employers coordinate and promote work opportunities mapped to supply and demand cycles in specific regional areas.

- 5.72 We recommend that the Department of Primary Industries sets up a Help Harvest NSW network to help employers coordinate and promote work opportunities that are mapped to supply and demand cycles in regional areas.
- 5.73 Being able to produce and supply enough food is critical to food security. A secure and reliable workforce is essential to achieving this. We heard that serious worker shortages are an issue across food production and supply sectors.⁴¹²
- 5.74 The COVID-19 pandemic resulted in extreme worker shortages due to the

⁴⁰⁹ [Submission 55](#), Sydney Fish Market, p 2; Ms Annabel Johnson, Head of Policy and Advocacy, NSW Farmers, [Transcript of evidence](#), 21 March 2022, p 12.

⁴¹⁰ [Submission 73](#), NSW Farmers, p 15; Ms Annabel Johnson, Head of Policy and Advocacy, NSW Farmers, [Transcript of evidence](#), 21 March 2022, p 12.

⁴¹¹ [Submission 17](#), NSW Government, pp 20-21.

⁴¹² [Submission 73](#), NSW Farmers, p 14; [Submission 19](#), Costa Group, p 4.

dramatic drop in visitors to Australia on working holiday visas.⁴¹³

- 5.75 NSW Farmers said that the impacts of COVID-19 travel restrictions on workforce availability illustrates the vulnerability of our food production industries.⁴¹⁴
- 5.76 They stressed that we need to urgently resolve these shortages across the agricultural processing and supply chain. Ms Johnson told us that the absence of a reliable workforce means reduced profits for farmers.⁴¹⁵
- 5.77 Mr Michael Pisasale, Water Policy Manager at Murray Irrigation, said that another major challenge was keeping workers on farms for a substantial period of time. He spoke of the significant burden caused by having to regularly train new staff when workers do not stay for longer periods.⁴¹⁶
- 5.78 The NSW Government also acknowledged that there is an ongoing need to attract, train and retain workers in the food sector.⁴¹⁷
- 5.79 We heard that workforce shortages are particularly severe in the horticulture sector. This is because high volumes of workers are required on a short-term, seasonal basis to harvest produce before it goes to waste.⁴¹⁸ Without enough harvest workers, fresh produce goes to waste.
- 5.80 Workforce shortages result in reduced returns on harvest. It also has a negative impact on overall food security. Ms Johnson told us that some farmers have not planted crops for next season if they believe they cannot get workers to harvest. Farmers who undertake the harvesting work themselves pose a workplace safety risk.⁴¹⁹
- 5.81 However, NSW Farmers noted that there are opportunities that could help manage the shortages of harvest workers. They recommended that the NSW Government establishes a network of Help Harvest NSW Coordinators. These coordinators would promote harvest work to attract labour and 'attract, coordinate, organise, and assist to resolve local pain points'.⁴²⁰
- 5.82 Ms Johnson stressed the value of connecting work opportunities during critical periods of increased labour demand, like harvesting seasons. This could encourage temporary workers.⁴²¹
- 5.83 The Help Harvest NSW website was launched in 2020 to connect Australians seeking work with farm work opportunities across NSW. It links to a number of

⁴¹³ [Submission 19](#), Costa Group, p 4.

⁴¹⁴ [Submission 73](#), NSW Farmers, p 14.

⁴¹⁵ Ms Annabel Johnson, Head of Policy and Advocacy, NSW Farmers, [Transcript of evidence](#), 21 March 2022, p 12.

⁴¹⁶ Mr Michael Pisasale, Water Policy Manager, Murray Irrigation, [Transcript of evidence](#), 25 March 2022, p 33.

⁴¹⁷ [Submission 17](#), NSW Government, p 3.

⁴¹⁸ [Submission 73](#), NSW Farmers, p 14; [Submission 19](#), Costa Group, p 4.

⁴¹⁹ Ms Annabel Johnson, Head of Policy and Advocacy, NSW Farmers, [Transcript of evidence](#), 21 March 2022, p 12; Ms Jenny Bradley, Chair, Innovation and Technology Working Group and Chair, Sheepmeat Committee, NSW Farmers, [Transcript of evidence](#), 21 March 2022, p 13.

⁴²⁰ [Submission 73](#), NSW Farmers, p 14.

⁴²¹ Ms Annabel Johnson, Head of Policy and Advocacy, NSW Farmers, [Transcript of evidence](#), 21 March 2022, p 12.

resources like job boards listing seasonal farming opportunities, agribusiness recruitment agencies, federal financial assistance programs and information about employment rights. There is also a map of seasonal work opportunities in NSW at particular periods of the year.⁴²²

- 5.84 While the Help Harvest NSW website is a good information tool for informing people about seasonal farming work in NSW, worker shortages persist.

⁴²² Minister for Agriculture and Western NSW, ['Help Harvest NSW' launched to help secure Ag workers to bumper harvest](#), media release, 24 August 2020, viewed 6 September 2022; NSW Government, [Help Harvest NSW](#), viewed 6 September 2022; NSW Government, [Discover where seasonal work opportunities are in NSW](#), viewed 6 September 2022.

Appendix One – Terms of reference

That the Committee on Environment and Planning inquire into and report on food production and supply in NSW, including:

1. Improving food security and equitable access to food.
2. Reducing food waste and destruction.
3. Developing technologies to bring food production into cities.
4. Preserving productive land and water resources.
5. Managing the impact of climate change.
6. Limiting the impact food production has on the environment, including overfishing.
7. Addressing complex challenges to food production including declining pollinating species and productive fertilisers.
8. Consideration of workforce challenges and skills development.
9. Development and growth of the food industry (raw or processed) as an export.
10. Implications for quality control and labelling of processed/manufactured food.
11. Consideration of Indigenous food and land management practices.

Appendix Two – Conduct of inquiry

The Committee resolved to conduct an inquiry into food production and supply in NSW on 10 November 2021.

Submissions to the inquiry closed on 28 February 2022. The Committee received 77 submissions to the inquiry from a range of stakeholders including academics and research bodies, health bodies, advocacy groups, community members and community groups, food relief organisations and local councils.

A list of submissions is at Appendix Four, and submissions are available on the inquiry [webpage](#).

The Committee also received a petition from Vegan Australia, which had 436 signatories. The wording of the petition can be found on the inquiry [webpage](#).

Three public hearings were held at Parliament House on 21 March, 25 March and 9 May 2022. The Committee heard from representatives of food relief organisations, local councils, health bodies, community groups, academics and research bodies, and the NSW Government.

Appendix Five is a list of witnesses who appeared at the hearings. Transcripts of evidence taken at the hearings are on the inquiry [webpage](#).

Committee members attended a site visit on 6 June to OzHarvest's headquarters in Alexandria. A report of the site visit is at in Appendix Three.

Appendix Three – Site visit

Monday 6 June 2022

Meeting with Ronni Kahn (CEO), Richard Watson (NSW State Director), and Sarah Flomersfeld (Operations Lead), at OzHarvest headquarters, Alexandria.

OzHarvest is a non-government food relief organisation founded in Sydney in 2004. It operates nationally, in metropolitan and regional areas. OzHarvest uses 'just-in-time' logistics, where drivers collect surplus fresh and short life food from supermarkets, restaurants, cafes, and other fulfilment centres, and distribute it to charities on the same day. OzHarvest also produces frozen and ready-to-heat meals in their kitchens, which are then distributed to communities across the state. During the COVID-19 pandemic, OzHarvest have also produced emergency hampers using purchased food.

The following issues were discussed during the meeting:

Funding

OzHarvest has requested \$3.5 million in funding from the NSW Government. \$2.5 million of this is to continue its existing NSW services. It would cover 50 per cent of operational costs in NSW. Corporate and individual donations have been significantly impacted by the economic uncertainty of the COVID-19 pandemic and OzHarvest can't raise enough funding to continue its existing food rescue services.

The additional \$1 million would allow OzHarvest to deliver a further 2 million meals. It would also establish a hub in Western Sydney to increase services in the region, and help rescue food directly from primary producers.

OzHarvest, and other food relief organisations, need ongoing and sustained funding. Support during crises is welcome, but makes long-term resilience difficult. It also makes it hard to address ongoing and rising need outside of individual incidents (such as natural disasters).

Food waste and rescue

NSW is estimated to waste 1.5 million tonnes of food per year, which costs the state's economy approximately \$7 billion per year. Currently, 0.2 per cent of food waste is recovered in NSW.

Rescued food is 60 per cent fresh produce (fruits and vegetables). Meat and dairy (including eggs) are also rescued. OzHarvest estimates that 90 per cent of rescued food is 'nutritionally valuable'. Many recipients of food relief face barriers in accessing nutritionally valuable food, particularly fresh fruit and vegetables, and meat, and rely on cheaper fast food, which is calorie-dense but deficient in nutrients.

Giving food relief organisations access to nutritionally valuable rescued food has flow-on benefits for recipients and their communities. It maximises the capacity of agencies (they can focus staff on other work), has benefits for public health, improves access to social services, and reduces landfill.

Farms are a significant generator of food waste. This is linked to aesthetic standards for produce enforced by major supermarkets. This means that a lot of viable produce is wasted at the farm, because it doesn't 'look nice', although it is perfectly edible and nutritious. It's difficult for farmers to find economically viable uses for waste food. Partnerships with local community and organisations are a good way to address this.

OzHarvest has partnered with ForPurposeCo. to create a fresh orange juice vending machine (Juice For Good) that uses rescued oranges from farms in the Hawkesbury region. Profits from the machines go to OzHarvest. There are currently 57 Juice For Good machines located across Sydney. Projects like Juice For Good provide important avenues for social enterprise and food rescue.

Benefits of food rescue model

OzHarvest's food rescue model has a wide range of benefits, including that it is extremely cost-effective – every \$1 invested delivers two meals and returns \$8.97 to the community (through benefits for public health, reduced landfill, increased agency capacity etc).

Additionally, food rescue has positive environmental impacts. OzHarvest estimates that for every 1kg of food rescued, up to 6.6kg of carbon dioxide emissions are avoided. Food waste, particularly landfill, generates around 10 per cent of emissions globally.

Increased demand

There was a big increase in demand for food relief during the COVID-19 lockdowns (2019-21). The economic impacts of the pandemic meant that more people were suddenly facing food insecurity, and this put significant pressure on food relief organisations and programs.

\$20 million in funding was received via NSW Food Program grants between March 2020 and June 2022, provided by the Department of Communities and Justice. This funding was primarily used for 'emergency hampers', put together from purchased food. This is because rescued food does not have reliable enough quantities to package hampers, due to its variability. This is not a long-term initiative, and funding for the program was due to run out at the end of June 2022.

Between 2019 and 2021 OzHarvest delivered 8.9 million meals, on top of its business as usual (8.2 million meals to 919 charities). After DCJ funding finishes in June 2022, 180 of these charities will return to the OzHarvest waitlist.

Despite pandemic restrictions easing, the demand for food relief has continued to rise. Food insecurity was high prior to the pandemic in NSW, with 1 in 5 people food insecure. Natural disasters and increased cost of living has continued to create increased need for food relief. Food relief searches on Askizzy (an online social services directory) in May 2022 were 109 per cent higher than pre-COVID.

Appendix Four – Submissions

No	Author
1	Mr Grant Mistler
2	Mr Julian Richards
3	Ms Karinda Stone
4	Ballina Shire Council
5	Dr Cathy Sherry
6	Confidential
7	Greater Sydney Parklands
8	Dr Felicity Small
9	Local Government NSW
10	Mr Christopher McElwain
11	Mr Benjamin Cronshaw
12	Bureau of Meteorology
13	Dr Amy Carrad
14	The Charles Perkins Centre Food Governance Node
15	Dr Belinda Reeve
16	Ms Anne Kelly
17	NSW Government
18	Dr Sarina Kilham
19	Costa Group
20	Vegan Australia
21	New South Wales Aboriginal Land Council
22	Mars Australia
23	Public Health Association of Australia (PHAA)
24	City of Sydney Council
25	The George Institute for Global Health
26	Slow Food Hunter Valley
27	Dharriwaa Elders Group and Walgett Aboriginal Medical Service
28	The Heart Foundation
29	Food Frontier
30	Northern Beaches Council
31	Community Gardens Australia
32	Ms Carole Meade

No	Author
33	Mr Thomas Munro
34	Ms Susan Arthur
35	Mrs Kim McDonald
36	Confidential
37	Ms Neena Love
38	Mr Raymond Kennedy
39	Confidential
40	Ms Marlene Hargreaves
41	Ms Jessica Saad
42	Mr Mark Berriman
43	Miss Joanne Tarbuck
44	Mrs Jane Harman
45	Dr Chloe Mason
46	Ms Vanessa Cullen
47	Dr Irit Alony
48	Ms Kate Rose
49	Mr Sam Quirk
50	Dr Elizabeth Nelson
51	Sustain: The Australian Food Network
52	Arup
53	Society for Immortality Research Ltd
54	Macquarie University Planetary Health and Equity Research Network
55	Sydney Fish Market
56	Foodswell Limited
57	Murray Irrigation
58	Right to Food Coalition
59	Australian Food Sovereignty Alliance
60	Australian Beverages Council Ltd.
61	Slow Food Australia
62	Vegan NSW
63	The Sax Institute
64	Green Connect
65	Food Fairness Illawarra
66	Ms Penelope Thompson
67	Foodbank NSW & ACT

No	Author
68	Dietitians Australia
69	Cancer Council NSW
70	OzHarvest
71	Mrs Ruth Adams
72	Mrs Paula Gilbard
73	NSW Farmers
74	Ms Jennifer Farmer
75	Aboriginal Health and Medical Research Council of NSW
76	Animal Liberation
77	Nature Conservation Council of NSW

Appendix Five – Witnesses

21 March 2022

Macquarie Room, Parliament House

Witness	Position and Organisation
Mr John Cameron Robertson	Chief Executive Officer, Foodbank NSW & ACT
Ms Sarah Flomersfeld	NSW Operations Lead, OzHarvest
Ms Annabel Johnson	Head of Policy and Advocacy, NSW Farmers
Ms Jenny Bradley	Chair, Innovation and Technology Working Group and Chair, Sheep Meat Committee NSW Farmers
Ms Joanna Treasure	Member, NSW Farmers
Dr Cathy Sherry	
Mr Christopher McElwain	
Ms Naomi Lacey	President, Community Gardens Australia
Ms Kylie Flament	General Manager, Green Connect
Prof. Karen Charlton	Member, Dietitians Australia Food & Environment Interest Group
Ms Clare Hughes	Manager, Nutrition Unit, Cancer Council NSW
Dr Kathy Chapman	NSW & ACT General Manager, Heart Foundation
Ms Jacquelyn Johnson	Director, Strategy and Operations, Nature Conservation Council of NSW
Ms Lauren Flaherty	Strategy Advisor – Social Strategy and Communications, City of Sydney Council

25 March 2022

Jubilee Room, Parliament House

Witness	Position and Organisation
Mr Gus Dannoun	Executive Manager, Sydney Fish Market
Mr Erik Poole	Innovation and Technical Manager, Sydney Fish Market
Mr Damian Maganja	Research Associate, Food Policy Division, George Institute for Global Health
A / Prof. Andrew McGregor	Member, Macquarie University Planetary Health and Equity Research Network
Mr Yuseph Deen	CEO, New South Wales Aboriginal Land Council
Dr Nick Rose	Executive Director, Sustain: The Australian Food Network

Ms Amorelle Dempster	Member of the Slow Food International Council, Slow Food Australia
Mr Geoff Parker	CEO, Australian Beverages Council
Ms Cathy Cook	Head of Corporate Affairs, Australian Beverages Council
Mr Greg McFarlane	Director, Vegan Australia
Ms Lynda Stoner	CEO, Animal Liberation
Ms Gabrielle Cusack	Executive General Manager – Shareholder Relations, Murray Irrigation
Mr Michael Pisasale	Water Policy Manager, Murray Irrigation

9 May 2022

Jubilee Room, Parliament House

Witness	Position and Organisation
Mr Michael Toby	Corporate Affairs Manager, Costa Group
Ms Berbel Franse	Coordinator, Food Fairness Illawarra
A/ Prof. Belinda Gibbons	
Ms Simone Sherriff	Research Officer, SEARCH Program, Research Assets Division, The Sax Institute
Mr Yianni Mentis	Executive Manager Environment & Climate Change, Northern Beaches Council
Dr Amy Carrad	Researcher, Urban Farm Volunteer and Fair Food Advocate
Dr Sarina Kilham	
Dr Belinda Reeve	
Mr Scott Hansen	Director General Manager, Department of Primary Industries
Ms Kate Lorimer-Ward	Deputy Director General, Agriculture, Department of Primary Industries
Dr Liza Szabo	Director Food Safety and CEO, NSW Food Authority, Department of Primary Industries
Ms Philippa Welman	Director Partnerships, Department of Communities and Justice
Mr Gavin Peek	Director Partnerships, Department of Communities and Justice
Ms Amanda Kane	Organics Manager, Circular Economy Programs, Engagement, Education and Programs Division, NSW Environment Protection Authority, Department of Planning and Environment
Ms Kylie Bell	Managing Director, Trade and Investment, Investment NSW, Department of Enterprise, Investment and Trade

Ms Kate Wilson	Executive Director, Climate Change and Sustainability, Office of Energy and Climate Change, NSW Treasury Cluster
Mr David Collins	Executive Director, Training Services NSW, Department of Education

Appendix Six – Extracts from minutes

MINUTES OF MEETING no 20

1.18pm, 10 November 2021

Room 1254 and videoconference

Members present

Mr Greenwich (Chair), Mr Chanthivong, Mr Griffin, Ms Wilson, Mr Smith

Officers in attendance

Leon Last, Dora Oravec, Ze Nan Ma, Siobhan Ryan, Ilana Chaffey

1. Confirmation of minutes

Resolved, on the motion of Mr Griffin, seconded Mr Chanthivong: That the minutes of the meeting of 5 August 2021 be confirmed.

2. ***

3. Proposed inquiry – food production and supply in NSW

3.1 Terms of reference and stakeholder list

The Chair briefed members on the draft terms of reference for the inquiry as circulated prior to the meeting.

Discussion ensued.

Resolved, on the motion of Ms Wilson, seconded Mr Smith: That the Committee on Environment and Planning inquire into and report on food production and supply in NSW, including:

1. Improving food security and equitable access to food.
2. Reducing food waste and destruction.
3. Developing technologies to bring food production into cities.
4. Preserving productive land and water resources.
5. Managing the impact of climate change.
6. Limiting the impact food production has on the environment, including overfishing.
7. Addressing complex challenges to food production including declining pollinating species and productive fertilisers.
8. Consideration of workforce challenges and skills development.
9. Development and growth of the food industry (raw or processed) as an export.
10. Implications for quality control and labelling of processed/manufactured food.
11. Consideration of indigenous food and land management practices.

The Committee discussed the stakeholder list circulated prior to the meeting and agreed that any additional stakeholders should be provided to the Committee secretariat by email.

Resolved, on the motion of Mr Griffin, seconded Mr Chanthivong: That the Committee calls for submissions to be received by 31 January 2022, and that the Chair writes to the agreed list of stakeholders seeking their submissions.

The Committee discussed the promotion of the inquiry.

3.2 Inquiry arrangements

The Chair discussed additional inquiry arrangements, including the inquiry timeline and potential locations for site visits.

Discussion ensued.

4. Next meeting

The meeting adjourned at 1.33pm until a date and time to be confirmed.

MINUTES OF MEETING no 21

11.32am, 3 March 2022

Room 1254 and webex

Members present

Mr Greenwich

Ms Wilson, Mr Chanthivong, Mr Smith (by videoconference)

Officers present

Clara Hawker, Dora Oravec, Ilana Chaffey, Siobhan Ryan

Apologies

Mr Griffin

1. Confirmation of minutes

Resolved, on the motion of Mr Chanthivong, seconded by Mr Smith: That the minutes of the meeting of 10 November 2021 be confirmed.

2. ***

3. Inquiry into food production and supply in NSW

3.1. Petition and template submissions

The Chair noted that the Committee received a petition from Vegan Australia, in addition to their submission.

The Committee agreed to treat the petition as correspondence.

Resolved, on the motion of Ms Wilson, seconded Mr Chanthivong: That the Committee publishes the petition wording on the first page of the petition received from Vegan Australia, with comments and signatures to remain confidential to the Committee.

The Committee noted that additional versions of the petition were received. The Committee agreed that those that were edited would be processed as submissions, and those that were copies of the petition would not be processed as submissions.

The Committee also noted that four copies of the Food Fairness Illawarra submission were received, and agreed that these would not be processed as submissions.

3.2. Publishing submissions

Resolved, on the motion of Ms Wilson, seconded Mr Chanthivong:

1. That the Committee publishes submissions 1 to 5, 7 to 15, 17 to 35, 37 to 38, 40 to 62, and 64 to 72 in full.
2. That the Committee publishes submission 16 with the attached images 1 and 3 redacted.
3. That submissions 6, 36, 39 and 63 remain confidential to the Committee and not be published.

3.3. Selecting witnesses for public hearings

Resolved, on the motion of Mr Smith, seconded Ms Wilson: That the Committee invites the listed witnesses to give evidence at public hearings to be held on Monday 21 March and Friday 25 March.

4. General business

The Chair raised options for site visits that could be undertaken as part of the inquiry.

Discussion ensued.

The Chair asked members to contact committee staff with suggestions for site visit locations.

5. Next meeting

The meeting adjourned at 11:46 am until Monday 21 March 2022.

MINUTES OF MEETING no 22

9.28 am, 21 March 2022

Macquarie Room and webex

Members present

Mr Greenwich, Mr Chanthivong, Mr Smith

Officers present

Clara Hawker, Dora Oravec, Ilana Chaffey, Amy Pond

Apologies

Mr Griffin, Ms Wilson

1. Deliberative meeting

1.1 Confirmation of minutes

Resolved, on the motion of Mr Smith, seconded Mr Chanthivong: That the minutes of the meeting of 3 March 2022 be confirmed.

1.2 Media orders

Resolved, on the motion of Mr Smith, seconded Mr Chanthivong: That the Committee authorises the audio-visual recording, photography and broadcasting of the public hearing on 21 March 2022, in accordance with the Legislative Assembly's guidelines for the coverage of proceedings for parliamentary committees administered by the Legislative Assembly.

1.3 Answers to questions taken on notice

Resolved, on the motion of Mr Smith, seconded Mr Chanthivong: That witnesses be requested to return answers to questions taken on notice and supplementary questions within 1 week of the date on which the questions are forwarded to the witnesses.

1.4 Publishing submissions

Resolved, on the motion of Mr Smith, seconded Mr Chanthivong: That the Committee publishes submissions 73 to 77 in full.

The meeting concluded at 9.29am.

2. Public hearing – inquiry into food production and supply in NSW

The Chair opened the hearing at 9.46am and made a short statement.

Witnesses were admitted.

Mr John Robertson, Chief Executive Officer, sworn and examined by videoconference.

Ms Sarah Flomersfeld, NSW Operations Lead, OzHarvest, affirmed and examined by videoconference.

Ms Annabel Johnson, Head of Policy and Advocacy, NSW Farmers, affirmed and examined.

Ms Jenny Bradley, Chair, Innovation and Technology Working Group & Chair, Sheepmeat Committee, sworn and examined by videoconference.

Ms Joanna Treasure, Member, affirmed and examined by videoconference.

Dr Cathy Sherry, Associate Professor, UNSW Law and Justice, affirmed and examined by videoconference.

Mr Chris McElwain, UNSW Law and Justice, affirmed and examined by videoconference.

Ms Naomi Lacey, President, Community Gardens Australia, sworn and examined by videoconference.

Ms Kylie Flament, General Manager, Green Connect, affirmed and examined by videoconference.

Professor Karen Charlton, Member, Food and Environment Interest Group, Dieticians Australia, sworn and examined.

Ms Clare Hughes, Manager, Nutrition Unit, Cancer Council NSW, sworn and examined.

Dr Kathy Chapman, NSW and ACT General Manager, Heart Foundation, sworn and examined.

Ms Jacquelyn Johnson, Director, Strategy and Operations, Nature Conservation Council of NSW, affirmed and examined.

Ms Lauren Flaherty, Strategy Advisor – Social Strategy and Communications, City of Sydney Council, affirmed and examined by videoconference.

The Committee questioned the witnesses. Evidence concluded and the witnesses withdrew.

The public hearing concluded at 3.27pm.

3. Deliberative meeting

The Committee commenced a deliberative meeting at 3.28pm.

Resolved, on the motion of Mr Smith, seconded by Mr Chanthivong: That the corrected transcript of public evidence given today be authorised for publication and uploaded on the Committee's website.

4. Next meeting

The meeting adjourned at 3.28pm until 10.00am on Friday 25 March.

MINUTES OF MEETING no 23

10.26am, 25 March 2022

Jubilee room and webex

Members present

Mr Greenwich (Chair)

Mr Chanthivong, Mr Smith (via videoconference)

Officers present

Clara Hawker, Dora Oravec, Ilana Chaffey

Apologies

Ms Wilson, Mr Griffin

1. Deliberative meeting

1.1. Confirmation of minutes

Resolved, on the motion of Mr Chanthivong, seconded by Mr Smith: That the minutes of the meeting of 21 March 2022 be confirmed.

1.2. Media orders

Resolved on the motion of Mr Smith, seconded Mr Chanthivong, that the Committee authorises the audio-visual recording, photography and broadcasting of the public hearing on 25 March 2022, in accordance with the Legislative Assembly's guidelines for the coverage of proceedings for parliamentary committees administered by the Legislative Assembly.

1.3. Answers to questions taken on notice

Resolved on the motion of Mr Smith, seconded Mr Chanthivong, that witnesses be requested to return answers to questions taken on notice and supplementary questions within 1 week of the date on which the questions are forwarded to the witnesses.

The meeting concluded at 10.27am.

2. Public hearing: inquiry into food production and supply in NSW

The Chair opened the public hearing at 10.30am and made a short opening statement.

Witnesses were admitted.

Mr Gus Dannoun, Executive Manager, Seafood Trading, Sydney Fish Market, sworn and examined by videoconference.

Mr Erik Poole, Innovation & Technical Manager, Sydney Fish Market, affirmed and examined by videoconference.

Mr Damian Maganja, Research Associate, Food Policy Division, George Institute for Global Health, affirmed and examined by videoconference.

Associate Professor Andrew McGregor, Member, Macquarie University Planetary Health and Equity Research Network, affirmed and examined by videoconference.

Mr Yuseph Deen, Chief Executive Officer, NSW Aboriginal Land Council, affirmed and examined by videoconference.

Dr Nick Rose, Executive Director, Sustain: The Australian Food Network, affirmed and examined by videoconference.

Ms Amorelle Dempster, Member of the Slow Food International Council, Slow Food Australia, affirmed and examined.

Mr Geoff Parker, Chief Executive Officer, Australian Beverages Council, affirmed and examined.

Ms Cathy Cook, Head of Corporate Affairs, Australian Beverages Council, affirmed and examined.

Mr Greg McFarlane, Director, Vegan Australia, affirmed and examined.

Ms Lynda Stoner, Chief Executive Officer, Animal Liberation, sworn and examined by videoconference.

Ms Gabrielle Cusack, Executive General Manager – Shareholder Relations, Murray Irrigation, sworn and examined by videoconference.

Mr Michael Pisasale, Water Policy Manager, Murray Irrigation, affirmed and examined by videoconference.

The Committee questioned the witnesses. Evidence concluded and the witnesses withdrew.

The public hearing concluded at 4.26pm.

3. Deliberative meeting

The Committee commenced a deliberative meeting at 4.27pm.

3.1. Publication of transcript

Resolved, on the motion of Mr Smith, seconded Mr Chanthivong, that the corrected transcripts of public evidence given today be authorised for publication and uploaded on the Committee's website.

3.2. Documents tendered

Resolved, on the motion of Mr Chanthivong, seconded Mr Smith, that the following documents tendered at today's hearing be accepted by the Committee:

- A Refreshing Recovery: A Post-Coronavirus Recovery Blueprint for the Australian Drinks Industry, Australian Beverages Council, July 2020
- Making cents: Economic Analysis of Container Deposit/Refund Schemes, Australian Beverages Council, November 2020.

4. Next meeting

The meeting adjourned at 4.29 until a date and time to be confirmed.

MINUTES OF MEETING no 24

10.28am, 9 May 2022

Jubilee Room and Webex

Members present

Mr Greenwich (Chair), Mrs Preston, Mr Chanthivong (videoconference), Mrs Davies (videoconference), Mr Marshall

Officers present

Clara Hawker, Dora Oravec, Ilana Chaffey, Jenny Gallagher, Jordan Manning

1. Deliberative meeting

1.1. Committee membership

The Chair noted that Mr Adam Marshall, Mrs Tanya Davies and Ms Robyn Preston have been appointed to the Committee in place of Mr James Griffin, Mr Nathaniel Smith and Ms Felicity Wilson, as recorded in the Legislative Assembly Votes and Proceedings no 134, entry no 17, Thursday 31 March 2022.

The Chair thanked Mr Griffin, Ms Wilson and Mr Smith for their service on the Committee.

1.2. Election of Deputy Chair

Resolved on the motion of Mrs Davies, seconded by Mr Marshall: That Mrs Preston be elected Deputy Chair of the Committee.

1.3. Confirmation of minutes

Resolved, on the motion of Mr Chanthivong: That the minutes of the meeting of 25 March 2022 be confirmed.

1.4. Media orders

Resolved on the motion of Mr Marshall: That the Committee authorises the audio-visual recording, photography and broadcasting of the public hearing on 9 May 2022, in accordance with the Legislative Assembly's guidelines for the coverage of proceedings for parliamentary committees administered by the Legislative Assembly.

1.5. Answers to questions taken on notice

Resolved on the motion of Ms Preston, seconded Ms Davies: That witnesses be requested to return answers to questions taken on notice and supplementary questions within 1 week of the date on which the questions are forwarded to the witnesses.

The deliberative meeting concluded at 10.30am.

2. Public hearing: Inquiry into food production and supply in NSW

Witnesses were admitted. The Chair opened the public hearing at 10.30am and made a short opening statement.

Mr Michael Toby, Corporate Affairs Manager, Costa Group, sworn and examined by videoconference.

Ms Berbel Franse, Coordinator, Fair Food Illawarra, affirmed and examined.

Associate Professor Belinda Gibbons, Member, Fair Food Illawarra, affirmed and examined.

Ms Simone Sherriff, Research Officer, SEARCH Program, Research Assets Division, the Sax Institute, affirmed and examined by videoconference.

Mr Yianni Mentis, Executive Manager Environment and Climate Change, Northern Beaches Council, affirmed and examined by videoconference.

3. Deliberative meeting

The Committee commenced a deliberative meeting at 12.40pm.

3.1. Publication of transcript

Resolved, on the motion of Mrs Davies, seconded Mrs Preston: That the corrected transcript of public evidence given today, May 9 2022, be authorised for publication and uploaded on the Committee's website.

3.2. Publishing answers to questions taken on notice

Resolved, on the motion of Mr Marshall, seconded Mrs Davies: That the following answers to questions taken on notice be published on the Committee's webpage:

- City of Sydney
- Macquarie University Planetary Health and Equity Research Network
- Nature Conservation Council of NSW
- New South Wales Aboriginal Land Council
- NSW Farmers
- Sustain: The Australian Food Network
- OzHarvest
- Murray Irrigation.

3.3. Site visit

The Chair asked members to confirm their availabilities for a proposed site visit to OzHarvest premises at Alexandria, Sydney.

Discussion ensued.

3.4. Approval for publication of photo

The Chair noted that the Sax Institute requested permission to publish a screen capture of proceedings on social media.

Resolved, on the motion of Mrs Preston: That representatives from the Sax Institute be permitted to publish a screen capture taken of proceedings on their Twitter feed.

The meeting concluded at 12.43pm.

4. Public hearing: Inquiry into food production and supply in NSW - continued

Witnesses were admitted. The hearing resumed at 2.02pm.

Dr Amy Carrad, Researcher, urban farm volunteer and fair food advocate, affirmed and examined by videoconference.

Dr Belinda Reeve, Senior Lecturer, Sydney Law School, University of Sydney, affirmed and examined.

Dr Sarina Kilham, Lecturer in Agricultural Extension and Rural Sociology, Charles Sturt University, affirmed and examined.

Mr Scott Hansen, Director General, NSW Department of Primary Industries, sworn and examined.

Ms Kate Lorimer-Ward, Deputy Director General, Agriculture, NSW Department of Primary Industries, affirmed and examined.

Dr Lisa Szabo, Director Food Safety, NSW Department of Primary Industries and CEO, NSW Food Authority, affirmed and examined.

Ms Philippa Welman, Director Partnerships, NSW Department of Communities and Justice, affirmed and examined.

Mr Gavin Peek, Director Partnerships, NSW Department of Communities and Justice, affirmed and examined.

Ms Amanda Kane, Organics Manager, Circular Economy Programs, Engagement, Education and Programs Division, NSW Environment Protection Authority, NSW Department of Planning and Environment, affirmed and examined by videoconference.

Ms Kylie Bell, Managing Director, Trade and Investment, Investment NSW, NSW Department of Enterprise, Investment and Trade, affirmed and examined by videoconference.

Ms Kate Wilson, Executive Director, Climate Change and Sustainability, Office of Energy and Climate Change, NSW Treasury, affirmed and examined.

Mr David Collins, Executive Director, Training Services NSW, NSW Department of Education, affirmed and examined by videoconference.

The Committee questioned the witnesses. Evidence concluded and the witnesses withdrew.

The public hearing concluded at 3.53 pm.

MINUTES OF MEETING no 25

12.10pm, 9 June 2022

Room 1043 and webex

Members present

Mr Greenwich (Chair), Mrs Preston, Mr Chanthivong, Mrs Davies

Apologies

Mr Marshall

Officers present

Clara Hawker, Dora Oravec, Ilana Chaffey, Anna Tran, Jenny Gallagher

1. Briefing with George Institute

The Deputy Chair opened the meeting.

Members were briefed by the following staff of the George institute:

- Chelsea Hunnisett – Policy and Advocacy Advisor
- Dr Alexandra Jones – Senior Research Fellow, Food Policy and Law, Food Policy
- Damian Maganja – Research Associate & PhD Candidate, Food Policy
- Keziah Bennett-Brook – Program Lead, Aboriginal and Torres Strait Islander Health Program
- Alinta Trindall – Research Assistant, Food Policy.

2. Inquiry into food production and supply in NSW

2.1. ***

2.2. Publishing submissions

Resolved on the motion of Ms Preston, seconded by Mr Chanthivong:

- That the Committee publishes submission 63 in full.
- That the Committee publishes an amended version of submission 9 in full.

2.3. Answers to additional questions

Resolved on the motion of Mr Chanthivong, seconded by Ms Preston: That responses to additional questions received from the Aboriginal Health and Medical Research Council, the Department of Communities and Justice, the Department of Primary Industries, and Food Fairness Illawarra be published on the Committee's webpage.

2.4. ***

3. Next meeting

The Committee adjourned at 1.02pm until a date and time to be determined.

UNCONFIRMED MINUTES OF MEETING no 26

1.18pm, 19 October 2022

Room 1254

Members present

Mr Greenwich (Chair), Mrs Preston, Mr Chanthivong, Mrs Davies, Mr Marshall

Officers present

Clara Hawker, Dora Oravec, Alison Buskens, Nicolle Gill, Sam Griffith

1. Confirmation of minutes

Resolved, on the motion of Mr Chanthivong: That the minutes of the meeting of 9 June 2022 be confirmed.

2. ***

3. Inquiry into food production and supply in NSW

3.1. Answers to additional questions and questions on notice

Resolved, on the motion of Mrs Davies: That responses to additional questions and questions on notice received from the Department of Education and Northern Beaches Council be published on the Committee's webpage.

3.2. Consideration of Chair's draft report

The Chair and Committee thanked Committee staff for their work on the report.

The Committee agreed to consider the report by going through the amendments proposed by Mrs Davies.

Resolved, on the motion of Mrs Davies, to adopt the following amendments in globo:

1. That the first paragraph under the heading 'Data on food security and food waste' on page vi be amended by inserting ", and in schools" after "We have recommended that the Government introduces regular, comprehensive food security and nutrition surveys of a diverse representation of our community, including culturally and linguistically diverse groups and Aboriginal and Torres Strait Islander communities".
2. That the first paragraph under the heading 'Supporting farmers to diversify and adapt to the transition to renewable energy' on page ix be amended by omitting "ing" from "supporting" in the sentence "We also found that planning frameworks should supporting diversified uses of farmland such as agritourism activities."
3. That Recommendation 3 on pages xi and 6 be amended to omit:

That the NSW Government conducts regular and comprehensive food security and nutrition surveys from a diverse representation of local communities across NSW, including Aboriginal and Torres Strait Islander communities and culturally and linguistically diverse groups, and reports publicly on the data collected.

and insert instead:

That the NSW Government conducts regular and comprehensive food security and nutrition surveys from a diverse representation of local communities across NSW, including Aboriginal and Torres Strait Islander communities and culturally and linguistically diverse groups, and in schools, and reports publicly on the data collected.

4. That Recommendation 8 on pages xii and 12 be amended omit:

That the Department of Planning and Environment introduces planning instruments that enable local governments to consider the community's health and wellbeing when determining development applications.

and insert instead:

That the Department of Planning and Environment begins consulting on introducing planning instruments that enable local governments to consider the community's health and wellbeing when determining development applications.

5. That Recommendation 18 on pages xiii and 34 be amended to omit:

That the NSW Government considers legislative or regulatory change to limit the ability of major retailers to impose aesthetic standards for produce, leading to significant food waste.

and insert instead:

That the NSW Government adopts policies in consultation with industry and farmers to limit the ability of major retailers to impose aesthetic standards for produce, leading to significant food waste.

6. That Recommendation 19 on pages xiii and 35 be amended to insert "Without limiting recommendation 18," at the start of the recommendation.
7. That Recommendation 20 on pages xiii and 36 be amended to insert ", including engaging with young people through digital platforms and social media." at the end of the recommendation.
8. That the first paragraph under the heading 'NSW lacks a comprehensive food system plan' on page 2 be amended to replace "actors" with "participants" in the sentence "A food system is a complex web of actors, processes and interactions, which grow, process, distribute, consume and dispose of foods."
9. That the first bullet point, in the third paragraph under the heading 'NSW lacks a comprehensive food system plan' be amended to replace "actors" with "participants" on page 2 in the sentence "Food supply chain: activities and actors involved in food production, storage, processing, packaging and selling."
10. That a new paragraph be inserted after the third paragraph under the heading 'NSW lacks a comprehensive food system plan' on page 2, reading "The Committee agreed that food choices can be heavily influenced by people's religious beliefs."

11. That the first bullet point in the third paragraph under the heading 'NSW needs central oversight of our food system' on page 5 be amended to replace "actors" with "participants" in the sentence "Build capacity and programming across the food system and all its actors."
12. That the fourth paragraph under the heading 'Better data and information on food security' on page 7 be amended to replace "actors" with "participants" in the sentence "Dr Carrad told us that national nutritional data is not specific enough for food system actors to pinpoint what is happening at the local level, for example, by local government area."
13. That the eighth paragraph under the heading 'Better data and information on food security' on page 8 be amended to omit "is" in the sentence "This review aimed to determine the baseline level of demand for food relief is in NSW ...".
14. That the fourth paragraph under the heading 'Stronger data on food waste in the food supply chain' on page 9 be amended to:
 - insert "the" after "In addition to advocating for improved data collection, Mr McElwain highlighted".
 - replace "actors" with "participants" in "... to properly identify food waste hotspots and tailor solutions for specific food types or groups of actors."
15. That a new paragraph be inserted after the fifth paragraph under the heading 'Stronger data on food waste in the food supply chain' on page 9, reading "The Committee noted that there are a number of charities across NSW that support communities through food relief."
16. That the fourth paragraph under the heading 'Most local governments lack food system policies' on page 11 be amended to capitalise "government" in "NSW government".
17. That the following sentences "Food swamps are areas with a large proportion of unhealthy food outlets. Food deserts are areas with limited access to affordable, nutritious food. We heard that food swamps tend to develop in areas of socioeconomic disadvantage, in the outskirts of growing cities and in more regional areas." be omitted from the second paragraph under the heading 'The issue of food swamps and food deserts' on page 13 and inserted at the end of the first paragraph under the heading 'Local governments considering community health and wellbeing in planning decisions' on page 12.
18. That the second paragraph under the heading 'Government funding for food relief during the pandemic' on page 20 be amended to capitalise "government" in "NSW government".
19. That the fourth paragraph under the heading 'Government funding for food relief during the pandemic' on page 21 be amended to replace "Foodbank NSW.ACT" with "Foodbank NSW and ACT" in the sentence "DCJ will also provide \$5.5 million to Foodbank NSW.ACT ...".
20. That the fifth paragraph under the heading 'Government funding for food relief during the pandemic' on page 21 be amended to insert "NSW" before "Government during the pandemic".

21. That the second paragraph under the heading 'Integrating food relief into crisis preparation' on page 22 be amended to replace "." with "." at the end of the sentence "The City of Sydney Council recommended that 'emergency food relief responses are undertaken in parallel with the development of informed strategic responses to improving food insecurity in NSW.'"
22. That the seventh paragraph under the heading 'Measures to rescue more food' on page 27 be amended to replace "no-metropolitan communities" with "non-metropolitan communities" in the sentence "Mr Gavin Peek, Director, Partnerships at DCJ, told us that getting chilled products and fresh food to remote and no-metropolitan communities 'was a big issue'."
23. That the first paragraph under the heading 'Consumer education campaign for households' on page 37 be amended to insert the sentence "Any social media campaigns should be developed in consultation with young people." at the end of the paragraph.
24. That the sixth paragraph under the heading 'School curricula should aim to improve students' food literacy' on page 44 be amended to replace "framing" with "farming" in the sentence "She called for education for the community to learn about framing practices ...".
25. That the second paragraph under the heading 'A standardised food sustainability labelling system' on page 46 be amended to replace "MacGregor" with "McGregor" in the sentence "We heard from Associate Professor Andrew MacGregor ...".
26. That the eighth paragraph under the heading 'Supporting Aboriginal peoples to maintain community traditional food gardens' on page 61 be amended to omit "protected" in the sentence "while people protected supported initiatives to grow fresh produce ...".
27. That the last paragraph under the heading 'Water resources are vulnerable to a changing environment' on page 64 be amended to insert ", and to address flooding" after "They are also improving measures for drought planning, preparation and resilience".
28. That the eleventh paragraph under the heading 'A strategy to address workforce challenges in the food production sector' on page 74 be amended to insert "are" after "We note that there".

Resolved, on the motion of Mr Marshall, and seconded by Ms Preston:

1. That the draft report as amended be the report of the Committee and that it be signed by the Chair and presented to the House.
2. That the Chair and committee staff be permitted to correct stylistic, typographical and grammatical errors.
3. That, once tabled, the report be posted on the Committee's webpage.

4. Next meeting

The meeting adjourned at 2.00pm until a date and time to be determined.