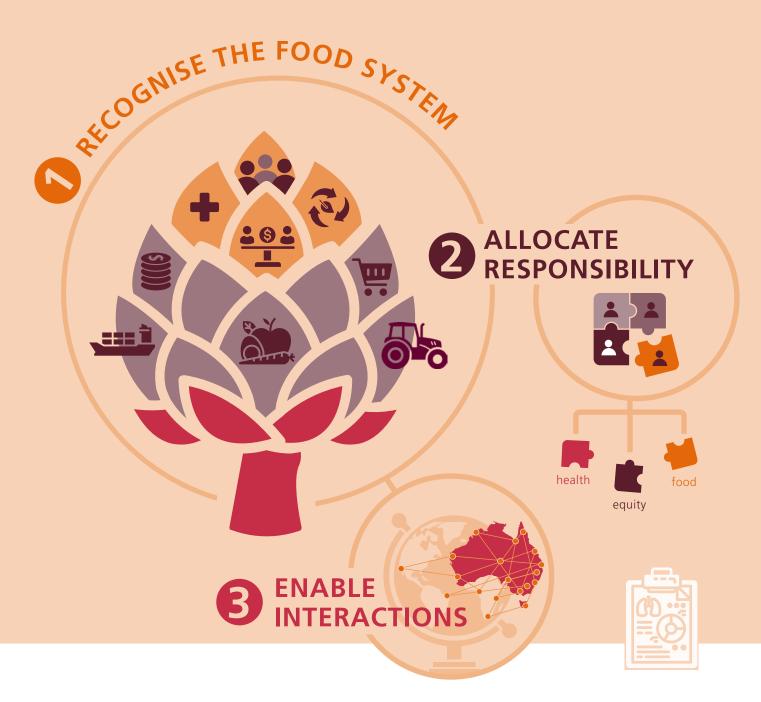
Overview

Towards a state of the food system

Rohan Nelson, Andy Hall, Lilly Lim-Camacho & Cathy Robinson





INTRODUCTION

This report is a first step towards a regular report on the 'state of the food system' in Australia. We analyse the state of Australia's food system using the available mix of data and methods. The report highlights opportunities to better recognise and manage Australia's food system by highlighting gaps and biases in reporting that obscure important food system interactions. Insights into reporting and management are drawn across the food system, loosely grouped into the goals of the food system, issues affecting its sustainability and issues to do with food production and its impacts (Figure 1). These insights into the state of Australia's food system are used to analyse opportunities for better recognising the food system, allocating responsibility for its management and enabling interactions that help address challenges and opportunities. Future reports will likely contain an even broader and more eclectic mix of insights from across the food system.

THE STATE OF AUSTRALIA'S FOOD SYSTEM

Economic success

Australia's food system generated over \$800 billion in goods and services in the financial year 2022–23 and added over \$200 billion to Australia's economy. It employed more than 3.5 million people across food value chains from agricultural production to food services and supported a workforce around four times larger than its own over the previous decade. Australia's food system is growing rapidly, and production-based estimates suggest that it is capable of feeding approximately 100 million people. The value added to the Australian economy by the food system grew by 1.3% per year between 2006–07 and 2022–23.

Australia has a reputation for clean and safe food that is central to its trading image around the world. The logistical efficiency and safety of Australia's food system are impressive given Australia's vast size and small population. The system has for long periods provided convenient and affordable food to Australia's mostly urban population.

Commodities versus food

However, this economic narrative provides only a partial view of Australia's food system. It focuses attention on the size of the agricultural sector, rather than on agriculture's role within the food system or its contribution to supporting multiple sectors across Australia's economy, including mining, manufacturing and services. Claims that Australia is food secure are based on Australia's aggregate status as a net exporter of bulk agricultural commodities such as wheat and beef. Food security should also take into account food affordability issues driven by high living costs, and the diversity of foods and food groups required to meet nutritional requirements.

Currently, millions of Australians routinely rely on food charity. Australia's food system does not produce enough vegetables to meet recommended daily intakes. Production-based analysis of food security also overlooks the critical role that food environments play in shaping dietary choices and health outcomes.



The promotion of convenient, highly processed foods is costing the Australian economy billions in lost productivity from the impact of preventable, diet-related diseases. These challenges suggest a significant opportunity for communities, governments and businesses to work together to create future food environments that are healthier, more sustainable and more equitable.

Food environments

A food environment describes all the factors affecting decisions to acquire, prepare and consume food, including what foods are made available, how those foods are marketed, how much different foods cost and their affordability, how far consumers need to travel to buy food, and what other goods and services they can access when buying food.



Unintended consequences and missed opportunities

Commercial activity across Australia's food system, particularly in the agricultural sector, generates a range of unintended but significant environmental impacts. Together, the net present value of the overall negative health and environmental impacts of Australia's food system is around 13% of Australia's gross domestic product (GDP). These environmental impacts, including climate change and damage to fragile soils, have contributed to a plateauing of agricultural productivity.



Australia's food system is worth around \$800 billion but focusing on the economics alone limits our view of the food system's real value to Australian society. The food system has tended to focus on commodity exports. By shifting our focus, we have the chance to embrace opportunities to develop and test innovative business models and food processing technologies with the potential to drive productivity growth in food manufacturing. For example, we have the opportunity to create new high-value regional food manufacturing industries for products that complement bulk commodity exports. Such products may help Australia meet noneconomic goals such as healthy diets, waste management and providing culturally diverse food options. New food technologies potentially use more energy but less land than conventional agriculture, creating both new sustainability challenges and opportunities. New foods such as complementary proteins may also help Australians meet nutritional goals as part of a balanced diet, complementing the intake of meat and other existing sources of protein.

New business models are emerging with potential to enable thriving regional food manufacturing industries to complement bulk commodity exports, and reporting is needed to help shape these.

Preferred food futures

Australia's food system is highly efficient from a short-term economic perspective. However, mechanisms for negotiating and working towards the food futures desired by diverse groups across Australian society seem to be underdeveloped. Public sector leadership is likely to be needed to balance ongoing economic goals with sustainability, equity and health goals because of the mixed incentives that profit-motivated businesses have to pursue these goals. Food policy needs to be supported by the consolidated reporting and accountability arrangements provided to other systems, such as the health, social welfare and criminal justice systems. Food policy is fragmented across portfolios as diverse as agriculture, industry, social services, health, transport, environment and urban planning. There are few formal mechanisms to recognise the food system or manage its priority interactions. This inhibits system-wide action to correct problems. The good news is that we know, for example, how to correct the health impacts of highly processed foods and the food environments that promote them. Australia has heavily regulated other potentially addictive and harmful consumer products such as tobacco and alcohol. In a similar way, greater coordination, information sharing and constant vigilance are required to overcome a tendency for food safety to be left to corpora-





Public sector leadership is needed to balance economic goals with sustainability, equity and health goals for Australia's food system

tions with mixed incentives to report on emerging threats.

Rebalancing metrics

There are gaps in the evidence necessary for identifying and negotiating goals for the food system and agreeing on actions for pursuing these goals. This has constrained the development of consolidated food system planning. A past focus on monitoring progress towards short-term economic goals has not been matched by the development of systems for monitoring progress towards sustainability, equity and health goals. It is also challenging to make definitive statements about the sustainability of Australia's food system because people with different interests and perspectives value sustainability in different ways. Progress has been made towards creating metrics that can help prioritise action towards agreed sustainability goals for the food system. However, these metrics have yet to be embedded into accountable institutions with statutory reporting arrangements.

Similarly, defining and meeting Indigenous food system goals remains especially challenging. Current reporting on the national food system lacks the detail necessary to negotiate improved futures for diverse Indigenous food systems. Mechanisms are also needed for incorporating learning and food products from Indigenous food systems into Australia's industrial food system.

Aligning reporting with food system goals

This report begins to consolidate an evidence base to support more holistic, proactive and forward-looking management of Australia's food system. It seeks to close a gap between the challenges and opportunities facing Australia's food system and the kinds of reporting available to understand and manage these challenges and opportunities. It does this by examining the state of Australia's food system from diverse perspectives across the system using the information currently available, and showing how more holistic management of Australia's food system is inextricably linked to more holistic reporting.



Reporting on economic goals has crowded out reporting of longer-term sustainability, equity, nutrition and health goals.



A brief history of food system reporting

One of the key reasons we can't 'see' important interactions across Australia's food system is because reporting has evolved to support a narrow set of mostly economic goals within individual sectors such as agriculture (Lim-Camacho and Nelson, 2024).

A sectoral approach to reporting has become deeply embedded in Australia. Australia's systems of reporting on agriculture and the food system took their current shape following World War II. The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) and its predecessor organisations have regularly reported on the economic dimensions of individual food industries since 1945 (e.g. see BAE, 1945, 1946, 1947, 1948) and have more recently produced reports on food manufacturing and trade (DoA, 2014).

Since then, Australia has successfully structured its economy and approach to policy to pursue economic efficiency, driven by competition policy reforms (Harper et al., 2015; Hilmer et al., 1993). While this reporting is useful in tracking the economic efficiency of production-oriented sectors such as agriculture and food manufacturing, it is less useful for tracking and managing non-economic goals such as sustainability, equity and health.

A result of this is that economic reporting on the agricultural sector is highly developed and focuses on the productivity and profitability of farm businesses (see ABARES, 2025a) and the value generated by agricultural production via commodity exports (see ABARES, 2025b).

Data on food manufacturing are less developed. Statistics continue to be produced

on the employment and value-adding of manufacturing industries (see ABS, 2024), but there is no ongoing public sector analysis of these data. Reporting on the food retail sector has focused on the competitiveness of fresh produce and food retail markets through irregular public inquiries (see ACCC, 2025).

Reporting on the nutrition and health impacts of the food system is entirely separate from agriculture and food manufacturing and is mostly based on irregular Australian Bureau of Statistics (ABS) surveys. Household expenditure on food is routinely reported, but public sector reporting on equity issues such as the affordability of food or the influence of food environments is mostly absent.

For decades now, there have been signs of society-wide demand for more holistic food system reporting. Since 2000, various organisations have tried to fill gaps created by a public sector withdrawal from food system reporting by creating their own reports. Prominent examples include the publication of food manufacturing statistics by organisations such as Food Innovation Australia Limited (FIAL, 2020) and the Australian Food and Grocery Council (AFGC, 2025), the creation of a Hunger Report by Foodbank (2024), reports by Food Frontier on the state of the alternative protein industry (Food Frontier, 2023), the Hort360 best practice management platform developed by Queensland Fruit and Vegetable Growers (Growcom, 2025) and global benchmarking of the health and nutrition status of Australia's food environments by the INFORMAS network (INFORMAS, 2025).

FOOD SYSTEM THINKING

Australia's food system has evolved to feed Australians and contribute to the food security of millions of other people in Australia's export markets. It includes all the processes of producing, distributing and consuming food and food ingredients, from natural resources like water and soils that support agricultural production, through the manufacturing, processing and distribution of food, to its impacts on nutrition and human health. Interactions between these disparate components of the food system and an array of biophysical and socio-economic drivers of change mean that food systems are dynamic and can be unpredictable. Food system thinking is a way of organising our understanding of all the interconnected activities, people and inputs that are required to feed people (Figure 2). These activities include transforming ingredients into food, marketing it and disposing of by-products and waste. Food systems are part of the environment, culture and economy of every nation, which can give food systems like Australia's some unique characteristics. These characteristics include a strong regional identity with trusted sustainability credentials including adaptation to drought and to Australia's diverse climates and soils.

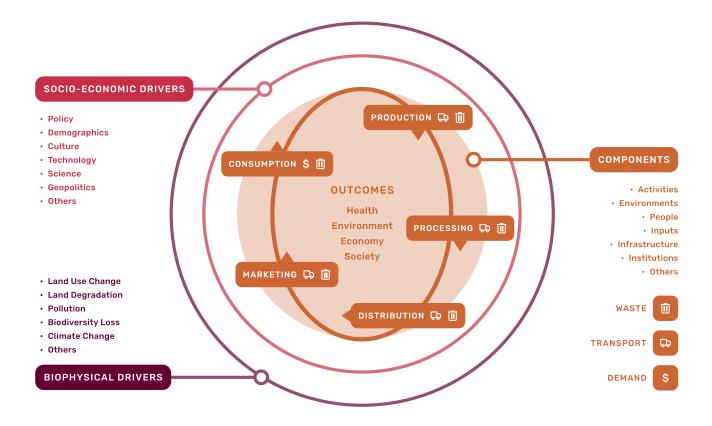


Figure 2: Australia's food system includes all the activities associated with producing, distributing and consuming food and food ingredients, from natural resources like water and soils that support agricultural production, through manufacturing, processing and distribution of food, to the impacts of food on nutrition and human health. Source: Food System Horizons (Palmer, 2024)





The purpose of Australia's food system is to nourish Australians and contribute to the diets of millions of other people around the world.

The goals we have for our food systems change over time as social and economic priorities change. This means that the capabilities we need to build into food systems often need to change to meet new goals. The defining feature of food systems is multiple and diverse interactions between activities. These interactions can result in surprising and difficultto-manage health, environmental, economic and social outcomes. They can also make the food system difficult to 'see', resulting in food system challenges not being effectively managed and food system opportunities being overlooked (Lim-Camacho and Nelson, 2024).

Awareness of Australia's food system has been growing, and the challenges and opportunities facing it were comprehensively reviewed in a 2023 'roadmap' (CSIRO, 2023). The roadmap found that Australia has an opportunity to take a global leadership role in building sustainable, productive and resilient food systems. Five focal areas were identified as key challenges to Australia's food system:

- enabling equitable access to healthy and sustainable diets
- minimising waste and improving circularity
- facilitating Australia's transition to net zero emissions
- aligning resilience with socio-economic and environmental sustainability
- increasing value and productivity.

Reports such as the 2023 roadmap have given us a profound understanding of the challenges and opportunities facing Australia's food system. This report seeks to move from exploring these challenges and opportunities to building the evidence base necessary to agree on food system goals and for negotiating action to meet these goals.



Australia has an opportunity to take a global leadership role in building sustainable, productive and resilient food systems.



FROM ANALYSIS TO ACTION

We know how to manage food systems

This report makes the case that the food system needs to be managed through interventions that improve its performance and future trajectories of development and that better reporting has a key role to play. However, tackling food related challenges and opportunities requires a type of system management that supports the ongoing evolution of the food system while at the same time providing guiderails on its direction of travel aligned to a diversity of national aspirations. This type of system management is best implemented in a distributed way through inclusive deliberation and genuine partnership between government, industry and community.

Food system thinking is developing around the world, and there is growing consensus on the practical steps necessary to manage food systems (e.g. see Bustamante et al., 2024; Conti et al., 2024; Mausch et al., 2020). These steps are increasingly being recognised in global best practice for applied food system policy (Deconinck et al., 2022). This combined knowledge and practice suggests three types of actions necessary to manage food systems:

1. Recognise the system

An essential first step is to recognise the food system, the broad mix of goals that society has for it and the interactions that need to be managed to meet these goals.

2. Allocate responsibility

A second critical step is allocating responsibility for negotiating and meeting food system goals, and for reporting on progress towards meeting these goals.

3. Enable interactions

A third step is enabling interactions across the food system by creating collaborative processes for negotiating goals and actions for pursuing them, and governance processes for negotiating trade-offs between conflicting goals.

Recognition of the food system, allocation of responsibility for managing it and practical processes for enabling interactions vary widely across Australia's food system. The system and its interactions need to be recognised before responsibility for managing them can be allocated, and responsibility needs to be allocated before coordination and governance can be enabled. Varying degrees of maturity of systems thinking and practice across the food system, especially in government and industry, set the challenge for institutional reform. The institutional reforms that are required involve a rebalancing of institutions and practices across the public sector that are designed almost exclusively to meet sectoral economic goals, with the institutions and practices required to meet a broader set of economic, sustainability, equity and health goals by managing food system interactions. These institutions and practices include processes for negotiating food policy goals, agreeing on actions across government for inducing progress towards them and embedding the monitoring systems that build on this report to routinely evaluate progress.

Recognising the system, allocating responsibility for managing it and enabling system interactions are not abstract or academic





A common challenge with managing food systems

A challenge common to managing systems like Australia's food system is continuously adapting the system to meet changing societal goals. A number of factors work against our collective ability to agree on changing goals and proactively adapt the food system to meet them. Most of these factors are different types of 'path dependency' or 'lock-in', which imply that our willingness and ability to understand and manage the future is overly constrained by past perspectives and practices. This has led to the creation of 'silos' of activity and interest across Australia's food system that pursue sectoral interests independently and that are sometimes in conflict with each other.

Conti et al. (2021) describe multiple types of path dependency affecting food systems, all of which tend to be mutually reinforcing:

- Misaligned policies and incentives and conflicts across scales – can create clusters of policy, regulation and thinking that reinforce sectoral perspectives. These silos can develop inertia against adapting to external pressures for change.
- Technological persistence occurs when skills, knowledge, policy and institutional settings tend to reinforce existing technologies and practices, and disadvantage new ones.
- Infrastructure rigidities form when longlived investments in infrastructure such as energy, transport and regulatory systems tend to favour existing commercial activities.



- Political interests can skew the direction of change, especially when powerful actors have strong incentives to instil perspectives and drive change in directions that protect their interests.
- Attitudes and cultures can cause a general aversion to change that combines with vested interests to lock in current practices and resist change as 'mission creep'.
- The processes used to set research and development priorities and reward scientists can combine with sectoral interests and the risk aversion of funders to favour incremental, sector-specific research and development.



notions for a theoretical food system. Nor can they be ignored as peripheral goals imposed by remote international bureaucracies focused on the environment, developing countries or vulnerable communities. They are practical steps for a real, functioning food system that the Australian Government has already recognised a need for. The 2023 parliamentary inquiry into food security in Australia called for a national food strategy (to recognise the food system), a Commonwealth ministerial portfolio for food (to allocate responsibility) and a national food council (to enable interactions) (Commonwealth of Australia, 2023).

Recognise the food system

Recognition of Australia's food system varies across its component parts and low recognition is often due to 'lock-ins' to sectoral interests (see Box – A common challenge with managing food systems).¹ From an industry policy perspective, the food system has historically been equated with agricultural production and commodity exports and - to a lesser extent with local Australian food manufacturing and employment. This approach to food policy has supported the growth of a highly efficient agricultural sector, facilitated by Australia's comparative advantage in land. The agricultural sector is reinforced by a world-class levy-funded research and development system that has emphasised the size of the sector and the productivity necessary to maintain competitiveness in export markets.

However, this focus on agricultural production seems to have reduced recognition that most agricultural commodities (excluding fibres such as wool and cotton) are food. This lack of recognition of commodities as food has conseguences for nutrition and health. As the insight sections of this report show, Australians have a low awareness of how historical patterns of agricultural production and a focus on commodity exports have shaped food availability. Likewise, there is low awareness of how these patterns have led to food environments associated with poor health outcomes in Australia and its export markets around the world. Emphasising agricultural production to enable bulk commodity exports has also reduced recognition of the potential to create innovative hubs of regional food manufacturing. These have the potential to meet employment and other economic goals while linking consumers to local food producers to pursue broader cultural, nutrition, equity and health goals.

The development of Australia's food manufacturing sector has been conditioned by a perception that Australia's relatively high labour costs mean that food manufacturing cannot be economically viable. Consequently, there is a view that world markets for bulk commodity exports will continue to be the dominant economically viable option (Griffith and Watson, 2016). An immense ongoing industrial and research effort to sustain agricultural productivity seems to have crowded out smaller but complementary pathways for food manufacturing and export growth.

New business models such as regional innovation hubs have the potential to overcome the indivisibility of labour and capital costs that has hampered the scaling-up of small-tomedium food manufacturing enterprises. New food technologies such as precision fermentation may be less land- and labour-intensive than agriculture, but perhaps more capital-, energy- and perhaps water-intensive. This has

¹ Sectors are defined here in the economic sense of aggregations of related industrial interests and activities.

the potential to alter Australia's comparative advantage by shifting production from labour to capital, and to shift some of the burden for meeting sustainability goals away from farming businesses that depend on land. New food technologies that produce food products such as complementary proteins also offer avenues to meet nutrition and health goals.

The sustainability goals that Australians increasingly have for their food system partly originate from the environmental consequences of a quest to remain internationally competitive in global commodity markets. Inexorable pressure to continuously extract more and more productivity from Australia's highly optimised agricultural systems has inevitably put pressure on Australia's fragile and infertile soils and other natural resources such as water and biodiversity. Collective agreement on what this means will allow Australians to be confident that Australia's food system is sustainable.

Allocate responsibility

The allocation of responsibility for managing Australia's food system is currently hampered by two types of policy-related path dependency. The first is a lack of public sector recognition of the food system due to a long history of pursuing sectoral goals via economic and administrative specialisation. Designing public agencies to pursue the interests of individual sectors has proven efficient for meeting some (mostly economic) sectoral goals, but it has also created silos of responsibility for policy, reporting and industry engagement that are deeply entrenched. These silos are mutually reinforcing to the point where people working within them can feel obliged to resist the idea of food systems as an inappropriate and unresourced expansion of their responsibilities.

The second type of policy-related path dependency is a deep conditioning regarding the roles of the public and private sectors in agriculture and food-related policy, derived from past policy experiences that may no longer be relevant to future food policy. Public sector attitudes and approaches to agricultural policy continue to be conditioned by a long and hard-won history of market reform in agriculture (see Productivity Commission, 2016). Government intervention to bolster commodity prices proved highly inefficient. It raised food prices for consumers and distorted incentives that changed what foods were produced so much so that deregulation has led to lower food prices and significant productivity gains (Gray et al., 2014; Productivity Commission, 2016). However, a legacy of this experience seems to have been a general withdrawal of public sector intervention from agriculture and agriculture-related food policy since the 1990s, and a belief that the private sector is more



We have well-developed mechanisms for the public sector to act on important societal goals that businesses lack commercial incentives to address.



efficient at setting directions for the sector. Aspects of agricultural policy where public leadership has been retained tend to facilitate bulk commodity exports, including efforts to maintain biosecurity protocols and maintain market access.

The question is, however, whether the private sector is capable of recognising and pursuing the broader suite of sustainability, equity and nutrition goals that Australians increasingly hold for Australia's food system, alongside ongoing economic goals. The success of withdrawing government intervention from agricultural marketing to meet economic efficiency goals seems to have led to a belief that the private sector can more efficiently meet all other policy goals.

The reality is that an over-reliance on markets in Australia's food system has resulted in a range of challenges that are either unintended by-products of market-related activity or are important societal goals that businesses have little or no commercial incentive to provide. Most sustainability challenges, such as land degradation, greenhouse gas emissions, pests and diseases and biodiversity loss, are unintended by-products of market-based activities in agriculture and food manufacturing. At best, markets can only provide muted incentives for important societal goals such as equity, food safety, cultural diversity, nutrition and health.

Australia's market reforms since the 1990s now also mean that we have 30 years of experiential evidence that free markets are unable to deliver a sustainable, equitable or healthy food system for Australia. We already have well-developed mechanisms enabling the public sector to initiate action to address the unintended environmental and health impacts that businesses lack commercial incentives to address. Similar experience internationally across a range of 'grand societal challenges', including food security, has led to the development of new forms of public leadership to pursue public interest sustainability, equity and health goals for national economies and food systems (e.g. see Mazzucato, 2016).

Growing pressure to meet a suite of sustainability, equity and health policy objectives that go beyond the knowledge and experience of managing industry policy has led to an emerging recognition in public sector agencies of the need to better coordinate disparate elements of food policy. So far, however, no public sector agency has been given a whole-of-government mandate to coordinate existing strands of food policy in Australia or to develop more integrated approaches to future food policy. This means, for example, that researchers producing emerging forms of integrated food system reporting, such as the true cost of food and circularity, have no public agency to report to. Neither is there a public agency to plan action based on these researchers' findings.



Public sector oversight is needed to monitor Australia's food environments and their consequences for nutrition and human health.



Responsibility for defining and pursuing sustainability is locked into sectoral perspectives, and responsibility for gaining consensus on food system sustainability and how to monitor it has not yet been allocated.

Free market thinking has also been locked into the interpretation of public health epidemics in diet-related non-communicable diseases. These are seen as an acceptable consequence of personal choice, foregoing the benefits of collective action to improve public health and alleviate public health costs. No public sector agency has a mandate to monitor the evolution of food environments in Australia or their consequences for nutrition and human health, or to engage communities in proactively shaping food environments into the future. Even the historically strong regulation surrounding food safety is becoming fragmented as a withdrawal of public sector ownership places increasing reliance on food companies with conflicting interests to balance profitability with food safety outcomes.

Reducing the separation between Indigenous food systems and Australia's industrial food system could provide opportunities to understand and address challenges in diverse Indigenous food systems, and to integrate products and learning from Indigenous food systems into the industrial food system. these negotiation processes. Negotiation on food system goals has been patchy and inconsistent since federation, often driven by crises such as drought (ACCC, 2008) or cost-of-living pressures (Commonwealth of Australia, 2023). Organisations such as ABARES and the Australian Institute of Health and Welfare (AIHW) have been created to provide a consistent flow of data and analysis for select parts of the food system, but they often have no interaction. Even in the parts of the food system where reporting does exist, it is not strongly embedded in the processes necessary to bring people from across the food system together to negotiate food system goals and trade-offs between them, or to agree on actions to pursue these goals. This is not just hampering



Reporting on Australia's food system is needed to manage public-good food system challenges and to promote commercial innovation and growth.

Enable interactions

Enabling food system interactions involves bringing organisations and individuals together to negotiate the collaboration and trade-offs needed to agree and pursue food system goals. It also involves creating an evidence base to support deliberation and decision-making in Australia from managing public-good food system challenges such as sustainability, equity and nutrition. It may also be inhibiting commercial innovation and growth. For example, opportunities exist to monitor and report on the evolution of food manufacturing innova-



tion hubs around Australia, as well as on influences on their success and enablers of rich regional food cultures across Australia. This is especially critical for the south-east Queensland region ahead of the 2032 Brisbane Olympics. There are opportunities for governments at all levels to work with communities and food retailers to design regional food environments that better connect consumers to local food producers to meet cultural, sustainability, equity and health goals.

Australia lacks mechanisms for reporting and analysing the evolution of its food environments. It also lacks processes for negotiating preferred futures for these. A tendency to blame commercial retailers for food environments that do not meet equity and public health goals overlooks the public sector's responsibility for negotiating what mix of goods and services should be provided, and how these can be provided when it is not commercially viable to do so. Shareholders have a critical role to play. They expect large supermarket chains to maximise profit subject to whatever limitations are placed on them by Australian society via government policy and regulation. However, they also benefit from improved sustainability, equity and health outcomes. Also missing are the robust mechanisms for gathering civil society preferences for what food environments and regional food cultures should look like into the future and enabling these preferences to be heard by governments, in addition to powerful corporate interests.

Methods to assess sustainability from different perspectives are under continuous development. Agreement on what food system sustainability means and how to assess it will help monitor progress on sustainability. Promising examples include methods of accounting for the true cost and circularity of food systems. These remain experimental, however, and lock-ins to sectoral reporting will need to be addressed before these complementary systems can be built into processes for negotiating food systems with lower environmental, health and social impacts. The future of sustainability reporting lies in the entwined development of science-based reporting on the sustainability of food system components, with processes for negotiating whole-of-food-system sustainability goals and trade-offs. Similarly, greater coordination, information sharing and constant vigilance are required to overcome a tendency for food safety to be left to corporations with mixed incentives to report on emerging threats.

Indigenous food systems have long been recognised for their intrinsic cultural value and their role in remote food security. They are now increasingly being recognised for their potential to enrich Australia's industrial food system. However, this recognition tends to be done through a colonial lens that implies that Indigenous food systems need to adapt to Australia's industrial food system, rather than vice versa.



Indigenous food practices and human– food interactions have potential to inform and enrich Australia's food system.



A deeper 'decolonised' recognition of Indigenous food systems is currently hampered by the top-down aggregation of reporting systems. This degree of aggregation masks the local detail required to understand diverse local Indigenous food systems and makes it difficult to effectively engage Indigenous communities.

TOWARDS A FOOD SYSTEM STRATEGY

Recognising Australia's food system and allocating responsibility for managing crucial interactions is becoming less of an abstract 'nice to have' and becoming more and more essential to advancing Australia's economy and way of life. Australia routinely recognises and actively engineers systems with similar complexity to the food system, including society-wide systems where significant public leadership is needed to address market failures and balance sectoral interests with broader societal goals. Examples include emergency management, air traffic control, maritime safety, the road transport system, the pharmaceutical system, the Australian Defence Force, multiple state and Commonwealth police forces and criminal justice systems, the social welfare system and the health system. The goals of these activities have proven to be beyond the capability of markets to deliver, and a high degree of public leadership and coordination has been put in place across Australia's three tiers of government to guide, regulate or replace absent market incentives to meet societally important goals.

Common to many of these examples is a need to negotiate and balance sectoral interests that are often in conflict with broader societal interests, and to coordinate action across sectors to pursue societal goals. Within governments, central agencies such as Treasury, Finance and especially Departments of Prime Minister/Premier and Cabinet have evolved as mechanisms for elevating systemic public good outcomes above competing sectoral interests. They focus political will and administrative effort to bring together the capabilities needed to pursue public-good goals. Canada – with a food system similar to Australia's – already has a combined agrifood portfolio coordinating food system policy (Government of Canada, 2025). The government of the United Kingdom also has an integrated Department of Environment, Food and Rural Affairs (DEFRA, 2025).

Most of these big public systems have highly developed reporting systems associated with them. An example relevant to the food system is the State of the Environment Report (Commonwealth of Australia, 2021). Regular reporting would enable the food system to be recognised and help allocate responsibility for prioritising and managing food system challenges



Food system reporting supports collaborative dialogue between governments, industry and the wider Australian community about the state and future of Australia's food system.





and opportunities. Food system reporting also supports deliberative dialogues between governments, industry and the wider Australian community as to what Australia's future food system should look like into the future and acceptable steps for getting there.

Participants across Australia's food system have important roles to play in recognising and managing it. The non-market nature of many food system goals requires public sector leadership to evaluate whether current food system institutions and reporting systems remain fit-for-purpose and what functions need to be redirected or added. Civil society food system leaders have a significant role to play in balancing sustainability, equity and health goals for Australia's food system alongside ongoing economic goals. Industry has a role to play in recognising community goals and helping to design efficient delivery of non-market services while meeting profit directives from shareholders. Researchers can support this process by marshalling evidence from novel forms of

analysis that provide new insights into critical interactions and trade-offs across the food system.

This report and the roadmap that preceded it have shown that Australians collectively have a deep knowledge of the challenges and opportunities facing Australia's food system and a growing knowledge of how to manage these. This report has begun to consolidate an evidence base necessary for negotiating priority goals for food system management and agreeing on pathways for pursuing these goals. Embedding regular food system reporting into institutions with a mandate to recognise and enable food system interactions is likely to be a necessary first step towards being able to 'see' the food system. This will, in turn, support strategies that arise from communities, governments and industries working together to decide what Australia's future food system should look like and what actions are needed to achieve this preferred future food system.



Prioritise not generalise

The growing pressures to diversify the goals of Australia's food system have been comprehensively reviewed in a food system 'roadmap' produced by CSIRO (2023), with broad consultation across the food system. New food system goals create pressure to supplement sectoral reporting with reporting on food system interactions that are causing acute challenges or creating prospective opportunities (Lim-Camacho and Nelson, 2024).

Research worldwide reveals that one response to these changing goals has been a proliferation of food systems frameworks. This, in turn, has led to calls for harmonised reporting (e.g. see Fanzo et al., 2021). Harmonised global reporting has a role to play in supporting international benchmarking by enabling national food systems to be compared. However, it has proven much less useful for guiding context-specific policy and management (Conti et al., 2024; Deconinck et al., 2022). Harmonised reporting at a local scale seems impractical

given constraints on reporting budgets and is likely to be defeated by the rapid evolution of food systems and the challenges and opportunities emerging from them (Bustamante et al., 2024; Deconinck et al., 2022).

A pragmatic approach to prioritising scarce research and reporting resources suggests that processes are needed for negotiating priority food system challenges and opportunities to report on. A global review of the evidence available for food system policy found that context-appropriate national reporting is needed to help define the characteristics of policy issues and the effectiveness of potential policy responses and to engage the actors and interests involved (Deconinck et al., 2022). Felt local impacts are likely to motivate specific local policy responses much more than claims of urgency based on generalised global processes such as the United Nations Sustainable Development Goals (UN SDGs).

