Insight

10 Manufacturing

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1 STATE OF FOOD MANUFACTURING

$125 billion
Largest manufacturing industry in Australia

24%
Largest employer in manufacturing sector

90%
Mostly small-to-medium enterprises

2 CHALLENGES

- **Current business models** favour offshore manufacturing
- **Current statistics** poorly reveal the success factors for new business models in regions
- **Imported ingredients** significant dependence on food ingredients from other countries

3 OPPORTUNITIES

- **Regional innovation clusters** help make regional food manufacturing economically viable
- **Seeing farm produce as ingredients** tailoring production to domestic manufacturing
- **Industry strategy** FM2050 is planning for future industry success

KEY POINTS

- The gross value of production from Australia's food manufacturing sector was $125 billion in 2023, and the sector employed over 200,000 people.
- Australia's food manufacturing industries face challenges from high input costs and shortages of skilled labour.
- New business models and food processing technologies have potential to make regional food processing economically viable by upskilling labour and reducing start-up costs.
- Improved reporting on the development of innovation hubs would help businesses to scale up and extend into new regions.

Australia's food manufacturing sector faces high input cost and shortages of skilled labour.

10.1 State of the food manufacturing system

In 2023, the gross value of Australia's food manufacturing sector was $125 billion, which is about the same as the gross value of the agricultural sector (ABS, 2024a). Food manufacturing is the largest employer within the manufacturing sector, accounting for 24% of jobs in 2023 (ABS, 2024a). Over 40% of these jobs are in regional areas. In June 2024, there were just over 2000 food manufacturing businesses in Australia (including seafood processing), just under 90% of which were small-to-medium enterprises with less than 20 employees (ABS, 2024b). Although a high proportion of domestic food and beverages are manufactured locally, many rely on imported ingredients. This makes Australian food manufacturing heavily dependent on China, the United States and Europe for essential inputs (ABARES, 2020; CSIRO, 2021).

Australia's food manufacturing sector faces several challenges, including high input costs, which have impeded the growth of domestic food manufacturing and maintained a focus on exporting agricultural commodities (DISR, 2024). Other challenges include a small domestic market, skilled labour shortages, infrastructure constraints, energy use, compliance with environmental sustainability rules, and the logistical challenges of large distances (Commonwealth of Australia, 2023a). Policies to support value-adding of agricultural commodities have been fragmented (Greenville et al., 2020), and agricultural policy continues to favour commodity exports. The scaling-up of

production for new food products has been hampered by limited access to innovation expertise and access to spare processing capacity for piloting new food technologies and market testing (FIPWA, 2025).

10.2 Reporting to enable manufacturing

New business models

Australia's small markets and high labour costs have contributed to a deeply embedded view in agricultural and food manufacturing policy that Australia's food system is unlikely to ever have a comparative advantage in food manufacturing (Griffith and Watson, 2016). This view is supported by sound economic reasoning that favours offshore manufacturing. Processing food closer to large markets such as Asian megacities provides manufacturers with economies of scale and the flexibility to source and blend ingredients from diverse sources to meet changing consumer preferences.

Proposed food manufacturing business models need to have clear strategies for overcoming the economics supporting offshore manufacturing. Alternative business models such as innovation clusters have potential to lower start-up costs by overcoming the indivisibility of labour and capital costs to make it more cost-effective for small-to-medium enterprises to scale up.

Innovation clusters are regional concentrations of interconnected businesses, research institutions and government organisations that work together to establish local ecosystems of resources, knowledge and relationships to support the growth of businesses in a particular field (Porter, 1990). They enable small emerging businesses to commercially acquire the services they need, without having to purchase the assets concerned or to employ the providers of essential services. They also provide an effective means for governments and research organisations to support food industry development. They can help to meet sustainability goals by locating niche, high-value food manufacturing closer to agricultural producers to increase circularity (see Insight 7, Circular economy). Better connections between food producers and consumers in regional food ecosystems can also help meet important cultural and nutritional goals.

However, there is currently only sporadic reporting on the development of innovation hubs and analysis of factors influencing their success. FIAL (2023) evaluated four regional food manufacturing clusters across Australia. They found that clusters were effective for supporting energy sustainability, food security, circular economy and the exploration of new products and processes. Ongoing reporting would help to gather and communicate learning about the potential of clusters to enable economically viable local food manufacturing and to extend these business models to new regions.

Industry strategy also has a role to play in expanding the role of manufacturing in Australia's food system. FoodManufacturing2050 is a foresighting initiative that will convene communities, governments and industries across the food system to explore opportunities for improving the economic viability of food manufacturing using strategies that go beyond regional innovation clusters. By acknowledging current manufacturing capacity and unlocking new value-adding opportunities, this initiative seeks to deliver a set of transformative pro-

grams that will further support a national research and development strategy for food manufacturing.

New food technologies

New food manufacturing technologies such as precision fermentation have potential to ease land use and related sustainability pressures. They also have potential to create new types of food, such as complementary proteins, that can help people to meet their nutritional goals. A problem faced by all emerging industries is that they struggle to register in aggregated industry metrics such as gross value of production (see Insight 11, Economics) amid larger incumbent industries. As discussed in Insight 11 (Economics), a reliance on aggregate metrics of economic size can favour incumbent industries over new entrants in policies such as those that govern research and development funding. Overcoming these biases requires a redirection of innovation metrics from past production and productivity to likely success in meeting a future with a more balanced mix of efficient production, value-adding, sustainability, nutrition and health goals.

New food manufacturing technologies have potential to ease sustainability pressures and create new types of food that can help people meet their nutritional goals.

Seeing agricultural produce as food ingredients

Australia's food system is currently fragmented and siloed across value chains, which exacerbates an industry reliance on imported ingredients and reduces opportunities for local manufacturing (Commonwealth of Australia, 2023a; Commonwealth of Australia, 2025). There is very little information flow between the farmers who produce food ingredients and the manufacturers who take these materials and make food products. This reduces opportunities to tailor agricultural produce for food manufacturing versus exporting it as a bulk commodity. An example is that oilseeds grown for oil content may lack characteristics that make them easier to crush during manufacturing.

Scaling-up new foods

Greater coordination of Australia's food system might also help to facilitate the scaling-up of food manufacturing industries. For example, a regularly updated map of underutilised food processing capacity could help the proponents of emerging food products find spare manufacturing capacity and reduce initial investments in capital infrastructure (Figure 14). New business models that tap into underutilised manufactur-ing capacities have potential to overcome some of the impediments to economically viable food manufacturing in Australia (Commonwealth of Australia, 2023b).

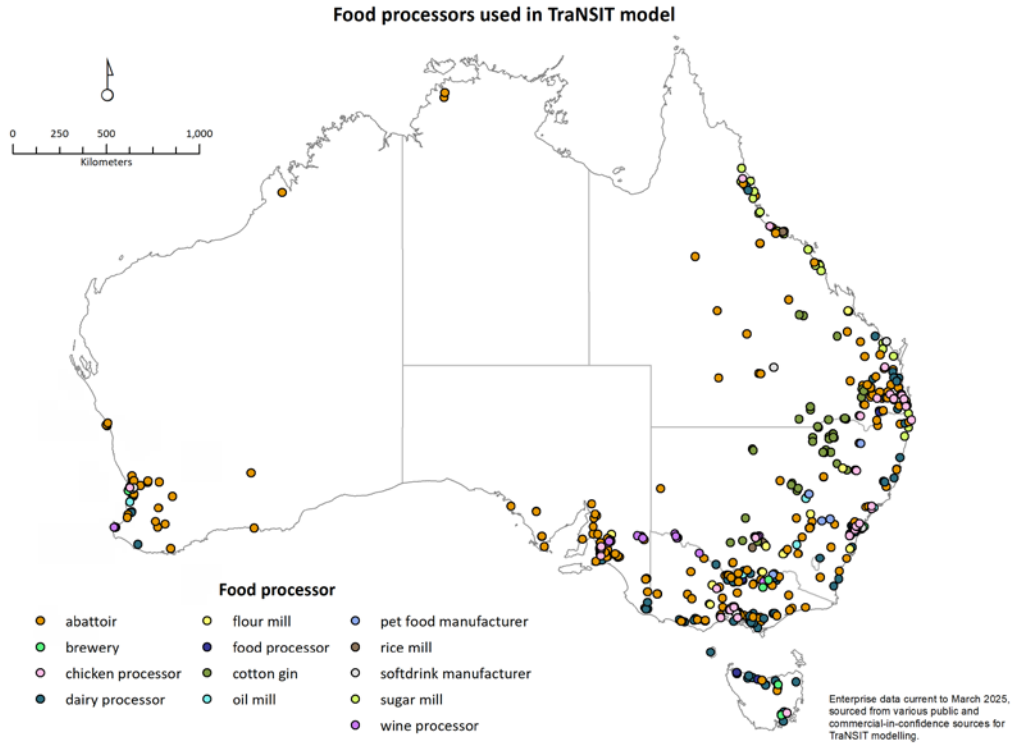

Figure 14: TraNSIT map of processing facilities across Australia and the knowledge gap of processing capability and capacity. Source: CSIRO (2025)

Greater coordination of Australia's food system would increase opportunities to tailor agricultural produce for food manufacturing and scale-up food manufacturing industries.

Overcoming transport challenges

Transport connectivity between food manufacturers and markets is poor, particularly in remote Australia. The state of the roads and rail infrastructure and the reliability of the transport system make food supply chains vulnerable to a range of threats, especially weather events. Transport resilience planning is a vital part of food system reporting. It helps to create options for moving food and other supplies, especially to remote areas, when climate or other events disrupt supply chains. Mapping the interactions between food processing facilities and road networks can help decide factors such as where food distribution centres should be located to best cope with potential supply chain disruptions (CSIRO, 2025).

Environmental sustainability

Food manufacturers are increasingly required to meet sustainability regulations that are necessary for maintaining social licence in Australian and foreign markets. Sustainability reporting and climate disclosure requirements commenced for large Australian entities on

1 January 2025, with smaller entities to start reporting in coming years (ASIC, 2025).
As discussed in Insight 6 (Sustainability), Australia does not yet have an overarching framework for reporting on the overall sustainability of the food system, including food manufacturing. An overarching framework of this kind would help us to monitor the sustainability of existing food manufacturing and to assess the sustainability claims made for new food technologies. New food technologies such as complementary proteins are likely to use more energy and water but less land than conventional agriculture, creating both new sustainability challenges and opportunities. Sustainability reporting would also help redesign regulations to minimise waste and improve the circularity of the food system.

Industry strategy

The food manufacturing sector is less well organised than other the other main production-oriented sector of Australia's food system - agriculture. Agricultural industries are represented by peak bodies with industry strategies working towards a shared $100 billion production target for 2030. Similar strategies have been suggested for Australia's food manufacturing sector, such as the 'Capturing the prize' strategy developed by Food Innovation Australia Limited in 2020 (FIAL 2020), but have gained much less traction across industry and government. This is likely because the manufacturing sector is less organised and therefore less able to negotiate a shared vision for the future. There is a risk that the apparent fragmentation of industry is impeding its development towards a more profitable and internationally competitive future. A new initiative, FoodManufacturing2050 (FM2050), will bring together industry leaders, policy advisers and researchers to identify shared challenges and develop a long-term vision for the sector. This initiative will build an evidence base around manufacturing capacity that supports the co-development of a strategic, evidence-based vision that helps negotiate the direction for food manufacturing in Australia to 2050. This vision will help to identify industry and government actions to drive towards innovation, policy and industry competitiveness goals.