



Parliamentary Inquiry into Food Security in Australia

UWA submission

The University of Western Australia welcomes the opportunity to provide a submission to the Parliamentary Inquiry into Food Security in Australia.

Key points:

- **Despite climate change and other challenges, Australian agriculture is on course to remain able to feed our nation's population as it grows.**
- **There is very significant potential to grow the value of agriculture in the Australian economy and the value of agricultural exports, if we are able to manage agricultural, scientific, economic and policy challenges.**

Despite being the driest human inhabited continent in the world, and with a limited proportion of land suitable for agriculture, Australia is blessed with a variety of different climates, meaning that our country can produce a range of agricultural products. Our agricultural sector makes good use of the available land, resulting in Australia not only being able to produce enough food for its own population, but also to be a major exporter of food and other agricultural products. Australian agriculture currently feeds 26 million people at home and about 50 million people overseas¹.

Over the next few decades our limited amount of agricultural land will be further reduced due to the impacts of climate change, land degradation, and competition for land and water use. The Australian population in 2061 is projected to be between 37 and 48 million², but despite this, and even at current productivity levels, Australian agriculture will be able to feed our nation. To maintain and increase the value of agricultural exports in an Australia with a greater population, however, we will need to deal with agricultural, scientific, economic and policy challenges.

The potential for growth is very significant, if we are able to overcome these challenges and if we are able to identify new opportunities and conduct the necessary research and development. The Food and Agribusiness Growth Centre in 2020 identified 19 major opportunities over the decade to 2030³. These can be grouped into four major research and development priority areas: the future consumer; food security and sustainability; enhanced production and value addition; and a global marketplace.

Australia's current food and agribusiness opportunity is worth around \$125 billion, and could be worth \$200 billion by 2030⁴. Growth can come in particular from health and wellness, traditional proteins, supply chain transformation, direct to consumer models, and reduction in food loss and waste. The total economic benefit by 2030 (including direct increase in sales, economic impact on suppliers, and consumption induced benefits could be as high as \$548b⁵, with the potential for the creation of 300,000 additional jobs associated with food and agriculture products and industries. To

¹ <https://www.afgc.org.au/news-and-media/2020/06/no-need-to-panic-australia-produces-enough-food-for-75-million>

² [https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/3222.0main+features32012%20\(base\)%20to%202101](https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/3222.0main+features32012%20(base)%20to%202101)

³ "Capturing the prize: The A\$200 billion opportunity in 2030 for the Australian food and agribusiness sector", The Food and Agribusiness Growth Centre (2020)

⁴ Ibid

⁵ Ibid

achieve this job growth there is a need to attract new talent to the industry and to tertiary courses to train professionals to support the industry – for example, Australia will need to train enough agricultural scientists, agronomists, technologists, and other specialists to work in the growing sector. Australia will also need to upskill people already working in the sector, as workers will need different skills to do future jobs in food and agribusiness, and demand for people with technical, managerial and numeracy skills will grow strongest. Administrative workers are expected to require the largest change in skills to do the job in 2030 and beyond.

Worldwide data, such as that provided by the OECD-FAO⁶, should factor into Australian planning when looking at key commodity crops. Over the coming decade, worldwide growth in demand for key commodity crops will be driven primarily by population growth and to a much lesser extent by per capita demand growth – this contrasts to the period 2012-21 where per capita demand growth was a significant factor in overall demand growth (or shrinkage in the case of sugar crops). Per capita demand growth is likely to remain significant for dairy, and to a lesser extent for fish and vegetable oils. China will drive demand for meat and fish, India for dairy, Sub-Saharan Africa and India for cereals. Growth in land use will be low in the decade to 2031, meaning that growth in yield will be critical to increasing agricultural output. In most regions and countries (India, Africa, Europe and Central Asia for example) there will be a reduction in land used for agriculture.

Outside of the main commodity crops, there will be strong opportunities for growth in niche markets and in luxury agricultural products – the success of Australian wine and high-end seafood products being the prime examples.

Free trade in agriculture favours Australia, as a net exporter, but creates challenges for many countries, including countries which are major or potentially major export markets for Australia. Navigating these challenges will be crucial to the degree of agribusiness growth Australia can achieve. Moves by countries to become more independent in food are likely to see increases in trade barriers, such as import duties, and also increased subsidies to what is already an extremely highly subsidised sector in Europe, the US and Japan⁷. High end luxury exports, (e.g. special cheeses, wine, honey, organics) may be less susceptible than staples such as rice and wheat. Essentially though, whether the threat is real or not, perceptions about food security will increase lobby groups' power for import controls in these markets. It's also likely that some foods such as beef will also face high border taxes in response to carbon tax initiatives.

Despite Australia being a net exporter of food and agricultural products, it is vulnerable to supply chain issues, as it is reliant on imports of agrichemicals and fertilisers. A disruption to the availability of these inputs would have a major impact on production for domestic consumption and for export. This is an area which merits policy consideration.

Less developed countries are most exposed to food security and food independence risks, and Australia has an opportunity to increase regional diplomacy by offering food security guarantees to neighbouring countries which may feel insecure.

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⁶ OECD-FAO Agricultural Outlook 2022-2031

⁷ ABARES Insights Issue 1 2022