



LAND USE
FUTURES

GLOBAL FOOD AND LAND USE TRANSITIONS



Promoting healthy diets

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Globally, unhealthy diets are a greater risk to morbidity and mortality than alcohol, drug and tobacco use, and unprotected sex combined¹. Malnutrition is the leading global cause of disease; almost two billion experience micronutrient deficiency and a further two billion are overweight. There is substantial inequity in access to healthy diets².

Recent studies³ have sought to describe the dietary shifts that would meet human health and nutritional needs, while also contributing towards keeping within environmental limits. These include:

- Increased consumption of fruits, vegetables, whole grains, legumes and nuts.
- Increased consumption of nutritious foods in general for the estimated two billion people living in moderate or severe food insecurity⁴ – a number which is predicted to rise dramatically as a result of the COVID-19 pandemic⁵.
- Reduction in over-consumption in some regions, in particular over-consumption of ultra-processed foods high in salt, sugar and saturated fats, and animal protein.
- Flexibility to account for countries' different starting points, and variable cultural and socio-economic environments.

A global shift towards a healthier, more sustainable diet presents a significant opportunity to reduce emissions⁶. However, the environmental benefits of this shift will depend on agricultural production methods, location of production and transportation methods⁷, which highlights the importance of other critical transitions for unlocking the full potential of changes in diet (see especially the

[Scaling Productive and Regenerative Agriculture](#), [Diversifying Sources of Protein](#), and [Building Local Loops and Linkages](#) papers).

The health benefits of plant-rich diets are well established, but the evidence is inconclusive regarding health benefits of foods produced with low or zero inputs of synthetic fertilisers and chemicals⁸. Likewise, while reduced chemical application in agriculture can deliver environmental benefits (see the [Scaling Productive and Regenerative Agriculture](#) paper), there remains debate about the links between chemical use in agriculture and adverse health effects on workers. Despite the limited evidence base, there are also strong consumer trends towards foods produced with fewer synthetic inputs⁹.



AUSTRALIAN CONTEXT

Unhealthy diets are a major driver of ill health in Australia¹⁰, and only incremental shifts towards healthier diets are currently occurring

- Obesity, dietary risks, high blood pressure, and diabetes are all among the top five health risks in Australia¹¹.
- Over 60 per cent of all Australians are either overweight or obese¹², rising to over 80 per cent for males aged 51 to 70¹³.
- Fewer than 1 in 10 Australian adults meet the recommendations for daily vegetable consumption¹⁴, and on average Australians don't eat enough of the five core food groups and eat too much 'discretionary food' high in salt, sugar and fat¹⁵.
- Australians are the second highest per person consumers of meat in the world¹⁶, and eat almost three times more than the global average¹⁷.
- Food consumption patterns have changed little over a period of over 30 years¹⁸, but incremental shifts have occurred away from red meat¹⁹, towards mostly or entirely vegetarian diets (now 10 per cent of Australians)²⁰. There have also been consumer shifts towards organic products, but this is still less than one per cent of market share²¹.
- National dietary guidelines that integrate environmental sustainability alongside health have been considered but not implemented at this stage²².

Australian agriculture is well placed to respond to changing international diets

- Around 70 per cent (by value) of Australian agricultural productⁱ is exported, making Australia the 12th largest agricultural exporter, with three per cent of global agricultural trade²³.
- Demand from Asian nations is predicted to double between 2007 and 2050²⁴, with the largest growth predicted in fruit and vegetables, followed by meat and cereals²⁵.
- There are strong trends amongst Asian food consumers towards premium health foods, in part due to food safety scares. There has been double-digit growth in organic sales in the Asian region, which is expected to reach US\$10 billion in coming years²⁶.
- Australia is generally regarded as a clean and safe food producer. On the other hand, some of Australia's key food exports – red meat, wheat, lamb and sugar²⁷ – are commodities whose demand could level out or fall in a global shift to healthier diets.



i Including food and non-edible fibres.

CURRENT STATE OF PLAY

Key action areasⁱⁱ for promoting healthy diets include:

- **ALIGN GOVERNMENT POLICIES ON AGRICULTURE, PUBLIC HEALTH AND ENVIRONMENT**, for example through a whole-of-government food and nutrition policy that aligns health guidelines, public procurement, regulation of labelling and advertising, and incentives.
- **REDIRECT PUBLIC FINANCE** towards healthy foods that tend to be underconsumed, and away from unhealthy foods that tend to be overconsumed, for example through adjustments to agricultural subsidies, taxes and cash incentives.
- **ENCOURAGE BUSINESSES TO TARGET INVESTMENT AND INNOVATION**, for example through research and development (R&D) investments, product development, public advocacy and advertising strategies, and acquisitions and marketing spend.

This can be supported by action on the other three action areas, and by public procurement and addition of nutrition to financial sector environmental, social, and corporate governance (ESG) assessments.

- **PROMOTE BEHAVIOURAL CHANGE** amongst food consumers, for example through changes in how food is presented in supermarkets and restaurant menus, public and private research and development funding for behavioural change approaches, and community engagement and education to improve food literacy.

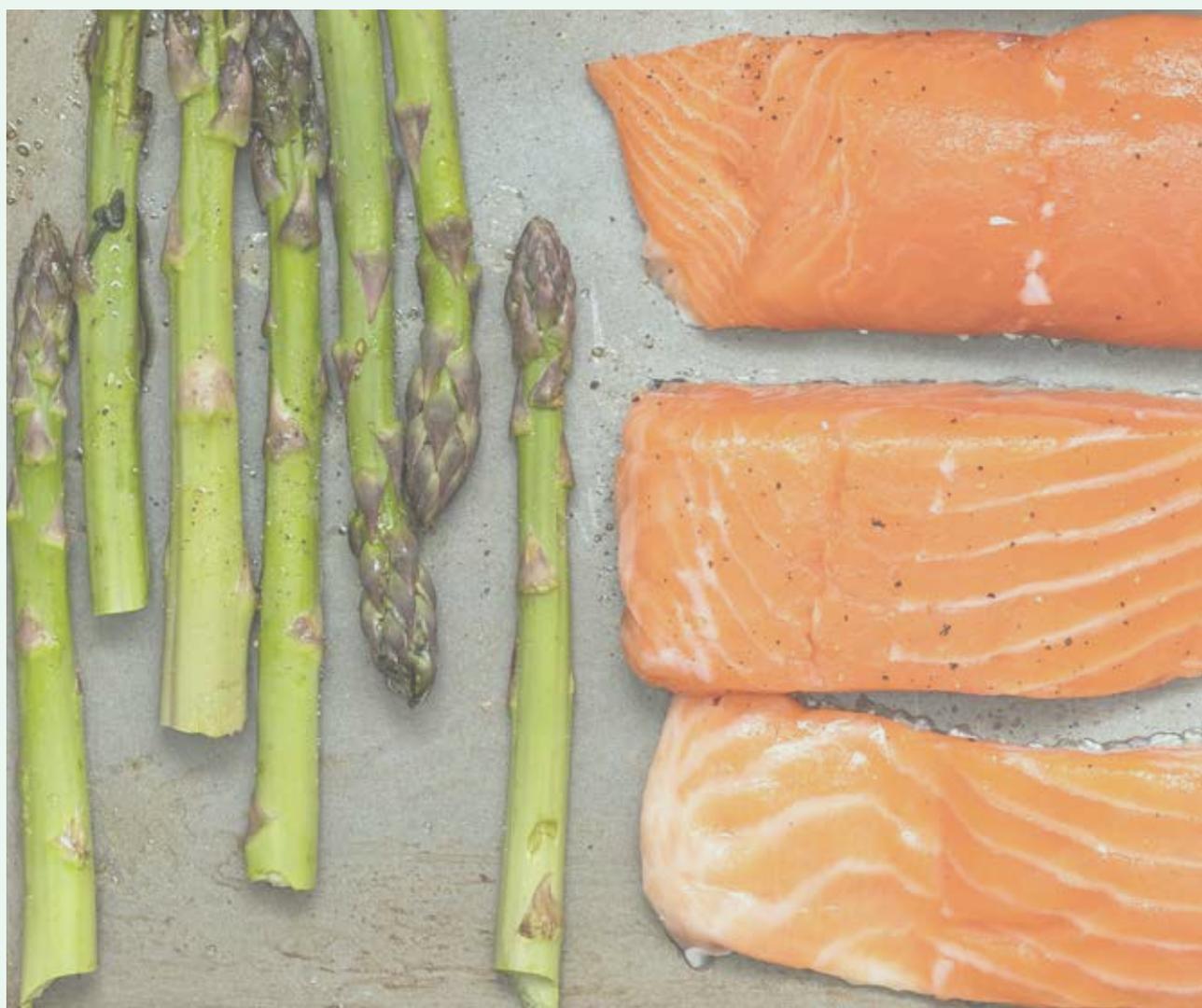
The table below outlines the current state-of-play for each action area, including major current and proposed initiatives.

KEY ACTION AREA	PROGRESS TO DATE
ALIGN GOVERNMENT POLICIES ON AGRICULTURE, PUBLIC HEALTH AND ENVIRONMENT	<ul style="list-style-type: none"> ● Highly fragmented and complex governance of food systems, and decisions affecting health are often made in other parts of the system. ● Broad trend away from government intervention²⁸, e.g. food marketing regulation mostly on a voluntary basis operated by food and advertising industries²⁹. ● Limited progress on identified public policy priorities, e.g. food taxes and subsidies, alignment between agriculture and trade policies and health and nutrition objectives, food literacy issues in the education sector, healthy food incentives for retail stores. ● Lack of clear communication of a food’s healthiness in food labelling and promotions reduces effectiveness. ● National dietary guidelines do not reflect sustainability considerations as in, for example, Brazil, Sweden and the Netherlands³⁰. ● Emerging issues with marketing to children through online games and social media³¹.
REDIRECT PUBLIC FINANCE TOWARDS HEALTHY FOODS AND AWAY FROM UNHEALTHY FOODS	<ul style="list-style-type: none"> ● Strong push in recent years to introduce taxes on unhealthy foods, particularly sugar-sweetened beverages, e.g. UK, Mexico and parts of the US³². ● As yet, little progress in implementing either taxes or subsidies at scale in Australia.

CONT. 

ii Based on the Growing Better report.

KEY ACTION AREA	PROGRESS TO DATE
<p>ENCOURAGE BUSINESSES TO TARGET INVESTMENT AND INNOVATION</p>	<ul style="list-style-type: none"> • There are moves at some levels of government to incorporate dietary guideline recommendations into standards for large-scale food procurement³⁵. • A number of research and innovation initiatives have been established to work with businesses on food innovation, including health and sustainability, e.g. Monash Food Innovation Centre, the Future Food Systems CRC, CSIRO food cluster. • Incorporation of nutritional outcomes into corporate business strategies is occurring but remains limited, and effectiveness is unclear³⁴. • Inclusion of nutritional outcomes in corporate ESG assessments isn't widespread in Australia, and investors lack Australia-specific tools to support this, e.g. absence of an Australian benchmarking platform such as the global Access to Nutrition Index.
<p>PROMOTE BEHAVIOURAL CHANGE</p>	<ul style="list-style-type: none"> • A range of government, research and non-profit initiatives exist to promote healthy food and help people make healthier food choices, e.g. WA 'LiveLighter' program³⁵, CSIRO VegEze app³⁶, Stephanie Alexander Kitchen Garden³⁷. • See also the Building Local Loops and Linkages paper for examples of consumer engagement focused more on sustainable local food.



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FOR MORE INFORMATION

The Land Use Futures program is working to adapt the global transitions to reflect Australia's unique national and regional circumstances, and identify key actions to accelerate the transition. This paper is the first step in that process.

Find out more about Land Use Futures by visiting our website: www.climateworksaustralia.org/project/land-use-futures

The Land Use Futures program is led by ClimateWorks Australia (working within the Monash Sustainable Development Institute), Deakin University and CSIRO.

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