



Department of
Primary Industries and
Regional Development

Protect
Grow
Innovate

Primary Industries Plan 2022 update



Western Australia's strategic context

Western Australia's (WA) primary industries operate in a complex environment, affected by both local, regional, and international trends and drivers, as outlined below. Building on our competitive advantages, the industry remains well positioned to support the economic diversification of the State.

WA is a small supplier to a very large and rapidly growing market

In 2020-21, WA's Gross Value of Production (GVAP) was \$10.9b, a \$1.3b (14%) increase from the previous year. Despite the impact of COVID-19 on global trade and supply chains, WA exports decreased with 1% to \$8.2b in 2020-21, less than comparable jurisdictions.

WA primary producers face increasing competition

Since early 2022, the Ukraine and Russian conflict has led to significant disruptions in the grain industry, given Ukraine is responsible for 10 to 13% of global wheat and barley production. Subsequently, grain prices have peaked on this and other contributing seasonal production factors. As a result of the conflict, costs of production have spiked with high fertiliser and fuel prices. In addition, labour supply constraints, interest rate rises and inflationary pressure has had a significant impact on profitability.

Consumer expectations of product, production systems and nutritional values grow

WA's produce remains of high quality. The State is maintaining its Marine Stewardship Council certification, with more than 90% of the State's commercial fisheries certified. Despite numerous and increasing biosecurity incidents, the State has maintained market access to its key markets.

The increased emphasis on producers' Environmental Sustainability Governance (ESG) credentials will affect the industry going forward. WA primary industries have the potential to deliver competitive ESG outcomes, framed by our stable government, sophisticated environmental, biosecurity, labour and financial management frameworks and comparative advantage in natural resources.

Product and market concentration of WA primary industries is significant

While WA continues to diversify its primary industries, the recent COVID-19 pandemic has seen a slight decrease in the value of our non-broadacre exports. Despite this, there are positive signs the industry is continuing to diversify, both in terms of products and markets. The number of commodities constituting 90% of our exports has been increasing over recent years and there has been a slight increase in the number of export destinations constituting half our exports.

The export of barley, lobster, logs, hay and wine to China remains subdued. However, several affected export industries have been able to sustain export dynamism by either diversifying into new markets, and/or increasing volumes into some existing markets.

Climate change will continue to drive change in primary production conditions in WA

In support of the State's commitment to net-zero emissions by 2050, the primary industries sector is increasingly embracing more sustainable agricultural practices. The hectareage of land incorporated into sequestration carbon farming projects has increased with approximately 50% over the last year, from 12.3m to 18.9m hectares. By June 2022, more than 1.7m Australian Carbon Credit Units have been issued to 27 projects in WA, injecting between \$23m and \$59m into regional communities.

Ownership and management of agribusinesses in WA will continue to evolve

Consistent with the trend of farming consolidation and capital-intensive technological innovation, the number of primary industries workers continues to

decline, except for support services which has increased from 2020-21 to 2021-22.

The shortage of affordable accommodation particularly in the regions remains a significant concern and the number one barrier for workforce recruitment.

The age of farmers continues to increase, with the average age now at 63.

Corporate investment in primary industries is continuing, with the number of foreign held properties increasing from 1,449 in 2020 to 1,564 in 2021.

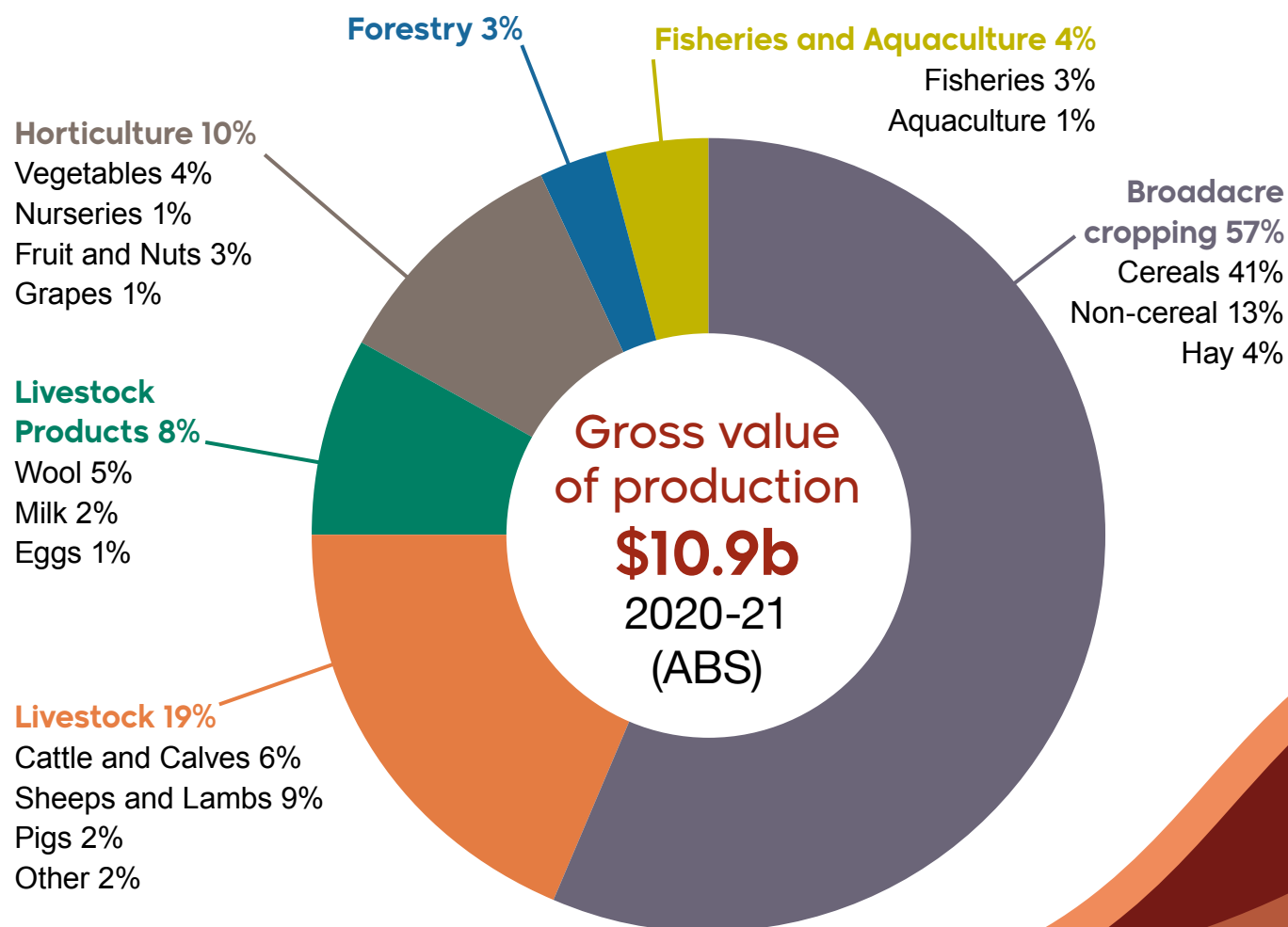
WA food manufacturing costs remain a challenge

While manufacturing costs remains a challenge, the amount of food and beverage workers, as a percentage of the total primary industries workforce, has increased substantially over recent years increasing from 28% in 2017-18 to 38% in 2021-22.

The rapidly rising cost of doing business, inflationary pressures and resource sector competition for workers remain an ongoing concern. The impacts of COVID-19 and rising costs of doing business continue to dampen business confidence.

Building international competitiveness continues to be the focus of government support and intervention activities.

Gross value of production – Primary Industries



Key facts and figures*

Exports and production		2018-19	2019-20	2020-21		
Export to major partners	China	\$2,650m	\$2,610m	\$1,520m	↓	
	Japan	\$1,030m	\$850m	\$770m	↓	
	Korea	\$550m	\$610m	\$540m	↓	
	Philippines	\$630m	\$400m	\$290m	↓	
	Other	\$4,250m	\$3,860m	\$5,120m	↑	
Export by product type	Cereals	\$5,500m	\$5,080m	\$5,450m	↑	
	Livestock	\$2,190m	\$2,150m	\$1,910m	↓	
	Horticulture	\$220m	\$240m	\$210m	↓	
	Fishing	\$570m	\$380m	\$320m	↓	
	Forestry	\$450m	\$350m	\$240m	↓	
	Other	\$170m	\$130m	\$120m	↓	
	Export by value-add	Raw	\$6,600m	\$5,980m	\$6,210m	↑
Processed		\$2,500m	\$2,360m	\$2,040m	↓	
Total exports		\$9,103m	\$8,339m	\$8,240m	↓	
Gross value of production (GVAP)	Cereals	\$5,290m	\$3,546m	\$4,450m	↑	
	Other Broadacre Crops	\$1,100m	\$922m	\$1,408m	↑	
	Livestock	\$3,011m	\$2,964m	\$2,859m	↓	
	Horticulture	\$981m	\$996m	\$1,052m	↑	
	Hay	\$372m	\$340m	\$415m	↑	
	Total Agriculture	\$10,753m	\$8,769m	\$10,183m	↑	
	Fishing and Aquaculture	\$610m	\$472m	\$421m	↓	
	Forestry	\$409m	\$367m	\$314m	↓	
Total GVAP		\$11,772m	\$9,608m	\$10,919m	↑	
Primary industries imports	Processed	\$1,001m	\$1,088m	\$1,123m	↑	
	Raw goods (fruit & veg)	\$69m	\$74m	\$76m	↑	
	Total imports	\$1,069m	\$1,163m	\$1,199m	↑	
Employment		2018-19	2019-20	2020-21	2021-22	
Agriculture		32,000	28,000	28,000	25,000	↓
Fisheries + Aquaculture		2,100	1,600	1,400	1,500	↓
Forestry		900	1,100	800	700	↓
Support Services		4,000	4,300	2,800	4,000	↑
Agriculture, Fisheries & Forestry Total		39,000	35,000	33,000	31,000	↓
Food and Beverage		17,000	19,000	20,000	19,000	↓
Total		56,000	54,000	53,000	50,000	↓

* Source: Based on Australian Bureau of Statistics (ABS) data

Commitments and actions

Now in its second year, the Department has delivered several key initiatives under the Primary Industries Plan.



1. Protect and enhance the condition of our natural resources

Strategic initiative	Achievement
<p>1.1 Sustainable management of fish and aquatic resources</p> <p><i>Ensure aquatic resources are managed within sustainable limits.</i></p>	<p>98% of fishing stocks considered sustainable and not at risk from fishing.</p> <p>Supported the recovery of WA's herring stock, with a science assessment indicating numbers of the popular finfish species had returned to sustainable levels.</p> <p>Boosted recreational fishing opportunities and strengthened local tourism in the East Kimberley, released the millionth barramundi into Lake Kununurra in July 2021 and a further 300,000 by June 2022.</p> <p>Implemented major upgrades to the Shark Monitoring Network, with 37 shark detection receivers now located between Perth and Esperance.</p>
<p>1.2 Sustainable management of land and soil resources (land condition and soil health)</p> <p><i>Deliver on the Auditor General recommendation in relation to rangelands condition monitoring assessment and reporting by implementing the risk-based pastoral lands framework</i></p>	<p>Secured \$2m from the State and Commonwealth for the Southern Rangelands Revitalisation project.</p> <p>Initiated the Pastoral Lands Reform Project to implement sustainable land management practices across the rangelands, including a Sustainable Pastoral Management Framework.</p> <p>Worked with CSIRO¹ to update the assessment of salt affected land.</p> <p>Re-established the Soil and Land Conservation Council.</p> <p>Initiated the WaterSmart Farms project exploring suitable agriculture water options (including on-farm desalination).</p>
<p>1.3 Systems based agriculture, fisheries, aquaculture, and forestry</p> <p><i>Identify farm, aquaculture, fishing and forestry management systems that enhance the economic value of primary production and also improve the condition of our natural resources</i></p> <p><i>Support business planning for a future with less secure water including support for more efficient use of water, identifying opportunities for on farm desalination, and transitioning businesses to be more resilient to reductions in water availability</i></p>	<p>Commissioned a new 300 head Sheep Feed Intake Facility at Katanning Research Station, the biggest in Australia.</p> <p>Commenced development of a policy framework to support contemporary application of the Soil and Land Conservation Act, 1945.</p> <p>Coordinated the Gngangara Water Use Efficiency Grants supporting the transition to sustainable allocations on the Gngangara allocation area.</p>

¹ Commonwealth Scientific and Industrial Research Organisation

<p>1.4 Climate change strategy</p> <p><i>Provide leadership in land and marine-based responses to climate change</i></p>	<p>Initiated the \$15m Agriculture Climate Resilience Fund to deliver solutions for WA's climate and agricultural issues by leveraging Commonwealth, philanthropic and commercial resources.</p> <p>Commenced the development of an Agriculture Sectoral Emissions Reduction Strategy (\$1.5m) and Carbon Farming Industry Development Plan (\$1.5m).</p> <p>Launched the Katanning Research Facility Carbon Neutral Demonstration Project (\$4.2m).</p> <p>Completed Round 1 of the \$15m Carbon Farming and Land Restoration Program targeting the uptake of carbon farming in the South West Land Division.</p> <p>Completed Round 1 of the Carbon for Farmers Voucher Program supporting farmers to devise land management strategies informing business decisions about carbon farming.</p>
<p>1.5 Environmental biosecurity</p> <p><i>Provide systems for the delivery of environmental biosecurity</i></p>	<p>Lifted the Quarantine Area Notice for Red Imported Fire Ant (RIFA) in place for the Fremantle area with area freedom from RIFA expected in 2022-23.</p>

2. Build trust in Western Australia's primary production



Strategic initiative	Achievement
<p>2.1 WA biosecurity</p> <p><i>Maintain and strengthen the State biosecurity program to protect WA from significant pests and diseases that may damage the productivity, profitability, market access, and reputation of WA's primary industries</i></p> <p><i>Use a risk-based approach to ensure the biosecurity system is robust and effective</i></p>	<p>Conducted 171,053 tests, comprising 101,519 animal and 21,799 plant pathology tests and 47,735 insect identifications, to ensure early diagnosis of exotic or notifiable diseases and provide trading partners with assurance of our industry's biosecurity and integrity.</p> <p>Established interim diagnostic labs at the Department's South Perth site, ensuring continuity of critical biosecurity lab functions while plans for a new facility are being finalised.</p> <p>Received and screened more than 8,500 enquiries from industry and the public for biosecurity concerns, resulting in more than 75 detections of animal and plant pests of concern.</p> <p>Following the easing of COVID-19 border restrictions, there was 34% more passengers on interstate flights into Perth (905,539) and 30% more vehicles entering the state through road checkpoints (109,311). From this, Quarantine WA intercepted 31,681kg of quarantine risk material, with 32 significant plant disease and pest intercepts. The service also inspected and certified 142,082 lines of produce and seed, and 38,104 interstate livestock.</p>

<p>2.2 Animal welfare</p> <p><i>Develop animal welfare systems that meet community expectations and enhance the reputation of WA Agriculture.</i></p>	<p>Released Standards and Guidelines for the Health and Welfare of Horses in WA for public comment.</p> <p>Through the \$2m Animal Welfare Grant Program (four years), allocated \$500,000 for 16 projects targeting the wellbeing of companion animals and rescued wildlife.</p> <p>Commenced drafting of an amendment Bill to modernise the Animal Welfare Act 2002.</p> <p>Established the Animal Welfare Advisory Committee to advise the Minister for Agriculture and Food.</p>
<p>2.3 Industry Standards</p> <p><i>Support the development of national industry standards and guidelines where new technology, and changing farming methods provide a competitive advantage, improved productivity, and/or price premium to WA primary industries</i></p>	<p>Drafted National Environmental Standards for Covered Cattle Feedlots and Handling Facilities and started a review of the National Environmental Guidelines for Rotational Outdoor Piggeries.</p> <p>Engaged with Grain Producers Australia regarding its draft Code of Practice for Agricultural Mobile Field Machinery with Autonomous Functions in Australia.</p>
<p>2.4 Industry-led certification</p> <p><i>Provide government support and endorsement of product assurance standards, process verification and/or industry sustainability index plans for primary producers and supply chains.</i></p>	<p>Supported a review of the National Feedlot Accreditation Scheme which is the primary industry accreditation scheme for the feedlot industry.</p> <p>Maintained WA's reputation as a world leader in sustainable fisheries management, with two more fisheries receiving certification under the international Marine Stewardship Council standard.</p>



3. Maintain and build competitiveness



Strategic initiative	Achievement
<p>3.1 Applied research to maintain and increase productivity</p> <p><i>Undertake targeted research and development in areas that will drive innovation and commercial outcomes for grains, livestock, horticulture, fisheries, aquaculture, and forestry industries</i></p> <p><i>Co-invest and collaborate with industry and other research organisations to ensure primary industries have access to new products, technologies, and systems that are suitable under WA conditions, including under a changing climate</i></p> <p><i>Engage with industry organisations, grower groups and advisors across all sectors as an effective mechanism to ensure research relevance, rapid adoption of new technology, and the development of a collective knowledge base</i></p>	<p>Awarded \$25m (3 years) for the WA Agricultural Research Collaboration, bringing together DPIRD, CSIRO, and Curtin, UWA, Edith Cowan, Murdoch Universities. The Collaboration will respond to industry needs using suitable scientific solutions and attracting additional R&D funding.</p> <p>Initiated a \$20m WA Farming Systems Project, a 5-year co-investment by DPIRD and the Grains Research and Development Corporation for farming systems research and development in WA's medium/low rainfall regions.</p> <p>Developed 11 wheat lines with high resistance to Yellow Spot that have the potential to return \$212m annually. Yellow spot is prevalent across the grainbelt, leading to yield losses of up to 50%.</p> <p>Developed a test for ice nucleating bacteria to advance frost tolerance research. Average annual loss from frost is around \$400m.</p> <p>With universities and the private sector, developed decision support tools for grain crops fungal diseases that delivered more than \$20m in value to industry.</p> <p>Released a new yellow serradella legume pasture – SerraMax – to provide a new option for livestock producers in low to medium rainfall areas.</p>
<p>3.2 Growth through Ag-Tech and digital connectivity</p> <p><i>Support the development of a vibrant technology sector that supports primary industries in WA</i></p>	<p>Through the Agricultural Telecommunications Infrastructure Fund, provided \$1.03m for wireless infrastructure to deliver reliable broadband to the Leonora, Laverton and Menzies shires.</p> <p>Launched Extrata™, a data sharing platform enabling farmers to confidently share data with service providers.</p>
<p>3.3 Building business resilience</p> <p><i>Work with industry and State agencies to build resilience and the ability to adapt to change, whether to a changing climate or rapidly changing markets, through strengthening primary industries business management and planning skills</i></p> <p><i>Work with Commonwealth and State agencies to reactivate and recover those businesses severely affected by COVID-19</i></p>	<p>Delivered the Federal Farm Business Resilience program, assisting producers to build their skills and knowledge to improve business management capacity and climate change resilience.</p> <p>Commissioned research to assess industry circumstances once the International Freight Assistance Mechanism ended, and what Government actions would be beneficial in the context of global freight, logistics and market disruptions.</p>

<p>3.4 Primary industries workforce</p> <p><i>Work with industry to plan for and deliver strategies to meet the permanent and transient workforce needs of primary industries</i></p>	<p>Administered the Regional Agriculture, Tourism and Hospitality Workers Travel and Accommodation Support Scheme, which attracted more than 1,100 workers during 2021-22.</p>
<p>3.5 Improved logistics for supply chain competitiveness</p> <p><i>Strengthen WA's road, rail, and marine logistics networks to support primary industries and regional communities.</i></p>	<p>Represented agribusiness interests on the Freight and Logistics Council of WA that informs the Minister for Transport of transport disruptions.</p>

4. Differentiate, value-add, and diversify primary industries



Strategic initiative	Achievement
<p>4.1 Projects of strategic importance</p> <p><i>Provide lead agency support, working across government and with Regional Development Commissions, to navigate regulatory and approval pathways for priority agribusiness projects.</i></p>	<p>Provided case management support to 362 businesses. These businesses vary in scale and complexity, spanning multiple agricultural sectors to facilitate their plans to establish or expand agribusiness operations in WA.</p>
<p>4.2 Expand value-add agribusiness sector</p> <p><i>Support start-ups and small- and medium-sized enterprises (SMEs) with high growth potential and/or innovative products or production methods</i></p>	<p>Delivered the first round of the Value-Add Investment Grants (VAIG) and launched the Agrifood and Beverage Voucher Program. Over the past three years, the VAIG program provided \$17m in grants matched by \$152m in private sector investment and created ±900 jobs.</p> <p>With Southern Dirt grower group, delivered the Future of Food event in regional WA, attended by 400 delegates, and hosted the Meet the Buyer event attended by more than 180 visitors from buyers to importers.</p>
<p>4.3 Agri-food Cluster Development Program</p> <p><i>Focusing on priority established and emerging clusters of agri-food, fisheries and forestry businesses</i></p>	<p>Implemented the Food Industry Innovation project that supported the establishment of a new economic cluster facilitated by the Southwest Brewers Association.</p> <p>With the Mid West Food Industries Alliance, initiated a program supporting the clustering of food and beverage businesses in the Midwest.</p>
<p>4.4 Diversification of agribusiness opportunities</p> <p><i>Identify suitable land and water resources to support new projects of strategic importance</i></p>	<p>Approval to develop more than 50% of the 5,500ha Knox area in the Ord River Irrigation Area.</p> <p>Released 400ha with 4GL water for new irrigated horticulture in the Gascoyne (projected 25% increased production and 3-400 jobs) and progressing 2,000ha for new irrigated horticulture through Myalup Primary Industry Reserve.</p>

<p>4.5 WA Aquaculture Development Plan</p> <p><i>Through the State's Aquaculture Development Plan support aquaculture industry development over the next 10 years.</i></p>	<p>Established dedicated zones for aquaculture, leading to investment in shellfish aquaculture industry. The 2nd stage of the Albany Aquaculture Zone (810ha) is expected to produce around 1,500 tonnes of shellfish at an estimated value of \$30m per year.</p> <p>Tested a sea-based floating nursery (FLUPSY) in Albany's Oyster Harbour to boost shellfish aquaculture production. The FLUPSY has an annual production capacity of 5-10 million 5mm rock oyster seed.</p>
<p>4.6 Aboriginal participation</p> <p><i>Support Aboriginal communities and entrepreneurs to develop land and sea-based enterprises that support Aboriginal employment in primary industries</i></p>	<p>Supported Aboriginal Business Development Programs enhancing planning initiatives for Aboriginal business and de-risking suitable commercial fish species from northern Gascoyne waters to the Kimberley.</p> <p>Developed "Setting up for Success in Bushfoods" and "Protecting Indigenous Ecological Knowledge" as best practice guides for Aboriginal business looking to promote and benefit from Aboriginal knowledge and intellectual property.</p> <p>Coordinated an Aboriginal Pastoral Academy pilot program and delivered Regional Sheep Shearing and Woolhandling Training Hubs for Aboriginal youth.</p>
<p>4.7 Forest industries (Forest Products Commission, FPC)</p> <p><i>Grow the forest and agri-forestry sector and diversify WA forestry products and markets</i></p>	<p>FPC commenced the \$350m softwood plantation expansion program and, with industry, developed a decision tool to inform landowner decisions to invest in farm forestry.</p> <p>FPC currently exploring approaches to the 'ecological management' of the South West native forests.</p>

5. Secure and grow markets



Strategic initiative	Achievement
<p>5.1 Industry growth partnerships</p> <p><i>Establish an Industry Growth Partnership Program to support sector wide initiatives</i></p>	<p>Implemented the \$3m Wine Industry Export Growth Partnership seeking to expand sales in existing markets and opening new markets in Southeast and Northeast Asia. WA wine outperformed other states with a 3% volume increase for 2021-22.</p> <p>Under the Processed Oats Partnership, initiated four research projects that supports growers to improve yield gains, disease resistance and beta-glucan, protein and fat levels. The improved quality benefits WA oats processors who need consistently high-quality oats to meet consumer expectations.</p>

<p>5.2 Targeted in-market development</p> <p><i>Strengthen relationships in key existing and new markets for WA agricultural and food products</i></p>	<p>Delivered the International Competitiveness Co-Investment Fund (ICCF) to assist agri-food businesses to retain and build Asian market share.</p> <p>Partnered with Austrade's TradeStart Program to recruit two TradeStart Advisers to deliver expanded export support to WA agribusiness by leveraging Austrade services, networks, and market engagement opportunities.</p>
<p>5.3 Strengthening market access and marketing</p> <p><i>Promote and build a strong brand for WA agricultural and aquatic food and forestry products</i></p>	<p>Collaborating with the Commonwealth Department of Agriculture, Fisheries and Forestry on WA priorities for future market access such as avocados to Thailand and India, and lupin food products to Japan.</p> <p>With Austrade ran an in-market promotion themed 'Flavours of Western Australia', building on a previous DPIRD promotion that covered grapes, carrots and onions, and increased the awareness of the WA bred BRAVO® apple (branded 'Soluna' internationally) and other horticulture products.</p> <p>With the Department of Jobs, Tourism, Science and Innovation, executed Plating Up WA: Singapore Edition in June 2022, which partnered with 21 Singaporean food and beverage establishments. The venues served dishes featuring WA produce, including rock lobster, black truffle and black barley.</p>
<p>5.4 Australian Export Grains Innovation Centre</p> <p><i>Prioritise investment in a strong, integrated AEGIC to continue providing market intelligence and research to match WA grain qualities and functionality to the needs of premium export markets</i></p>	<p>With the Grains Research and Development Corporation, committed to annual funding for AEGIC of \$3 million from 2022-23 until 2025-26.</p> <p>Providing an additional \$1million per annum for AEGIC to undertake WA focused research</p>

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