

Avocado

Strategic Investment Plan

2022-2026



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EXECUTIVE SUMMARY

The overarching strategic intent of this Strategic Investment Plan (SIP) is to support the success of the Australian avocado industry by using globally competitive production systems, increasing domestic demand, developing export markets and improving consistent product quality.

The avocado SIP 2022-2026 provides a roadmap to guide Hort Innovation's investment of avocado industry levies and Australian Government contributions, ensuring investment decisions are aligned with industry priorities.

The Australian avocado industry situation in 2019/20 is described on **page 4** with further information provided in **Appendix 1**. The avocado industry is in a strong growth phase and is expected to continue to grow at a rapid rate over the next five years based on the area planted across the nation. About half of all plantings are yet to come into full production with large increases in supply expected in North Queensland, Central Queensland and Western Australia. Over the next five years, it is estimated that the industry will need to increase both domestic and international markets to consume an additional 90,000 tonnes, more than double the production volume in 2021.

The strategic intent of the avocado SIP provides a summary of how the avocado industry will drive change over the life of the SIP. It reflects the importance of domestic and international market development, the use of globally competitive production systems and consistent supply of product quality to remain competitive in these markets.

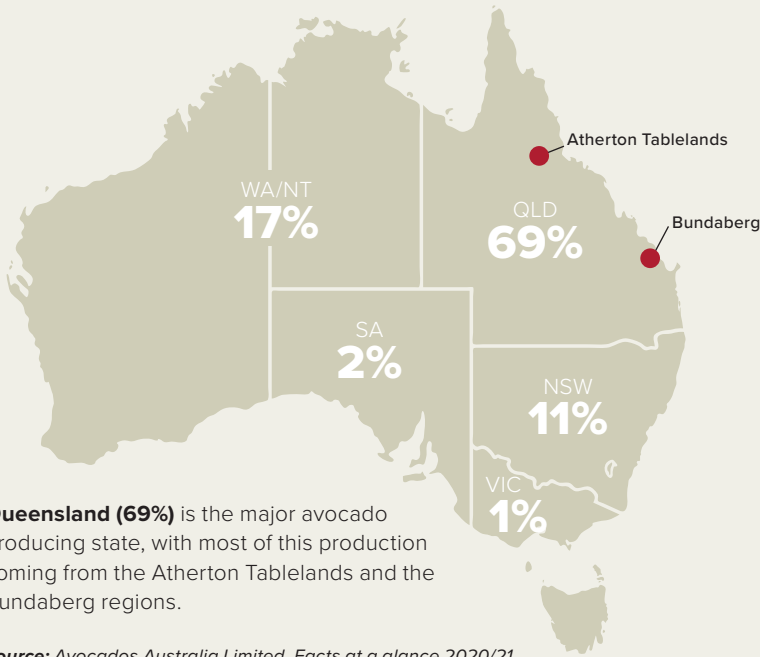
The financial estimates give an indicative overview of the funding availability for the period of FY2022-FY2026. Currently there is funding available for research and development (R&D) investments over the life of the SIP with significant opportunity to invest in R&D investments over the next five years.

The four outcome areas of this SIP cover significant themes under which programs and investments will be focused and are listed in priority order for the avocado industry. Demand creation remains the primary focus and will be the key to sustainable expansion of production and consumption in both domestic and international markets. This will involve identifying and prioritising domestic and international market niches where there is demand and growth potential for competitive supply of quality Australian avocados. Strategies to improve productivity, quality, supply and sustainability are also crucial to ensure production systems are competitive, through improved orchard management practices, adaptation of technology and improved varieties. Extension, communication and capability-building initiatives will support the adoption of best practices and good business decisions for the benefit of the broader industry, while decisions informed by high-quality information and analysis provided through business insights will ensure targeted and effective investments.

The key performance indicators (KPIs) detail how the impact of each strategy will be measured, for example, development of a market access and trade development strategy, feedback from retailers on the value of joint business planning initiatives, new knowledge becoming available for growers to enable orchard yield consistency and manage quality in the supply chain, and technologies to improve cost efficiencies identified and shared with growers.



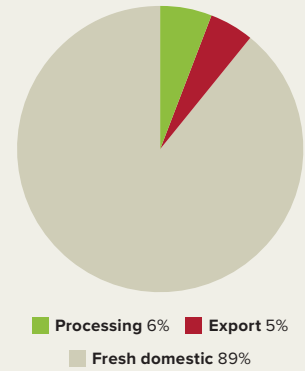
PRODUCTION REGIONS:



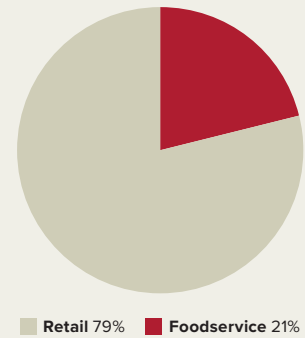
Queensland (69%) is the major avocado producing state, with most of this production coming from the Atherton Tablelands and the Bundaberg regions.

Source: Avocados Australia Limited, Facts at a glance 2020/21

EXPORT/FRESH DOMESTIC/ PROCESSING:



RETAIL VS FOODSERVICE:



PRODUCTION WINDOW:



Year-round

NUMBER OF GROWERS:



Approx. 850

PER CAPITA CONSUMPTION:



3.65 kg

in 2019/20

PRODUCTION VOLUMES:



87,546 tonnes

in 2019/20

FARMGATE VALUE OF PRODUCT:



\$450 million

in 2019/20

GROWTH TRENDS:



+6.9%
Average annual volume growth

VARIETIES:



Hass 80%

Shepard 17%

Reed, Sharwil, Wurtz and others 3%

THE AVOCADO STRATEGIC INVESTMENT PLAN

The avocado SIP is the roadmap that will guide Hort Innovation's oversight and management of the avocado industry's investment programs. It lays the foundation for decision-making in investments and represents the balanced interest of the whole industry. The important function of this SIP is to ensure that the investment decisions align with avocado industry priorities.

Hort Innovation has led the process for preparing the refresh of the avocado SIP, listening and engaging with levy payers and key stakeholders including Industry Representative Bodies (IRBs) and expertise available through advisory mechanisms and delivery partners. The refresh process involved consultation with and input from a wide range of levy payers, objective analysis of performance and learning from the recent SIP, and environmental scanning to identify emergent trends and issues that could impact on industry profitability and sustainability.

Hort Innovation has valued the support, advice, time, and commitment of all stakeholders that contributed to producing this SIP, especially avocado growers.

The whole-of-company approach taken by Hort Innovation to produce this SIP has harnessed existing external and internal knowledge, learning, partnerships and relationships. The output is a tailored plan with which the avocado industry can be confident of its strategic intent, including visibility on how investment impacts will be identified. Specific investments to address the SIP strategies and align with industry strategic priorities will be outlined in detail via the avocado Annual Investment Plan (AIP). The AIP will be published each year over the lifespan of the SIP and detail the investments that will be prioritised based on potential industry impact, as well as the availability of levy funds. Hort Innovation will advise industry stakeholders when the AIP has been published via established communication channels each year. The AIP will be developed with input from the avocado R&D Strategic Investment Advisory Panel (SIAP), avocado marketing SIAP, IRBs and other key stakeholders.

Producers in the avocado industry pay levies to the Department of Agriculture, Water and the Environment, which is responsible for the collection, administration and disbursement of levies and charges on behalf of Australian agricultural industries.

Agricultural levies and charges are imposed on primary producers by government at the request of industry to collectively fund R&D, marketing, and biosecurity.

Levy is payable on avocados that are produced in Australia and either sold by the producer or used by the producer in the production of other goods. The grower-raised R&D levy rate on avocados is set at 2.9 cents per kilogram for fresh avocados and 1 cent per kilogram for processing avocados. The marketing levy is set at 4.5 cents per kilogram.

Hort Innovation has developed this SIP for the avocado industry to strategically invest the collected avocado levy funds into the priority areas identified and agreed by the avocado industry.

This SIP represents the Australian avocado industry's collective view of its R&D and marketing needs over the next five years (2022-2026). Learning, achievements and analysis of the previous SIP, consultation with Australian avocado levy payers, and synthesis of various strategic documents have been incorporated into the development of this SIP.

Appendix 3 acknowledges the people who were consulted in the preparation and validation of this SIP. Statistics and data within this publication are sourced from the Australian Horticulture Statistic Handbook 2019/20 and other documents unless stated otherwise and are listed in **Appendix 4**. A list of acronyms used within the document is available in **Appendix 5**.



Financial estimates

The annual revenue from levy income and Australian Government contributions for eligible R&D set the overall budget parameters for the SIP. Importantly, a portion of these funds are already committed, as the industry has current multi-year projects for R&D and marketing activities. In addition, the levy income from year to year will vary due to changes in seasonal and market conditions.

The indicative financial estimates used for the purposes of developing this SIP are presented in **Table 1** below. These figures are regularly reviewed to reflect the latest information and statistics for the industry and any changes in investment priority. The avocado R&D industry closing balance will need to reduce over the period of the plan. Hort Frontiers provides an opportunity to invest R&D levy funds. For further details refer to the industry Annual Investment Plan (AIP).

TABLE 1. Indicative financial estimates for the avocado SIP over the life of the SIP

	2022 \$	2023 \$	2024 \$	2025 \$	2026 \$
R&D					
Balance end FY2021	3,597,630				
Estimated levy funds (growers)	2,700,000	3,000,000	3,500,000	4,000,000	4,500,000
Australian Government contribution	2,443,735	2,538,573	2,348,434	2,264,501	2,071,172
Current investments	4,213,000	2,176,500	1,048,700	404,000	370,700
New investments	–	2,200,000	3,000,000	3,500,000	3,200,000
Total project investments	4,213,000	4,376,500	4,048,700	3,904,000	3,570,700
CCR	674,471	700,646	648,168	625,002	571,643
Projected end balance	3,757,000	4,303,000	5,364,000	6,910,000	8,995,000
MARKETING					
Balance end FY2021	1,484,721				
Estimated levy funds (growers)	4,300,000	4,500,000	5,000,000	5,500,000	6,000,000
Current investments	4,708,440	–	–	–	–
New investments	–	3,500,000	3,500,000	3,500,000	3,300,000
Total project investments	4,708,440	3,500,000	3,500,000	3,500,000	3,300,000
CCR	843,966	627,358	627,358	627,358	591,509
Projected end balance	55,000	520,000	1,514,000	3,000,000	5,040,000

Disclaimer: All figures are indicative only and may change depending on actual income and expenditure.

Balance end FY2021 – The closing balance of the fund as at 30 June 2021

Estimated levy funds – Net levy income/revenue that is generated and collected by levy revenue services (LRS)

Australian Government contribution – Amount of contribution from the Australian Government on R&D levy-funded expenditure

Current investments – Current estimated value of contracted projects

New investments – The estimated dollar value that is available for potential new investments for industry subject to industry advice

CCR – Corporate cost recovery: the cost to implement and manage R&D and marketing investment programs for each industry

Projected end balance – Forecast of the anticipated final position of the fund



AVOCADO INDUSTRY OUTCOMES

The overarching strategic intent of this SIP is to support the success of the Australian avocado industry by using globally competitive production systems, increasing domestic demand, developing export markets and improving consistent product quality.

Industry outcomes

Outcome statements as identified and prioritised by the avocado industry have been prepared under four key outcome areas: demand creation; industry supply, productivity and sustainability; extension and capability; and business insights.

OUTCOME 1: Demand creation

Grow consumer demand in domestic and international markets to support farmgate grower returns.

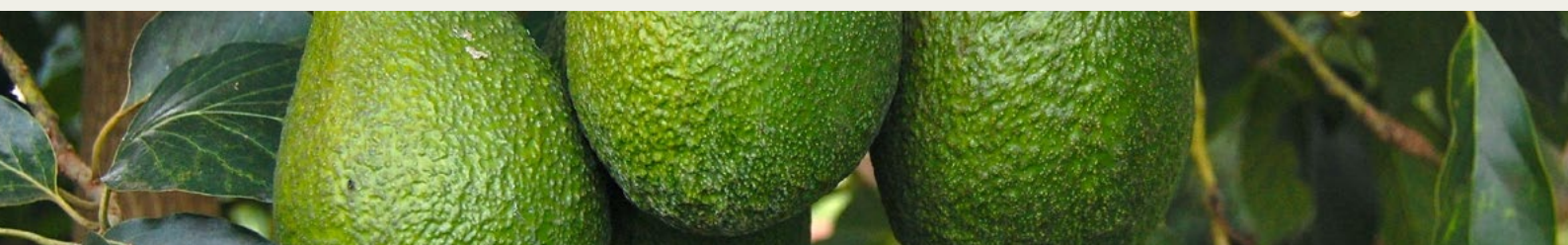
Demand creation will support the avocado industry to expand into existing and future domestic and international markets.

The strategic intent of this outcome is to maintain and strengthen consumer demand in both domestic and international markets. Investments aligned with this outcome will contribute to improved consumer knowledge, attitudes, in addition to encouraging purchase intent to drive category volume growth.

Achieving the outcome will involve:

- Broadening consumer awareness so that avocados are more top of mind and purchased more frequently
- Building a strong brand in 'Australian Avocados' by improving awareness, consideration, attitudes and knowledge
- Supporting product positioning with consistent quality, evidence of beneficial product health attributes and responsible industry production practices
- Developing strong relationships across the supply chain, including foodservice and retail, with a shared goal to grow the category
- Identifying and prioritising domestic and international market niches where there is demand and growth potential for competitive supply of quality Australian avocados.

Over the next five years, it is estimated that the industry will need to increase both domestic and export markets to consume an additional 90,000 tonnes of avocados, more than double the production volume in 2021. This level of increase will require substantial increases in both domestic and international markets, making this outcome a foundation for sustainable expansion of production and consumption in both domestic and international markets.



OUTCOME 2: Industry supply, productivity and sustainability

Improve industry productivity (inputs/outputs) to increase local and international competitiveness, while maintaining viability and sustainability of supply.

The Australian avocado industry will increase marketable yield per hectare through globally competitive production systems, such as orchard management, varieties, innovative R&D and sustainable best management practices (BMPs).

The strategic intent of this outcome is to accelerate the application of production practices that optimise returns and reduce risk to growers. Achieving the outcome will involve:

- Evaluation of high-performing commercial rootstock varieties in major growing regions, increasing productivity and driving quality improvements to meet consumer quality expectations
- Globally-competitive sustainable growing systems
- Accelerating widespread use of existing and new R&D findings and proven management practices that will help growers to improve product quality and increase production efficiency
- Prioritising improved and consistent product quality based on a systems approach and advances in physiology, crop nutrition, irrigation, pest and disease management, and adoption of BMPs throughout the entire supply chain to the end consumer
- Securing pollination for industry through robust honey bee health, pest and disease mitigation and investigation of alternate pollinators
- Proactively monitoring potential crop protection regulatory threats and having access to a broader suite of effective, socially acceptable and environmentally sound crop protection solutions.

Productivity is known to be a key driver of profitability for the Australian avocado industry, and hence the sustainability of the industry will require ongoing improvements in productivity. This will become increasingly important as the industry becomes a more active participant in the global market. Whilst Australia is inherently a high-cost producer, investments to increase productivity, thereby reducing unit cost of production, will improve industry competitiveness.

As productivity and quality often go hand in hand, the two are considered together as part of this outcome area. Practices that increase yield may positively or negatively impact on quality and vice versa, and hence must be considered simultaneously.

Due to the wide range of growing conditions, this outcome will also require tailoring management practices to specific regions.

Increased production efficiency can also be achieved by reducing inputs per volume of production. Identification and adaptation of technologies will be a key area of focus to enhance production efficiencies by improving labour efficiency and other resource use efficiencies.

“The important function of this SIP is to ensure that the investment decisions align with avocado industry priorities.”

OUTCOME 3: Extension and capability

Building capability and innovative culture.

Building capability will enable adoption across the supply chain of best practices and innovation which will support an innovative culture.

The strategic intent of this outcome is to manage knowledge, relationships, systems and the processes required to communicate effectively with internal and external stakeholders. Achieving the outcome will involve:

- A change in knowledge and skill leading to adoption of best practice and innovation
- Maintaining and improving industry cohesiveness through engagement along the supply chain
- Growers, supply chain, the general public and government are well informed on industry initiatives and achievements as a vital part of regional communities and networks
- Improved networks and cross-industry collaboration that increase the use of levy investment outputs and build a stronger, more resilient industry
- Proactive strategic and evidence-based decision-making in businesses and for industry on investment, priorities and risk management.

The success of the Australian avocado industry and its businesses depends largely on the capability of the people that work within it. This outcome will support all sections of the industry adopt best practice in all facets of management and ensure industry participants have the best quality information available to support good business decisions.

The industry is comprised of a diverse mix of people – some new to the industry, some long established, some with large businesses, and some with small. The industry is also comprised of various business types and is spread across a wide range of climates from subtropical to temperate. Investments from this outcome will aim to address the diverse needs of industry, supporting the adoption of best practice and good business decisions for the benefit of the broader industry.

OUTCOME 4: Business insights

Measure industry supply (production) and demand (consumer behaviour) data and insights to inform decision-making.

Business insights will support the industry to respond to market and industry trends to drive informed decision-making.

The strategic intent of this outcome is to deliver data and insights which is foundational to achieving success in the other three outcome areas of demand creation; industry supply, productivity and sustainability; and extension and capability.

Achieving the outcome will involve reliable baseline data and analysis to provide insights and understand current and emerging trends. Key investments will support the provision of consumer insights including attitudinal, behavioural and sensory elements, trade data, independent reviews, production statistics and forecasting to enable better decision-making processes at the industry level, as well as for individual businesses.

These investments underpin and are complementary to the delivery of the other outcome areas as decisions informed by high-quality information and analysis are likely to lead to better outcomes.

Investments to increase demand will be underpinned by robust consumer and market insights, while a greater understanding of consumers and markets, enables more targeted and effective investments, providing a greater chance that the market growth targets will be achieved. Given the need to dramatically increase domestic and international markets over the next five years, the quality and frequency of the required insights justify a substantial investment.

As the industry operates in a global market, it is imperative to understand the dynamics of the global industry and global markets to identify opportunities and threats for the Australian industry, as they arise.

Production information is essential to help with both short and long-term planning at both an industry and business level. Information about industry plantings provides important insights to inform long-term production forecasts and, therefore, strategies for industry and businesses. Regular monitoring and reporting of product supply volumes provide information to support a balance between supply and demand.



AVOCADO INDUSTRY STRATEGIES

Strategies to address industry investment priorities

The tables below describe the strategies and identified impacts for each of the key outcome areas. The highest priority investments lay the foundation for the SIP and its implementation will require a balanced approach to ensure the industry has a high likelihood of success over the short (0-3 years), medium (3-5 years) and long term (5-10 years).

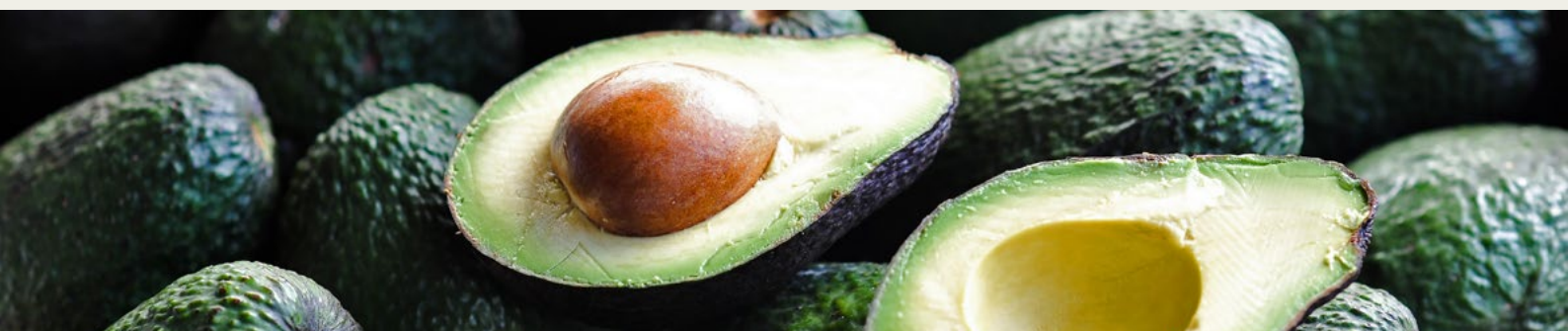
The ability to deliver on these strategies (and subsequent investments) will be determined by the ability of the statutory levy to provide the resources to do so. Further resources and efficiencies may potentially become available through alternative funding sources by way of Hort Frontiers strategic partnership initiative, external grants and/or cross-industry initiatives.

OUTCOME 1: Demand creation Demand creation supports the Australian avocado industry to develop existing and future domestic and international markets.	
STRATEGIES	POTENTIAL BENEFIT OR IMPACT
1. Increase domestic consumer demand for fresh, quality Australian avocados through improving knowledge, attitudes and purchase intent	<ul style="list-style-type: none"> Increased consumer demand for Australian avocados in the domestic market Positive shifts in awareness, consideration, and conversion Increased awareness of health benefits of avocados
2. Increase international consumer demand for fresh, quality Australian avocados through improving knowledge, attitudes and purchase intent	<ul style="list-style-type: none"> Increased consumer demand for Australian avocados in key international markets Clear priorities for export marketing investments outlined in an export marketing strategy for Australian avocados
3. Develop a strategic plan for market access and trade development opportunities	<ul style="list-style-type: none"> Increased consumer demand in high-value markets Increased market share of existing markets while building trade opportunities to diversify markets Clear priorities for export R&D investments outlined in a market access and trade development strategy 2022-2026 Increased volume of Australian avocados in existing markets while building international trade opportunities to diversify markets
4. Improve technical access to high-value markets as identified within the export strategic plan	<ul style="list-style-type: none"> Export growth with access to new and existing high-value markets Increased exports and grower capability
5. Identify opportunities to increase the use of Australian avocados through alternative menu use in foodservice channels	<ul style="list-style-type: none"> Greater recognition of the versatility and value proposition of Australian-grown avocados by food industry professionals
6. Engage retailers in joint business planning	<ul style="list-style-type: none"> Across-supply-chain understanding of varieties, optimal handling and display, and confidence in volume and quantity information for avocado supply

OUTCOME 2: Industry supply, productivity and sustainability

The Australian avocado industry has improved profitability, efficiency and sustainability through globally competitive production systems, orchard management, varieties, innovative R&D and sustainable BMPs.

STRATEGIES	POTENTIAL BENEFIT OR IMPACT
1. Identify and evaluate high-performing commercial rootstock varieties in major growing regions	<ul style="list-style-type: none"> Improved orchard productivity, disease resistance, canopy management and product quality
2. Develop improved orchard management practices to increase productivity, yield consistency and fruit quality based on improved knowledge of tree physiology	<ul style="list-style-type: none"> Improved fruit quality, yield consistency and productivity Improved consumer experience of Australia avocados
3. Reduce costs of production through identification and adaptation of technologies	<ul style="list-style-type: none"> Optimum use of labour and water New tools and knowledge to drive sustainable, productive and profitable orchard systems Enhanced labour efficiencies
4. Develop and optimise fit for purpose pest and disease management strategies	<ul style="list-style-type: none"> Crop loss reduced by sustainable pest and disease practices
5. Enhance crop pollination and resilience through improved pollination security and understanding of avocado crop pollination requirements	<ul style="list-style-type: none"> Maintained access to honey bees for pollination Increased understanding and application of alternative pollinators
6. Apply a systems research approach to improving quality of Australian avocados throughout the supply chain	<ul style="list-style-type: none"> Improved supply chain efficiency and product quality Improved consumer experience of Australian avocados Stronger relationships across the supply chain to improve quality and grow the category
7. Prioritise the major crop protection gaps through a Strategic Agrichemical Review Process (SARP)*	<ul style="list-style-type: none"> Available registered or permitted pesticides are evaluated for overall suitability against major disease, insect pests and weed threats. Where tools are unavailable or unsuitable the SARP aims to identify potential future solutions.
8. Provide regulatory support and co-ordination for crop protection regulatory activities with the potential to impact plant protection product access, both in Australia and internationally*	<ul style="list-style-type: none"> Regulatory Risk Assessments have informed proactive strategic priority-setting to avoid pest management gaps in the event that access or use is negatively impacted.
9. Generate residue, efficacy and crop safety data to support applications to the Australian Pesticides and Veterinary Medicines Authority (APVMA) to gain, maintain or broaden access to priority uses for label registrations and/or minor use permits for crop protection needs*	<ul style="list-style-type: none"> Crop protection solutions meet industry priority needs as identified in the industry SARP or biosecurity plan



OUTCOME 3: Extension and capability

Improved capability and an innovative culture in the Australian avocado industry maximises adoption of best practice and innovation in productivity and demand.

STRATEGIES	POTENTIAL BENEFIT OR IMPACT
1. Deliver tailored extension and communication services to support positive change in the areas of export development and capability, domestic demand creation and BMPs in quality throughout the supply chain, biosecurity, sustainable orchard systems and integrated pest and disease management (IPDM)	<ul style="list-style-type: none"> Adoption of BMPs and innovation leading to industry profitability and sustainability
2. Provide the opportunity for engagement between industry, across tree crop producers and other stakeholders to innovate	<ul style="list-style-type: none"> Improved networks and cross-industry collaboration that increase efficiencies and the use of R&D outputs to build a stronger, more resilient industry
3. Foster regional capacity and strengthen industry leadership through initiatives and training	<ul style="list-style-type: none"> Proactive strategic and evidence-based decision-making in business and for industry on investment priorities and risk management

OUTCOME 4: Business insights

Improved decision-making in the Australian avocado industry through the use of consumer knowledge and tracking, trade data, production statistics and forecasting, and independent reviews.

STRATEGIES	POTENTIAL BENEFIT OR IMPACT
1. Use consumer insights to inform the positioning of the 'Australian Avocados' brand and underpin effective marketing strategies to drive increased demand*	<ul style="list-style-type: none"> Access to and analysis of consumer insights to deliver against demand, supply and extension outcomes Opportunities are identified leading to initiatives that address quality, value-adding or differentiation Growers are aware of consumer trends, preferences and attitudes
2. Access and report trade data to guide ongoing export development opportunities*	<ul style="list-style-type: none"> Growers, exporters, and industry are informed of changes in markets and global export dynamics
3. Use production forecasts to inform long-term and/or in-season market planning and supply strategies in domestic and international markets	<ul style="list-style-type: none"> Increased industry or other stakeholder capacity (e.g., export capacity)

* Foundational investments provide data and information that underpin the delivery of other SIP outcome areas and will be aligned to this strategy. Foundational investment areas include:

- Consumer behavioural data
- Consumer usage and attitudes, and brand health tracking data
- Impact assessments
- Trade data
- Crop protectant data.





AVOCADO SIP MONITORING AND EVALUATION

The avocado SIP Monitoring and Evaluation (M&E) Framework has been developed and informed by the Hort Innovation Evaluation Framework.

Progress against the SIP will be reported in Hort Innovation publications and through industry communication channels. The SIP outcomes and strategies are used to inform key performance indicators (KPIs) that in turn drive the investments and individual projects to deliver on the SIP. Projects responsible for delivering the strategy aligned with each KPI will collect the data.

An M&E and reporting framework is shown below. The framework shows what will be measured to demonstrate progress against the plan and how metrics will be tracked. Reporting on KPIs will be processed through various formal channels to inform industry and government investors of progress, performance, and impact. Data sources to support M&E will be identified and collected as part of the requirements for each levy investment.

Hort Innovation will facilitate the regular review of the SIP to ensure it remains relevant to industry.

Avocado SIP Monitoring and Evaluation Framework

The avocado SIP M&E Framework is shown below. It includes key performance KPIs and data collection methods both at a macro/industry (trend) level and at more specific SIP strategic level/s.

OUTCOME	STRATEGIES	KPIs
Demand creation		
Outcome 1: Demand creation supports the Australian avocado industry to develop existing and future domestic and international markets.	1. Increase domestic consumer demand for fresh, quality Australian avocados through improving knowledge, attitudes and purchase intent	<ul style="list-style-type: none"> • Positive influence on consumer preference • Use of nutritional information to support consumer demand • Positive shifts in brand tracking
	2. Increase international consumer demand for fresh, quality Australian avocados through improving knowledge, attitudes and purchase intent	<ul style="list-style-type: none"> • Positive influence on consumer preference • Increased knowledge of customer needs and behaviours in international markets • Measurement of consumer sentiment on Australian avocados in international markets (D&I Consumer tracker surveys in key export markets)
	3. Develop a strategic plan for market access and trade development opportunities	<ul style="list-style-type: none"> • Development of a market access and trade development program • Development of an export marketing strategy • Evidence-based market access protocols are prioritised on national benefit

Continued >>

OUTCOME	STRATEGIES	KPIs
Demand creation		
Outcome 1: Demand creation supports the Australian avocado industry to develop existing and future domestic and international markets.	4. Improve technical access to high-value markets as identified within the export strategy	<ul style="list-style-type: none"> • Technical access to selected export markets is supported (e.g., case studies) • Increased exporter satisfaction with progress on agreed market access priorities (e.g., case studies)
	5. Identify opportunities to increase the use of Australian avocados through alternative menu use in foodservice channels	<ul style="list-style-type: none"> • Avocado businesses engaged to improve supply to the domestic foodservice sector • Training programs offered to foodservice providers in collaboration with the avocado sector
	6. Engage retailers in joint business planning	<ul style="list-style-type: none"> • Retailer feedback on the value of joint business planning initiatives
Industry supply, productivity and sustainability		
Outcome 2: The Australian avocado industry has improved profitability, efficiency and sustainability through globally competitive production systems, orchard management, varieties, innovative R&D and sustainable BMPs.	1. Identify and evaluate high-performing commercial rootstock varieties in major growing regions	<ul style="list-style-type: none"> • Availability of new knowledge for growers on the performance of commercial rootstock varieties from global and Australian variety managers and programs under Australian conditions • Establishment of comprehensive and grower-led Regional Variety Trial (RVT) sites across major growing regions
	2. Develop improved orchard management practices to increase productivity, yield consistency and fruit quality based on improved knowledge of tree physiology	<ul style="list-style-type: none"> • Availability of new knowledge for growers on how to manage canopies in low and high-density production systems • Availability of new knowledge for growers to enable orchard yield consistency and manage quality in the supply chain
	3. Reduce costs of production through identification and adaptation of technologies	<ul style="list-style-type: none"> • Technologies and approaches to improve cost efficiencies are identified and shared with growers
	4. Develop and optimise fit for purpose pest and disease management strategies	<ul style="list-style-type: none"> • Development of pest and disease management strategies that mitigate crop loss in collaboration with growers
	5. Enhance crop pollination and resilience through improved pollination security and understanding of avocado crop pollination requirements	<ul style="list-style-type: none"> • Evidence of sustainable honey bee health through surveillance data
	6. Apply a systems research approach to improving quality of Australian avocados throughout the supply chain	<ul style="list-style-type: none"> • Evidence of increased product quality management across avocado supply chains

Continued >>

OUTCOME	STRATEGIES	KPIs
Industry supply, productivity and sustainability		
Outcome 2: The Australian avocado industry has improved profitability, efficiency and sustainability through globally competitive production systems, orchard management, varieties, innovative R&D and sustainable BMPs.	7. Prioritise the major crop protection gaps through a SARP*	<ul style="list-style-type: none"> Coordinated industry priority setting with a clear outlook of gaps and risks in existing pest control options Industry priority needs published and shared with stakeholders, including registrants
	8. Provide regulatory support and co-ordination for crop protection regulatory activities with the potential to impact plant protection product access, both in Australia and internationally*	<ul style="list-style-type: none"> Regulatory Risk Assessments maintained
	9. Generate residue, efficacy and crop safety data to support applications to the APVMA to gain, maintain or broaden access to priority uses for label registrations and/or minor use permits for crop protection needs*	<ul style="list-style-type: none"> Data to support applications to the APVMA and the establishment of MRLs
Extension and capability		
Outcome 3: Improved capability and innovative culture in the Australian avocado industry maximises adoption of best practices and innovation in productivity and demand.	1. Deliver tailored extension and communication services to support positive change in the areas of export development and capability, domestic demand creation and BMPs in quality throughout the supply chain, biosecurity, sustainable orchard systems and IPDM	<ul style="list-style-type: none"> Establishment of a baseline and then increased share of industry (ha) with positive change in knowledge, attitude, skills and aspiration (KASA) and practice concerning targeted high priority areas Establishment of a baseline and then increased share of industry (ha) that are implementing targeted high priority areas (e.g., export capability)
	2. Provide the opportunity for engagement between industry, across tree crop producers and other stakeholders to innovate	<ul style="list-style-type: none"> Grower satisfaction with growth in cooperation within industry and across industries leading to business and industry innovations (i.e., survey data)
	3. Foster regional capacity and strengthen industry leadership through initiatives and training	<ul style="list-style-type: none"> Increased capacity – active participation in the industry – of leadership participants



“The avocado SIP is the roadmap that will guide Hort Innovation’s oversight and management of the avocado industry’s investment programs.”

OUTCOME	STRATEGIES	KPIs
Business insights		
Outcome 4: Improved decision-making in the Australian avocado industry through the use of consumer knowledge and tracking, trade data, production statistics and forecasting, and independent reviews.	1. Use consumer insights to inform the positioning of the ‘Australian Avocados’ brand and underpin effective marketing strategies to drive increased demand*	<ul style="list-style-type: none"> • Delivery of a consumer insights strategy • Evidence that consumer insights inform strategic market engagement • New consumer knowledge available for industry stakeholders
	2. Access and report trade data to guide ongoing export development opportunities*	<ul style="list-style-type: none"> • Trade data maintained and data outputs supplied to meet stakeholder needs
	3. Use production forecasts to inform long-term and/or in-season market planning and supply strategies in domestic and international markets	<ul style="list-style-type: none"> • Availability of production data • Evidence that production data supports marketing and production decisions, including supporting retailer engagement

* Foundational investments provide data and information that underpin the delivery of other SIP outcome areas and will be aligned to this strategy. Foundational investment areas include:

- Consumer behavioural data
- Consumer usage and attitudes, and brand health tracking data
- Impact assessments
- Trade data
- Crop protectant data.

Reporting framework

Hort Innovation will use dynamic reporting aligned to the Organisational Evaluation Framework to report regularly on progress and performance. Reporting will be processed through formal channels to inform industry and government investors.

A review of investment performance against the respective industry outcome and/or strategy-level KPIs for the avocado SIP will be completed annually as the primary reporting mechanism. The SIP performance report will provide:

- Evidence of progress towards achieving the industry-specific outcomes and strategies through an assessment of the KPIs identified in the SIP
- Evidence of progress towards cross-industry investment strategies and outcomes. It will involve Hort Innovation’s whole-of-horticulture reporting obligations and corporate plan and involve annual reports and Hort Innovation’s Annual Operating Plan.

SIP performance reports will also inform the Australian Government of progress towards achieving government priorities. In particular, reporting will support Hort Innovation to meet the Performance Principles and requirements contained in the [Deed of Agreement 2020-2030](#).





COLLABORATION AND CROSS-INDUSTRY INVESTMENT

Based on advice from industry throughout the engagement process, Hort Innovation understands that Australian horticulture industries have common issues, and in turn have identified prospective areas for collaboration and cross-industry or regional investment.

These opportunities have been included as strategies across multiple industry SIPs where relevant and required. By delivering targeted multi-industry collaboration in research, development and extension (RD&E), marketing and international trade, Hort Innovation aims to support more effective and efficient outcomes for growers and the wider horticulture sector. This includes driving investment through the Hort Frontiers strategic partnership initiative. Importantly, while this approach acknowledges there is value in solving issues across industries and regions, it does not reduce the importance of industry-specific initiatives.

Cross-industry/regional R&D opportunities identified for the avocado industry include:

- Opportunities to support export markets
- Export supply chain pathways (new way of doing business)
- Leadership
- Food safety.

Cross-industry areas of collaboration for demand driving outcomes provide the opportunity to advance the prosperity of the sector through gaining efficiencies in the delivery of the program and contributing to stronger overall outcomes. By collaborating as one sector to win the hearts and minds of the consumers, in addition to individual demand driving programs, there is the potential to enhance the total category value proposition, contributing to driving returns for Australian growers.

Areas of consideration for collaboration for demand driving outcomes across the lifespan of the 2022-2026 SIP include:

- All-of-horticulture consumer marketing campaigns designed to drive awareness, consideration, and purchase behaviour change
- Communications to bring horticulture to top of mind (saliency) and reposition the benefits they provide to Australian and international consumers

- Retail partnerships to advance total category and shopper demand-driving programs
- A global brand platform to reinforce the unique selling proposition of Australian-grown horticultural produce and drive preference with international consumers.

Strategic science and research focus

The avocado SIP takes into consideration the research priorities of various industry stakeholders, including Avocados Australia Limited and the Australian Fresh Produce Alliance (AFPA), and acknowledges the representation of these organisations. In developing the strategies presented within the avocado SIP, the strategic research areas that have been considered are available in **Table 2**.

TABLE 2. Avocado research priorities

Avocados Australia Limited priorities	AFPA priorities
Foster industry growth and development	Sustainability (climate change, water, packaging and shelf life)
Work across all parts of the supply chain to improve grower's ability to provide a healthy, profitable and safe product for all consumers	Trade (market access, industry capability development)
	Biosecurity (managing pest and disease, Integrated Pest Management (IPM), chemistry)
	Food Safety (systems and technology)
	Pollination (bees and flies, alternate pollinators)

Collaboration across the agriculture research community is also essential, including with organisations such as universities, private enterprise and state government agencies. Hort Innovation is a member of the National Horticulture Research Network (NHRN) together with other senior horticultural R&D representatives from state and Australian Government agricultural agencies. The NHRN is responsible for the development and implementation of the broader Horticulture RD&E Strategy under the National Primary Industries RD&E Framework.

During the engagement process, key delivery partners were contacted including lead agencies within the NHRN Framework as well as specific delivery partners for each industry. The lead agency involved with the avocado industry investment program, Department of Agriculture and Fisheries, Queensland (DAFQ), was engaged during the development of this SIP to ensure consideration and strategically aligned priorities for the avocado industry. In addition, priorities and opportunities identified within the strategic plans of national and state agencies and research organisations have been considered in the development of Hort Innovation’s SIPs where applicable.

TABLE 3. Government and key agency priorities

DAFQ priorities	Rural RD&E for Profit priorities	Australian Government Science and Research priorities
Regionally relevant orchard management	Advanced technology	Food
Rootstock improvement	Biosecurity	Soil and water
Quality improvements	Soil, water & managing natural resources	Advanced manufacturing
Capacity building	Adoption of R&D	Environmental change
Sustainable market development		Health
Sustainable IDPM		

This SIP has been developed alongside the government and key agency priorities listed in **Table 3**, with consideration of issues faced by the avocado industry. These strategic areas further emphasise the opportunity and importance of cross-industry and regional collaboration. All the priority areas are of importance to Australian horticulture, and these will play a role in driving the efficiency and effectiveness of investment across the sector.



Annual investment planning

Specific investments to address the SIP strategies and align with industry strategic priorities will be outlined in detail each year via the avocado AIP. Investment decisions are guided by the SIP and prioritised based on potential industry impact, as well as the availability of levy funds each year. The AIP will be developed with input from the avocado SIAP and SMP, which are made up of growers and other industry representatives as well as IRBs and other key stakeholders. Wherever possible, investments will be aligned to form multi-industry projects to increase the efficiency of funding availability. Details of the SIAP and SMP can be found on the Hort Innovation website [here](#), and the AIP will be published on the same page each year.

Investment opportunities through Hort Frontiers

Innovation is key to the future success of Australian horticulture. The next evolution of the long-range, higher risk and transformational R&D that has the potential to make a significant impact will be possible through Hort Innovation's Hort Frontiers program strategic partnership initiative.

Hort Frontiers is a strategic partnership initiative that facilitates collaborative, cross-industry investments focused on the longer term and more complex themes identified as critical for Australian horticulture by 2030. The partnership framework is currently being established and will include a number of key investment themes for potential investment to guide the initiative and drive transformational R&D across horticulture. Key investment themes will include:

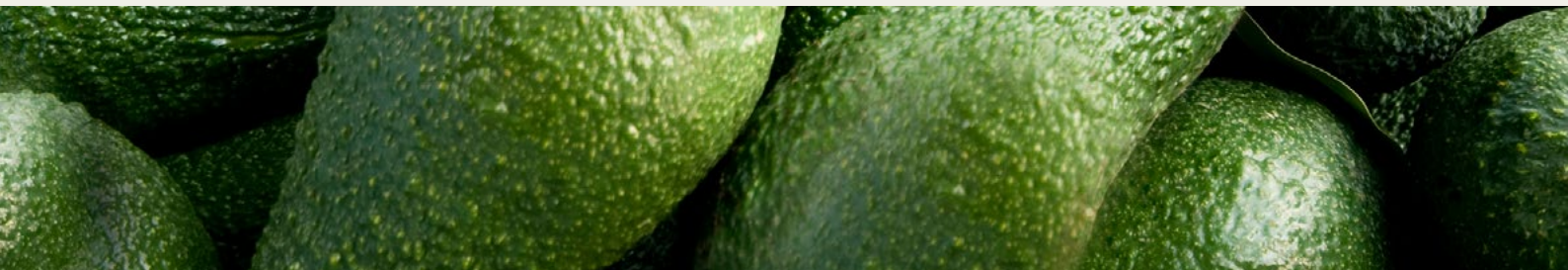
- Environmental sustainability (water, soil and climate)
- Pollination
- Green cities
- Biosecurity
- Health, nutrition and food safety
- Advanced production systems
- International markets
- Leadership
- Novel food and alternate uses (waste reduction).

The development of these areas for investment will benefit all of horticulture, with support from partners with aligned priorities to co-invest in deliverables identified that require alternative funds available outside the levy. Hort Frontiers is being developed to align with the Australian-grown Horticulture Sustainability Framework and invest in specific impact areas to drive innovation and sustainability initiatives.

The avocado industry views a number of these investment areas as opportunities for success into the future, including:

- Advanced production systems
- Health, nutrition and food safety
- International markets
- Leadership.

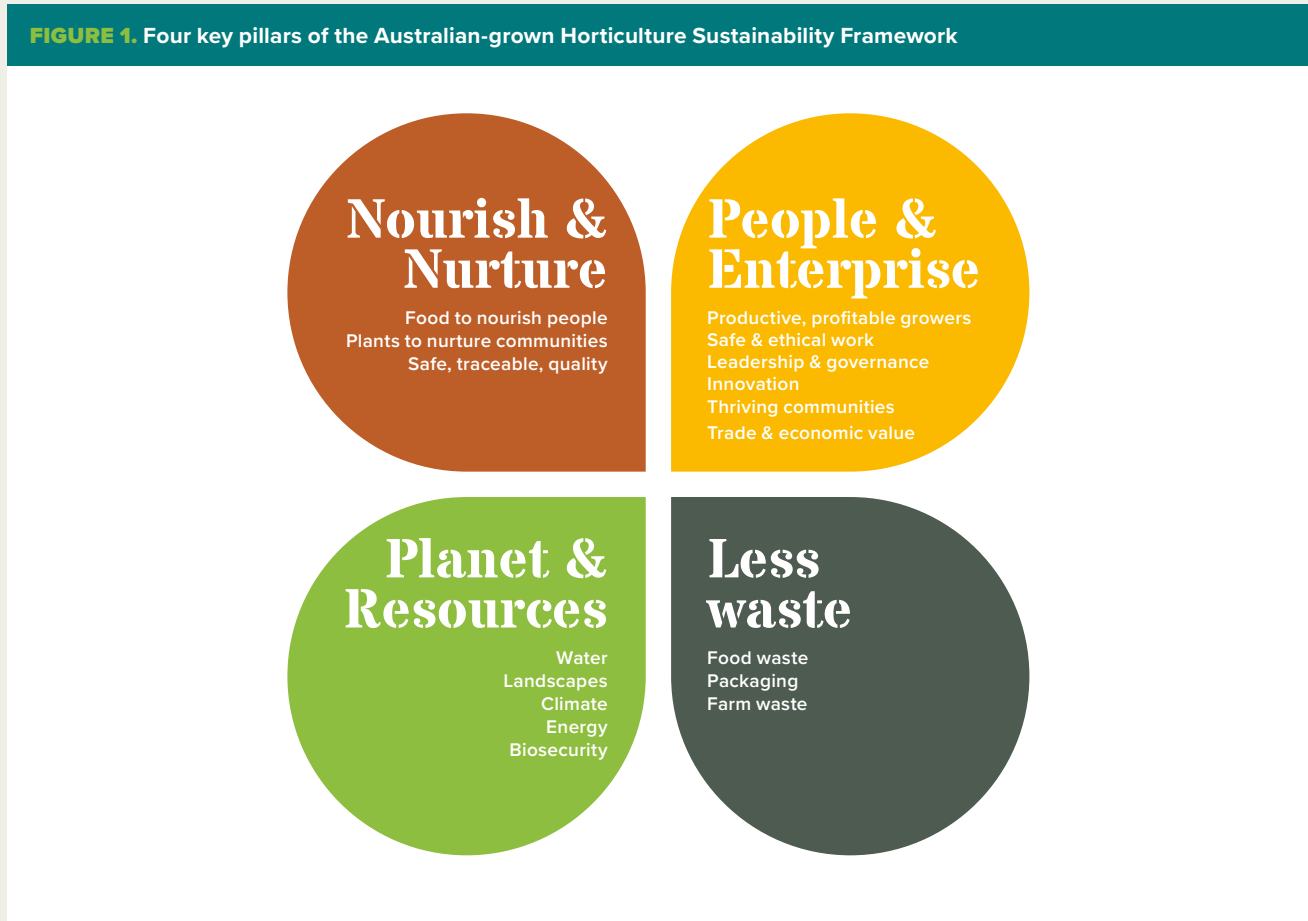
Partnering with Hort Frontiers on these areas would provide the avocado industry with opportunities for access to world class research, specialised project management teams and large-scale R&D.



Australian-grown Horticulture Sustainability Framework

Hort Innovation has developed the Australian-grown Horticulture Sustainability Framework, aiming to strengthen the horticulture industry’s sustainability to meet the changing expectations and needs of growers, consumers, the community, investors and governments. The report applies across the whole of Australian horticulture, including fruits, vegetables, nuts and nursery stock. Through widespread consultation with industry and external groups, proposed sustainability goals and indicators were identified and are detailed within the framework. The framework is aligned to the UN Sustainable Development Goals.

Four key pillars were identified in the framework (*Figure 1*).



The framework should be cross-referenced when undertaking prioritisation of investments. At the time of publication, Hort Innovation is working with industry groups regarding the overall responsibility for the framework, setting and reporting progress against the framework targets and performance measures.

View the Australian-grown Horticulture Sustainability Framework on the Hort Innovation website [here](#).

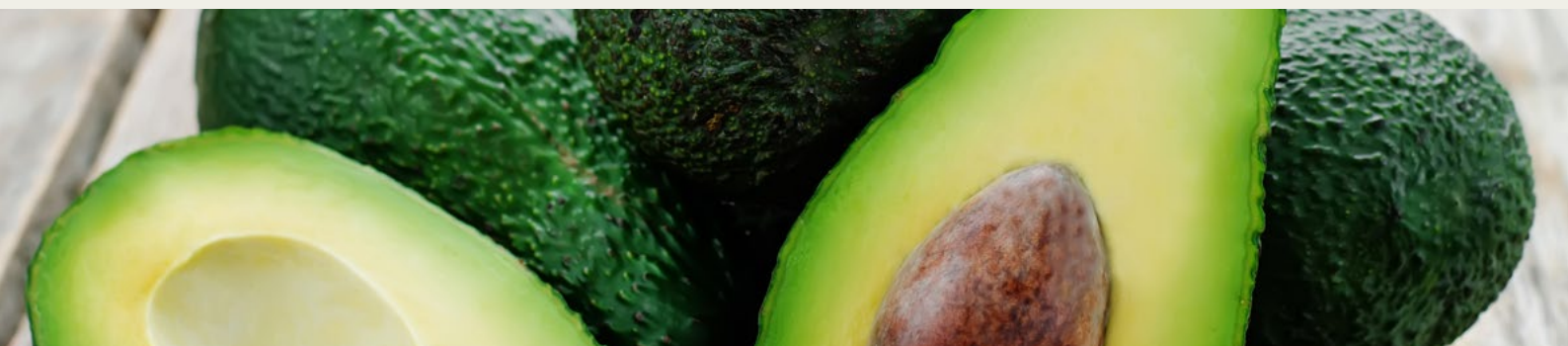


Table 4 provides examples of avocado SIP strategies showing how the industry is already aligning to the framework.

TABLE 4. Avocado SIP strategy examples showing how the industry is already aligning to the Australian-grown Horticulture Sustainability Framework

STRATEGY	IMPACT	SUSTAINABILITY GOAL
Improve technical access to high-value markets as identified within the export strategic plan	<ul style="list-style-type: none"> Export growth with access to new and existing high-value markets Increased exports and grower capability 	People & Enterprise
Reduce costs of production through identification and adaptation of technologies	<ul style="list-style-type: none"> Optimum use of labour and water New tools and knowledge to drive sustainable, productive and profitable orchard systems Enhanced labour efficiencies 	Planet & Resources
Develop and optimise fit for purpose pest and disease management strategies	<ul style="list-style-type: none"> Crop loss reduced by sustainable pest and disease practices 	Planet & Resources
Enhance crop pollination and resilience through improved pollination security and understanding of avocado crop pollination requirements	<ul style="list-style-type: none"> Maintained access to honey bees for pollination maintained Increase understanding and application of alternative pollinators 	Planet & Resources
Apply a systems research approach to improving quality throughout the supply chain	<ul style="list-style-type: none"> Improved supply chain efficiency and product quality Improved consumer experience of Australian avocados 	Less waste
Generate residue, efficacy and crop safety data to support applications to the APVMA to gain, maintain or broaden access to priority uses for label registrations and/or minor use permits for crop protection needs	<ul style="list-style-type: none"> Crop protection solutions meet industry priority needs as identified in the industry SARP or biosecurity plan 	Planet & Resources Nourish & Nurture
Deliver tailored extension and communication services to support positive change in the areas of export development and capability, domestic demand creation and BMPs in quality throughout the supply chain, biosecurity, sustainable orchard systems and IPDM	<ul style="list-style-type: none"> Adoption of BMPs and innovation leading to industry profitability and sustainability 	People & Enterprise Planet & Resources



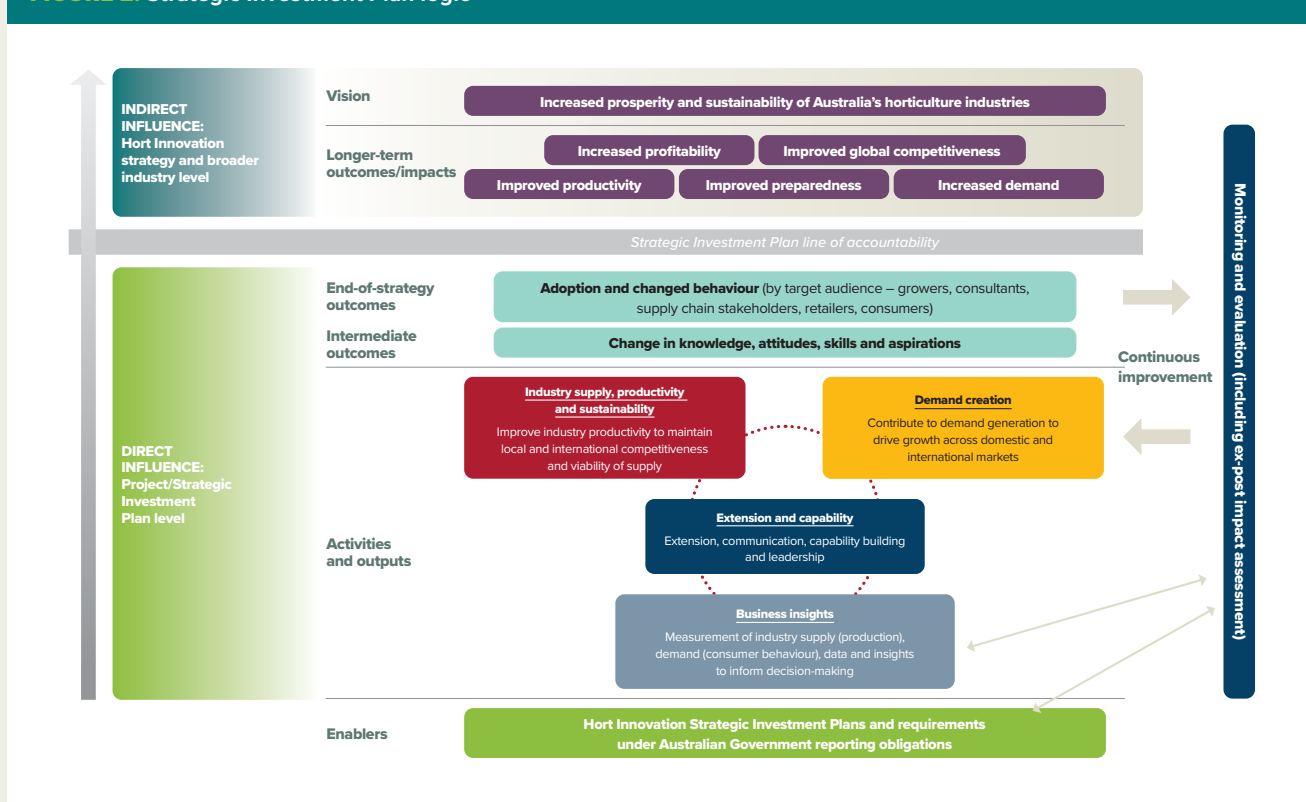
HORT INNOVATION



Strategic Investment Plan logic

The SIP logic (**Figure 2**) identifies how investment activities and outputs (delivered through each SIP outcome area) will support changes in industry knowledge, skills, attitudes, and aspirations, which drive adoption and behaviour change. Beyond the SIP, investment will contribute to driving longer-term impacts for the sector like increased preparedness, demand, productivity, global competitiveness, and profitability. Realising these impacts will support Hort Innovation’s vision of increased prosperity and sustainability of Australia’s horticulture industries.

FIGURE 2. Strategic Investment Plan logic



Aligning to Hort Innovation investment priorities

Hort Innovation is committed to sustainable growth in horticulture, with the overarching aim of increasing the sector’s value to \$20 billion by 2030. We will do this through implementing the SIP and investments against the three core pillars, committed to:

1. Drive knowledge and innovation into horticulture industries
2. Deliver the highest value R&D, marketing and international trade investments across industries now and into the future
3. Enable activities that drive all strategic imperatives.

Hort Innovation is governed by a Deed of Agreement with the Australian Government, which allows for the transfer

and investment of levies and Australian Government contributions. As a Research and Development Corporation (RDC), Hort Innovation is able to leverage industry levy investments in RD&E with Government contributions up to a value of 0.5% of the industry’s gross value of production. All investments made by Hort Innovation are thoroughly considered to ensure they contribute to the guiding performance principles:

- Productivity
- Profitability
- Preparedness for future opportunities and challenges
- Competitiveness
- Demand: demonstrates how productivity, preparedness and demand lead to profitability and competitiveness and sustainability.



APPENDICES

APPENDIX 1: Industry context

Industry supply chain

Over the past five years, important changes in the avocado industry have taken place, which means that it is crucial for the refreshed SIP to respond to the changed market, the increased number of large/corporate growers and production challenges. The avocado industry's continued success will depend on how it responds to these challenges.

Australian avocados are predominantly grown for the fresh market and are supplied year-round. Whilst the numbers can vary slightly from year to year, the main varieties produced are Hass (80%) and Shepard (17%), with minor production of varieties such as Reed, Lamb Hass, Wurtz, Gwen and Sharwil.

Domestic consumers and drivers of demand

Australian avocados continue to be predominantly sold through domestic supermarkets and fresh fruit grocers/markets (79%). The foodservice sector is estimated to account for 21% of the domestic market.

The rapid rate of increase in avocado production has created an imperative for the industry to find ways to further increase domestic demand and to access and develop new markets.

Globally, avocados remain a relatively new food option and many consumers, particularly in overseas markets, are yet to become familiar with the product. Domestic consumer analysis has confirmed that there are opportunities to achieve further growth in the domestic market by targeting those consumer segments that are less frequent purchasers of avocados.

It is estimated that avocado consumption per capita was 3.7 kilograms in 2019/20, a significant increase from 3.1 kilograms in 2014/15. The current trend towards healthy diets and fresh sustainable produce will also help the avocado industry expand both domestically and internationally.

The industry has improved the supply of consistent quality fruit throughout the supply chain to consumers, which has supported and enabled growth in demand over the past decade or more. However, consistency with fruit quality continues to be a major issue, as the quality of second grade fruit supplied to the domestic market risks a negative impact on prices and consumer confidence.

To gain maximum benefit from the domestic market opportunities, future marketing investments need to be regularly informed by high-quality consumer insights. Broader market research is also needed to explore opportunities within market segments such as foodservice, which as previously stated, is estimated to account for 21% of the domestic market. The majority of Australian avocados will continue to be sold at retail, particularly through major retail chains, and hence collaboration with retailers to drive increased retail sales in store will be paramount.



Export markets

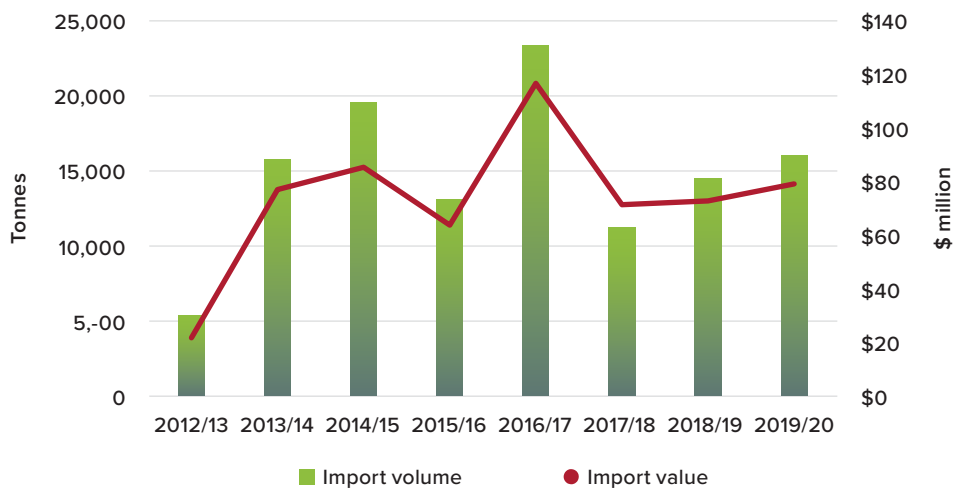
FIGURE 3. Avocado exports, 2012/13 to 2019/20



Source: Australian Horticulture Statistics Handbook (2019/20)

Exports became an increasingly critical component of the avocado strategic agenda over the past five years in response to potential oversupply of the domestic market. Over the past two years this has yielded positive industry results, with exports increasing from 1,786 tonnes in 2017/18 to 4,051 tonnes in 2019/20, representing an average annual growth rate of 50.6%. Export value over this time has increased from \$12 million to \$25 million, representing an average annual growth rate of 46.8% (Figure 3). Exports now represent 4.6% of production volume, which is only a marginal increase from 3.6% in 2012/13. A refreshed export strategy as well as dedicated resources will help guide the industry’s efforts in relation to export development, from increasing capability to requesting new and improved market access.

FIGURE 4. Avocado imports, 2012/13 to 2019/20



Source: Australian Horticulture Statistics Handbook (2019/20)

Australia imported 16,121 tonnes and exported 4,051 tonnes of avocados in 2019/20. New Zealand and Chile are the current largest exporters of avocados to Australia, however, Israel, Mexico, South Africa, Thailand and the USA have exported avocados to Australia since 2015. Mexico has requested market access to Australia for over a decade and is the world’s largest producer and exporter of avocados.

Given the need to increase exports by 400% over five years, export development needs to target large markets with the capacity to take volume at sustainable prices. The larger markets that need to be targeted are phytosanitary protocol markets. Sustained efforts are required to continue to progress workable market access protocols based on robust data packages.

Most Australian avocado growers and exporters have no or limited experience in meeting the requirements of international market access protocols. Significant effort will need to be directed to helping businesses adopt market access protocols and incorporate the requirements as part of their business practices.

Due to the small quantity of avocado exports to date (less than 5%) there are large sectors of the Australian avocado industry that have limited experience with exporting. This means there is a significant task to increase the capability and capacity of the industry to participate in avocado exporting. Of note, one of the key differences is that export supply chains are much longer than typical domestic supply chains. By necessity, the industry will increasingly use sea freight for the majority of its exports as consignment volumes increase. The longer timeframes from harvest to retail in export markets dictate that the fruit must be robust and cool chain management must be precise. A successful exporting program requires excellent quality management practices during growing, postharvest and throughout the entire supply chain.

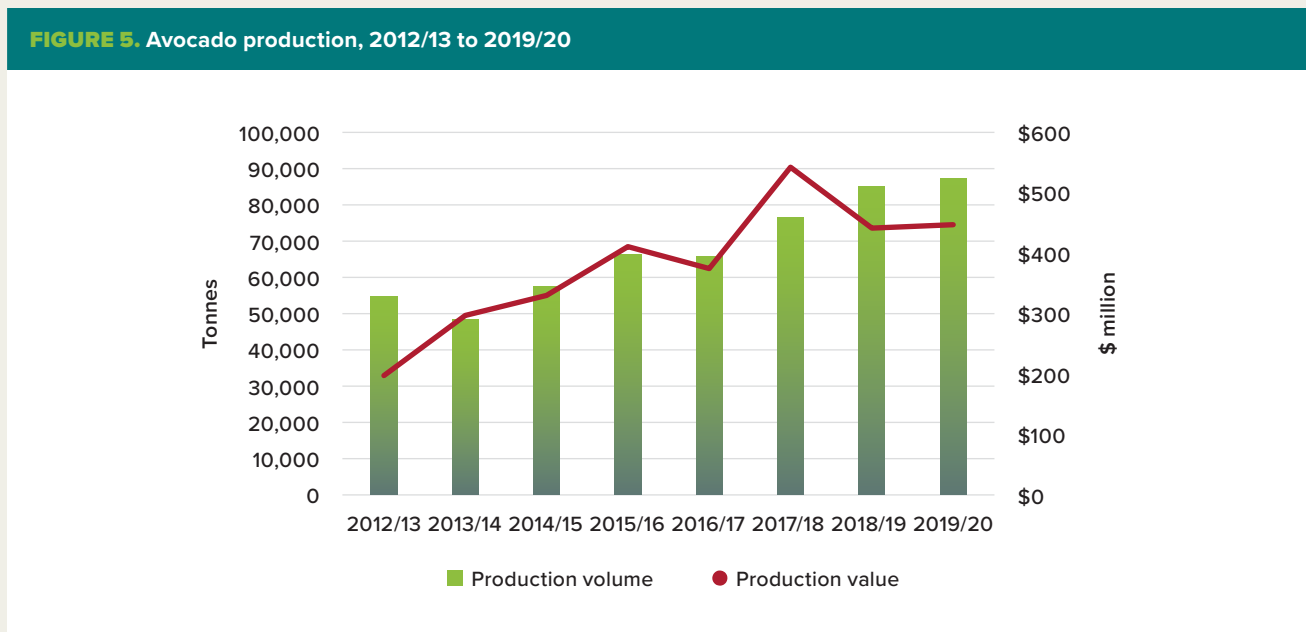
Global competition in avocado markets is increasing. Based on the OECD-FAO Agricultural Outlook 2021-2030 report, global avocado production is expected to reach 12 megatonnes by 2030 – more than three times its level in 2010. However, the global avocado market is also increasing at a rapid rate and avocados are expected to be the most traded major tropical fruit by 2030, reaching 3.9 megatonnes of exports, and overtaking both pineapples and mangoes in quantity terms. The global avocado market is expected to grow at a compound annual growth rate of 5.72% from 2020 to 2025 to reach a total market size of US\$17.905 billion by 2025, an increase from US\$12.824 billion in 2019.

The USA and EU are expected to remain the top importers, accounting for 40% and 31% of world imports in 2030, respectively. This is good news for the Australian avocado industry with the focus primarily on Asian markets closer to home, although many of our global competitors can capably supply these markets as well.

If the Australian avocado industry is to be successful in export markets, it must identify markets with the greatest opportunity for Australian avocados, develop a strong point of difference, invest in marketing and promotional programs that capitalise on this, and deliver on the promise.

Industry production

Australia’s wide distribution of avocado growing areas across various climates provides an opportunity to supply avocados 12 months of the year. The period which has traditionally been the lightest supply period is January and February.

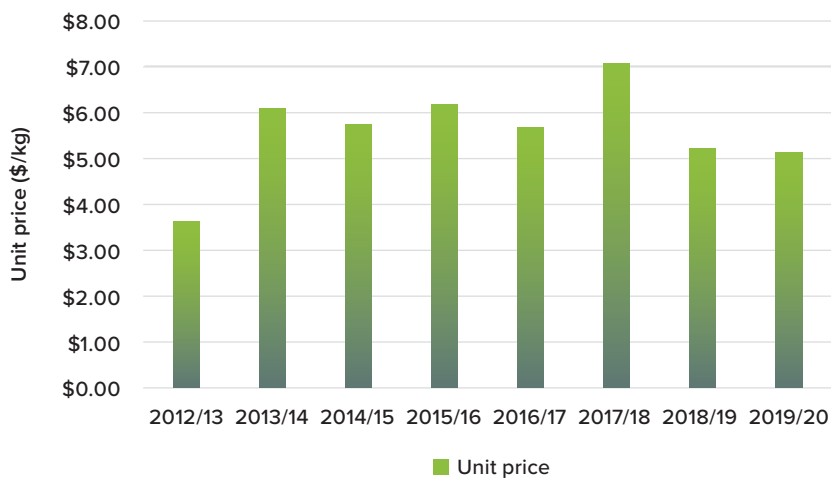


Source: Australian Horticulture Statistics Handbook (2019/20)

Avocado production volumes have increased greatly over the past seven years, indicating that the industry has matured and there have been significant new plantings. The increase from 54,877 tonnes in 2012/13 to 87,546 tonnes in 2019/20 represents an average annual growth rate of 6.9% (**Figure 5**). This is much higher than the average annual growth rate of 2.0% for the total fruit sector over this period.

Production volume over this period has also grown significantly, mainly driven by the increases in production volume, but also due to price increase. The increase from \$198 million to \$450 million represents an average annual growth rate of 12.4%, over-indexing the volume increase.

FIGURE 6. Avocado unit price, 2012/13 to 2019/20



Source: Australian Horticulture Statistics Handbook (2019/20)

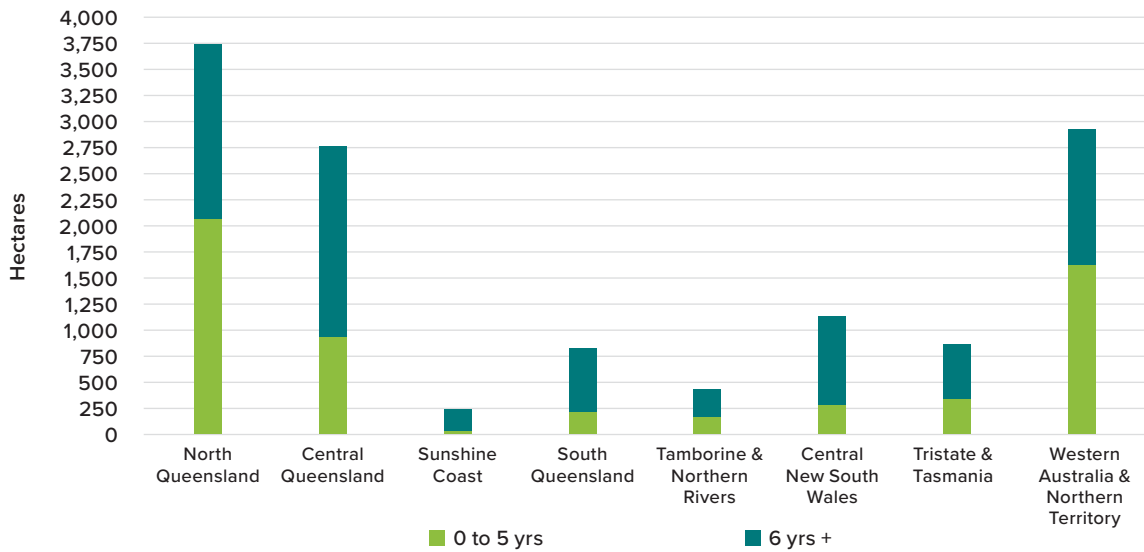
Figure 6 shows that while unit price has increased from 2012/13, it has decreased since 2013/14, largely because of the large supply increases. The industry will face further challenges in maintaining prices as more new plantings become productive.

Productivity improvements are also important to maintain and improve margins in the domestic market. Consultations with growers indicate that there can be significant variability in the productivity of Australian farms within regions and nationally.

The industry is expected to continue to increase at a rapid rate over the next five years based on the area planted across the nation. About half of all plantings are yet to come into full production with large increases in supply expected in North Queensland, Central Queensland and Western Australia.



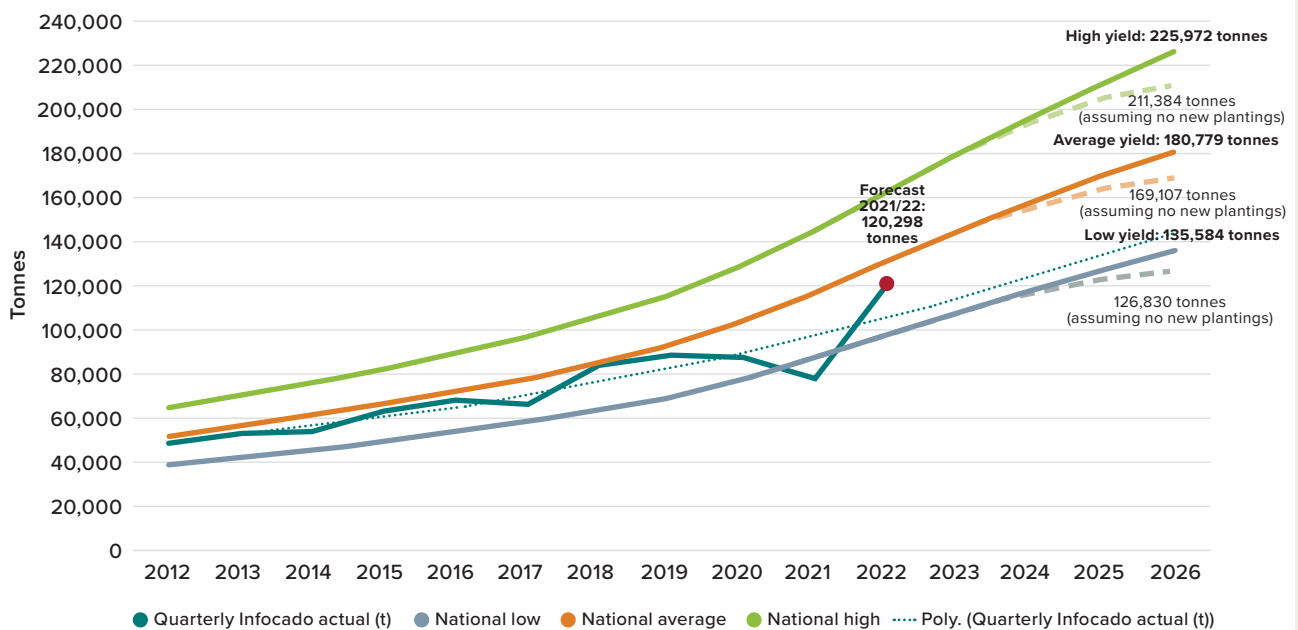
FIGURE 7. Australian hectares of avocado plantings by maturity, 1/8/2020



Source: 2020 OrchardInfo report (Avocados Australia Limited, 2020)

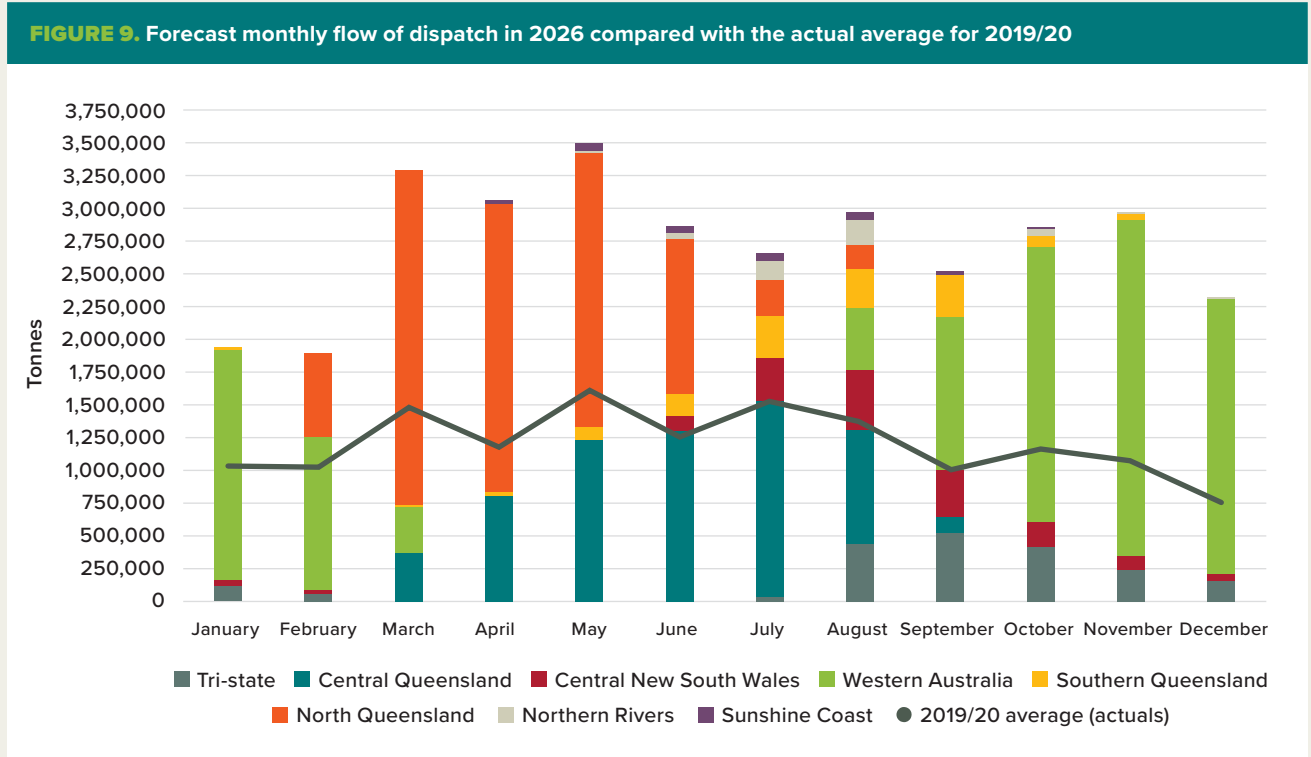
Plantings have increased significantly over the past five years. Based on the Avocados Australia Tree Census data, in 2016 the area of the national crop was about 8,000 hectares. In 2020, this had increased to about 13,000 hectares (Figure 7). Recent mapping undertaken by University of New England in 2021 suggests that about 16,000 hectares of avocados were planted in Australia (the data is yet to be fully validated). Based on the area of current plantings and average yields, production has been forecast to increase to around 170,000 tonnes by 2026 (Figure 8). It is highly likely there will be fluctuations from year to year due to seasonal conditions.

FIGURE 8. Forecast production to 2026 compared with average actual production to 2021



Source: 2020 OrchardInfo report (Avocados Australia Limited, 2020)

Modelling suggests that this increased supply is likely to be marketed across the year as shown in **Figure 9**. This modelling shows that there will be periods of very high supply with peak supply expected in Autumn. Autumn and winter months are periods when domestic demand tends to soften in line with cooler conditions in the main Australian domestic markets.



Source: 2020 OrchardInfo report (Avocados Australia Limited, 2020)



APPENDIX 2: Avocado industry situation analysis

At the time of refreshing the SIP in 2021, the global coronavirus (COVID-19) pandemic continues to affect horticulture industries to varying degrees. Although the outcome and ultimate impact of the pandemic are unknown, areas of investment across horticulture that may be influenced over the period of this SIP include export and trade relationships, domestic and international demand, logistics and supply chain, labour supply – all having potential impacts on grower profitability.

Environmental, economic and social sustainability are vitally important to Australian horticultural growers and industries. Customers, consumers, and investors also seek information about the sustainability and ethics of how their food is produced. Sustainability is particularly crucial as topics such as climate variability, health and ethics continue to shape the social, environmental, and political landscape for agricultural industries. The impact of these issues may have influence on a whole range of investment areas for horticulture from production practices and land management, demand and reputation of products, quality expectations and cultural/community engagement.

Strengths, weaknesses, opportunities and threats

Table 5 has been used to analyse the avocado industry's strengths, weaknesses, opportunities, and threats (SWOT). The SWOT tool assists the industry to build on what works, observe what is lacking, minimise risks, and take the greatest possible advantage of chances for success.

TABLE 5. Avocado SWOT analysis

The avocado industry	
Strengths	<ul style="list-style-type: none"> • Geographic proximity to increasing high-value markets in Asia • Industry awareness, interest and action in developing export markets • Geographically diverse production regions enable year-round supply • Established and increasing capacity to supply large volumes of fruit to markets • Australian avocados regarded as high quality and 'safe' in domestic and overseas markets • High production standards across the value chain • Established industry systems to gather production data and prepare forecasts • Industry image for environmentally sustainable production • Sustained domestic demand for avocados • Avocados are a unique product with no direct substitutes • Marketing levy funds available to promote Australian avocados • R&D levy funds are available for production, value chain and consumer research, development and extension • Industry has proven ability to collaborate nationally and across value chains for industry development • Industry commitment to export markets is increasing • About 91% of consumers are satisfied with their experience of Australian avocados – overall high score • 80% of consumers claim to 'love' eating avocados • Avocados are a rich source of healthy nutrients • Avocados contain good fats • Brand awareness of 'Australian avocados' is growing and is currently at 42% • 'Support local, buy Australian' consumer sentiment has never been higher

The avocado industry

Weaknesses

- Limited or no technical access to high-value export markets due to phytosanitary issues
- Domestic-focused industry with limited export experience
- High reliance on sales through the two major domestic supermarket chains
- High costs of production including labour, relative to overseas competitors
- Ongoing issues with consistency of fruit quality (estimated on average 20% affected)
- Variable productivity across producers, regions and compared with some overseas producers
- Irregular bearing in some major production regions undermines market development efforts
- Declining access to crop protectants needed for optimal production
- Limited evidence of industry environmental performance
- Low awareness in international markets about Australian avocados
- Large increases (actual and potential) in supply places more emphasis on quality and timeliness of industry data and forecasting
- Vulnerability to drought, water security
- Industry commitment to export markets has been limited to date
- Adoption of best practice handling at retail has been limited to date
- Low brand awareness at point of purchase due to limitations and costs associated with in-store advertising
- Supply volatility at certain times creates high price volatility
- Consumer segmentation and Nielsen segments don't correlate so are difficult to track
- Consumers still purchasing avocados infrequently
- Consumers buying only one avocado
- High export costs, especially airfreight
- Perception that the Hass variety is better than Shepard
- Limited 'Australian Avocado' branding on avocados or avocado trays



The avocado industry

Opportunities

- Increase in supply provides capacity to meet demand in export markets
- Improve access to existing and new export markets
- Mature distribution model for export
- Increase awareness of and interest in Australian avocados in overseas markets
- Create a strong and unique value proposition for Australian avocados in export markets
- Import displacement to ensure year-round consumption of Australian product
- Develop export markets to take a range of sizes
- Health-conscious consumers interested in new food experiences
- Increasing consumer demand for safe and clean food
- Consumer awareness/expectation of environmentally sustainable production
- Growing recognition by consumers of the positive health attributes of avocados
- Smaller size fruit preferred in Asian markets which complements domestic market preference for larger fruit
- Supply chain desire for strategic industry engagement
- Supermarkets seeking security of supply
- Access to technology providing new avenues for data collection, analysis, information sharing and communications
- Information and communications technology is enabling rapid and global information flows between consumers, community, businesses and governments
- Investment into other varieties
- Dual merchandising of Shepard and Hass varieties
- Continuation of education – retail and consumer
- Foodservice – increase in share of menu
- 64% of avocado purchases are planned
- 67% of consumers are confident in selecting the perfect avocado
- Avocados have 78% household penetration
- Expanding behaviour from breakfast to include other meal occasions including snacking
- Improved retailer engagement and collaboration
- Optimise the 'Taste Australia' program to suit market nuances so it is not a one size fits all program



The avocado industry

Threats

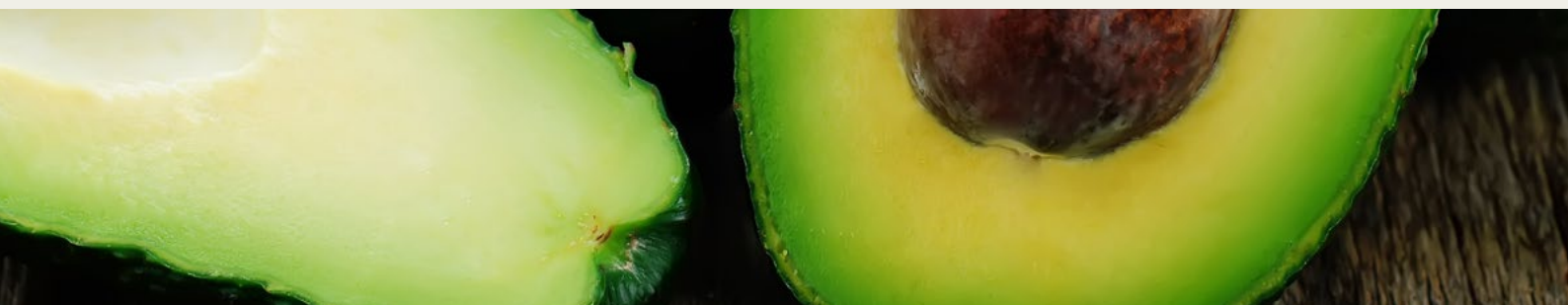
- Major increases in avocado supply could exceed consumer demand and cause prices to fall leading to unsustainable returns for growers
- Consumer trust in the product erodes with experiences of inconsistent quality
- Well-resourced overseas competitors, with the ability to compete based on lower price and seasonal variation
- Potential market access for Peruvian or Mexican avocados into Australia could impact on Australian price and market share
- Industry environmental practices (or perceptions of) come under public scrutiny
- Biosecurity risks to plant health status
- Industry cohesion being impacted as businesses, markets and industry service bodies evolve
- Increased imports of processed avocado products that compete with Australian avocados Rising production places pressure on current infrastructure and cool chain capacity
- Climate change and variability in growing conditions
- Irregular bearing impacting on production in major growing regions, in particular Western Australia
- High costs of production resulting in Australian avocados being unable to compete on price globally
- Too much reliance on the Hass variety
- Adverse weather conditions affecting domestic supply



APPENDIX 3: People consulted

The following people are acknowledged for their contribution to the avocado SIP development process.

NAME	INDUSTRY ROLE	REGION
Alan Blight	Grower	Western Australia
Antony Allen	Avocado Export Working Group	
Clayton Lynch	Avocado R&D SIAP; Grower	Queensland
Cormac te Cloot	Avocado SMP; Grower	
Daryl Boardman	Avocado marketing SIAP; Director, Avocados Australia; Grower	Queensland
David De Paoli	Grower	Queensland
Eric Carney	Director, Avocados Australia	Queensland
John Tyas	CEO, Avocados Australia	Queensland
Kylie Collins	Avocado R&D SIAP	Queensland
Lachlan Donovan	Grower	Queensland
Liz Singh	Industry Development Manager, Avocados Australia	Queensland
Trena Welch	Avocado SMP; Grower	
Rob Wheatley	Grower	
Simon Grabbe	Grower	
Simon Newett	Delivery partner	Queensland
Dudley Mitchell	Grower	Western Australia
Stewart Ipsen	Avocado R&D SIAP; Grower	Western Australia
Jim Kotchi	Avocado R&D SIAP; Grower	Queensland
Ian Tolson	Avocado SMP; Grower	New South Wales
Jennifer Franceschi	Avocado SMP; Avocado Export Working Group; Grower	Western Australia
Richard Clayton	Avocado SMP; Grower	New South Wales
Russell Delroy	Avocado SMP; Grower	Western Australia
Jacinta Foley	Grower	Western Australia
Tom Silver	Avocado Export Working Group; Grower	New South Wales
Joshua Franceschi	Avocado Export Working Group; Grower	Western Australia
Kym Thiel	Director, Avocados Australia; Grower	South Australia



APPENDIX 4: Reference material

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APPENDIX 5: List of acronyms

AIP	Annual Investment Plan
APVMA	Australian Pesticides and Veterinary Medicines Authority
BMP	best management practice
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DAFQ	Department of Agriculture and Fisheries, Queensland
EPPR	Emergency Plant Pest Response
FY	financial year
GI	glycemic index
IRB	Industry Representative Body
IPDM	integrated pest and disease management
IPM	integrated pest management
KASA	knowledge, attitudes, skills and aspirations
KPI	key performance indicator
M&E	monitoring and evaluation
NHRN	National Horticulture Research Network
PHA	Plant Health Australia
R&D	research and development
RDC	Research and Development Corporation
RD&E	research, development and extension
SARP	Strategic Agrichemical Review Process
SMP	Strategic Marketing Panel
SIAP	Strategic Investment Advisory Panel
SIP	Strategic Investment Plan
SWOT	strengths, weaknesses, opportunities and threats

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