

FEBRUARY 2022

Avocado

Strategic Investment Plan 2017-2021

PERFORMANCE REPORT



Avocado SIP performance report

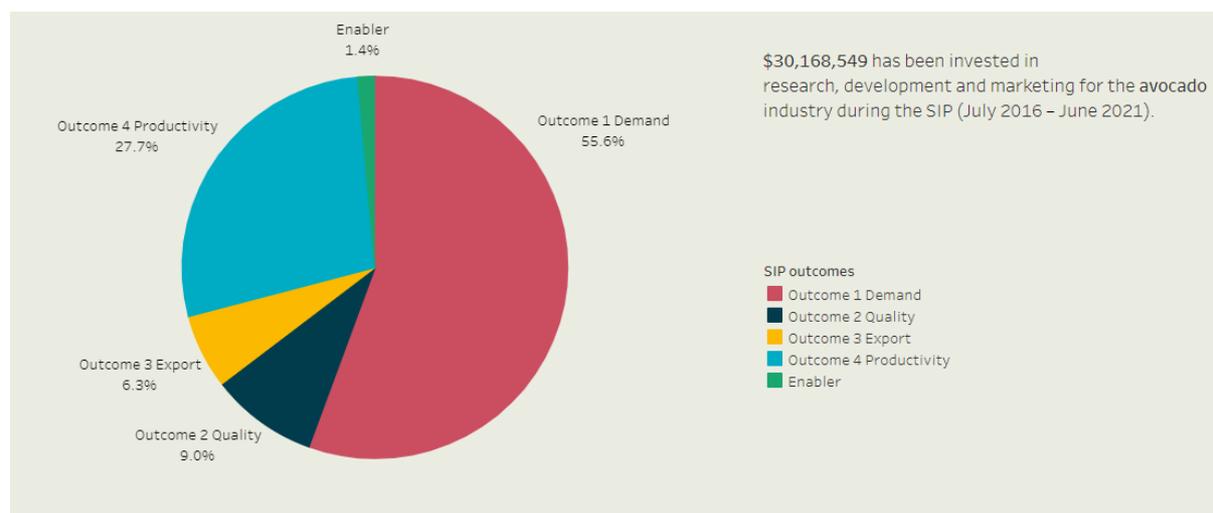
This performance report reviews the performance of levy investments delivered against the avocado Strategic Investment Plan (SIP), which was active for the 5-year period from 2016/17 to 2020/21. The SIP was developed to strategically guide research and development (R&D) and marketing levy investment in accordance with core industry priorities. The SIP featured four outcome areas, 20 strategies and 23 key performance indicators (KPIs), summarised in Table 1. A total of \$30.2 million was invested into the Avocado Fund over the 5-year term of the SIP. The total investment expenditure allocated against each outcome is provided in Figure 1.

Table 1 — Avocado SIP outcomes

Outcome	Description	Expenditure allocation*
1. Demand	By 2021, domestic demand for Australian avocados has increased by at least 20%	55.6%
2. Quality	By 2021, over 90% of avocados received by consumers will meet or exceed their expectations of quality	9.0%
3. Export	By 2021, over 10% of production will be exported to markets where customers have a willingness and capacity to pay a premium for Australian avocados	6.3%
4. Productivity	By 2021, productivity (marketable yield per hectare) has improved by 15% on average, without increased production costs per kilogram	27.7%

*Total investment \$30.2 million as of June 2021. Balance of expenditure comprises of enabler investments, which includes expenditure to support the delivery of the SIP including advisory meeting and publication costs.

Figure 1 — Avocado SIP investment expenditure analysis



SIP performance analysis

This performance report reviews the investment achievements delivered within each outcome area that have generated impact for growers. The overall status of each strategic area was informed through an assessment of KPI performance is also provided. The evaluation status and criteria were:

Strategic area status	Criteria
Achieved	Key performance indicators for this strategic area were met
In Progress	Investment delivery remains ongoing
Not achieved	Investment was not prioritised in this strategic area

The results have been informed from evidence compiled through reviewing investment documentation and engagement with project managers. Outcomes generated through the investments are documented and brief case studies of flagship performance and impact for each outcome area are also provided.

Outcome 1: Demand – By 2021, domestic demand for Australian avocados has increased by at least 20%

The rapid rate of increase in avocado production has created an imperative for the industry to find increased market opportunities. The avocado SIP 2017-2021 identified key opportunities relating to domestic demand including increased production enabling import displacement and ensuring year-round consumption of domestically grown avocados.

Summary of strategic area and achievement status:

The strategies in the SIP that were identified to support avocado domestic demand are listed below. An achievement status is provided based upon internal evaluation of project performances:

Strategic area	Status
Domestic marketing to increase domestic value while encouraging consumers to buy more avocados more often	In progress
Establish strategic relationship management with the major supermarket chains	Achieved
Modern production and market information collection, analysis and sharing across value chain	Achieved
Improve the reliability, consistency and year-round supply of Australian avocados to replace the reliance on imported fruit	In progress
Collect and promote evidence of industry practices that strengthen the reputation of value chain businesses and avocado products	Not achieved

KPI callouts:

- *Avocado health professional education and research program (AV15000)* and *Avocado chef training & education program (AV15001)* developed knowledge, awareness and skills of health and foodservice professionals with regards to Australian avocados.
- The *Australian Horticulture Statistics Handbook (HA18002)* reported that domestic consumption of Australian grown avocados increased by 29% over the five years of the SIP, above the SIP target of 20%.
- Household penetration increased from 76% in 2018 to 77.6% in 2021, while total purchase weight increased from 7.9/kg to 9.4/kg (Nielsen Homescan data)
- The *Infocado* and *Orchardinfo* resources (*Avocado industry and market data capture and analysis (AV20000)*) continue to support growers to understand the short- and long-term supply, dispatch, productivity, and market dynamics. A mid-term review of the previous project iteration *Avocado industry and market data capture and analysis (AV16006)* produced in 2019 found that 67% of surveyed participants used the report for decision-making, helping to contribute to more consistent supply dynamics to the market.

Case study: Avocado marketing

Quantum Market Research was commissioned to conduct a program of research to inform the development of the avocado industry's 2018-2021 strategic marketing plan, which resulted in updated positioning and communications platforms, and prioritised target audiences for marketing activities. In 2018 a new logo was developed and the 'Smash an Avo' campaign was created, which ran between 2018-2020, being executed through social media, digital media, cinema, TV and out of home. PR campaigns were run to educate Australians on the similarities and differences between varieties, driving awareness of how to select avocados and providing inspiration on how to use the two varieties.

A new Australian Avocados website was launched in 2019 with continued increases in web traffic and engagement. In 2021 the new 'Our Green Gold' campaign was launched in the domestic market, designed to drive the premium and iconic status of Australian avocados. This campaign ran across TV, digital, out of home, radio and social media reaching 17.6 million Australians. Research identified that two in three consumers reported they would be likely to purchase more avocados after seeing this campaign.

Outcome 2: Quality – By 2021, over 90% of avocados received by consumers will meet or exceed their expectations of quality

The avocado SIP 2017-2021 identified consistent quality fruit as a fundamental driver of competitive advantage for Australian avocados. Consistent quality was deemed critical for the ability of the industry to credibly position its products on value; sustain and increase domestic demand; and to compete internationally.

Summary of strategic area and achievement status:

The strategies in the SIP that were identified to support avocado quality are listed below. An achievement status is provided based upon internal evaluation of project performances:

Strategic area	Status
Establish objective evidence and understanding of the primary sources of continued quality issues	In progress
Quantify the levels of quality variability between farms and across value chains to consumers	In progress
Develop targeted programs to implement best practice in those areas identified as being the highest risk/lowest performance	In progress
Collection and sharing of information on performance in the supply of consistent quality avocados at point of sale	Achieved

KPI callouts:

- Significant work was undertaken to support enhanced fruit quality for avocado consumers. Research was primarily directed at the post-farmgate level with the projects *Supply chain quality improvement – technologies and practices to reduce bruising* (AV15009), *Supply chain quality improvement – cool chain best practice guidelines* (AV15010), and *Supply chain quality improvement – retailer point of purchase improvements* (AV15011).
- The ongoing project *Implementing best practice of avocado fruit management and handling practices from farm to ripening* (AV18000) is helping the avocado industry achieve further improvements in fruit quality by monitoring supply chain performance and facilitating the adoption of better practices through direct feedback to collaborators and resources such as the Avocado Australia – Best Practice Resource website.
- The benefits of the investments in fruit quality are being measured by *Monitoring avocado quality at retail* (AV19003), which found that average percentage of acceptable retail fruit rose to 86% in the 2021 season, up from the previous estimate of 79% in 2015 (*Avocado industry fruit quality benchmarking* (AV11015)).

Case Study: Supply chain quality improvement program (AV15009, AV15010, and AV15011)

Retail surveys had reported consistently that fruit on sale at retail were characterised by significant internal quality impacts such as bruising or rotting, with around 20% of Australian retail fruit not meeting consumer expectations. Poor fruit quality was found to reduce consumer satisfaction and decreases sales.

Ongoing supply chain quality improvement was identified as an important investment strategy to address quality issues for Australian avocados and thereby support consumer demand and farmgate value. As such, investments were undertaken to understand and promote best practice in three key areas of supply chain management:

Technologies and practices to reduce bruising (AV15009) confirmed the relationship between impact injury and postharvest disease, developed new knowledge of pre- versus post-harvest influences on fruit quality, and reviewed 16 technologies for non-destructive assessment of avocado firmness. Extension workshops were held with 72% of participants finding them "extremely useful" or "very useful".

Cool chain best practice guidelines (AV15010) identified that supply chain temperature management performs an important role in quality outcomes. 426 growers and supply chain participants were directly engaged in the best practice resources that have supported practice change by packers and growers.

Retailer point of purchase improvements (AV15011) addressed improvements that could be targeted to retailers, including supplying avocados sorted by ripeness; supplying ripe fruit; and header cards indicating ripeness. It was estimated these recommendations could reduce fruit squeezing by 41%, reduce bruising severity by 59%, and increase in the number of fruits purchased by customers by 30%.

An independent evaluation (*Ex-post impact assessment (MT18001)*) found that these investments likely resulted in increased industry awareness of the fruit damage being incurred along the supply chain and the management changes that can lead to improved quality. The projects were found to have improved adoption of best management practices and are likely to have increased the quality of avocados at point of retail sale, supporting improved consumer confidence of Australian avocado fruit quality, and thereby supporting demand and prices. A net present value of \$1.61 million was estimated to be generated over 30 years, with a benefit cost ratio of 3.59:1.

Outcome 3: Export – By 2021, over 10% of production will be exported to markets where customers have a willingness and capacity to pay a premium for Australian avocados

The avocado SIP 2017-2021 identified a need to reduce the high dependency on the domestic market and enable the industry to scale up efficient production while maintaining margins.

Summary of strategic area and achievement status:

The strategies in the SIP that were identified to support avocado exports are listed below. An achievement status is provided based upon internal evaluation of project performances:

Strategic area	Status
Develop trade with existing export markets	Achieved
Improve the reliability and consistency of year-round supply of Australian avocados	In progress
Gain technical access in high value markets as defined by avocado exporters	In progress
Coordinate integrated industry response to expand exports into newly accessed high value markets	Achieved
Value chain collaboration for gathering and sharing of market intelligence on existing and new export markets	Not achieved

KPI callouts:

- The *Australian Horticulture Statistics Handbook* (HA18002) reported that avocado exports reached a high of 4,000 tonnes in 2019/20 (5% of production), compared to exports of 1,500 tonnes (2% of production) in 2015/16. Whilst exports fell to 3,200 tonnes in 2020/21, over the 5-year period of the SIP export grew 104%, with a CAGR of 15%. Despite this growth, the proportion of production that was exported remains below the 2021 target of 10% of production set in the SIP.
- *The project Avocado export readiness and market access* (AV17000) delivered the *Avocado Export Strategy 2019-2021*, and supported export market development by delivering export market business cases and assisting the Department of Agriculture Water and Energy (DAWE) to establish the Avocado Market Access Advisory Group to develop workable market access protocols for new and existing markets. Impacts to date include the first market access protocol for Japan, and supporting 30 growers and five pack houses in Western Australia to be accredited under the new Japanese market protocols.
- The projects *Avocado industry and market data capture and analysis* (AV16006 and AV20000) and *Horticultural trade data 2017-2019* (MT16010) have provided access to trade data and market intelligence to assist with developing export markets and understanding global competitors.

Case Study: Avocado export readiness and market access (AV17000)

In developing the avocado SIP 2017-2021, the avocado industry identified the risk that major increases in Australian avocado production could exceed domestic consumer demand, impacting prices. Increased export market access, as well as improved export resources and capacity were identified in the *Avocado Export Strategy Review (AV16011)* as key factors to enable market diversification and support industry sustainability.

As a result, from 2017 to 2020, the project *Avocado export readiness and market access (AV17000)* was implemented to ensure the Australian avocado industry was prepared to export and had capacity to pursue new and improved market access. It also provided the necessary support for government negotiations with intended markets as required.

Key achievements of this project include:

- The *Avocado Export Strategy 2019-2021*, laying the foundations for ongoing export development
- A well-informed avocado industry with increased awareness of export opportunities and requirements due to targeted education, and regular and insightful communication activities
- New or updated business cases to progress market access negotiations for the priority markets identified by the industry – China, India, Thailand, New Zealand and Japan – which were all subsequently approved by Hort Innovation’s Trade Assessment Panel
- A workable new market access protocol negotiated for Japan, successfully used by 30 growers and five pack houses in Western Australia
- Assisting DAWE to establish the Avocado Market Access Advisory Group to enable the development of robust, workable avocado market access protocols for both new market access and market improvement.

Outcome 4: Productivity – By 2021, productivity (marketable yield per hectare) has improved by 15% on average, without increased production costs per kilogram

The avocado SIP 2017-2021 identified productivity improvements as being important if the Australian industry aspires to succeed in increasing avocado exports and compete with imports. Consultations with growers identified significant variability in the productivity of Australian farms within regions and nationally.

Summary of strategic area and achievement status:

The strategies in the SIP that were identified to support avocado industry productivity are listed below. An achievement status is provided based upon internal evaluation of project performances:

Strategic area	Status
Establish and share baseline and time series information on farm productivity.	In progress
Promote uptake of established on-farm good practice tailored to variety/region	Achieved
Facilitate access to crop protectants and regulants of high value to growers	Achieved
Identify and use proven technologies to reduce costs and improve marketable yields	Achieved
Review and prioritise the main constraints to increasing farm productivity	In progress
Maintain and improve biosecurity	In progress

KPI callouts:

- The *Infocado* and *Orchardinfo* resources (*Avocado industry and market data capture and analysis* (AV20000)) continue to support growers to understand the short- and long-term supply, dispatch, productivity, and market dynamics. A mid-term review of previous project iteration (AV16006) produced in 2019 found that 67% of surveyed packers, consolidators and wholesaler used the report for decision making, helping to contribute to more consistent supply dynamics to the market.
- Through the ongoing project *Maximising yield and reducing seasonal variation* (AV16005), CSIRO has made progress developing the knowledge and tools needed to manipulate and maximise avocado tree yields, with a particular focus on minimising fruit drop related to tree nutrient and carbohydrate levels, to help improve production and profitability in the industry.
- The ongoing project *Implementing precision agriculture solutions in Australian avocado production systems* (AV18002) has produced technologies and innovations to support productivity through more informed decision making regarding the management of biosecurity incidents, natural disasters and production. Project outputs include; AARSC Web Maps Apps, Land use Survey App, Industry Engagement Web App, Australian Bushfires Rapid Response Map, Australian Tree Crop Severe Weather App, and Fruit Number Prediction maps.
- The strength of national biosecurity plans is being undertaken in a review project, *Review of the National Biosecurity Plans* (MT17003), specific to avocados and mangos. Two key outcomes that will help to avert incursions of new pests and disease include a post-border biosecurity capability assessment for all high priority pests to inform the development of biosecurity implementation activities to mitigate risk, and endorsement of biosecurity plans at the industry level.

Case Study: Avocado industry development and extension (AV17005)

Strong avocado demand in Australia has supported the growth of the Australian industry, but has also attracted interest from exporting countries such as Chile, Mexico and Peru, which have much lower costs of production. The SIP recognised that for the Australian avocado industry to be globally competitive it is essential to improve productivity and fruit quality as well as reduce production costs.

From 2019, *Industry development and extension (AV17005)* project has delivered a range of events and resources to help the avocado industry access, understand and implement best practice information, with the goal of improving orchard productivity, fruit quality and overall profitability. The project has delivered a range of training and extension events and resources along the entire supply chain. With topics including irrigation, nutrition, pest management, and supply chain management. Over 700 growers and 500 other stakeholders have attended the project events, with feedback showing that 66% of participants would change practices as a result of their involvement.