

FEBRUARY 2022

Strawberry

Strategic Investment Plan 2017-2021

PERFORMANCE REPORT



Strawberry SIP performance report

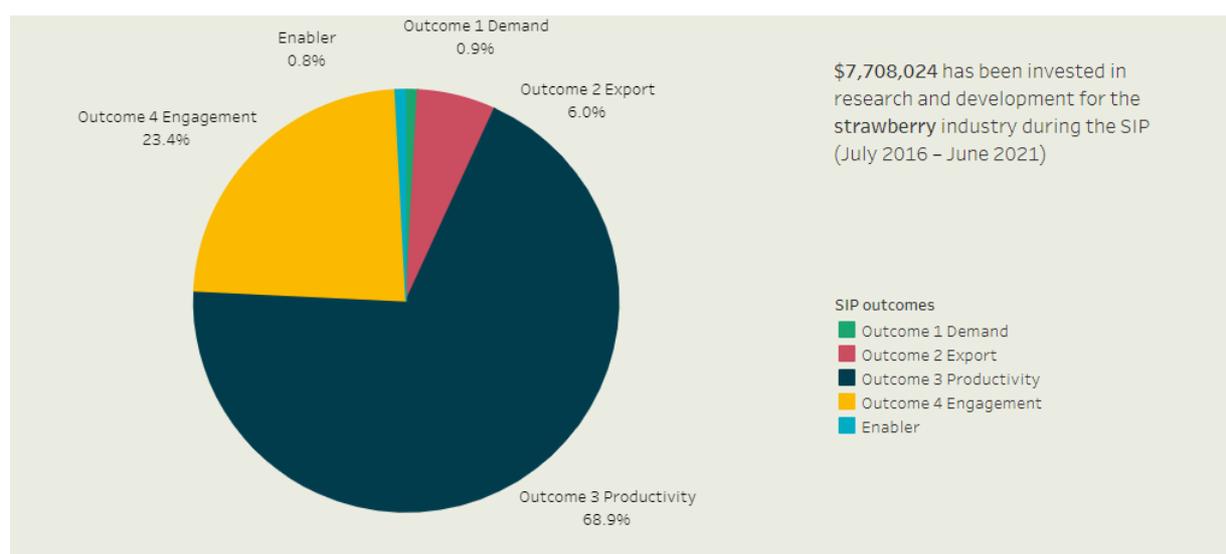
This performance report reviews the performance of levy investments delivered against the strawberry Strategic Investment Plan (SIP), which was active for the 5-year period from 2016/17 to 2020/21. The strawberry SIP was developed to strategically guide research and development (R&D) levy investment in accordance with core industry priorities. The SIP featured four outcome areas, 12 strategies and 20 key performance indicators (KPIs), summarised in Table 1. A total of \$7.7 million was invested into the Strawberry Fund over the 5-year period of the SIP. The total investment expenditure allocated against each outcome is provided in Figure 1.

Table 1: Strawberry SIP outcomes

Outcome	Description	Expenditure allocation*
1. Demand	By 2021, per capita domestic consumption of fresh Australian strawberries will increase by 10%, underpinned by consistent supply of premium quality fruit that matches consumer desires	0.9%
2. Export	By 2021 increase exports of Australian strawberries from 4% to at least 8% of national production by volume, in selected markets, with a capacity and willingness to pay a premium for quality fruit	6.0%
3. Productivity	By 2021, the industry will increase farm productivity (marketable yield per hectare) by an average 10%	68.9%
4. Engagement	By 2021, at least 90% of growers and other firms involved in the strawberry value chain will be directly engaged with and value national industry services	23.4%

*Total investment \$7.7 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: Strawberry 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, informed through an assessment of KPI performance, is also provided. The evaluation status and criteria were:

Strategic area status	Criteria
Achieved	KPIs 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, per capita domestic consumption of fresh Australian strawberries will increase by 10%, underpinned by consistent supply of premium quality fruit that matches consumer desires

With Australian strawberries predominantly grown for the domestic fresh market and sold through retail and hospitality distribution channels, the strawberry SIP 2017-2021 noted that without increased domestic demand, continued increases in domestic production could oversupply domestic market and impact on prices.

Summary of strategic area and achievement status:

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

Strategic area	Status
Consumer research	In progress
Methodology to measure and monitor quality against expectations	Not achieved
Evidence of health attributes and industry practices that bolster industry and product reputation	Not achieved

KPI callouts:

- The *Australian Horticulture Statistics Handbook* (HA18002) reported that domestic supply per person of Australian grown strawberries increased by 12% over the five years of the SIP from 2.39 kg in 2015/16 (baseline) to 2.67 kg in 2020/21, above the SIP target of 10%.
- Household penetration and purchase volume remained flat, while average shopping trips increased from 13 in 2018 to 13.5 in 2021 (Nielsen Homescan data).
- The ongoing Harvest to Home data facilitated through project *Consumer behavioural and retail data for fresh produce* (MT17015), allowed strawberry growers to access latest consumer behavioural data which demonstrates trends in the way consumers are engaging with strawberries.

Outcome 2: Export – By 2021 increase exports of Australian strawberries from four per cent to at least 8%, by volume, in selected markets with a capacity and willingness to pay a premium for quality fruit

The strawberry SIP 2017-2021 recognised that the strawberry industry was a domestic-focused industry with limited export experience. Improved export capability and market opportunity would support increased industry growth opportunities.

Summary of strategic area and achievement status:

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

Strategic area	Status
Develop strawberry export strategy during 2017	Achieved
Pursue technical market access for the priority markets	In progress
Market development program in priority markets	In progress

KPI callouts:

- The *Australian Horticulture Statistics Handbook* (HA18002) reported that Australia’s strawberry export share of production by volume grew modestly over the 5-year period of the SIP, growing from 4.2% in 2015/16 to 4.6% in 2020/21. Export share of production peaked at 5.7% in 2019/20, which was still below the SIP target of 8%.
- Funded by the raspberry, blackberry and strawberry industries, the project *Berry Export Strategy* (MT17001) provided a thorough assessment of multiple industries for export. The strategy identified, and prioritised opportunities for the industries in international markets over a 10-year horizon. Identified export market opportunities included Singapore, Hong Kong, Malaysia, Thailand, New Zealand, Macau, UAE, Indonesia and the UK in the short-medium term; and China, Vietnam, Taiwan, Japan, the USA, and Canada in the medium to long term.

Outcome 3: Productivity – By 2021, the industry will increase farm productivity (marketable yield per hectare) by an average 10%

The strawberry SIP 2017-2021 saw opportunities to increase productivity by moving towards integrated pest management (IPM), reducing production inputs, and increasing adoption of technology and practices to at all stages of value chain.

Summary of strategic area and achievement status:

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

Strategic area	Status
Superior strawberry varieties are available to growers	Achieved
Identify the regulatory imposts, proven technologies and good management practices to increase productivity	In progress
Inform strawberry growers on protected cropping systems	Not achieved
Continual improvement of integrated pest management	In progress

KPI callouts:

- The multi-industry investments *Improving the biosecurity preparedness of Australian horticulture for the exotic spotted wing drosophila* (MT17005) and *Developing IPM-compatible controls for spotted winged drosophila* (MT18010) decreased the biosecurity threat posed by the spotted wing drosophila by reducing both the likelihood of incursion and the production impact in the event of an incursion.
- The ongoing project *National strawberry varietal improvement program* (BS17000) has continued to progress the successful Australian strawberry breeding program (ASBP), which has reduced the industries reliance on imported runners, and seen ASBP plantings capture 70% of the subtropical market and 30% of the national market in 2018.

Case study: National strawberry varietal improvement program (BS12021 and BS17000)

Historically, over 90% of strawberry runners selected by Australian growers were sourced from overseas, predominantly from the USA, with locally bred varieties were supplying less than 10% of the national market.

Between 2013-2018, the project *National strawberry varietal improvement program (BS12021)* was tasked with developing a range of high quality, high value varieties suited to production across the range of important Australian growing regions by targeting subtropical type environments.

Outputs from BS12021 included a series of crosses and evaluation of lines aimed at new variety releases with higher yields and improved quality and with significant gross margin increases for growers compared to existing varieties. The program released seven new sub-tropical varieties, two new temperate varieties, and three new Mediterranean varieties. In addition, the program made progress towards an improved resistance to Fusarium, the most common cause of crown rot in strawberries in Western Australia, causing major losses in some crops, as there was no chemical control available.

By the end of BS12021 there was a demonstrated increase in plantings of varieties from the Australian Strawberry Breeding Program (ASBP), which captured 44% of the subtropical market and 19% of the national market in 2017, and around 70% of the subtropical market and 30% of the national market in 2018. The 2017 plantings were calculated to have had a farmgate value of approximately \$78 million and contributed approximately 2,700 jobs in production. Through the project *Ex-post impact assessment (MT18011)*, it was estimated that a net present value of \$13.27 million and a benefit cost ratio of 2.9:1 would be generated over a 30-year period directly from this investment.

As a result of the success of BS12021, and the ongoing need for strawberry varieties targeted to Australian growing conditions and markets, the SIP continued the breeding work through investment in the project *National strawberry varietal improvement program (BS17000)* from 2017 to 2023.

Outcome 4: Engagement – By 2021, at least 90% of growers and other firms involved in the strawberry value chain will be directly engaged with and value national industry services

The strawberry SIP 2017-2021 noted limited availability of up-to-date, reliable data and information describing industry characteristics, the various markets for its products and trends with consumers. Such baseline information was considered fundamental for good decision-making at the industry policy level and for growers and other value chain businesses.

Summary of strategic area and achievement status:

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

Strategic area	Status
Direct two-way communications with strawberry businesses across Australia	Achieved
Timely information on industry production, forecasts and markets	Not achieved

Case Study — Facilitating the development of the Australian strawberry industry (BS15002, BS15003 and BS15004)

Industry engagement in the strawberry SIP 2017-2021 was led by three projects under the banner of *Facilitating the development of the Australian strawberry industry*. Running from 2016 to 2019, these projects sought to enhance the strawberry industry’s adoption of innovations by building and maintaining industry partnerships and networks, and delivering regionally specific industry development activities to extend R&D outcomes and facilitate capacity building within the industry.

To achieve this, the overarching national engagement project (BS15002) produced and maintained key industry communication channels, including the website, newsletter, and e-newsletter. This was complimented with regional industry engagement delivered through two projects, *Facilitating the development of the Australian strawberry industry – subtropical regional delivery* (BS15003) and *Facilitating the development of the Australian strawberry industry – temperate regional delivery* (BS15004) including workshops, grower groups, farm walks, field days, study tours, case studies, and industry analysis. Over the four years, the regional engagement projects delivered more than 62 events, with nearly 4000 participants, and provided additional updates through grower newsletters and emails.

RMCG undertook a detailed evaluation of the overall program, with feedback from strawberry growers reporting that they valued the various communication products, and that as a result they had increased skills and knowledge, and increased interest in adopting new technologies and biosecurity measures.

An independent evaluation, *Ex-post impact assessment* (MT18011), also found that by increasing capability and intent to adopt new practices, the engagement program increased the productivity and business capacity of strawberry producers and supported more a cohesive and collaborative national industry, and more efficient strawberry supply chains. This impact was quantified for the temperate program, with a net present value of \$1.45 million estimated to be generated over 30 years, with a benefit cost ratio of 3.28:1.