

FEBRUARY 2022

# Banana

**Strategic Investment Plan** 2017-2021

## PERFORMANCE REPORT



## Banana SIP performance report

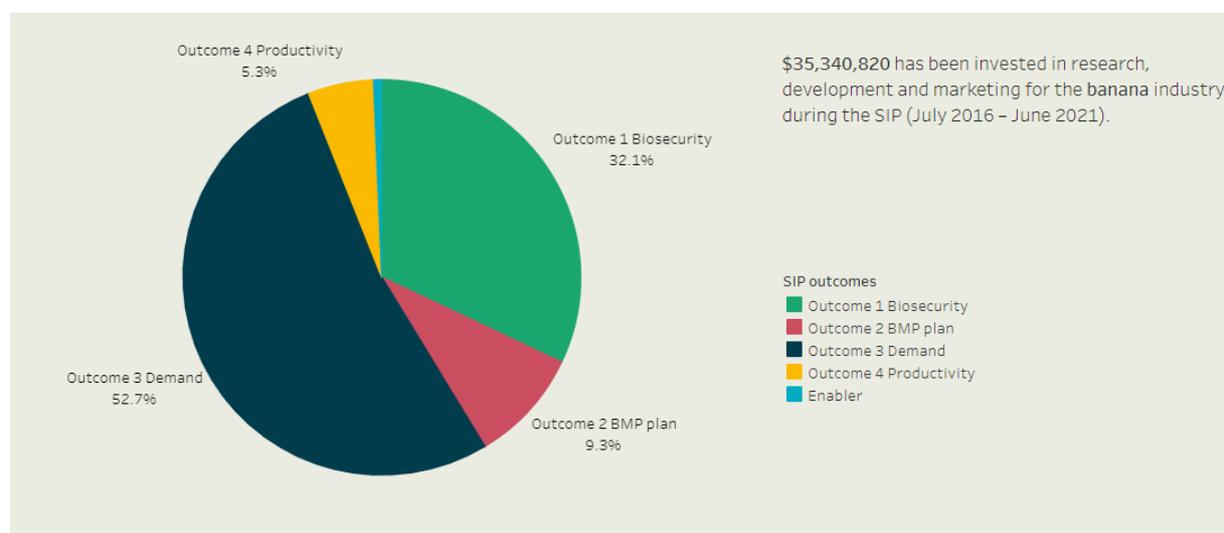
This performance report reviews the performance of levy investments delivered against the banana Strategic Investment Plan (SIP), which was active for the 5-year period from 2016/17 to 2020/21. The banana SIP was developed to strategically guide research and development (R&D) and marketing levy investment in accordance with core industry priorities. The SIP featured four outcome areas, 16 strategies and 26 key performance indicators (KPIs), summarised in Table 1. A total of \$35.3 million was invested into the Banana Fund over the 5-year term of the SIP. The total investment expenditure allocated against each outcome is provided in Figure 1.

**Table 1: Banana SIP outcomes**

Outcome	Description	Expenditure allocation*
1. Biosecurity	New varieties introduced and improved pest and disease management that improve varietal diversity and biosecurity	32.1%
2. BMP plan	Increased adoption of the industry's best management practice (BMP) plan that improves industry sustainability, biosecurity and environmental stewardship	9.3%
3. Demand	Increased domestic demand, developed export markets and product diversification that increase grower profitability	52.7%
4. Productivity	Increased adoption of continuous improvement and automation technology that improve industry productivity and profitability	5.3%

\*Total investment \$35.3 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: Banana 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: Biosecurity – New varieties introduced and improved pest and disease management that improve varietal diversity and biosecurity

The ongoing viability of the Australian banana industry is underpinned by managing biosecurity risks. Investment that supports increased resilience to biosecurity threats is essential to preserving the industry's future supply and productive capacity.

### Summary of strategic area and achievement status:

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

Strategic area	Status
New varieties	Achieved
International collaboration	Achieved
Pest and disease management and biosecurity	Achieved
Improved IPDM to reduce environmental impact	In progress

### KPI callouts:

- The ongoing banana plant protection program includes *Improved plant protection for the banana industry* (BA16001) and *Strengthening the banana industry diagnostic capacity* (BA16005). The program has developed a state of art diagnostic capability for endemic and exotic threats, developing Australian banana varieties with improved pest and disease traits, and enhancing the industry's pest and disease management and biosecurity. The program has built collaborations with international breeding programs to aid access to new banana varieties for importation and evaluation.

### ***Case Study: Improved plant protection for the banana industry (BA16001)***

The discovery of Panama tropical race 4 (TR4) on a Queensland farm in 2015 made the adoption of biosecurity best management practice (BMP) one of the highest priorities for the banana SIP 2017-2021.

In response to the biosecurity risk, the objective of the ongoing project *Improved plant protection for the banana industry* (BA16001) was to develop and maintain capacity for accurate detection and identification of emerging endemic and exotic plant pathogens, and thereby enhance industry capacity to effectively mitigate the risk posed by endemic and exotic banana diseases.

Key activities have been to:

- Negotiate access to and trial banana cultivars with improved pest and disease resistance. The new Cavendish selection *Asia Pacific #3* showed comparable yields and fruit length to Williams over two crop cycles, as well as strong resistance to Panama disease TR4. Four Cavendish selections have continued to perform well in all respects, with a few commercial farms having already begun growing these varieties on a small-scale due to their promising agronomic qualities.
- Ensure safe, disease-free importation of new and improved banana cultivars. 18 banana cultivars from three different breeding programs (CIRAD, EPAGRI and EMBRAPA) have been imported to date. A total of 3,517 plants have been provided to industry: 1,039 to growers; and 2,478 to researchers.
- Investigate cost-effective and sustainable integrated pest and disease management (IPDM) options. Trials of IPDM compatible bell injection products have highlighted several promising candidate chemistries based on their efficacy against banana flower thrips. Trials evaluating IPDM compatible products for the management of yellow Sigatoka disease have highlighted a product with excellent disease control in comparison to the current industry standards. A diagnostic assay for picorna-like virus was developed and is now incorporated in routine PEQ testing. Significant progress has been made in evaluating the resistance of potential rotation or ground cover crops to burrowing nematode.

The project has communicated its results across a range of industry and research channels including the Australian Bananas Magazine, industry e-bulletins, the Australian Banana Growers' Council website, and industry workshops and conferences.

## Outcome 2: BMP plan – Increased adoption of the industry’s best management practice (BMP) plan that improves industry sustainability, biosecurity and environmental stewardship

The banana industry developed the *Banana Best Management Practices Environmental Guideline* (BMP Guideline) as a national guide outlining best practice production and environmental considerations for banana growers including IPDM. The BMP Guideline ensures the sustainable management of the industry. The SIP noted that complete industry-wide adoption of BMP Guideline had proved challenging due to the required time and capital outlay, and addressing these issues to increase adoption was a key priority.

### Summary of strategic area and achievement status:

The strategies in the SIP that were identified to support banana BMP development and adoption are listed below. An achievement status is provided based upon internal evaluation of project performances:

Strategic area	Status
Adoption of BMPs	In progress
Communicate BMPs to the community	Achieved
Communicate industry benefits to the community	Achieved
Develop innovation leaders to promote BMP adoption	In progress

### KPI callouts:

- The *Banana industry communications program* (BA15005 and BA18001) and *The National Banana Development and Extension Program* (BA16007 and BA19004) supported grower adoption of the BMP through communication materials, online training, road shows, and educational material.
- The *Banana strategic industry development manager* (BA16008) engaged with the industry and stakeholders to develop, implement and respond to industry-related strategies and policies, and provided support for the adoption of new practices.
- The biosecurity BMP was released in 2017 and in 2021 a survey of growers found that 99% of growers saw biosecurity as important for protecting their farm, with 29% of Queensland growers and 7% of New South Wales growers having good biosecurity practices in place.

### ***Case Study: The Australian banana industry communications program (BA15005)***

Running from 2016 into 2019, this investment was responsible for keeping Australian banana growers and other industry stakeholders informed about key industry issues and the latest R&D in a timely way. The ultimate goal was to facilitate the uptake of new information, technologies and practices including the banana industry BMPs – to help growers forge more productive, profitable and resilient businesses.

The program produced and maintained key communication channels, including the Australian Bananas Magazine, e-bulletins, website, media relations, social media, SMS/calls to growers, events, mail-outs, posters, factsheets, and video content. The project was also responsible for media relations services, creating and distributing media releases and fielding media enquiries on behalf of the industry.

The project supported increased stakeholder engagement across key communication channels, including:

- A 47% website use increase from 18,755 in 2016/17 to 27,621 in 2018/19
- A consistent e-bulletin base of 1,000 subscribers, with the average opening rate increasing throughout the project from 39% in 2016 to 43% in 2019
- A 160% increase in “likes” of the Australian Banana Growers’ Council Facebook page – from 690 to 1,820 over the 3-year project.

End of project outcomes achieved through BA15005 include improved on-farm practice and behavioural changes; adoption of incremental improvements stimulated through R&D; increased knowledge and recognition of innovation and technology; improved product quality through increasing levels of growers meeting minimum quality standards; and a proactive bank of newsworthy stories to further improve the reputation and positioning of the Australian banana industry.

The work of the *Banana industry communications program* remains ongoing under the current investment (BA18001), which has been underway since July 2019 and will run for three years.

## Outcome 3: Demand – Increased domestic demand, developed export markets and product diversification that increase grower profitability

Australia does not import fresh bananas for biosecurity reasons, and exports are currently low. Domestically, while bananas have been in a dominant position relative to other fruit sales, demand creation initiatives are essential in supporting ongoing relevance, consideration and purchase intent for consumers, which will support robust prices.

### Summary of strategic area and achievement status:

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

Strategic area	Status
Domestic market growth	Achieved
Develop and maintain grower-led exports	Not achieved
Increase consumer demand for different varieties	Achieved

### KPI callouts:

- While domestic demand can be driven by multiple factors – of which some are outside the control of the levy program – the SIP has delivered a rich promotional program including emphasis of different banana varieties, and during the 5-year term of the SIP, Australian bananas have retained their leading position as the #1 snack product group.
- The *Australian Horticulture Statistics Handbook* (HA18002) reported that over the 5-year period of the SIP the average supply of Australian bananas increased 6% from levels before the SIP was produced, while at the same time, wholesale prices increased 9%. Together, these resulted in a 16% increase in domestic market value above levels before the SIP produced, reaching \$723 million in 2020/21.
- Market penetration for bananas declined slightly from 93% in 2018 to 91.2% in 2021, while weight of purchase, trips and purchase volume per trip has remained stable (Nielsen Homescan data).

### ***Case study: Banana marketing program***

The Australian Bananas marketing program aimed to increase domestic demand for Australian bananas by sustaining their position as the countries number one snack and growing their consumption throughout morning occasions.

The program kicked off in 2017/18 with newly created 'Nature's Non-Stop Energy Snack' campaign, running across TV, digital, out of home media, as well as in-store point of sale for major retailers and independents. There was a significant increase amongst target audiences who ranked bananas as the #1 energy snack, as measured via Edentify quantitative in-market research in October 2018.

Transitioning to the 'Peel Good, Feel Good' campaign in 2019, the Australian Bananas website was refreshed generating increasing traffic and engagement, supported via the social media and PR program. Continuing the integrated media approach, recall of the campaign grew strongly to a peak of 53% in the 2020/21 summer season, which was critically important, reminding consumers about what they love most about bananas, at a time of considerably higher prices due to cyclone effected supply. Consumer research completed in 2020 (BA20000) indicated that nearly two in three consumers would be likely to take action in purchase, consumption or communication of bananas after seeing campaign material.

## Outcome 4: Productivity – Increased adoption of continuous improvement and automation technology that improve industry productivity and profitability

The banana SIP 2017-2021 identified the importance of improved productivity to maintain a sustainable and resilient industry given downward pressure on retail prices. New technologies and industry benchmarking and supply chain data were seen as key elements in achieving improved productivity.

### Summary of strategic area and achievement status:

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

Strategic area	Status
Harvest and post-harvest systems	In progress
Production benchmarking and supply chain data	Achieved
Adoption	Achieved
Waste minimisation	Not achieved

### KPI callouts:

- *The project Banana enterprise performance comparison (BA16009)* explored productivity, costs, returns and cash profits across an 8-year period. The project provided updated data and analysis on key differences between growing regions, as well as benchmarking data for biosecurity and environment management, to help support decision-making and communication at a farm and industry level.
- *The National banana development and extension projects (BA13004 and BA16007)* provided a coordinated information development and dissemination program to growers around Australia that delivered the latest results and progress updates on industry-funded R&D projects to growers. Among other outcomes, the project supported adoption of best harvest and post-harvest practices, which generated improvements in packed fruit quality outcomes for 25% of grower participants. Overall, 93% of surveyed participants rated the project good to excellent.