Potato grower Strategic Investment Plan 2017-2021

PERFORMANCE REPORT





POTATO – FRESH FUND

Potato grower SIP performance report

This performance report reviews the performance of levy investments delivered against the potato grower 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) levy investment in accordance with core industry priorities. The SIP featured four outcome areas, 19 strategies and 16 key performance indicators (KPIs), summarised in Table 1. A total of \$5.5 million was invested into the Potato – Fresh Fund over the 5-year period of the SIP. The total investment expenditure allocated against each outcome is provided in Figure 1.

Outcome	Description	Expenditure allocation*
1. Profitability	Industry profitability is significantly improved by increasing the value of product sold on the domestic market	0%
2. Exports	Export markets have grown, resulting in increased average returns to growers	13.5%
3. Yields	Average yields have significantly improved, resulting in reduced cost of production	49.2%
4. Sustainability	Increased innovation and agility in potato businesses has resulted in a sustainable industry that can adapt to highly dynamic markets	30%

Table 1: Potato grower SIP outcomes

*Total investment \$5.5 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.

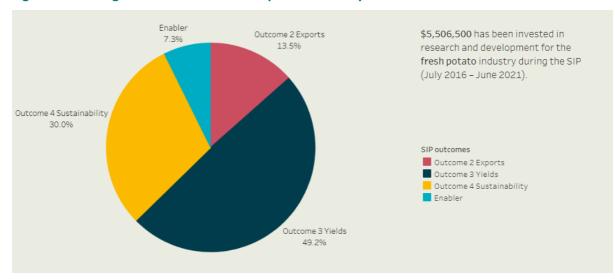


Figure 1: Potato grower SIP investment expenditure analysis

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: Profitability – Industry profitability is significantly improved by increasing the value of product sold on the domestic market

The potato grower SIP 2017-2021 noted that per capita consumption of potatoes was in long-term decline because of health concerns, a trend to low-carbohydrate diets, and competition from other carbohydrates such as pasta and rice. The biggest factor contributing to declining industry profitability of the industry was identified as the erosion of category value. This was being driven by the dominance of supermarkets, the high frequency of price promotions, and the fact that potatoes had become heavily commoditised with low levels of consumer engagement

Summary of strategic area and achievement status:

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

Strategic area	Status
Collaborate with retailers to better understand the opportunities to build category value	Not achieved
Build capability in servicing regional and niche market channel opportunities	Not achieved
Develop new fresh potato product concepts	Not achieved
Support development of higher value products	Not achieved
Support R&D around improving waste stream use	Not achieved

This outcome was not prioritised for investment during the 5-year period of the SIP.

Outcome 2: Exports – Export markets have grown, resulting in increased average returns to growers

This outcome highlighted that returns from fresh potatoes were declining because of an oversupply on the domestic market and lower consumer demand. As such, the potato grower SIP 2017-2021 targeted an increased focus on potato exports to support an improved farmgate price.

Summary of strategic area and achievement status:

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

Strategic area	Status
Develop a five-year export market development strategy covering fresh, processing and seed potatoes	Not achieved
Provide the necessary R&D support for priority market access and market improvement business cases	Achieved
Support exporter capability building and knowledge of prime prospect markets	In progress
Establish improved intelligence for export markets	In progress

KPI callouts:

- The potato grower SIP 2017-2021 identified a target of growing fresh potato exports to over 45,000 tonnes by 2020. The Australian Horticulture Statistics Handbook (HA18002) reported 2018/19 exports of 45,912 tonnes of potatoes (fresh and processing potatoes were not calculated separately), up from a 4-year average of 31,000 tonnes prior to development of the SIP, bringing exports to 3.3% of total production for that year, up from an average of 2.3% prior to development of the SIP. However since the peak of exports in 2018/19, exports have moderated, averaging 39,000 tonnes over the 5-year period of the SIP.
- Export activities have been supported through *Vegetable industry export program* (VG16061), which was designed to support implementation of the *Vegetable Industry Export Strategy 2020* (VG15052). For the potato industry, the focus was to particularly provide support and advice to potato growers on how to commence trade to Indonesia in the lead up to the Indonesia-Australia Comprehensive Economic Partnership Agreement (IA-CEPA) that entered into force in July 2020 and provides Australian growers with a 10,000 tonne quota for reduced tariff exports to Indonesia. In 2020, exports to Indonesia reached a 5-year high of nearly 6,000 tonnes, representing 13% of total exports, however, in 2021 exports to Indonesia declined to 4,200 tonnes, representing 9% of total exports.

Outcome 3: Yield – Average yields have significantly improved, resulting in reduced cost of production

The potato grower SIP 2017-2021 identified a focus on increasing yields by 5% to support a reduced cost of production. This was to be targeted through improved adoption of integrated pest management (IPM) and by improving practices around soil health.

Summary of strategic area and achievement status:

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

Strategic area	Status
Run subject-specific professional development workshops for consulting agronomists (jointly with processing program)	Achieved
Leverage the potato extension program into establishing regional grower development groups	In progress
Integrate integrated pest management (IPM) and soil health as core elements of the potato extension program	Achieved
Establish an appropriate prioritised regional program to address pest and disease challenges/threats	Achieved
Support the wider application and adoption of PREDICTA® Pt	Achieved
Support industry-wide efforts to improve the performance of certified seed across the supply chain	Not achieved

KPI callouts:

- The project Navigating the wealth of soil health information and identification of opportunities (PT16003) critically reviewed the relevant soil health literature, identified knowledge gaps, provided direction for research priorities, and provided industry-ready information for extension activities.
- Ongoing at the end of the SIP, An IPM extension investment for the potato and onion industries (MT16009) supported direct training and adoption of IPM in potato crops through the training of field officers from major processors, major reseller agronomy companies, and independent advisors.
- The project *Program approach for pest and disease potato industry investments* (PT17002) provided support in coordinating the industry's R&D investments in pest and disease management to develop an integrated program approach and enabled other projects to better share information and coordinate their efforts in research as well as in extending the research findings to potato growers and processors.
- The project Extension of the PREDICTA® Pt potato diagnostic service (PT15008) expanded industry knowledge of DNA-based testing that identifies pathogens and helps potato growers manage the risk of soil and seed borne diseases. The project resulted in 51 industry representatives completing the training, with nine agronomists accredited to deliver PREDICTA® Pt across Western Australia, New South Wales and Queensland.

 The investment Australian Potato industry communications and extension program (PT20000) commenced in late 2020 and has established 10 regional extension regions to support delivery of regionally-specific extension information. Five demonstration sites have been established to conduct trials on seed dormancy and canopy recovery, with field days planned around key growing milestones.

Case study: An IPM extension program for the potato and onion industries (MT16009)

Between 2016 and 2021, this project focused on supporting grower adoption of IPM on farm – improving pest management with minimal pesticide use and a reduction in associated costs.

Integrated pest management (IPM) strategies were developed for potatoes and onions in Tasmania, South Australia, Queensland and New South Wales. IPM resources were developed, including pocket guides, case studies, and fact sheets. IPM training and ongoing support was provided through introduction and training workshops, field days at the commercial on-farm demonstration sites in each growing region, and also through online workshops, phone-calls and text messages. In addition to assisting farmers directly, the project trained field officers from major processors (McCain, Snackbrands and Simplot), major reseller agronomy companies (IK Caldwell, Elders, Landmark, EE Muir and Sons, Serve-Ag, Roberts, CRT's, Farmer Johns) and independent advisors.

The project reported that participating advisors saw the value in using IPM and there was a significant change in the type of advice being given by these advisors, who have ceased recommending routine, broad-spectrum insecticides and are now promoting IPM. The results showed a significant reduction in insecticide use as a result of the recommended IPM strategies, with commercial demonstration sites showing that potato growers were able to reduce insecticides applications from seven down to zero or one for the whole season.

Outcome 4: Sustainability – Increased innovation and agility in potato businesses has resulted in a sustainable industry that can adapt to highly dynamic markets

The long-term prosperity and international competitiveness of the Australian potato industry was recognised in the potato grower SIP 2017-2021 as being closely tied to an industry that is equipped with the knowledge base and agility to respond to the highly dynamic global environment in which it operates

Summary of strategic area and achievement status:

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

Strategic area	Status
Improve industry engagement with a revised communication program	Achieved
Introduce an annual scholarship to support overseas study tours for young growers	Not achieved
Introduce Next Gen leadership development program, including internships and scholarships for growers, scientists and advisors (in collaboration with the potato – processing SIP)	Not achieved
Develop an IT self-assessment benchmarking tool	Not achieved
Develop an online knowledge database for growers that translates the latest research into practical information	Achieved

KPI callouts:

- The project Potato stakeholder needs analysis and extension strategy development (PT18003) sought to outline an approach for the integrated delivery of communications and extension for fresh and processing potato growers. The proposed plan identified gaps including knowledge and skills of potato seed production and storage, crop storage postharvest (fresh), IPM cultural practices, identification and management of diseases, crop nutrition and irrigation understanding and management, and technologies including 'Precision Ag'. Key activities to support delivery against the gaps included industry coordination, knowledge transfer and communications.
- The industry was supported by the *Potato industry communication program 2016-18* (PT15007) producing hardcopy, online and video material. Data collected through PT15007 indicated that 43% of surveyed growers had implemented some research outcomes as a result of seeing them in industry communications.
- The project Australian potato industry communications and extension program (PT20000) launched PotatoLink in June 2021, serving as an online website which summarises key research topics across growing, harvesting, processing and crop protection.
- The ongoing project *Australian potato grower's manual* (PT19003) is scheduled to deliver a comprehensive online guide to potato production best practice.

Case study: Potato industry communication program 2016-18 (PT15007)

The communication program aimed to inspire Australian growers to take advantage of the groundbreaking and world-leading research that was taking place in the industry, and to gain real-world benefits on-farm and encourage business innovation, with the ultimate aim of improving profitability for the Australian potato industry.

Over the 3-year project, industry knowledge and capacity was supported through the delivery of:

- 97 fresh potato levy funded projects were featured in potato industry communications
- 63 projects communicated to 2,700 stakeholders through *Potatoes Australia* magazine, including 14 projects communicated through *Grower Success Stories*
- 50 projects communicated to 3,200 stakeholders through the *Weekly Update* e-newsletter, which increased the open rate threefold to 24% over the project duration
- 9 projects communicated through InfoVeg videos, which achieved an average of 169 views
- 38 projects communicated through social media, including 1,391 tweets published (eight per week) and a 235% increase in Twitter followers to 4,227
- 17 final reports uploaded to the InfoVeg R&D database.

When asked to provide feedback on the effectiveness of the communications project, stakeholder responses indicated that PT15007 was successful in improving industry knowledge and capacity with regards to levy R&D, as well as the levy investment process itself:

- 43% of grower respondents indicated that they had implemented some research outcomes as a result of the communication program
- 84% of stakeholders reported that their knowledge of the potato levy R&D process and the projects being funded was improved through industry communications.