



**2019**



# **Strategy and Business Plan**

Potatoes New Zealand Inc.

April 2019



# 2019 Potatoes Industry Strategy

Potatoes New Zealand Inc.

April 2019

## **Executive Summary**

This document outlines the Potato Industry strategic framework, targets refreshed in 2016 and amendments made in 2017, 2018 and 2019.

### **Potato Industry Strategy Targets**

The 2019 industry targets remain unchanged from the 2013 strategy. This is appropriate given the timeframe extends to 2025:

- 1. Increase profit from productivity by \$150 per ha per annum**
  - Continuous productivity improvement underpins the competitiveness of the industry, both domestically (for resources) and internationally (versus other exporters)
  - Equates to a 12% yield increase and \$1500 per ha over ten years
- 2. Double the value of fresh & processed New Zealand based exports by 2025.**
  - Aligned with objectives of the government's business growth agenda
  - Implies volume and value growth
- 3. Enhance the value of the domestic market by 50% by 2025**
  - Implies value growth on stable volumes, above CPI

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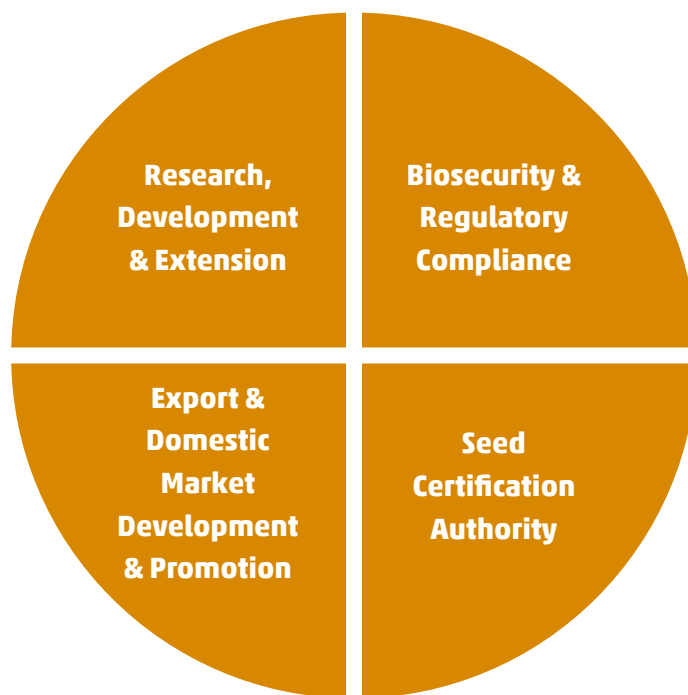
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## Overview

### Potatoes New Zealand Structure and Roles

The 2016 Potato Industry Strategy clarified the four key roles for Potatoes New Zealand (PNZ) in regards to achieving industry objectives. These are shown below:

*Direct R&D initiatives to continuously improve grower productivity, develop new cultivars, use science to resolve major threats and test options. Extension and Education to facilitate adoption by growers.*

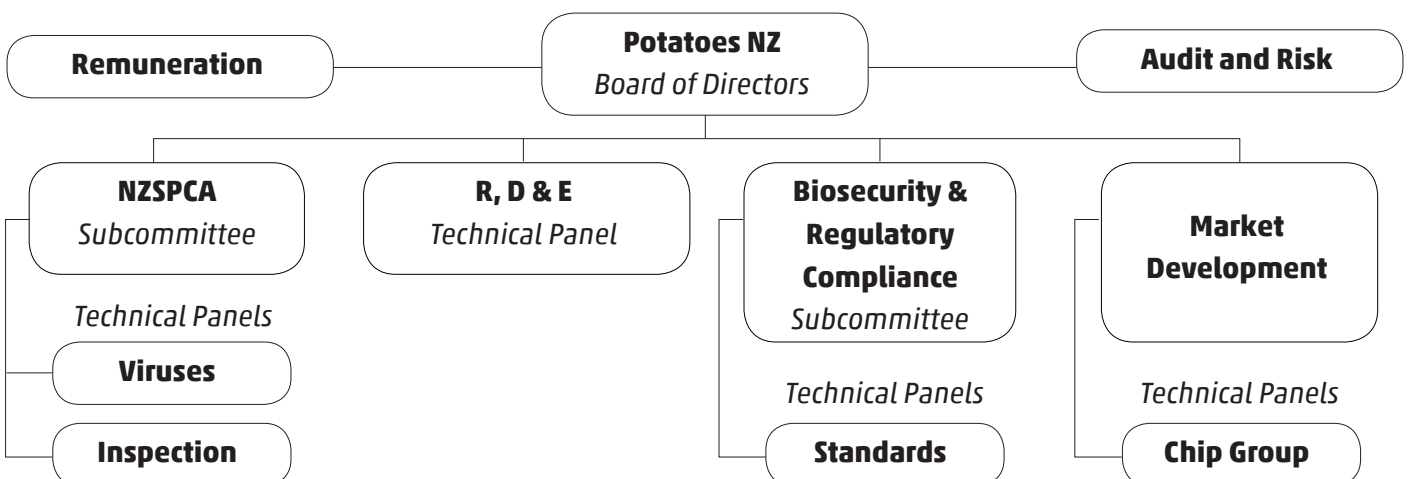


*Protect the reputation of NZ potatoes, coordinating industry stakeholders in regards to compliance, biosecurity and product standards.*

*Develop improved market access to targeted export markets to enable growth of the New Zealand Industry. Develop, protect and enhance key export and domestic markets.*

*Manage an efficient and consistent national seed quality assurance programme.*

**Aligned to these key roles, the industry governance has the following structure:**



## Refreshed Potato Industry Strategy

The 2019 Industry Strategy comprises three core strategic themes, and one enablement theme:



The Quality theme comprises the three essential industry functions of maintaining compliance, biosecurity and standards. PNZ performs an essential function in representing growers’ interests, keeping growers informed of developments and coordinating industry initiatives.

The Market theme comprises both export and domestic markets. It recognises that manufacturing is a vital mainstay of the New Zealand industry, for both domestic and export markets. It also recognises the opportunity to enhance the value of fresh markets.

The Research, Development and Extension (RD & E) theme comprises breeding, on-farm productivity and manufacturing innovations. This includes fundamental research that drives on-farm productivity innovations, including plant breeding,

and the development and extension activities on-farm to achieve actual gains for growers. It also focuses on process innovations for the manufacturing sector to increase manufacturing productivity, and includes new product innovations and the utilisation of waste streams.

The Industry Good theme seeks to clarify and align planning processes with partners/contractors to provide clear and timely direction for investment. It deals with establishing processes and expectations for reporting and accountability. The Industry Good theme is also concerned with how industry good is governed particularly with regards to responsible use of the Potatoes Commodity Levy, and the accountability to stakeholders, as well as efficient management of the organisation.

## Potato Industry Strategy Initiatives

There are a total of nineteen (19) initiatives aligned to the strategic themes, and these include those continued from the 2013 strategy. There are four internal enablement strategies. These are outlined below, with current status and the party partnered with or contracted for delivery of the result.

Strategic Initiative	Description	Status	Partner
<b>Theme 1</b> Research & Development & Extension			
1	General	Current	Internal
2	Industry Plant Breeding	Current	PFR
3	Crop Productivity	Current	PFR
4	Disease & Pest Management	Current	PFR
5	Soil, Water & Environment	Current	PFR/Landwise
6	Crop Profitability	Current	AgBus
7	FIET Novel Waste and Product Development	Current	PFR/MU/FIET
8	Process Improvement	Current	OU/MU
9	Targeted Asian Market Development	Current	Internal
10	The Chip Group	Current	MOH
11	Stakeholder Engagement	Current	Internal
12	Annual Domestic and Export Market Value Fresh & Processed	Current	Internal
13	Biosecurity & GIA	Current	MPI
14	Potato Quality	Current	Internal
15	Seed Quality	Current	Internal
16	Industry Good Structure	Current	Internal
17	People, leadership and development	Current	Internal
18	Industry Good Processes	Current	Internal
19	Act as an advocate to HortNZ	Current	Hort NZ

## Industry Targets

The 2013 strategy set targets in three areas:

- Profit from productivity
- Value of exports (fresh and processed)
- Value of the domestic market

The 2013 Strategy provides a benchmark for the current understanding of the NZ potato industry in terms of volume and value. Based on the levy received, the 2013 farmgate value was estimated at \$103 million. 2018 farmgate value is \$165 million, an increase of 61% over the last 5 years.

### **Target 1: Profit from Productivity**

***Increase profit from productivity by \$150 per ha per annum.***

Profit from productivity (PFP) is defined as the difference between actual operating profit and the operating profit that would have occurred with no productivity changes since a base year (i.e. in the absence of production increases and with operating expenses per kilogram of production increasing annually at the rate of farm input price inflation). In essence, PFP is a measure of cost-efficient potato production increases since the base year valued at the end year operating profit margin per kilogram of production. It generally excludes the cost of capital, although depreciation and changes in hectares utilised are accounted for.

### **Target 2: Value of Exports Double the value of fresh & processed New Zealand based exports by 2025.**

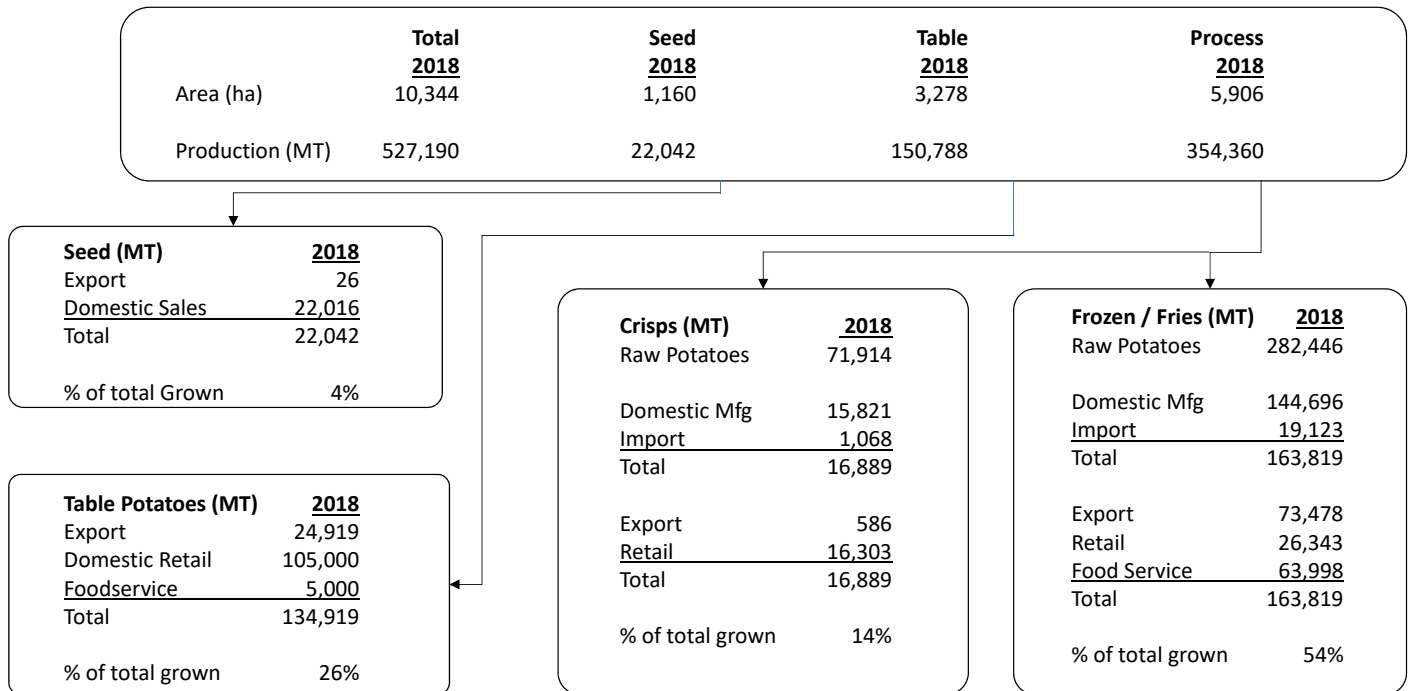
The 2013 Strategy provides a benchmark for the current understanding of the NZ potato industry in terms of volume and value. The 2013 value of exports was \$110.5m. With the 2019 value of exports at \$129.3 million, there has been a 17% increase in export value. Current annual growth rate is 3.2%. An annual growth rate of 8% to 2025 is required to achieve target. This is an achievable goal. However there is a concern that export value has not increased for the year ended 2018 when compared with the previous year.

### **Target 3: Value of Domestic Market Double the value of the domestic market in New Zealand by 2025.**

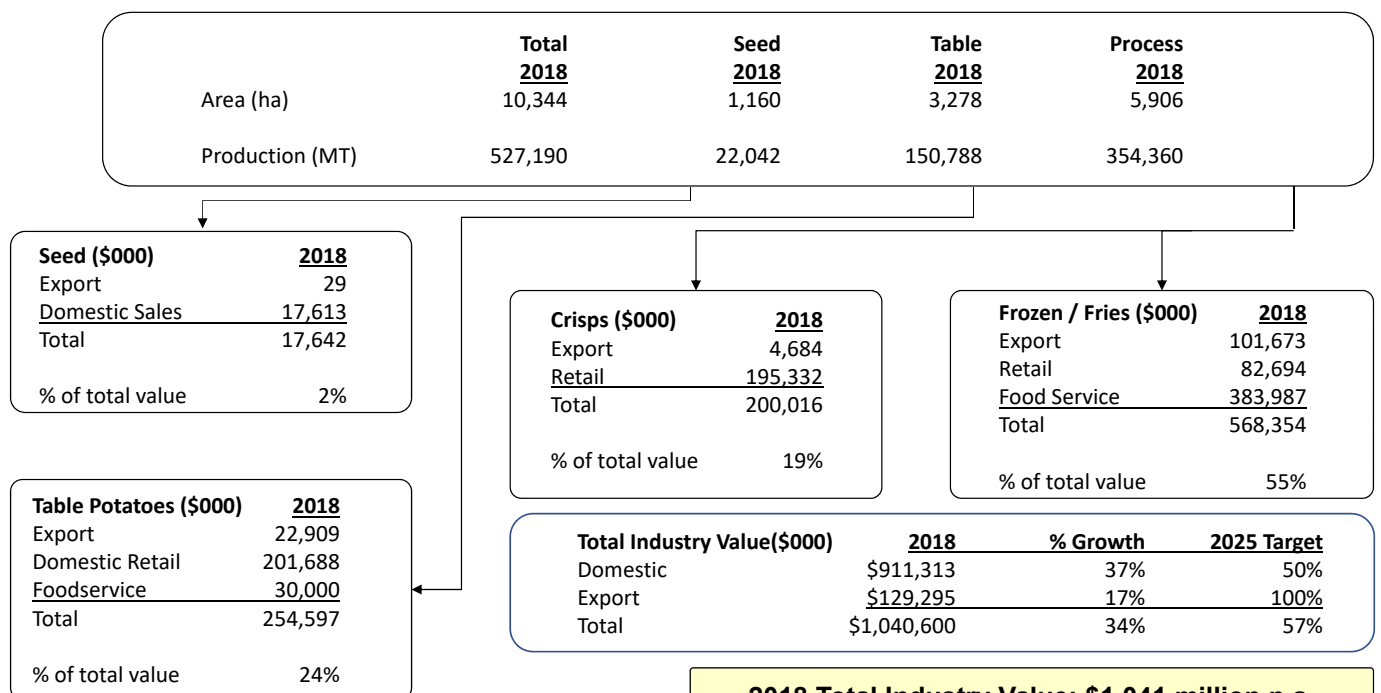
The 2013 Strategy provides a benchmark for the current understanding of the NZ potato industry in terms of volume and value. The 2013 value was estimated at \$665 million. The current domestic market is valued at \$911 million (an increase of 37%). An annual target growth rate of 1.3% is required; the current growth rate is 6.5%. Therefore, we are on target to reach this goal.



## 2018 NZ Potato Industry by Volume



## 2018 NZ Potato Industry by Value



**2018 Total Industry Value: \$1,041 million p.a.**

Note: Total Industry Value based on final sales value in New Zealand (or FOB)  
Figures are for the period ended 31 December 2018

## 2013-2018 NZ Potato Industry by Volume

	Total			Seed			Table			Process		
	2013	2017	2018	2013	2017	2018	2013	2017	2018	2013	2017	2018
Area (ha)	10,328	10,306	10,344	1,182	1,123	1,160	3,516	3,278	3,278	5,631	5,905	5,906
Production (MT)	493,872	496,900	527,190	22,453	21,337	22,042	161,736	150,788	150,788	309,683	324,775	354,360

Seed (MT)	2013	2017	2018
Export	300	20	26
Domestic Sales	22,200	21,280	22,016
Total	22,500	21,300	22,042
% of total Grown	5%	4%	4%

Table Potatoes (MT)	2013	2017	2018
Export	29,900	27,100	24,919
Domestic Retail	105,000	105,000	105,000
Foodservice	5,000	5,000	5,000
Total	39,900	137,100	134,919
% of total grown	28%	28%	26%

Crisps (MT)	2013	2017	2018
Raw Potatoes	66,200	71,700	71,914
Domestic Mfg	13,200	15,800	15,821
Import	600	1,500	1,068
Total	13,800	17,300	16,889
Export	1,900	1,300	586
Retail	11,900	16,000	16,303
Total	13,800	17,300	16,889
% of total grown	13%	14%	14%

Frozen / Fries (MT)	2013	2017	2018
Raw Potatoes	243,500	253,100	282,446
Domestic Mfg	126,700	127,600	144,696
Import	14,500	19,200	19,123
Total	141,200	146,800	163,819
Export	59,500	66,500	73,478
Retail	20,300	25,300	26,343
Food Service	61,400	55,000	63,998
Total	141,200	146,800	163,819
% of total grown	49%	51%	54%

## 2013-2018 NZ Potato Industry by Value

	Total			Seed			Table			Process		
	2013	2017	2018	2013	2017	2018	2013	2017	2018	2013	2017	2018
Area (ha)	10,328	10,306	10,344	1,182	1,123	1,160	3,516	3,278	3,278	5,631	5,905	5,906
Production (MT)	493,872	496,900	527,190	22,453	21,337	22,042	161,736	150,788	150,788	309,683	324,775	354,360

Seed (\$000)	2013	2017	2018
Export	300	30	29
Domestic Sales	17,700	17,070	17,613
Total	18,100	17,100	17,642
% of total value	2%	2%	2%

Table Potatoes (\$000)	2013	2017	2018
Export	18,000	29,500	22,909
Domestic Retail	119,000	218,000	201,688
Foodservice	24,000	30,000	30,000
Total	161,000	277,500	254,597
% of total value	21%	27%	24%

Crisps (\$000)	2013	2017	2018
Export	15,500	8,200	4,684
Retail	143,300	179,700	195,332
Total	158,800	187,900	200,016
% of total value	20%	20%	19%

Frozen / Fries (\$000)	2013	2017	2018
Export	76,700	91,600	101,673
Retail	66,800	78,100	82,694
Food Service	294,600	329,600	383,987
Total	438,100	499,300	568,354
% of total value	56%	52%	55%

Total Industry Value(\$000)	2013	2017	2018	% Growth	2025 Target
Domestic	\$665,500	\$852,500	\$911,313	37%	50%
Export	\$110,500	\$129,300	\$129,295	17%	100%
Total	\$776,000	\$981,800	\$1,040,600	34%	57%

**2018 Total Industry Value: \$1,041 million p.a.**

*Note: Total Industry Value based on final sales value in New Zealand (or FOB)  
 Figures are for the period ended 31 December 2018*

## Theme 1: Research & Development & Extension

**Objective:** Increase potato industry productivity.

The first part of this theme comprises the fundamental research that drives on-farm productivity innovations, including plant breeding, and also the development and extension activities on-farm to achieve actual gains for growers. The second part focuses on process innovations for the manufacturing sector to increase manufacturing productivity, and includes new product innovations and the utilisation of waste streams.

### Part A:

On-farm Productivity RD & E is defined as activities to improve the productivity of potato growing. Improving productivity means increasing production relative to inputs. It does not mean just increasing yield, as this can be achieved at a higher marginal cost without adding value. The scope has four parts: breeding, seed management, bed preparation and crop management as shown below. Overall, these four parts must combine to achieve an overall improvement in productivity. RD & E must be integrated to ensure research relevance and rapid adoption by growers.

### Part B:

Process Innovation RD & E is concerned with the NZ industry beyond the farm gate. The performance of this sector is vital as potatoes grown for processing represent 65% of the total crop. Processed potato products are exposed to competition from international marketers. Productivity improvement across the value chain is necessary to increase competitiveness, and thereby both protect the domestic manufacturing base and also position for growth in exports. Productivity in manufacturing requires investment in R & D to minimise waste, utilise waste in new products, and develop more efficient processing.

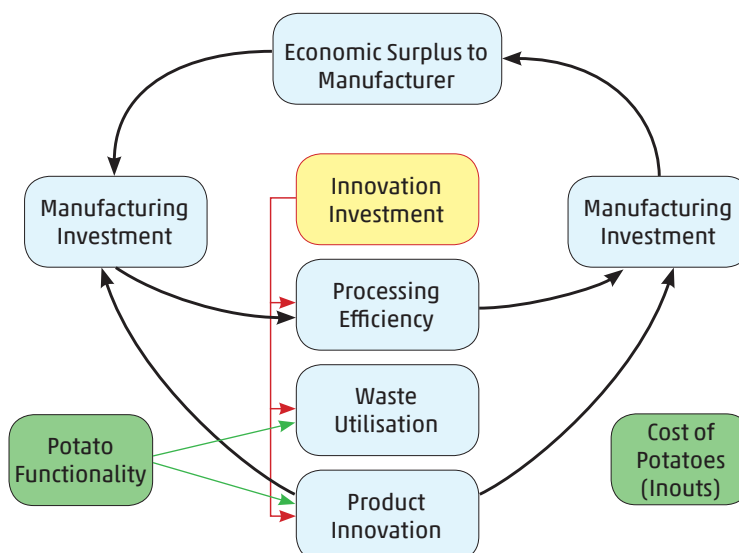
The starting point for developing the RD & E investment strategy for processing is to understand the overall system as shown in the figure below. Potatoes NZ objective is for sustainable growth of the sector, and this requires a virtuous cycle of growing investment and returns to manufacturing and growing, i.e.

- More efficient processing
- Product innovation
- Improved market competitiveness

A reliance on driving down the cost of potatoes to the manufacturer will not create a sustainable advantage by itself.

However, highly productive growers can potentially attract investment in New Zealand processing infrastructure.

Investment in processing innovation is equally important



## RD & E Initiatives:

There are nine initiatives associated with the RD & E theme. The first seven were outlined in the 2013 strategy and have been revised. Numbers seven and eight were added in 2016.

Initiative	Status	Partner
1 General	In progress	Internal
2 Industry Plant Breeding	In progress	PFR
3 Crop Productivity	In progress	PFR
4 Disease & Pest Management	In progress	PFR
5 Soil, Water & Environment	In progress	PFR/Landwise
6 Crop Profitability	In progress	AgBus
7 Novel Waste and Product Development	In progress	PFR/MU
8 Process Improvement	In progress	OU/MU

### 1. General

**Status:** In progress

**Partners:** Internal

**Key Objective:** Increase potato industry productivity.

### 2. Industry Plant Breeding

**Status:** In progress

**Partners:** Plant and Food Research

**Key Objective:** Alignment of interests through an industry-focused breeding programme.

### 3. Crop Productivity

**Status:** In progress

**Partners:** Plant and Food Research

**Key Objective:** To identify solutions to the yield gap difference between observed and theoretical yields.

### 4. Disease & Pest Management

**Status:** In progress

**Partners:** Plant and Food Research

**Key Objective:** Growers have the tools necessary to deal with existing and potential pests and diseases.

## 5. Soil, Water & Environment

**Status:** In progress

**Partners:** Plant & Food Research and Landwise

**Key Objective:** Growers develop infrastructure and methods to improve water, nutrient and bioactive use efficiency, and the industry maintains priority access to water, nutrients and bioactive resources for growers, within the context of a changing climate and regulatory environment.

## 6. Crop Profitability

**Status:** In progress

**Partners:** Agribusiness Consultants

**Key Objective:** Measure crop profitability.

## 7. Novel Waste and Product Development

**Status:** In progress

**Partners:** Plant and Food Research, Massey University

**Key Objective:** To identify higher-value options to use low value potatoes, or potato waste, in applications for animal feed, and/or use potatoes, or potato waste, in novel applications.

## 8. Process Improvement

**Status:** In progress

**Partners:** Otago and Massey Universities

**Key Objective:** To improve potato processing productivity

## Theme 2: Markets

**Objective:** Increase the total market value of potatoes grown in New Zealand

**Outline:** The Market theme comprises both export and domestic markets. It recognises that manufacturing is a vital mainstay of the New Zealand industry, for both domestic and export markets. It also recognises the opportunity to enhance the value of fresh markets.

There are five initiatives under the Markets theme.

Strategic Initiatives	Status	Partner
9. Targeted Asian Market Development	In progress	Internal
10. The Chip Group	In progress	MoH
11. Stakeholder Engagement	In progress	Internal
12. Annual Domestic and Export Market Value Fresh & Processed	In progress	Internal

### 9. Targeted Asian Market Development

**Status:** In progress

**Partners:** Internal

**Key Objective:** To secure practical access for New Zealand potatoes into Asian markets.

### 10. The Chip Group

**Status:** In progress

**Partners:** Ministry of Health

**Key Objective:** To improve the nutritional status of New Zealand grown deep-fried chips served by New Zealand foodservice by reducing fat (total and saturated) and salt content.

### 11. Stakeholder Engagement

**Status:** In progress

**Partners:** Internal

**Key Objective:** Push 'good news' stories about the New Zealand potato industry and its value to the primary industry, through key stakeholder engagement. Position potatoes as the 'starch hero' of choice, by promoting potatoes as a nutritious tasty food option.

### 12. Annual Domestic and Export Market Value Fresh & Processed

**Status:** In progress

**Partners:** Internal

**Key Objective:** Research, distribute and communicate NZ retail and Export information for fresh potatoes and processed potato products.

## Theme 3: Quality

**Objective:** Maintain and Enhance the Reputation of New Zealand Potatoes

**Outline:** The Quality theme comprises the three essential industry functions of maintaining compliance, biosecurity and standards. Potatoes New Zealand performs an essential function in representing growers’ interests, keeping growers informed of developments and coordinating industry initiatives.

### a. Quality – Compliance

- Potatoes NZ is responsible for coordinating industry engagement with the various bodies that determine the various rules and regulations that apply to both domestic and export jurisdictions.
- This is an essential and ongoing industry service.

Compliance Area:	Potatoes NZ Responsibility
Food Safety: NZ GAP	Industry coordination and communication around the NZGAP quality assurance programme as it applies to potatoes
EPA: Agrichemicals Review	Industry coordination and advocacy with the EPA around the rules governing the safe and responsible use of
Phytosanitary Regulations for Export	Industry communications regarding developments in phytosanitary regulations and implications for growers and exporters
Environmental Compliance	Industry coordination and advocacy with respect to the increasing regulation around consented agricultural activities
Seed Certification	Provide assurance that certified seed lines meet the minimum standards for disease freedom and trueness to

### b. Quality – Biosecurity and GIA

The GIA (Government-Industry Agreement) operates as a partnership between industry and government to manage pests and diseases that could badly damage New Zealand’s primary industries, economy, and environment. It aims to improve biosecurity outcomes and give all stakeholders the confidence that the best decisions are being made.

Potatoes NZ is responsible for coordinating industry engagement with MPI in regards to signing the agreement and meeting minimum commitments. Potatoes NZ contracts with MPI for Operational Agreements (OA) regarding joint funding of readiness activities. In the event of a biosecurity breach, Potatoes NZ will participate in the response.

**c. Quality – Product Standards**

The 2013 strategy recommended that growers and retailers develop clear categories and quality standards for table potatoes, and introduce a quality mark for potatoes. Potatoes NZ has no mandate to dictate quality standards to growers or retailers, but does have an obligation to protect the interests of growers.

There are three initiatives under the Quality theme. Two of these initiatives are underway, and one has yet to be actioned.

Strategic Initiatives	Status	Partner
13. Biosecurity and GIA	In progress	MPI
14. Potato Quality	In progress	Internal
15. Seed Quality	In progress	Internal

**13. Biosecurity and GIA**

**Status:** In progress

**Partners:** MPI

**Key Objective:** Carry out biosecurity readiness activities and respond as per the Operational Agreement.

**14. Potato Quality**

**Status:** In progress

**Partners:** Internal

**Key Objective:** Quality assurance of fresh table potatoes for export and domestic markets.

**15. Seed Quality**

**Status:** In progress

**Partners:** Internal

**Key Objective:** Maintain and improve quality of NZ Seed Potatoes.



## Theme 4: Industry Good

This theme seeks to ensure overall industry good, through four Strategic initiatives: good structure, good people, good processes and good advocacy.

**Objective:** Clear direction to the industry, and accountability to members.

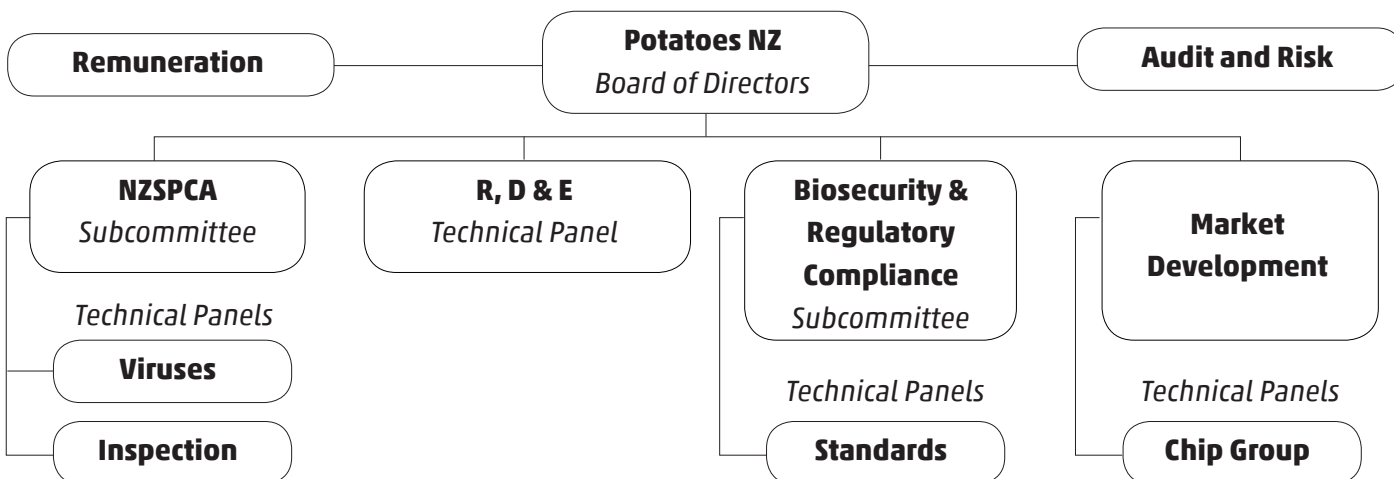
Strategic Initiatives	Status	Partner
16. Industry Good Structure	In progress	Internal
17. People leadership and development	In progress	Internal
18. Industry Good Processes	In progress	Internal
19. Act as an Advocate to Horticulture New Zealand	In progress	Internal

### 16. Industry Good Structure

**Status:** In progress

**Partners:** Internal

**Key Objective:** Ensure the right structure is in place to provide accountability to the members.



### 17. People leadership and development

**Status:** In progress

**Partners:** Internal

**Key Objective:** Develop ongoing education and development for and within the industry.

### 18. Industry Good Processes

**Status:** In progress

**Partners:** Internal

**Key Objective:** Clear direction to the industry and accountability to members

## **Service Provider Contract Model Reporting and Accountability**

Potatoes New Zealand has limited internal resources and must rely on external parties to deliver outcomes in key areas. Potatoes New Zealand is also responsible for use of the levy and is accountable to members. Potatoes New Zealand therefore can't abdicate or attempt to contract out of its responsibilities. Contractors must provide KPI reports and accurate financial reports to allow Potatoes NZ to adequately meet these responsibilities.

### **19. Act as an Advocate to Horticulture New Zealand**

**Status:** In progress

**Partners:** Horticulture New Zealand

**Key Objective:** Act as an advocate for the potato industry to Horticulture New Zealand on potato industry related issues.



# 2019 Business Plan

Potatoes New Zealand Inc.

April 2019

## Key Strategy Targets are:

**Target 1:** increase profit from productivity by \$150 per ha per annum

**Target 2:** Double the value of fresh & processed New Zealand based exports by 2025

**Target 3:** Enhance the value of the domestic market by 50% by 2025

## 19 Strategic Initiatives

Strategic Initiative	Description	Status	Partner
<b>Theme 1 - Research Development &amp; Extension</b>			
1	General	In progress	Internal
2	Industry Plant Breeding	In progress	PFR
3	Crop Productivity	In progress	PFR
4	Disease & Pest Management	In progress	PFR
5	Soil, Water & Environment	In progress	PFR/Landwise
6	Crop Profitability	In progress	AgBus
7	FIET Novel Waste and Product Development	In progress	PFR/MU/FIET
8	Process Improvement	In progress	OU/MU
<b>Theme 2 - Markets</b>			
9	Targeted Asian Market Development	In progress	Internal
10	The Chip Group	In progress	MOH
11	Stakeholder Engagement	In progress	Internal
12	Annual Domestic and Export Market Value Fresh & Processed	In progress	Internal
<b>Theme 3 - Quality</b>			
13	Biosecurity & GIA	In progress	MPI
14	Potato Quality	In progress	Internal
15	Seed Quality	In progress	Internal
<b>Theme 4 - Industry Good</b>			
16	Industry Good Structure	In progress	Internal
17	People, leadership and development	In progress	Internal
18	Industry Good Processes	In progress	Internal
19	Act as an advocate to Horticulture NZ	In progress	Hort NZ

## Theme 1 Research & Development & Extension

**Objective:** Increase potato industry productivity.

### 1. General

**Objective:** Increase potato industry productivity.

**Actions:**

- 1.1 Identify key areas for improving overall productivity in the NZ value chain and report to board for incorporation into 2020-2021 Strategic Plan.
- 1.2 Match R & D investment with providers, and seek industry- government partnerships to leverage funding into innovation.
- 1.3 Develop a 6-year R & D strategic plan that prioritises R & D activities and expenditure allocation, with appropriate policies for R & D projects. Report to board for incorporation into 2020-2021 Strategic Plan.
- 1.4 Establish technical panels as required.

### 2. Industry Plant Breeding:

**Objective:** Alignment of interests through an industry-focused breeding programme.

**Actions:**

- 2.1 PNZ-28. Breeding to focus on processing potatoes and specific attributes, in order of priority:
  1. Liberibacter resistance.
  2. Paid yield (aligned with purpose, e.g. solids for process applications).
  3. Resistance to pests & diseases.
  4. Fit for purpose.
  5. Flavour profile.
  6. Fresh potatoes for the NZ market.
  7. Establish a joint international R & D programme for liberibacter resistance.

### 3. Crop Productivity

**Objective:** To identify solution for yield gap between observed and theoretical yields.

**Actions:**

- 3.1 Carry out the following projects and report progress:
  - 3.1.1 PNZ-01. MBIE Realising Potato Export Value.

## 4. Disease and Pest Management

**Objective:** Growers have the tools necessary to deal with existing and potential exotic pests and diseases.

**Actions:**

- 4.1 Publish up to date protocols and methods for pest and disease control.
- 4.2 Ongoing investment in testing agri-chemicals and alternative management plans.
- 4.3 Disease and pest resistance programs established.
- 4.4 Carry out the following projects and report progress:
  - 4.4.1 PNZ-69. Canterbury TPP spray management trials.
  - 4.4.2 PNZ-74. PMTV Research Projects.
  - 4.4.3 PNZ-10. Tamarixia release project.
  - 4.4.4 PNZ-72. TPP Degree Days.
  - 4.4.5 PNZ-29. Leading Future Food Production PGG.

## 5. Soil, Water and Environment

**Objective:** Growers develop infrastructure and methods to improve water, nutrient and bioactive use efficiency, and the industry maintains priority access to water, nutrients and bioactive resources for growers.

**Actions:**

- 5.1 Carry out the following projects and report on progress:
  - 5.1.1 PNZ-26. Exploring Spongospora suppressive soils in potato production (HIA).
  - 5.1.2 PNZ-27. Improving the quality of seed potatoes using precision agriculture.
  - 5.1.3 PNZ-67. Remote sensor nutrient management trials.
  - 5.1.4 PNZ-17. Quick N - Measure it & manage it.
  - 5.1.5 PNZ-62. Future proofing vegetable production.
  - 5.1.6 PNZ-73. NZGAP Soil Erosion & Phosphate Dashboard.
  - 5.1.7 PNZ-15. Cadmium Project.
  - 5.1.8 PNZ-12. Don't Muddy the Waters.
  - 5.1.9 PNZ-24. Maximising the value of irrigation.
  - 5.1.10 PNZ-79. Nutrient Emissions Project.

## 6. Crop Profitability

**Objective:** Measure crop profitability.

**Actions:**

- 6.1 PNZ- 65. Publish annual crop profitability results for seed, process & table potatoes.
- 6.2 Ensure research projects are, where feasible, aligned to profitability target.

## 7. Novel Waste and Product Development

**Objective:** To identify higher-value options to use low value potatoes, or potato waste, in applications for animal feed, and/or use potatoes, or potato waste, in novel applications.

**Actions:**

- 7.1 Carry out the following projects and report progress:
  - 7.1.1 PNZ-75. Consumer desired flavour.
  - 7.1.2 PNZ-76. Identification of potato metabolites with potential high value.
  - 7.1.3 PNZ-77. Glycaemic impact (GI) of potato varieties.

## 8. Process Improvement

**Objective:** To improve potato processing productivity.

**Actions:**

- 8.1 Carry out the following projects and report progress:
  - 8.1.1 PNZ-57. Spectral Imaging & NIR.
  - 8.1.2 PNZ-42. Pulse electric field project.

## Theme 2 Markets

**Objective:** Increase the total market value of potatoes grown in New Zealand as per Strategic goals.

## 9. Targeted Asian Market Development

**Objective:** To secure practical access for New Zealand fresh potatoes into Asian markets.

**Actions:**

- 9.1 Prioritise the Japanese market for development.
- 9.2 Planned industry coordination to develop a specific market/s:
  - 9.2.1 MPI engagement for market access.
  - 9.2.2 Validate market opportunities in Japan, including details on specific fresh potato products and potential competitors in the export space.

## 10. The Chip Group

**Objective:** To improve the nutritional status of New Zealand grown deep-fried chips served by New Zealand foodservice by reducing fat (total and saturated) and salt content.

**Actions:**

- 10.1 Online training for Chip Group website project.
- 10.2 Hold annual People's Choice and Biennial Best Chip Shop Awards at the PNZ Biennial Conference.

## 11. Stakeholder Engagement

**Objective:** Push 'good news' stories about the New Zealand potato industry and its value to the primary industry. Position potatoes as the 'starch hero' of choice, by promote potatoes as a nutritious tasty food option.

**Actions:**

- 11.1 Develop and execute an annual education and communications plan.
- 11.2 Drive industry engagement through effective delivery of key messaging.
- 11.3 Co-ordinate newsletters, media and social media activity and track outcomes.
- 11.4 Work with training institutions, schools and representative bodies to develop appropriate resources and provide support.
- 11.5 Active participation in industry engagement activities.

## 12. Annual Domestic and Export Market Value Fresh & Processed

**Objective:** Research, distribute and communicate NZ retail and Export information for fresh potatoes and processed potato products.

**Actions:**

- 12.1 Research & publish export values weekly.
- 12.2 Research & publish processed values monthly.
- 12.3 Research & publish annual market value & volume statistics via the annual report.
- 12.4 Publish analysis of domestic and export markets for potatoes and potato products.



## Theme 3 Quality

**Objective:** Maintain and enhance the reputation of New Zealand potatoes.

### 13. Biosecurity and GIA

**Objective:** Carry out biosecurity readiness activities and respond as per the Operational Agreement.

**Actions:**

- 13.1 Growers interests are represented at GIA.
- 13.2 Undertake a biosecurity monitoring and surveillance programme for sector risk organisms.
- 13.3 Develop and undertake activities as agreed in the Industry Led.
- 13.4 Pest Management Plan for the PMTV incursion.
- 13.5 Undertake biosecurity training and development of appropriate industry personnel.
- 13.6 Undertake readiness and response activities as per the Operational Agreement.
- 13.7 Ensure minimum requirements of the GIA are met.
- 13.8 Carry out operational agreement projects as required.
- 13.9 Review and renew OAs with MPI as appropriate.
- 13.10 Ensure financial reserves meet with financial commitments entered into through the Deed.

### 14. Potato Quality

**Objective:** Quality assurance of fresh table potatoes to export and domestic markets.

**Actions:**

- 14.1 Work with growers and retailers to develop clear categories and quality standards for domestic table potatoes.
- 14.2 Revise export grading standards.
- 14.3 Develop an export code of practice.
- 14.4 Implement export quality assurance program for fresh categories.
- 14.5 Develop a project to investigate research questions regarding the storage, handling and transport of export fresh potatoes.
- 14.6 Visit and report on Fijian market.
- 14.7 PNZ-78. Agchem Strategy Project.

## 15. Seed Quality

**Objective:** Maintain and improve the quality of NZ Seed Potatoes.

**Actions:**

- 15.1 PNZ-37. National virus survey.
- 15.2 Ensure registration & training of seed inspectors.
- 15.3 Update Seed Authority rules as required.
- 15.4 Contract signed with IVAs for seed inspection.
- 15.5 Contract signed withASURE Quality for seed administration.
- 15.6 Investigate options for administration of the seed certification scheme and the provision of the seed certification database.

## Theme 4 Industry Good

**Objective:** Clear direction to the industry, and accountability to members.

## 16. Industry Good Structure

**Objective:** Ensure the right structure is in place to provide accountability to the members.

**Actions:**

- 16.1 Annually review the terms of reference for the subcommittees and Technical Panels for adoption by Potatoes NZ.
- 16.2 Adopt best practice for operational and management oversight.
  - 16.2.1 Financial Budget - Ensure regular financial reporting against budget.
  - 16.2.2 Ensure each staff member has a professional development plan.
  - 16.2.3 Develop an HR & Wellbeing Plan for PNZ Staff.
  - 16.2.4 Develop a Crisis & Organisational Resilience plan.
  - 16.2.5 Develop a membership CRM that allows integration of web, email and data for all PNZ activities.
  - 16.2.6 Develop a tracking & tracing database for all potato crops.
  - 16.2.7 Conduct annual Levy audit.
  - 16.2.8 Develop work programme to give effect to members' request for mid-term Levy review.
  - 16.2.9 Ensure R & D programme aligns with R & D Strategy.
  - 16.2.10 Ensure R & D engagement model is appropriate.
  - 16.2.11 Ensure R & D communication strategy is appropriate.

## **17. People, leadership and development**

**Objective:** Develop ongoing education and development for and within the industry.

**Actions:**

- 17.1 Support and promote horticulture training at a local and national level.
- 17.2 Support and promote good health and safety practices.
- 17.3 Support and promote tertiary horticultural training.
- 17.4 Undertake on farm biosecurity training and development activities.
- 17.5 Identify and support training of potential horticultural leaders.
- 17.6 Annual Governance training for the Potatoes NZ board.
- 17.7 Review Trade and Associate member fees and membership criteria.

## **18. Industry Good Processes**

**Objective:** Clear direction to the industry, and accountability to members.

**Actions:**

- 18.1 All service providers to Potatoes NZ must be under a formal contract which specifies the work plan and has appropriate milestones/key performance indicators.
- 18.2 Milestones/key performance indicators must be reported in a timely manner.
- 18.3 Potatoes NZ will review these milestones/key performance indicators and manage the contract accordingly.
- 18.4 Financial reporting is required under each contract showing the allocation of funds by the service provider.
- 18.5 Align all industry good activities using levy money under the single governance structure of Potatoes New Zealand.

## **19. Act as an advocate to Horticulture NZ**

**Objective:** Act as an advocate for the potato industry to Horticulture NZ on potato industry related issues.

**Actions:**

- 19.1 Seek regular contact with growers and industry to identify Potato issues for feedback to Horticulture NZ.

## List of Planned R+D Projects

List in numeric order

PNZ-01	<b>PFR MBIE Realising Potato Export Value</b>
PNZ-10	<b>Tamarixia</b>
PNZ-12	<b>Dont muddy the waters</b>
PNZ-15	<b>Cadmium</b>
PNZ-17	<b>Quick N - Measure It &amp; Manage It</b>
PNZ-24	<b>Maximising the value of irrigation</b>
PNZ-26	<b>Exploring Spongospora Suppressive Soils</b>
PNZ-27	<b>SFF Precision Agriculture</b>
PNZ-28	<b>PFR SPTS13802 - Breeding</b>
PNZ-42	<b>Pulse Electric Field Project</b>
PNZ-57	<b>Spectral Imaging &amp; NIR</b>
PNZ-62	<b>Future Proofing Vegetable Production</b>
PNZ-65	<b>Economic modelling for Potatoes</b>
PNZ-29	<b>PGP Leading Future Food Production - Arcoecology</b>
PNZ-67	<b>Remote Sensor Nutrient Management Trials</b>
PNZ-69	<b>Reduced Spray Program - Canterbury Psyllid Management Trials</b>
PNZ-72	<b>Degree Days Graphs</b>
PNZ-73	<b>NZGAP Soil Erosion &amp; Phosphate Dashboard</b>
PNZ-74	<b>PMTV Research Projects</b>
PNZ-75	<b>Consumer Desired Flavour</b>
PNZ-76	<b>Potato Metabolites</b>
PNZ-77	<b>GI Impact of Potato Varieties</b>
PNZ-78	<b>Agchem Strategy Project</b>
PNZ-79	<b>Nutrient Emissions Project</b>

## Timeline and reporting

- Report against actions at Board meetings.
- Review Business Plan annually at December Board meeting.
- Approve Annual Plan at February.
- Communicate Strategic Plan and Business Plan annually via newsletter and send a printed version to Growers.
- Report annually against Strategic Objectives and Business Plan actions in the annual report.
- Report regularly to growers on Business Plan in newsletters and NZ Growers.

## Abbreviations used

<b>AgBus</b>	Agribusiness Consultants
<b>DGG</b>	Deed Governance Group (re GIA)
<b>EPA</b>	Environmental Protection Agency
<b>FAR</b>	Foundation for Arable Research
<b>FIET</b>	Food Industry Enabling Technologies
<b>GIA</b>	Government Industry Agreement
<b>MAS</b>	Market Access Solutionz
<b>MFAT</b>	Ministry of Foreign Affairs and Trade
<b>MOH</b>	Ministry of Health
<b>MPI</b>	Ministry of Primary Industries
<b>MT</b>	Metric Tonnes
<b>MU</b>	Massey University
<b>NZGAP</b>	NZ Good Agricultural Practice
<b>NZTE</b>	New Zealand Trade and Enterprise
<b>OA</b>	Operational Agreement (re GIA)
<b>OH</b>	Otago University
<b>PCT</b>	Potatoes NZ Charitable Trust
<b>PFP</b>	Profit from Productivity
<b>PFR</b>	Plant and Food Research
<b>RD &amp; E</b>	Research and Development & Extension
<b>SFF</b>	Sustainable Farming Fund (MPI)
<b>Hort NZ</b>	Horticulture New Zealand