



2020



Strategy and Business Plan

Potatoes New Zealand Inc.

July 2020



2020 Potatoes Industry Strategy

Potatoes New Zealand Inc.

July 2020

Executive Summary

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

Potato Industry Strategy Targets

The 2020 industry targets have changed from the 2013 strategy. The farm profitability target has been dropped due to the difficulties of measuring profitability per hectare. A new emissions target has been added to ensure industry maintains its social and regulatory license to operate.

This is appropriate given the timeframe extends to 2025:

- 1. 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.
- 2. Enhance the value of the domestic market by 50% by 2025.**
 - Implies value growth on stable volumes, above CPI.
- 3. Zero net nutrient and GHG emissions from the potato industry by 2050.**
 - Aligned with the objectives of the government’s emission targets.
 - To be achieved in order of priority via reduction, mitigation and offsetting.

Contents

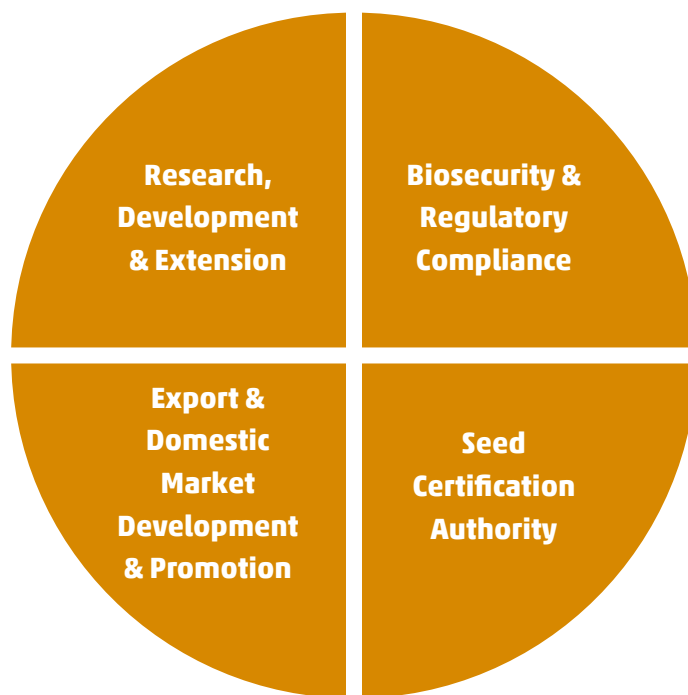
Executive Summary	
Potato Industry Strategy Targets	3
Overview	
Potatoes New Zealand Structure and Roles	5
Refreshed Potato Industry Strategy	6
Potato Industry Strategy Initiatives.....	7
Industry Targets	
Target 1: Value of Exports	8
Target 2: Value of Domestic Market	8
Target 3: Industry Emissions	8
Theme 1: Research & Development & Extension	11
1. General	12
2. Industry Plant Breeding	12
3. Crop Productivity.....	12
4. Disease & Pest Management.....	12
5. Soil, Water & Environment	13
6. Novel Waste and Product Development	13
7. Process Improvement	13
8. Emissions Monitoring, Reporting & Reduction	13
Theme 2: Markets	14
9. Targeted Asian Market Development	14
10. The Chip Group	14
11. Stakeholder Engagement	14
12. Annual Domestic and Export Market Value Fresh & Processed.....	14
Theme 3: Quality	15
13. Biosecurity and GIA	16
14. Potato Quality	16
15. Seed Authority	16
Theme 4: Industry Good	17
16. Industry Good Structure	17
17. People leadership and development.....	17
18. Industry Good Processes.....	17
19. Act as an Advocate to Hort NZ	18
Risk Mitigation Strategies	18
Business Plan 2019	19
Pandemic Recovery and Transformation Plan	20
Planned R+D Projects	29
Timeline and Reporting	30
Abbreviations used	30

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.

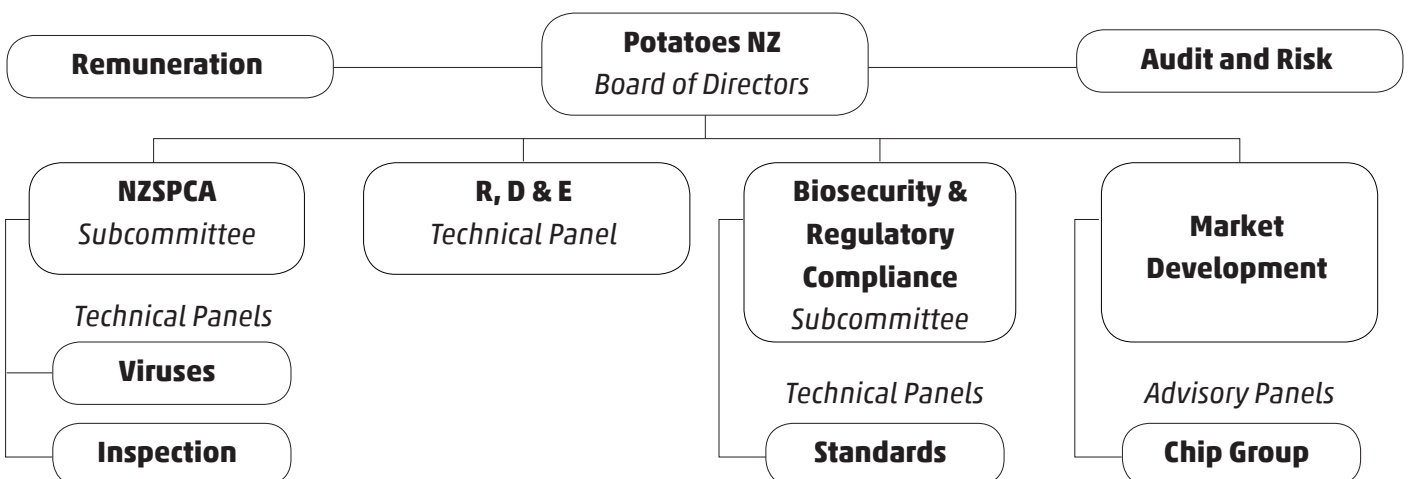


Protect the reputation of NZ potatoes, coordinating industry stakeholders in regards to compliance, biosecurity and product standards.

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 2020 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, emissions reduction & mitigation 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. Finally, the theme incorporates the measurement of emissions across the potato value chain.

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
Theme 1 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	Novel Waste and Product Development	Current	AgBus
7	Process Improvement	Current	PFR/MU/FIET
8	Emissions Monitoring, Reporting & Reduction	New	PFR/MU
9	Targeted Asian Market Development	Current	Internal
10	The Chip Group	Current	Internal. MOH contract ended 30 th June 2020
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 Hort NZ	Current	Hort NZ

Industry Targets

The 2020 strategy set targets in three areas:

- Value of exports (fresh and processed)
- Value of the domestic market
- Nutrient & GHG Emissions

The 2020 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. 2019 farmgate value was \$160 million, an increase of 55% over the last 6 years.

Target 1: 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 \$128,211 million, there has been a 16% increase in export value. Current annual growth rate is 2.67%. An annual growth rate of 12.06% 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 2019. Strong efforts must be undertaken to achieve this goal.

Target 2: 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 \$959 million (an increase of 44%). An annual target growth rate of under 1% is required; the current growth rate is 7.37%. Therefore, we are well on target to reach this goal.

Target 3: Zero Net Nutrient & GHG Industry Emissions by 2050.

The industry has adopted environmental targets that align with domestic and international targets. This ensures that the industry maintains its social and regulatory license. The tactics will include a mix of reduction, mitigation and off setting. The order of priority of these tactics will be reduction, mitigation and off setting as a last resort where all other tactics have failed then off setting.

2019 Potato Industry by Volume

	Total 2019	Seed 2019	Table 2019	Processed 2019
Area (ha)	10,417	1,117	3,300	6,000
Production (MT)	533,030	21,230	151,800	360,000

Seed (MT)	2019
Export	27
Domestic Sales	21,203
Total	21,230
% of total Grown	4%


Table Potatoes (MT)	2019
Export	20,774
Domestic Sales*	105,000
Foodservice*	5,000
Total	130,774
% of total grown	25%

* assumed

Crisps (MT)	2019
Raw Potatoes	58,457
Domestic Mfg	12,860
Import	887
Total	13,747
Export	837
Retail	12,910
Total	13,747
% of total grown	11%

Frozen/Fries (MT)	2019
Raw Potatoes	301,543
Domestic Mfg	156,289
Import	18,606
Total	174,895
Export	77,062
Retail	27,423
Total	174,895
% of total grown	57%

Notes: 2018 & 2019 figures have been updated as of July 2020.



2019 Potato Industry by Value

	Total 2019	Seed 2019	Table 2019	Processed 2019
Area (ha)	10,417	1,117	3,300	6,000
Production (MT)	533,030	21,230	151,800	360,000

Seed (\$000)	2019
Export	\$25
Domestic Sales	\$16,962
Total	\$16,988
% of total Grown	2%

Table (\$000)	2019
Export	\$20,774
Domestic Sales	\$192,325
Foodservice	\$30,000
Total	\$243,099
% of total grown	22%

Crisps (\$000)	2019
Export	\$5,781
Retail *	\$211,779
Total sold	\$217,561
% of final industry value	20%

*assume extra 10% value above Scan Data


Frozen/Fries (\$000)	2019
Export	\$101,631
Retail*	\$86,130
Food Service	\$422,462
Total Sold	\$610,223
% of final industry value	56%

*assume extra 10% value above Scan Data

	2019
Domestic	\$959,659
Export	\$128,211
Total Industry Value (\$000)	\$1,087,871

2019 Total Industry Value: \$1,088 million p.a.

Notes: 2018 & 2019 figures have been updated as of July 2020. Currency is NZD.



2013-2019 Potato Industry by Volume

Total					Seed				Table				Processed			
	2013	2017	2018	2019	2013	2017	2018	2019	2013	2017	2018	2019	2013	2017	2018	2019
Area (ha)	10,328	10,306	10,344	10,417	1,182	1,123	1,160	1,117	3,516	3,278	3,278	3,300	5,631	5,905	5,906	6,000
Production (MT)	493,872	496,900	527,190	533,030	22,453	21,337	22,042	21,230	161,736	150,788	150,788	151,800	309,683	324,775	354,360	360,000

Seed (MT)	2013	2017	2018	2019
Export	300	20	26	27
Domestic Sales	22,200	21,280	22,016	21,203
Total	22,500	21,300	22,042	21,230
% of total grown	5%	4%	4%	4%

Table Potatoes (MT)	2013	2017	2018	2019
Export	29,862	27,025	24,919	20,774
Domestic Sales*	105,000	105,000	105,000	105,000
Foodservice*	5,000	5,000	5,000	5,000
Total	139,862	137,025	134,919	130,774
% of total grown	28%	28%	26%	25%

* assumed

Crisps (MT)	2013	2017	2018	2019
Raw Potatoes	66,215	71,649	52,205	58,457
Domestic Mfg	13,243	15,763	11,485	12,860
Import	570	1,496	1,068	887
Total	13,813	17,259	12,553	13,747
Export	1,891	1,276	586	837
Retail	11,922	15,983	11,967	12,910
Total	13,813	17,259	12,553	13,747
% of total grown	13%	14%	10%	11%

Frozen/Fries (MT)	2013	2017	2018	2019
Raw Potatoes	243,468	253,126	302,155	301,543
Domestic Mfg	126,728	127,610	156,128	156,289
Import	14,484	19,204	19,123	18,606
Total	141,211	146,813	175,250	174,895
Export	59,554	66,574	73,478	77,062
Retail	20,269	25,306	26,343	27,423
Total	141,211	146,813	175,250	174,895
% of total grown	49%	51%	57%	57%

Notes: 2018 & 2019 figures have been updated as of July 2020.



2013-2019 Potato Industry by Value

Total					Seed				Table				Processed			
	2013	2017	2018	2019	2013	2017	2018	2019	2013	2017	2018	2019	2013	2017	2018	2019
Area (ha)	10,328	10,306	10,344	10,417	1,182	1,123	1,160	1,117	3,516	3,278	3,278	3,300	5,631	5,905	5,906	6,000
Production (MT)	493,872	496,900	527,190	533,030	22,453	21,337	22,042	21,230	161,736	150,788	150,788	151,800	309,683	324,775	354,360	360,000

Seed (\$000)	2013	2017	2018	2019
Export	\$310	\$50	\$29	\$25
Domestic Sales	\$17,762	\$17,053	\$17,613	\$16,962
Total	\$18,071	\$17,082	\$17,642	\$16,988
% of total grown	2%	2%	2%	2%

Table (\$000)	2013	2017	2018	2019
Export	\$18,020	\$29,487	\$22,909	\$20,774
Domestic Sales	\$119,000	\$217,963	\$201,688	\$192,325
Foodservice	\$24,000	\$30,000	\$30,000	\$30,000
Total	\$161,020	\$277,449	\$254,597	\$243,099
% of total grown	21%	28%	23%	22%

Crisps (\$000)	2013	2017	2018	2019
Export	\$15,518	\$8,182	\$4,684	\$5,781
Retail *	\$143,335	\$179,709	\$195,332	\$211,779
Total sold	\$158,853	\$187,891	\$200,016	\$217,561
% of final industry value	20%	19%	18%	20%

*assume extra 10% value above Scan Data

Frozen/Fries (\$000)	2013	2017	2018	2019
Export	\$76,650	\$91,605	\$101,673	\$101,631
Retail*	\$66,802	\$78,132	\$82,694	\$86,130
Food Service	\$294,664	\$329,605	\$452,575	\$422,462
Total Sold	\$438,115	\$499,342	\$636,941	\$610,223
% of final industry value	56%	51%	57%	56%

*assume extra 10% value above Scan Data

	2013	2017	2018	2019
Domestic	\$665,563	\$852,460	\$979,900	\$959,659
Export	\$110,497	\$129,304	\$129,295	\$128,211
Total Industry Value (\$000)	\$776,060	\$981,764	\$1,109,195	\$1,087,871

2019 Total Industry Value: \$1,088 million p.a.



Notes: 2018 & 2019 figures have been updated as of July 2020. Currency is NZD.

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, emission reductions & mitigation 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.

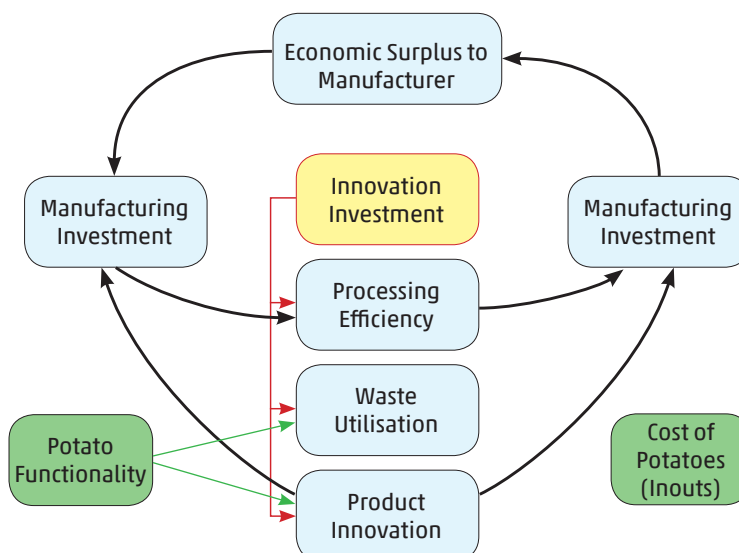
The starting point for developing the RD & E investment strategy for processing is to understand the overall system as shown in the figure below. Potatoes NZ objective is for sustainable growth of the sector, and this requires a virtuous cycle of growing investment and returns to manufacturing and growing,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

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	Novel Waste and Product Development	In progress	PFR/MU
7	Process Improvement	In progress	OU/MU
8	Emissions Monitoring, Reporting & Reduction	New	PFR/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. 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.

7. Process Improvement

Status: In progress

Partners: Otago and Massey Universities

Key Objective: To improve potato processing productivity

8. Emissions Monitoring Reporting Nutrient & GHG Reduction

Status: New

Partners: Plant and Food Research, Massey University

Key Objective: To reduce net emissions to zero by 2050 across the NZ potato industry value chain.

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	Internal
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: Internal

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 Authority	Provide assurance that certified seed lines meet the minimum standards for disease freedom and trueness to type

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.

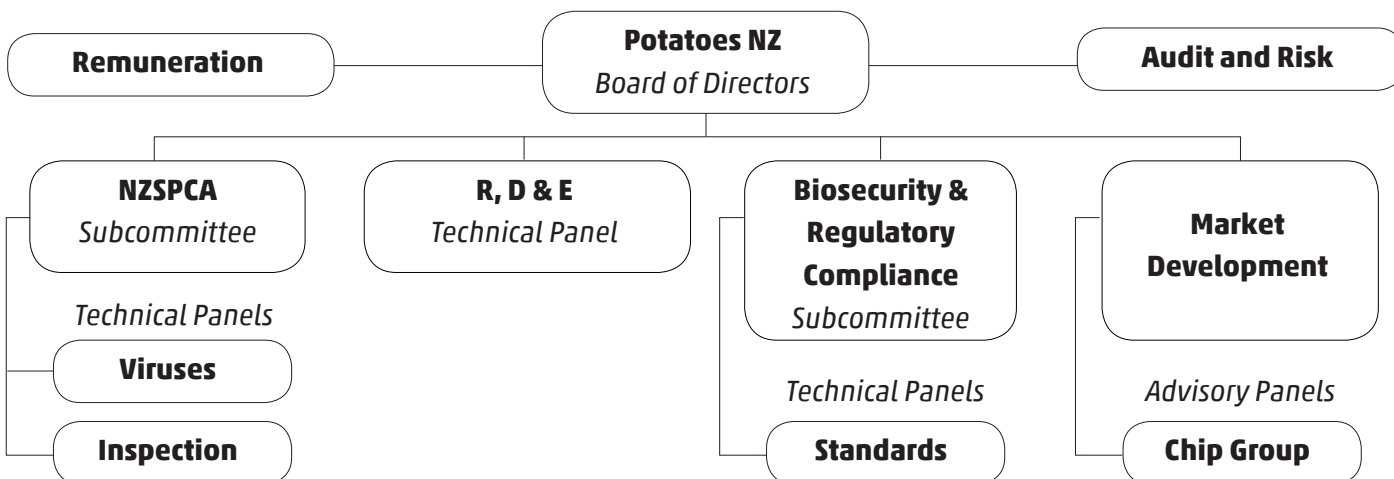
Strategic Initiatives	Status	Partner
16. Industry Good Structure	In progress	Internal
17. People leadership and development	In progress	Internal
18. Industry Good Processes	In progress	Internal
19. Act as an Advocate to Horticulture New Zealand	In progress	Internal

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.

Risk Mitigation Strategies

The following risk mitigation strategies have been adopted to counter the current and future risks.

1. Build Organisational Capacity & Capability

Identify key activity areas and develop internal capability through employing staff.

2. Utilise Contractors When Appropriate

Contractors should only be used on an annual or as needs basis, and strict KPI's applied. Care must be taken to ensure that contractors do not develop a monopoly situation.

3. Reduce Overhead & Operating Costs

Focus on grower needs. Maintain a virtual organisational model that reduces office overheads and focus on activities in the regions that deliver value to growers. Where needed engage with central Government, national organisations but only where and when it adds value to growers or achieves organisational strategies or helps complete actions.

4. Build Information Systems

Continue the development of the Biosecurity, Emissions & Levy Information System (BELIS).



2020 Business Plan

Potatoes New Zealand Inc.

July 2020




Covid-19 Pandemic Recovery and Transformation Plan

1. Export - Recovery & Transformation Plan.

- a. Identify new export growth potential for process and fresh spuds to achieve our industry strategic objectives.
- b. Protect domestic industry from unfair trade practices by investigation of anti-dumping safe guard measures.
- c. Undertake international trade data analysis to calculate NZ industry competitive ability.

2. Domestic – Recovery & Transformation Plan.

- a. Identify new domestic growth potential for process & fresh spuds to achieve our industry strategic objectives.
 - b. Undertake Market Research to look at the consumer behaviour and industry potential future trend.
 - c. Undertake quantitative and qualitative data analysis.
 - d. Survey a small group of growers to ascertain attitudes that may drive future behaviour.
- 

Key Strategy Targets are:

Target 1: Double the value of fresh & processed New Zealand based exports by 2025

Target 2: Enhance the value of the domestic market by 50% by 2025

Target 3: Reduce net emissions to zero by 2050

19 Strategic Initiatives

Strategic Initiative	Description	Status	Partner
Theme 1 - Research Development & Extension			
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	Novel Waste and Product Development	In progress	PFR/MU
7	Process Improvement	In progress	OU/MU
8	Emissions Monitoring, Reporting & Reduction	New	PFR/MU
Theme 2 - Markets			
9	Targeted Asian Market Development	In progress	Internal
10	The Chip Group	In progress	Internal
11	Stakeholder Engagement	In progress	Internal
12	Annual Domestic and Export Market Value Fresh & Processed	In progress	Internal
Theme 3 - Quality			
13	Biosecurity & GIA	In progress	MPI
14	Potato Quality	In progress	Internal
15	Seed Quality	In progress	Internal
Theme 4 - Industry Good			
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.
- 1.5 Implement accounting & R&D management systems to meet R&D tax credit scheme.

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-74. PMTV Seed Surveillance.
 - 4.4.2 PNZ-10. Tamarixia release project.
 - 4.4.3 PNZ-72. TPP Degree Days.
 - 4.4.4 PNZ-29. Leading Future Food Production PGG.
 - 4.4.5 PNZ-80. Powdery Scab Management.

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:
 - 5.1.2 PNZ-27. Improving the quality of seed potatoes using precision agriculture.
 - 5.1.5 PNZ-62. Future proofing vegetable production.

6. 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:

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

7. Process Improvement

Objective: To improve potato processing productivity.

Actions:

- 7.1 Carry out the following projects and report progress:
 - 7.1.1 PNZ-57. Spectral Imaging & NIR.
 - 7.1.2 PNZ-42. Pulse electric field project.

8. Emissions Net, Reporting & Reduction

Objective: To reduce net emissions to zero by 2050 across NZ Potato Industry Chain.

Actions:

- 8.1 Carry out the following projects and report progress:
 - 8.1.1 PNZ-79. Sustainable Vegetables Systems 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 via Chip Group website.
- 10.2 Promote NZ grown and produced frozen fries.

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 promoting New Zealand potatoes as a nutritious tasty food option.

Actions:

- 11.1 Develop and execute an annual education and communications strategy.
- 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 strategic partners to develop appropriate resources and provide support.
- 11.5 Annual November Means New Potatoes event or digital campaign.
- 11.6 Develop & launch Potatoes consumer guide.

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 Undertake a biosecurity monitoring and surveillance programme for sector risk organisms.
- 13.2 Develop and undertake activities as agreed in the operational agreement.
- 13.3 Pest Management Plan for the PMTV incursion.
- 13.4 Undertake biosecurity training and development of appropriate industry personnel.
- 13.5 Ensure minimum requirements of the GIA are met.
- 13.6 Review and renew OAs with MPI as appropriate.
- 13.7 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 in 2021, then every 3 years.
- 14.3 Develop an export code of best practice.
- 14.4 Develop a project to investigate research questions regarding the storage, handling and transport of export fresh potatoes.
- 14.5 Visit and report on Fijian market.
- 14.6 PNZ-78. Agchem Strategy Project.
- 14.7 Potato Grower Guides including MRL, Biosecurity Guide, Pest & Disease handbook, Seed Rules etc.

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 Investigate options for administration of the seed certification scheme and the provision of the seed certification database.
- 15.6 Capture seed crop information into GPS dataset.

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.
- 17.8 Develop a leadership & development programme for young growers.

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	PFR MBIE Realising Potato Export Value
PNZ-10	Tamarixia
PNZ-27	SFF Precision Agriculture
PNZ-28	PFR SPTS13802 – Breeding
PNZ-42	Pulse Electric Field Project
PNZ-57	Spectral Imaging & NIR
PNZ-62	Future Proofing Vegetable Production
PNZ-29	PGP Leading Future Food Production - Arcoecology
PNZ-69	Reduced Spray Program - Canterbury Psyllid Management Trials
PNZ-72	Degree Days Graphs
PNZ-74	PMTV Seed Surveillance
PNZ-75	Consumer Desired Flavour
PNZ-76	Potato Metabolites
PNZ-77	GI Impact of Potato Varieties
PNZ-78	Agchem Strategy Project
PNZ-79	Sustainable Vegetables Systems
PNZ-80	Powdery Scab Management
PNZ-81	Storage Project

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

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