

Potatoes New Zealand Inc.

1<sup>st</sup> April

2022



# PNZ Strategy & **Business Plan 2022**















**ACTIVITIES** 



THEMES

INITIATIVES



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# Potato Industry Strategic Targets 2022

#### 1. Double the value of fresh & processed exports by 2025

- Aligned with objectives of the government's business growth agenda
- Implies volume and value growth

#### 2. Zero net nutrient and GHG emissions by 2035

- Aligned with the objectives of the government's emission targets
- To be achieved in order of priority via reduction, mitigation, and offsetting

#### **Industry Targets in detail**

Target 1: 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 2020 value of exports at \$106 million, there has been a 4% decrease in export value since 2013. An annual growth rate of 20% to 2025 is required to achieve target. Strong efforts must be undertaken to achieve this goal.

#### **Target 2:** Net zero emissions by 2035.

The industry has adopted environmental targets that align with domestic and international targets. This ensures that the industry maintains its social sustainability and regulatory license. The tactics will include a mix of measurement, reporting, reduction, mitigation, and off setting, in order of priority.



# **2021 Potato Industry Strategic Themes and their initiatives**

# SUSTAINABILITY RESEARCH & EXTENSION

- Productivity
- Pests & Disease
- Environment

# ECONOMIC SUSTAINABILITY

- Export markets
- Domestic markets
- Industry Metrics

# SUSTAINABLE QUALITY

- Biosecurity
- Standards
- Seed

# SOCIAL SUSTAINABILITY

- Structure
- Resilience
- Processes





# 2022 Potato Industry Plan: Themes, Initiatives & Activities

#### Theme 1: Sustainability Research & Extension (REX)

Sustainably drive value chain optimization, by focusing on farm and processing innovations including sustainability; pest and disease management; plant breeding; emissions measuring, reporting, reduction, and mitigation; process innovations to increase manufacturing productivity; new product innovations; and the (re) utilisation of waste streams. Projects and extension will be undertaken using the logic modeling framework (see appendix 2).

See Appendix 3 for table of current REX projects.

#### **Initiatives**

#### 1. Productivity

Key responsibility: Internal including technical committee

**Key Objective:** Increase productivity and profitability across the value chain while reducing emissions.

#### **Business Plan Activities:**

- 1.1 Identify key areas for optimising the value chain.
- 1.2 Seek industry-government partnerships to leverage funding.
- 1.3 Facilitate collaborative international Research and Extension programme for liberibacter resistance/ tolerance.
- 1.4 Evaluate the domestic breeding programme given the industry strategic targets:
  - 1.4.1 PNZ-28. Potato breeding programme.
- 1.5 Process productivity projects:
  - 1.5.1 Investigate sustainability indices and reporting for export crops.

#### 2. Pests & Disease

Key responsibility: Technical, Extension and Communications

**Key Objective:** Ensure growers receive and understand the tools necessary to sustainably manage existing and potential pests and diseases.



- 2.1 Publish extension bulletins on the latest protocols and methods for pest and disease control.
- 2.2 Ongoing investment in testing agrichemicals and alternative management plans.
- 2.3 Carry out the following projects, undertake extension activities and report progress:
  - 2.3.1 PNZ-80 Powdery Scab Management.
  - 2.3.2 PNZ-82 Potato Tuber Moth.
  - 2.3.3 PNZ-83. CPLI project
- 2.4 Evaluate establishment of an International Potato Research and Extension Centre of Excellence

#### 3. Environment

**Key responsibility:** Technical, Extension and Communications

**Key Objective:** Ensure the industry has the capability to measure, monitor and improve water, nutrient and bioactive use efficiency. Carry out research and extension that allows the industry to sustainably maintain and grow access to land, water, nutrients, and bioactive resources.

- 3.1 Carry out the following projects, extend farmer facing resources and report on progress:
  - 3.1.1 SVS-79 Sustainable Vegetable Systems Programme.
- 3.2 Develop zero waste and zero emissions initiatives:
  - 3.2.1 Identify a potential zero waste project to support.
  - 3.2.2 Scope a project for emissions benchmarking.
- 3.3 Develop a Sustainability Strategy for industry.
- 3.4 Investigate funding and supporting regenerative projects.



#### **Theme 2: Economic Sustainability**

Targets both export and domestic markets to sustainably achieve industry targets.

It includes industry metrics, i.e., measurement of emissions across the potato value chain.

#### **Initiatives**

#### 4. Export markets

Key responsibility: Administration, Communications and Bio-Regulatory Committee

**Key Objective:** Secure market access and maintain international competitiveness. Underpin international marketing with evidence proving produce sustainability, product provenance and environmental sustainability.

#### **Business Plan Activities:**

- 4.1 Identify and prioritise market opportunities.
- 4.2 MPI engagement for market access.
- 4.3 Develop information systems to underpin international marketing.
- 4.4 Undertake international trade data analysis to calculate NZ industry competitive ability.
- 4.5 Identify and report domestic barriers to international trade competitiveness and communicate with the govt. i.e., impact of regulatory compliance and global sustainability trends.

#### 5. Domestic markets

**Key responsibility:** Communications

**Key Objective:** Publish 'good news', sustainability stories and nutritional facts about the New Zealand potato industry, products and their value to the primary sector, through key stakeholder engagement.

- 5.1 Develop and execute an annual communications strategy and plan.
- 5.2 Drive industry engagement through effective delivery of key messaging.
- 5.3 Co-ordinate newsletters, media and social media activity and track outcomes.
- 5.4 Work with strategic partners to develop appropriate resources and provide support.
- 5.5 Promote NZ's sustainably grown fresh potatoes.
- 5.6 Promote NZ's sustainably grown and processed potato products.



#### **6. Industry Metrics**

Key responsibility: Communications

**Key Objective:** Research, collate and communicate market and industry metrics for fresh potatoes and processed potato products.

#### **Business Plan Activities:**

- 6.1 Research & publish export values weekly.
- 6.2 Research & publish processed values monthly.
- 6.3 Research & publish annual market value & volume statistics via the annual report. Aim to include sustainability indices.
- 6.4 Investigate how to accurately measure profitability of farms.

#### Theme 3: Sustainable Quality

**Key Responsibility:** The Government-Industry Agreement (GIA) is a partnership between industry and government. Under this agreement PNZ operates an Operational Agreement (OA) on joint funding of readiness and response activities.

PNZ is responsible for coordinating engagement with various bodies that determine rules and regulations that apply to domestic and export standards and jurisdictions.

**Key Objectives:** Maintaining biosecurity readiness and response capability; Quality standards and Seed assurance.

#### **Initiatives**

#### 7. Biosecurity

Key responsibility: Technical Manager and Bio-Regulatory Committee

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

- 7.1 Undertake a biosecurity monitoring and surveillance programme for sector risk organisms.
- 7.2 Develop and undertake activities as agreed in the operational agreement and GIA deed of partnership.
- 7.3 Pest Management Plan for the PMTV incursion (reviewed annually).
- 7.4 Undertake on farm biosecurity training and development activities.
- 7.5 Maintain relevant incursion or management communications with industry



#### 8. Standards

Key responsibility: Bio-Regulatory Committee, Technical Manager and Communications.

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

#### **Business Plan Activities:**

- 8.1 Working from the 2021 revised export grading standards, every 3 years undertake a regional survey to monitor export quality against the voluntary export grade standards.
- 8.2 PNZ-81 Fiji Project.
- 8.3 Visit and report on Fijian market, subject to Covid-19 travel restrictions.
- 8.4 PNZ-78. Agchem Strategy Programme.
- 8.5 Publish potato Grower Guides including MRL, Biosecurity Guide, Pest & Disease handbook, Seed Rules etc as required.
- 8.6 Investigate Ministry of Primary Industries Approved Organisation (MAO) status for PNZ.

#### 9. Seed Quality

**Key responsibility:** Technical Manager, Seed Authority and Communications.

**Key Objective:** Provide assurance that seed lines meet minimum standards for disease freedom and trueness to type.

- 9.1 Ensure registration & training of seed inspectors.
- 9.2 Update Seed Authority rules as required.
- 9.3 Contract signed with IVAs for seed inspection for North Island.
- 9.4 Annual Seed Authority Newsletter.



#### Theme 4: Social Sustainability

This theme seeks to ensure overall industry good and accountability to members through three strategic initiatives; structure; resilience; and processes. This theme is concerned with how industry good is governed, particularly with regards to responsible use of the Potatoes Commodity Levy; organizational structure and management; and accountability to stakeholders. This theme seeks to build industry participants' capability and capacity, in order to build resilience.

#### **Social Sustainability Initiatives**

#### 10. Structure

**Key responsibility:** Board, Administration and Communications.

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

#### **Business Plan Activities:**

- 10.1 Annually review the terms of reference for the Subcommittees and Technical Panels for adoption by Potatoes NZ.
- 10.2 Ensure regular financial reporting against budget.
- 10.3 Develop work programme to give effect to members' request for mid-term levy review.
- 10.4 Develop an iwi engagement plan and where appropriate incorporate mātauranga Māori into projects.
- 10.5 Annually review organisational composition and structure.

#### 11. Resilience

Key responsibility: Administration, Technical, Communications, CEO and Board

**Key Objective:** Develop ongoing education and wellness programs to develop industry capability, capacity, and resilience.

- 11.1 Support and promote horticulture training at a local and national level.
- 11.2 Support and promote good health and safety practices.
- 11.3 Develop an annual professional development and wellness plan for PNZ Staff.
- 11.4 Review Trade and Associate member fees and membership criteria.
- 11.5 Monitor import and export data and act if necessary.
- 11.6 Communicate relevant Health & Safety advice to industry.



#### 12. Processes

**Key responsibility:** Administration, Technical, Communications, CEO and Board.

**Key Objective:** Clear direction to the industry and accountability to members. Where appropriate provide mandated advocacy for growers.

- 12.1 Develop a membership database that allows integration of web, email, and data for all PNZ activities.
- 12.2 Develop a tracking & tracing database for all potato crops.
- 12.3 Develop self-auditing levy system.
- 12.4 Verify active PNZ memberships for valid voting.
- 12.5 Align all industry good and sustainability activities using levy money under the single governance structure of Potatoes New Zealand Incorporated.
- 12.6 Seek regular feedback from growers and industry, to identify issues that the membership wishes to address.
- 12.7 Research and Extension to adopt the logic modeling framework for all projects.



## 2013-2021 Potato Industry by Volume and Value

	2013	2016	2017	2018	2019	2020	2021
<b>BY VOLUME</b> Area Planted (ha)		'	'	'	'	'	'
Seed	1,182	1,470	1,123	1,160	1,117	1075	951
Table	3,516	3,270	3,278	3,278	3300	3200	3000
Crisps	5,631	5,262	5,905	5,906	6000	5500	5,000
Total (ha) planted	10,328	10,002	10,306	10,344	10,417	9,775	8,951
Production (MT)	493,872	467,761	496,900	527,190	533,030	497,634	456,072
Saleable Yield (MT/ha) (multiplier)							
Seed	22,453	27,924	21,337	22,042	21,230	20,434	18,072
Table	161,736	150,427	150,788	150,788	151,800	147,200	138,000
Crisps	309,683	289,410	324,775	354,360	360,000	330,000	300,000
BY VALUE							
Seed ('000 NZD)							
Export	\$310	\$137	\$30	\$29	\$25	\$18	\$11
Domestic Sales	\$17,762	\$22,235	\$17,053	\$17,613	\$16,962	\$16,327	\$14,435
Total seed sold ('000 NZD)	\$18,071	\$22,372	\$17,082	\$17,642	\$16,988	\$16,345	\$14,447
% of final industry value	2%	3%	2%	2%	2%	1%	1%
Table Potatoes ('000 NZD)							
Export	\$18,020	\$26,679	\$29,487	\$22,909	\$20,774	\$20,016	\$20,539
Domestic Retail	\$119,000	\$191,800	\$217,963	\$201,688	\$192,325	\$234,413	\$234,413
Foodservice	\$24,000	\$28,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Total Table Potatoes ('000 NZD)	\$161,020	\$246,479	\$277,449	\$254,597	\$243,099	\$284,429	\$284,951
% of final industry value	21%	29%	28%	23%	22%	25%	26%
	1					-	
Crisps ('000 NZD)							
Export	\$15,518	\$9,368	\$8,182	\$4,684	\$5,781	\$6,844	\$6,844
Retail*	\$143,335	\$166,493	\$179,709	\$195,332	\$211,779	\$237,411	\$249,458
Total sold	\$158,853	\$166,493	\$187,891	\$200,016	\$217,561	\$244,254	\$256,302
% of final industry value	20%	19%	19%	18%	20%	21%	23%
assume an extra 10% above scan data							
Frozen/Fries ('000 NZD)							
Export	\$76,650	\$81,238	\$91,605	\$101,673	\$101,631	\$78,960	\$74,156
Retail*	\$66,802	\$73,159	\$78,132	\$82,694	\$86,130	\$107,245	\$112,323
Food Service	\$294,664	\$272,073	\$329,605	\$452,575	\$422,462	\$429,462	\$352,818
Total Sold	\$438,115	\$426,471	\$499,342	\$636,941	\$610,223	\$615,667	\$539,296
% of final industry value	56%	49%	51%	57%	56%	53%	49%
assume an extra 10% above scan data	JU/0	77/0	31/0	3170	30/0	J J /0	77/0
	¢445 5/7	¢7// 703	¢0F3 // 0	¢070.000	¢050 /50	¢1.054.053	¢007 / / =
Domestic Value	\$665,563	\$744,392	\$852,460	\$979,900	\$959,659	\$1,054,857	\$993,447
Total Export Value	\$110,497	\$117,422	\$129,304	\$129,295	\$128,211	\$105,838	\$101,549

2021 Total Industry Value: \$1,095 million p.a.

\$776,060

\$861,814

\$981,764

\$1,109,195

\$1,087,871

\$1,160,695

\$1,094,996

Total Industry Value (\$000)



## 2021 Potato Industry by Volume and Value

	2021
BY VOLUME Area Planted (ha)	
Seed	951
Table	3000
Crisps	5,000
Total (ha) planted	8,951
Production (MT)	456,072

	2021
BY VALUE Currency is NZD	
Seed ('000 NZD)	
Export	\$11
Domestic Sales	\$14,435
Total seed sold ('000 NZD)	\$14,447
% of final industry value	1%

# Saleable Yield (MT/ha) (multiplier)

(MI/IIa) (IIIuttiptiei)	
Seed	18,072
Table	138,000
Crisps	300,000

Table ('000 NZD)	
Export	\$20,539
Domestic Retail	\$234,413
Foodservice	\$30,000
Total Table Potatoes ('000 NZD)	\$284,951
% of final industry value	26%

<b>Crisps</b> ('000 NZD)	
Export	\$6,844
Retail*	\$249,458
Total sold	\$256,302
% of final industry value	23%

Frozen/Fries ('000 NZD)	
Export	\$74,156
Retail*	\$112,323
Food Service	\$352,818
Total Sold	\$539,296
% of final industry value	49%

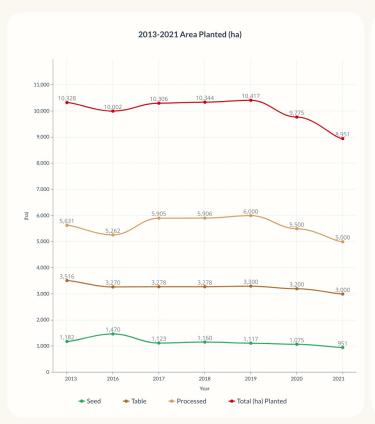
<sup>\*</sup>assume an extra 10% above scan data

Domestic Value	\$993,447
Total Export Value	\$101,549
Total Industry Value (\$000)	\$1,094,996

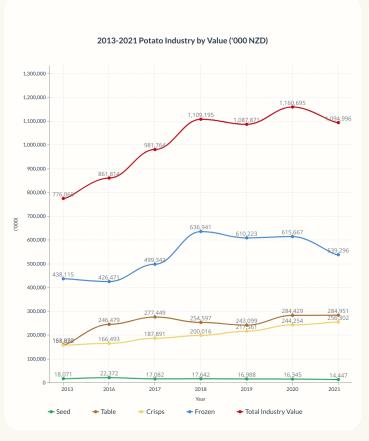
2021 Total Industry Value: \$1,095 million p.a.

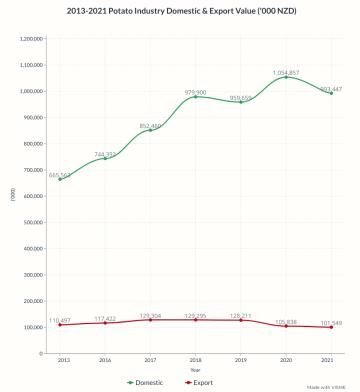


## 2013-2021 Potato Industry Graphs









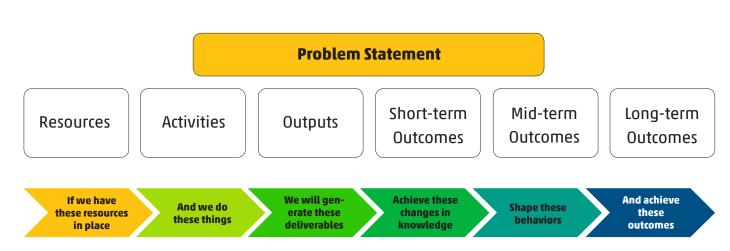


#### **Logic Model for framing Research and Extension**

#### Why use logic models?

- Planning tool
- Evaluation tool
- Roadmapping
- Reporting
- Measuring success
- Accountability
- Conveys and ensure desired outcomes
- Supports key changes in community of practice

#### Elements of a Logic Model (Roadmap)



#### **Logic Model Theory of Action**



#### Research programmes and projects

All information and reports for current and completed RD&E can be found on our website https://potatoesnz.co.nz/research- and- development/research-projects/

#### **Current RD&E**

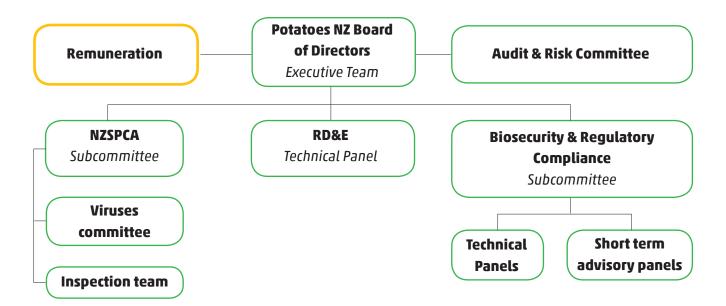
PNZ-78	Chemical Strategy Programme – ongoing
PNZ-79	Sustainable Vegetable Systems programme
PNZ-82	Potato Tuber Moth programme
PNZ-83	Canterbury Potato Liberibacter Initiative

**PNZ-85** N Mineralisation project

# **Appendix 4**

#### **Appendix 4: Organisational Structure & Processes**

Aligned to the sustainability themes, the industry governance and management has the following structure.





#### **Timeline and Reporting**

- Report against actions at Board meetings
- Review Strategy and Business Plan annually in November/December Board meeting
- Approve Strategy and Business Plan at February Board meeting
- Communicate Strategy and Business Plan at biennial industry conference
- Communicate Strategy and Business Plan annually via newsletter and send a printed version to Growers
- Report annually against Strategy and Business Plan actions in the annual report
- Report regularly to growers on Business Activities in newsletters, NZ Grower Magazine, and other industry/ trade publications.

# **Appendix 6**

#### **Risk Mitigation Strategies**

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

#### 1. Build Organisational Capacity & Capability

Identify key activity areas and develop internal capability through employing suitably qualified 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 and national organisations, only where and when it adds value to growers, achieves organisational strategies or helps complete actions.

#### 4. Build Information Systems

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