

Submission to the Productivity Commission

New Zealand Firms – Reaching for the Frontier

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Introduction

1. New Zealand Apples & Pears Incorporated is the industry association representing all apple, pear and nashi growers in New Zealand. Our 257 grower members produce approximately 600,000 metric tonnes of fruit annually, with about 400,000 metric tonnes for export, 70,000 metric tonnes for domestic consumption, and the balance for processing. Fruit is currently grown on 10,700 hectares from Gisborne in the north to Central Otago in the south. For the past 8 years, the industry has been growing at approximately 4% compound annual growth rate (CAGR) in planted area but 12% CAGR in value.
2. The New Zealand apple industry is consistently recognised as the most competitive apple industry in the world (independently assessed by Belrose Group, USA – a comparison of 33 apple producing countries). Our fruit is recognised globally as some of the highest quality, freshest and safest available.
3. New Zealand apple brands command premium prices over most other brands. This reflects our unique New Zealand developed and globally protected varieties, perfect growing conditions, sustainable growing practices, superior post-harvest technologies, and sophisticated globally branding and marketing.
4. The New Zealand apple industry has led the world in the development of sustainable growing practices. Our growers fully understand and are committed to economic, environmental, social and cultural sustainability. For example, we were the first to completely remove organo-phosphates from our pest and disease management tool kit, moving instead to the use of biological controls or targeted soft pesticides.

This submission

5. This submission addresses specific aspects of the Commission's draft report. It is supported by Horticulture New Zealand Incorporated, the pan horticulture industry organisation that advocates on behalf of New Zealand's 5,500 fruit and vegetable growers. Our comments follow the headings in the report.

Terms of Reference

6. The report focusses on private sector productivity, but we can't ignore the impact of the public sector on overall productivity. In 2018, the Commission noted that "productivity growth in the public sector appears to be poor and some public servants are actively hostile to the idea of measuring efficiency". The commission went on to say that "far too often, agencies are risk-averse, closed to ideas from outside and poor at managing change", and "non-government organisations and the private sector

are important sources of innovative ideas and processes, but can face hostile or unreceptive public agencies."

7. Better collaboration between the public and private sectors can lead to better overall outcomes.
8. Prominent economists have noted that New Zealand's productivity challenge could best be addressed by solving Auckland's transport problems through infrastructure investment.

Overview

9. We understand the argument that to become a frontier firm requires scale. However, we would argue that scale should not necessarily be considered on an individual firm basis but could be considered on an industry wide basis.
10. The NZ apple industry has organised itself in such a way that, despite producing only 0.5% of the world's apples, the industry makes up 18% of Southern hemisphere apple exports and has consistently been ranked the most competitive apple industry in the world over the past 6 years. Export returns have increased from approximately \$340m in 2012 to over \$900m in 2020. Most importantly, around 80% of this increase is value rather than volume driven.
11. This position has been achieved by:
 - New Zealand developed new world leading varieties, with IP protected globally
 - Sustainable production systems, where NZ has the highest productivity of any other producing country, over 50% higher than the next productive producer.
 - An historically efficient labour force, where skilled and highly productive migrant labour complements New Zealand sourced labour
 - World leading NZ developed post-harvest technology
 - Sophisticated marketing directly engaged with the customer
12. All of this means that New Zealand apple producers have significantly moved from commodity varieties to niche premium products commanding premium prices.
13. The report references the need to work "smarter" and not "harder". The apple industry has innovated along these lines to address key labour supply constraints. For example:
 - Dwarfing root stock means that the trees are shorter than they have been historically.
 - New tree architecture trained two dimensionally along wires rather than as a three-dimensional tree, makes it easier to maneuver ladders during harvest and provides for the introduction of future robotics and automation in the orchard.
 - More productive new varieties means that fruit is "clustered" across a smaller area.
14. All of this means that over the past 10 or so years, it has become easier/faster to pick a bin of apples. Halving the time to harvest represents a doubling of the real piece rate for a bin of apples.
15. The overview refers to a reliance on low-cost migrant labour which inhibits productivity boosting investment in capital and innovation. This will be discussed later in our submission.

What this inquiry is about

16. This section refers to the goal of sharing the benefits of growth across the broader economy. Our industry has been successful in contributing to this goal in two ways.
17. First, new varieties, developed primarily via the industry owned breeding programme, has produced varieties that are more productive and attuned to consumer preferences globally. New growing systems have enabled the fruit to be harvested more efficiently, providing for some automation in the field (such as picking platforms) which enables those who may not have the physical capacity required for harvest to become engaged.
18. Highly skilled returning Pacific Islanders provide the bulk of the orchard labour (80% of harvest labour is migrant labour) and enables the crop to be picked at optimum time for optimum value. Highly automated post-harvest facilities ensure that only the best quality fruit gets to market, commanding premium prices over other competing products. As returns increase (the value of the NZ apple industry has been increasing at an average of 12.5% CAGR per annum over the past 8 years), that is reinvested in the business by way of new plantings and infrastructure investment.
19. This in turn increases the demand for a New Zealand permanent workforce. On current growth projections, we estimate that the industry will need 2,349 more permanent staff by 2030 (891 on orchard; 1,080 post-harvest; and 378 in corporate/administration). The skill levels required for these roles continues to expand as new technology is introduced.
20. Second, the broader regional and national economic impact of the apple industry is significant (support or ancillary services, logistics, consultants, etc.). It is estimated that this is in the order of 3 to 5 times export value, which in today's terms translates to around \$2.7b to \$4.5b.

5 Exporting and innovation

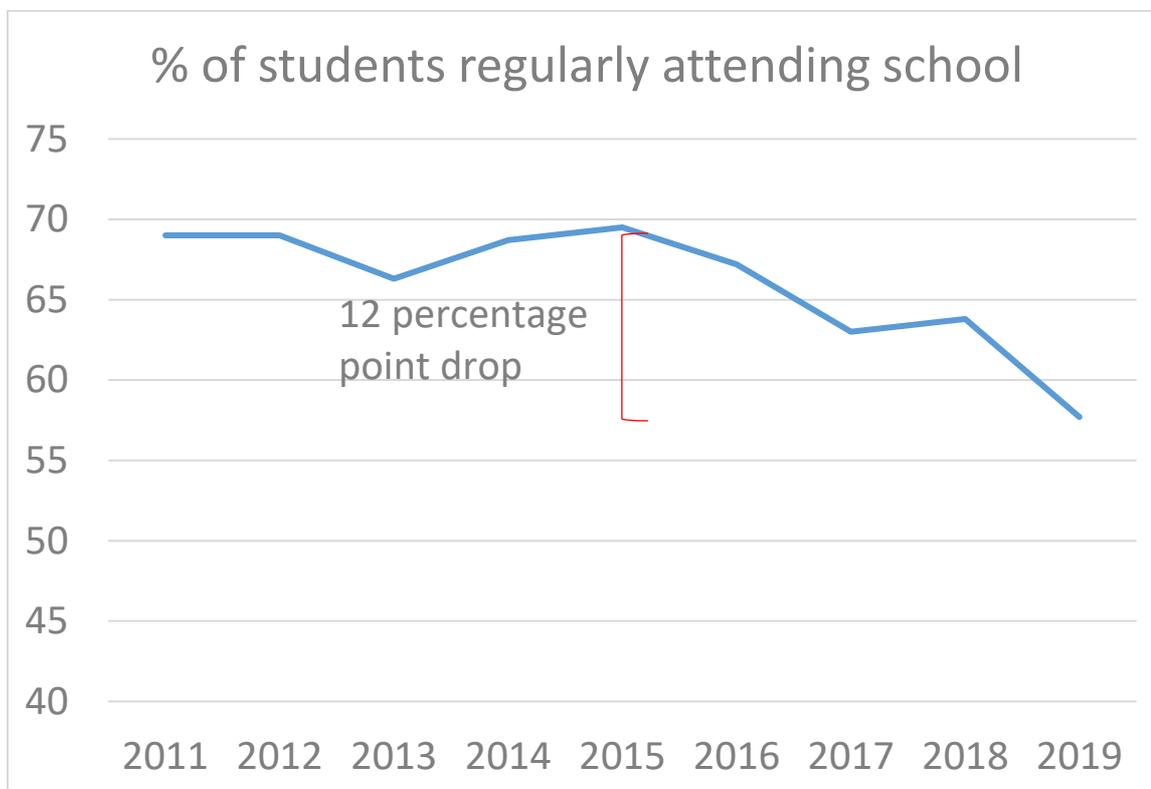
5.1 Through exporting, firms can reach for the global frontier

21. The report notes that “developed economies must predominantly rely on innovation to gain competitive advantage and avoid competing directly with low-wage economies in producing standard products that can be easily replicated”.
22. New Zealand competes in a \$100bn global apple market. We have achieved the number one ranking amongst the 33 apple producing nations through innovation, primarily New Zealand developed globally protected new varieties. We have also achieved it by being a reliable supplier of high quality, safe and fresh produce.
23. But we remain a high-cost producer. Distance to market, high and increasing labour costs and multiple levels of compliance continue to challenge our international competitiveness in global markets where, notwithstanding our premium position, large retailers can still significantly influence price. Having a supportive domestic legislative and regulatory framework is essential to complement our premium position.

6 Innovation ecosystems

6.1 Innovation and innovation ecosystems

24. The report identifies the need for a supply of skilled workers to support firms becoming global leaders. Our industry has invested considerable time and effort, influencing the future direction of vocational training through the RoVE review, working with education providers to develop curriculum and resources to support industry and member growth strategies, and ensuring a career and qualification pathway that will attract people to, and retain and develop people in the industry.
25. But there is a more significant issue that will confront our business community in the future and for which there is no clear government strategy or direction. Government continually speaks of the need for a long-term workforce development strategy for the primary sector. The shape of our future workforce can be predicted as early as current school statistics. But in 2019, only 57% of school students were recorded as regularly attending school (being attending school at least 4 days out of 5).



26. This has been in continued decline since 2011, and this will become “our” problem in years to come – what will work attendance look like if students can’t even manage to attend school? There is currently no obvious government policy to address this issue.
27. The report highlights Zespri as an exception to the industry participant comment that there is little collaboration amongst New Zealand firms. For completeness, this is not isolated to Zespri.
28. NZ Apples & Pears is the majority shareholder (55%) in the industry breeding vehicle, Prevar. Plant & Food Research develop varieties under Prevar’s direction, own the PVR’s, and assign the right to commercialise the varieties to Prevar. New varieties are made available to the industry on the basis that they will add commercial advantage to New Zealand growers.

29. In addition, NZ Apples & Pears develops and manages industry best practice, ensuring that apples and pears will be produced using identical processes and systems whether grown in Gisborne in the North or Central Otago in the South. This collaboration ensures consistency of quality, safety and traceability.

7 Innovation policy and NZ firms

7.1 NZ's broad innovation policy settings

30. There is currently a significant disconnect between research organisations and industry. There is a sense that research priorities are being driven by science imperatives, rather than by working with industry to identify and deliver on research that will support export growth and international competitiveness.
31. Likewise, government strategy and policy are often formulated without the inclusion of or consultation with those very industries who are expected to deliver on those strategies.
32. For New Zealand firms to compete on the global stage, government and industry must work in partnership to ensure that policy enables industry and encourages success and is not a handbrake to that.
33. There are good examples of effective public-private sector collaboration. Government Industry Agreements for Readiness and Response (GIA) is a government-industry partnership that has transformed the way that biosecurity risk is managed in New Zealand. Better biosecurity outcomes, more effective decision making, a more focused programme of biosecurity R&D, and an equitable cost sharing model have all been achieved as a result.

7.2 Researchers and firm engagement – key institutions

34. Universities in New Zealand have not served the primary sector well. For example, we have the world number one apple industry and the world number one kiwifruit industry, but no universities feature near the top of world rankings. That leads to the inevitable question of who is holding who back.
35. In addition, the CRI funding model is, in our view, flawed. Constant pressure on CRI funding has forced CRI's to look elsewhere for commercial revenue opportunities, which hasn't necessarily supported or encouraged decisions or priorities that align with industry strategy or support industry growth.
36. The New Zealand apple industry has worked closely with universities to provide them with up-to-date resources to support their academic programme (for example a demonstration apple orchard at Massey University), and to ensure that their courses are relevant to support industry needs (for example, we worked with Massey to reconstruct its Bachelor of Horticulture programme).

7.3 Focused innovation policy in NZ

37. In our view, in addition to the challenges posed by research organisations and tertiary institutions, there is a significant disconnect between government agencies and the plant sector.
38. The horticulture sector has been advocating for a plants strategy for some time, but this continues to fall on deaf ears at both a Ministerial and agency level.

39. Arguably, New Zealand's post-COVID recovery will come from the primary sector, with horticulture well positioned to lead that recovery. To that end, a well-connected supportive and enabling environment, focused on an agreed strategy, is needed.

8 Talent and leadership

Key points

40. We have already referred to the lack of responsiveness of the tertiary system and CRI structure previously and refer to the reports comments on migrant labour below.

8.3 Migration policy settings are inhibiting productivity improvements

41. This section of the Commission report is based on the findings of the NZIER report "Migration and New Zealand's Frontier Firm", authored by Fry & Wilson. This is a disappointing report that does not accurately reflect the position with respect to migrant labour, particularly in the context of our industry. It generalizes by referencing the Recognised Seasonal Employer (RSE) scheme in broad discussions about migrant labour. This then results in conclusions about the primary sector (reliant on low-cost labour; unattractive to kiwis due to low wages and piece rates; social issues such as drugs and absenteeism; mismatch in demand and supply of domestic labour) which cannot be substantiated.
42. The RSE scheme can be considered from two perspectives. First, as an aid scheme. The International Labour Organisation (ILO) identified the RSE programme as the world's most ethical labour scheme. The significant remittances from RSE workers have transformed communities back in their home Islands. Funds have been reinvested in upgrading homes, community facilities, infrastructure, starting new businesses leading to the employment of locals, etc. For example, 40% of Samoa's GDP is supported by the RSE scheme.
43. In addition, workers often learn new skills while in New Zealand which are then applied back in their homelands. For example, when Cyclone Pam struck Vanuatu in 2015, RSE workers received training in building practices which, with donated building materials, were then applied to help with the rebuild of their communities.
44. Second, the RSE scheme has underpinned the increase in industry value. To maximise the value of harvest, fruit once it reaches maturity must be harvested within a short harvest window, approximately 48 hours. If we miss this window, the fruit starts to degrade, and value erode.
45. RSE workers are largely fit and strong. To harvest a hectare of fruit, a worker will climb approximately 25 vertical kilometres up a ladder carrying 20kg bags of apples. Many New Zealanders are just not physically capable of doing this work on a regular basis. In the apple industry, about 80% of orchard workers are migrant labour, while in post-harvest about 80% of workers are New Zealanders.
46. Harvest is also a skilled job. Unlike some fruit crops which are "strip picked" at harvest, apples will be harvested when background and foreground colour reaches a certain standard. The picker must decide which apple to pick and which to leave for the next pick.
47. Many RSE workers return to New Zealand year after year. These workers become, on average, more skilled and productive than first year workers. New Zealanders who are just as skilled and just as productive will have the same income earning capacity as an RSE worker.
48. As noted previously, the ability to harvest fruit at optimum time for optimum quality and value enables businesses to reinvest premium returns in new planting or other capital infrastructure which in turn creates new permanent jobs for New Zealanders.

49. Fry and Wilson state that “bringing in seasonal workers from Pacific Island countries has enabled the sector to hire more people without increasing wages”. With respect, that is nonsense. Increases in piece rates coupled with the structural changes made in our orchards referred to previously, has meant that the opportunity for both a Pacific Island and New Zealand seasonal worker to earn good wages has significantly increased.

9 Innovation enabling regulation

Key points

50. The report refers to regulations that can block innovation, and specifically mentions PEQ limitations. Access to new genetics is critical in helping New Zealand industries to innovate through new root stock and variety development.
51. It is true that, historically, the plant import pathway has been a handbrake to this innovation, creating barriers by relying on technology and systems long replaced by other countries. On the other hand, the importance of managing biosecurity risk is a given.
52. Industry has welcomed a number of advancements in this area, both the proposed development of a transitional expanded PEQ facility ahead of a much larger investment in a state-of-the-art facility; and a restructure of how industry and MPI engage with the replacing of the former GERMAC with a much more focused Plant Germplasm Import Council.

9.4 Reducing constraints to innovation in the primary sector

53. The Commission has recommended that the government review the regulation of GMO. Our only comment on this part of the report is that little has been done by way of public education or awareness; if there is to be a fully informed discussion about GMO, this engagement needs to take place, as the concept of GMO is not well understood.
54. The apple industry has relied on natural breeding and genetics to develop its world leading varieties. Indeed, Hawkes Bay declared itself GMO free, providing a unique selling proposition for locally produced products. We remain interested in the outcomes of this discussion.

10 The agenda

10.2 Upgrading the innovation ecosystem

55. We agree that innovation is the key to gaining and retaining competitive advantage. We trust that through this submission, we have demonstrated how the NZ apple industry has used innovation to position itself at the top of world apple producing nations.

10.4 Supporting inclusive and sustainable growth and recovery

56. We also trust that through this submission, we have dispelled the myth that migrant labour is “low cost” but, in the case of our sector, our Pacific Island labour is a highly skilled and valued contributor to our premium global position.

Conclusion

57. With respect to some of the specific recommendations:

- We **support** Recommendation 7.1, specifically to include industry in any update of the government RSI strategy.
- We **support** Recommendation 7.2, again to specifically include industry in this process.
- We **support** Recommendation 7.3, specifically to develop a plants strategy across agencies and with industry.
- We **support** Recommendation 7.4 and suggest that the plant sector be a priority.
- We **do not support** Recommendations 8.2 and 8.3 regarding migration policy and migrant labour for the reasons outlined in this submission.
- We **support** Recommendation 9.1 for an “enabling” regulatory environment
- We **support** Recommendation 9.5 to welcome MPI’s investment in a state-of-the-art post-entry quarantine facility for new plant varieties and plant breeding material.

58. We thank the Commission for the opportunity to make this submission and would be happy to answer any questions or provide any clarification that the Commission may require.

59. We would welcome the opportunity to present this submission to the Commission.

Kind regards



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