



SUBMISSION

on

Improving Economic Resilience

To

New Zealand Productivity Commission

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Contact: Vera Power, Greg Sneath
Organisation: The Fertiliser Association of New Zealand
Postal Address: PO Box 11519, Manners St, Wellington, 6142
Phone: (04) 473 6552
E-mail: info@fertiliser.org.nz

About the Fertiliser Association of New Zealand

1. The Fertiliser Association of New Zealand is an industry association funded by member companies to address issues of common public good. Member companies include Ballance Agri-Nutrients Ltd and Ravensdown Ltd. Both are farmer co-operatives with some 40,000 farmer shareholders. Between them, our members supply the majority of fertiliser used in New Zealand. As co-operatives, they are driven by delivering best value to farmer shareholders rather than maximising the value of product sales.
2. The Association member companies have invested significantly in products, systems and procedures which support responsible nutrient management to enable a viable primary industry within environmental limits.
3. The Association submits on national policy and proposed regulation, with the view that policy and regulation should be enabling, and that controls are both appropriate and necessary while providing for sustainable primary production.

Key submission points

4. Sourcing materials from around the world is at the heart of the supply of fertiliser ingredients for food production in New Zealand.
5. Different supply chain vulnerabilities exist across sourcing and delivery to New Zealand. Our submission highlights the nature of the risks and vulnerabilities; and approaches that might contribute to mitigating existing risks.

Introduction

6. We have focused our submission on two aspects of supply chain risk – sourcing materials from around the world and getting these materials to New Zealand. These two issues are at the heart of the supply of fertiliser ingredients for food production in New Zealand.
7. We have structured our submission around the four questions asked in the Issues Paper.
 - What supply chain disruptions and trends are you worried about?
 - What is your industry/community currently doing or planning to do to address supply chain concerns?
 - How can the government help to enhance the resilience of your industry/community to supply chain disruption?
 - What should the Commission study to learn more about the economic resilience of industries and communities?
8. Our submission is necessarily high level, but we would be very keen to engage or provide additional material if it would be useful to the Commission.

Supply chain resilience - sourcing

What supply chain disruptions and trends are you worried about?

9. New Zealand is a food growing nation, both for domestic consumption and for export. Growth of healthy food is critically reliant on fertiliser inputs to replace the nutrient removed in food produce.
10. Geopolitical change and supply disruption has emphasized the vulnerability of fertiliser supply chains. Tariffs, sanctions, export controls, civil unrest, alongside port congestion and shipping, all impact on supply.
11. A key focus for our member co-operatives is managing supply chains to enable the manufacture and sale of fertiliser products that meet the needs of New Zealand farmers.
12. New Zealand's ability to sustain supplies and keep providing our fertiliser products and solutions to New Zealand farmers is based on integrated business models, sourcing raw material and

finished products worldwide, manufacturing domestically, and distributing product across New Zealand. The focus is on maintaining supply of product at consistent quality to customers and securing continuity throughout the supply chain.

- 13. We are concerned about the impact of the current supply pressures on the food value chain, with high food prices for consumers, and availability and affordability of fertilisers being a substantial challenge to farmers in New Zealand and worldwide. Russia’s war on Ukraine, disruptions in supply chains, and unprecedented volatility in energy and commodity prices directly impact on New Zealand farmers and their ability to grow food.



- 14. Almost half of the world’s population depend on mineral fertiliser for their food security. Mineral fertilisers are essential crop nutrients, which replenish the soil after harvest and enable farmers to profitably grow nutritious quality crops.
- 15. FAO estimates a need for a 60% increase in food production by 2050, and balanced fertilisation is crucial to sustainably increase agricultural output. New Zealand’s future economy will continue to be heavily reliant on meeting some of this world need for quality food.
- 16. Government policy such as outlined in the *Fit for Better World Roadmap* is focussed on supporting New Zealand’s food and fibres sector to meet increasing consumer demand for a secure supply of safe and healthy food. Growing healthy food in New Zealand starts with access to secure sources of nutrients.
- 17. New Zealand does not have a domestic supply of the mineral resources for fertiliser manufacture. The lack of resources means we are uniquely vulnerable to access to nutrient raw materials from across the world. As a nation whose economy is dependent of growing food, we are unique in our

dependence on imports for the raw material to grow food. These raw materials and products are not substitutable, and supplies are often concentrated. Phosphate rock, potash, and trace elements, and since the closure of Marsden Point, sulphur, are import dependent. Part of New Zealand's urea fertiliser supply is manufactured domestically but long-term the ability to economically produce urea in New Zealand is dependent on the ability to transition manufacturing to green energy.

Key concerns

18. There are two key areas of concern:

- Elevated prices. The price for raw materials and finished products is driven by constrained international supply. The impacts of the war in Ukraine, have demonstrated the fragility of supply chains with the consequent rise in prices when international markets are disrupted.
- Access. Many raw material resources are concentrated in a small number of countries, so long term access to supplies require the ability to maintain strong relationships. International sanctions on Belarus removed one of the two major sources of potash from the market. International export restrictions that are imposed by other jurisdictions also impact on our members ability to source product. China's export controls are a recent example, which meant members needed to rapidly source products such as di-ammonium phosphate, from alternate suppliers.

What is your industry/community currently doing or planning to do to address supply chain concerns?

19. The industry approach to managing risk is to foster a range of commercial enduring relationships. Some commercial relationships with individual supply companies have been in place for decades.
20. Strong relationships are built on shared values, understanding, and New Zealand's good reputation for responsible business practices. The fertiliser co-operatives in New Zealand have robust supply management processes with strong due diligence practices addressing a range of issues from quality to labour or health and safety issues. Expectations on supply chain management are continuing to grow. For example, more recently, companies are working to implement the OECD guidance for multinational enterprises and the UN guiding principles for business on human rights.
21. For the farmer owned co-operatives, there is also a strong focus on using product well with strong investment in innovation, and delivery of farm levels tools, codes of practice, and advice.
22. The past eighteen months have underscored the importance of the security of fertilisers, food, and energy. While there are many risks and uncertainties in the current international context, the New Zealand co-operatives have adapted operations to tackle a challenging environment, focussed on ensuring sustainable value creation for New Zealand farmers and growers.

How can the government help to enhance the resilience of your industry/community to supply chain disruption?

23. Commercial businesses have a critical role to play in fostering strong supply chains. However, Government also has role to play in managing supply chain risk, especially when the risks have widespread impacts. (See <https://www.oecd.org/trade/resilient-supply-chains/determine-government-role/> and *Fostering Economic Resilience in a World of Open and Integrated Markets. Risks, Vulnerabilities and Areas for Policy Action*, report prepared for the 2021 UK Presidency of the G7.) The OECD outlines a range of potential policy actions for governments:
- Assess the role of government for different types of risks
 - Risk prevention through efficient regulations, international cooperation, and regular reviews of risks and vulnerabilities
 - Mechanisms to detect and anticipate crises
 - Risk management strategies
24. The Commission's work is an important first step in assessing the role of government for different types of risks.
25. Work on risk prevention could also include consideration of the unintentional impacts of domestic policy as an exacerbator of New Zealand's supply vulnerabilities. The development and implementation of New Zealand's Emissions Reduction Plan and energy policies are examples of areas where domestic policy can impact on vulnerabilities.
26. Prevention steps could also include consideration of supply risk in trade policy and international engagement. Building understanding of international supply risks for the New Zealand primary sector through engagement with the sector would be an important part of this.

What should the Commission study to learn more about the economic resilience of industries and communities?

27. A key challenge is identifying and understanding New Zealand's supply risk exposure. The Commission has a unique opportunity to identify and contextualise New Zealand's supply chain risks and their importance in terms of creating vulnerability for New Zealand's economy.
28. A key question to explore is the nature of the critical risks for New Zealand's food production, in both the medium- and long-term horizon and what approaches can be taken to both understand and manage the risks.
29. Recommendations on approaches to managing vulnerability could be informed by a review of international government level approaches to manage supply chain vulnerabilities for raw materials and ingredients.

Supply chain risk – shipping and transport

What supply chain disruptions and trends are you worried about?

30. As a 'last bus-stop' island nation, distant from key trading partners, the economic growth and prosperity of New Zealand depends on the performance of the supply chains that move goods from end to end. Sea freight enables 99% of New Zealand's imports and exports annually, and underpins cost and competitiveness. Efficiency, reliability and cost-effectiveness of shipping and transport networks is critical, directly impacting on supply chain vulnerability.

Infrastructure

31. Capacity issues at ports and resultant congestion, is likely to be increasingly challenged by growing population, increased trade, and future changes in the size and needs of international shipping. Our ports have to be highly productive to keep shipping lines coming here. As cities have grown up around ports, careful planning is required to reflect the national benefit efficient freight corridors deliver while at the same time reflecting the needs of the local community.
32. In order to cater for future growth, alleviate current congestion in the supply chain, and build port network resilience, ongoing investment is needed in port capacity-building. Extending existing berth capacity, increased automation, and alternative fuel cargo handling facilities are all critical.
33. At major ports, inadequate and un-coordinated infrastructure impacts on the ability for efficient movement of cargoes across the transport network – to move from port to final destination. Strategically located and well-connected freight and logistics infrastructure is a critical part of easing congestion to help lift productivity and reduce emissions, and to provide necessary supply chain resilience.
34. Existing infrastructure problems are likely to be exacerbated as the international shipping fleet deploys increasingly bigger vessels. The Transport Outlook report (Te Manatu Waka, Ministry of Transport - Transport Outlook: Future State report, 2017) visioned a world where international shipping companies seek to send larger freight vessels to fewer New Zealand ports driving increased competition between ports and a need for significant investment in port infrastructure. This will also put pressure on road and rail networks with on shore freight moved longer distances by land from port. This impacts on location of manufacturing, warehousing and logistics hub models.

Reducing carbon emissions

35. Existing infrastructure capacity and suitability issues will be exacerbated by responses to management of greenhouse gas emissions. Care is needed to ensure that there is not duplication

across the range of domestic and international policies that will impact shipping to avoid cargo owners being impacted multiple times for the same initiative.

36. The International Maritime Organisation work on carbon emissions associated with shipping are particularly significant for New Zealand (Strategy on Reduction of GHG Emissions from Ships, 2018). The direction set will likely increase shipping costs and have a particularly adverse impact given our distance from markets and geographic remoteness. The Strategy focuses on both reducing the carbon intensity and absolute greenhouse gas emissions from international shipping. Measures include the improvements to the existing international fleet, reduction of emissions at port, and use of alternative low-carbon and zero-carbon fuels.
37. At COP26 New Zealand committed to the Clydebank declaration <https://ukcop26.org/cop-26-clydebank-declaration-for-green-shipping-corridors/>. The declaration focusses on the establishment of green shipping corridors – with the intent of enabling partnership to invest in accelerating the decarbonisation of the shipping sector and its fuel supply through green shipping corridor projects.
38. The creation of green corridors, shift to alternative low-carbon and zero-carbon fuels, and increased operational energy efficiency could have major impacts for New Zealand. The desire to reduce emissions will drive towards larger vessels, or reluctance in international shipping to serve remote ports.

What is your industry/community currently doing or planning to do to address supply chain concerns?

39. Association members currently have strong relationship with major ports in New Zealand. They also have partnerships/joint venture arrangements to ensure continued ability to ship goods. An example is Ravensdown Shipping Services which has an interest in cargoes moving to and from Australasia to complement the movement of their own fertiliser cargoes.
40. Association members have significant capital investment in storage, warehousing and port access facilities.
41. Association members are also members or affiliates in other associations that advocate for business and supply chain resilience, such as the Sustainable Business Council and NZ Council of Cargo Owners

How can the government help to enhance the resilience of your industry/community to supply chain disruption?

42. Infrastructure investment requires a coordinated generational approach. Improvements have wide national benefits. Government has a key role in convening and co-ordinating such development.
43. Rautaki Hanganga o Aotearoa, the New Zealand Infrastructure Strategy (2022) sets out a thirty year road map for improving the efficiency and security of freight and the national supply chain.
44. The New Zealand Freight and Supply Chain Issues Paper (2022) identified the need for generational investment.
45. Both strategies are critically dependent on the regulatory settings for resource management. The proposed Natural and Built Environment Bill will play a critical part in providing certainty for investment decisions and ensuring that necessary investment can be undertaken in a timely manner.
46. Being manufacturers and distributors of bulk fertilisers, our members are not only impacted by unforeseen changes in demand for our products but often also encounter supply chain interruptions leading to unexpected changes in demand that can place pressure on domestic storage capacity. To be in the position to quickly adjust to changing needs within New Zealand, speed of operations is key and for that reason our members are not always able to rely on the limited tonnage capacity for coastal cargoes that's available in New Zealand waters. The Maritime Transport Act places restrictions on the carriage of coastal cargo other than as incidental cargo carried on a direct coastal route determined by that ship's import/ export cargoes. How can a robust coastal shipping service be stimulated while continuing to take advantage of use of international ships transiting on the coast?

What should the Commission study to learn more about the economic resilience of industries and communities?

47. The Infrastructure Commission's submission on the Natural and Built Environment Bill argues that the overarching approach being taken does not get to the heart of the issues that need to be addressed in the planning system – primarily around incentives and integration. We agree with their position.
48. Challenges identified include misalignment between central and local government; and the wide range of legislation and responsibilities that impact on key infrastructure decisions. The Infrastructure Commission also raised concerns at the lack of role for the Ministers for Infrastructure and Transport in key decisions that relate to growth and development.

49. The Productivity Commission could explore development of scenarios to test how robust planning and decision making can be made under the proposed regulatory settings in the Natural and Built Environment Bill. The Commission could test whether the Bill is adequately future proofed for confident, co-ordinated and generational investment in shipping and transport infrastructure.
50. The Commission could consider what conditions would need to be in place for New Zealand to attract low emissions vessels in the future. This could include opportunities for producing low emissions fuels, infrastructure needed to support larger, low emissions vessels and the potential implications in terms of manufacture, warehousing and the cities and communities that have developed around our major ports.
51. From an on-shore viewpoint, a key question to consider is how the different modes of transport best compliment rather than compete with each other?

Conclusion

52. New Zealand is a beneficiary of global interconnectivity enabling domestic prosperity. However such integration has created some weaknesses for New Zealand which needs careful management. Enhanced resilience to supply chain disruption start with identification of the nature of the risks and the roles that business and government play in managing such risk. The investigation by the Productivity Commission is an important first step.

End.