



Australia: Rapid Scaling, Coordination Challenges, Market Reach

Strengths

Crop scale and diversity: Australia produces ~59 million tonnes of protein-rich crops annually (wheat, barley, lupin, canola, pulses), with global leadership in lupin.

Ingredient manufacturing: Six major processors now produce isolates, concentrates, and protein fractions. Investment in fractionation hubs, R&D platforms (CSIRO, public/private innovation), and regional manufacturing are underway.

Government mobilisation: Strategic taskforces drive public/private investment, regional policies, workforce development, and infrastructure, aiming to build a world-class ingredient value chain modelled on Canada's success.

Market evolution: Asia-Pacific (APAC) now accounts for 24%+ of global plant protein demand. Functional ingredients for dairy alternatives (32% of global share), blended/hybrid foods, snacking/convenience, and fortified nutrition clusters are growing fastest.

Barriers and Risks

Export commodity trap: 65% of grains and 90%+ of pulses are exported unprocessed; Australia remains highly dependent on imports of isolates/concentrates. Failing to capture value-add, leaves the farmers and wider sector exposed to fluctuating commodity prices and missed economic multipliers.

Infrastructure gaps: Value chain development lags crop production; equipment, large-scale processing, and skills remain bottlenecks. Up-front investment of AU\$100m+ per facility is required to compete globally.

Fragmentation: Industry silos, regional disunity, and inconsistent policy create inefficiency. Without an integrated sector strategy, Australia risks being outpaced by coordinated rivals (Canada, China, EU).

Innovation hurdles: Quality, taste, palatability, and functional nutrition require ongoing R&D (flavour, solubility, technical blending). Many IP/tech barriers also need cross-sector solutions.



New Zealand: Emerging Opportunity, Lessons from Australia

Unique Advantages

Land, climate and agri-food capability: New Zealand has ~1.7 million hectares of land suitable for plant protein crops (Land Use Classes 1–3). We also have premium growing conditions, a fresh water supply, the skills, capability and protected IP in dairy processing (engineering/ process know-how transferable to plant proteins).

Provenance and brand: A trusted export reputation for food safety, traceability, and environmental stewardship positions New Zealand for premium, provenance-led ingredients. Strong opportunities exist in blends, health foods, convenience, and export-oriented products.

Agility and innovation: New Zealand's agriculture sector is more agile, with the potential for rapid adoption and product diversification. Indigenous Māori partnerships, the Bioeconomy Sciences Institute, and small-scale innovation enable IP leadership in niche ingredients and advanced products.

Critical Barriers

Infrastructure: New Zealand lacks sufficient processing capacity/tonne-scale fractionation plants (~New Zealand\$100m+ per plant). Existing dairy expertise is asset-rich but under-leveraged. Proximity of facilities to cropping regions would be essential for quality and efficiency.

Cropping land and competition: High-value pasture (dairy/sheep), horticulture, seed and grain often outcompete plant protein crops for land use based on price. Crops must achieve reliable profitability and market demand to incentivise conversion.

Policy and coordination: New Zealand government support and sector strategy remain fragmented and subscale. There is no national roadmap, inconsistent R&D funding, and slow regulatory evolution. Industry efforts are siloed by high competition between companies and regions, slowing knowledge sharing and stalling coordinated action.

Scale and export focus: Domestic demand cannot support serious scale. Export orientation from the outset is vital. Collaboration between processors, policymakers, and brands must be built early to avoid lagging rivals and duplicated efforts.

Additional Barriers

Public perception: There is risk of backlash if plant proteins are seen as replacing traditional meat/dairy, which are major economic and rural employment drivers. Clear communication is critical to frame plant proteins as complementary, enabling crop rotation, blended products, and new income streams.

Application and innovation: Technical challenges (taste, texture, allergens), patent/IP hurdles, and the need for advanced food science require investment in capability, a coordinated R&D plan and rapid commercialisation pathways.

Key Strategic Learnings for New Zealand from Australia's Journey

What to prioritise

Collaboration across sectors: Early cross-sector coalitions between growers, processors, the BSI, and iwi, would avoid duplication and foster coordinated scaling, mirroring Canada/Australia's lessons.

Diversified cropping: Avoid one-crop dependence. Instead, foster multi-crop resilience (pea, fava, oats, hemp, lupin), focus on premium, specialty, sustainable niches rather than bulk competition.

Infrastructure investment: Scale infrastructure in parallel with cropping; do not wait for demand to outpace supply. Invest in regional processing hubs (e.g. Canterbury, Manawatu), driving jobs and innovation.

Policy roadmap: Push for an explicit government/industry roadmap, linked to export, bioeconomy, land use, and research platforms. Create national coordination to avoid siloed/slow growth.

Export-led mindset: Design for international positioning across APAC, with blended products, functional ingredients, and into convenience categories. Leverage New Zealand's provenance, traceability, sustainability credentials in a global brand positioning play.

Ingredients focus: Major value lies in supplying ingredients to global food manufacturers, not competing with large legacy finished-food brands. Partner to supply consistent, premium, certified ingredients; human, pet, and functional nutrition sectors.

What to Avoid

Commodity trap: Competing only on commodity price risks being undercut by global scale players. Focus instead on niche, high-value and blended ingredient categories.

Infrastructure lag: Do not delay investment or wait for demand. Invest early in infrastructure that is strategically located close to crops and coordinated with supply chains, to enable rapid scale-up and market access.

Fragmentation and siloed efforts: Duplicated or regionalised development slows progress. Implement a unified roadmap that bridges public/private/Indigenous knowledge systems.

Practical Opportunity Areas for New Zealand

- Develop regional pilot hubs combining crop trials, processing infrastructure, R&D, and partnerships with Māori, the BSI, Economic Development Agencies (CEDA, Venture Taranaki, Southland) and global ingredient leaders.
- Initiate an "ingredients-first" industry design, targeting premium APAC partners (Japan, Korea, Singapore) with functional blends, traceable supply, and nutrition science leadership.
- Advocate for public/private co-investment platforms focused on tech transfer, capability building, and rapid commercialisation, learning from Canada and Australia's multi-stakeholder approach.
- Deploy New Zealand's expertise in circular agriculture by upcycling by-products (starch, fibre, oils) into feed, bioenergy, or industrial use to boost profitability and sustainability.
- Communicate benefits to growers, rural communities, and the public, highlighting new income streams, regional jobs, and sector resilience, with plant protein as a complement to traditional meat/dairy exports.

Conclusion

Australia's rapid plant protein sector expansion highlights the power of scale, coordination, and export-led strategy, while revealing systemic pitfalls in fragmentation, infrastructure, and reliance on raw exports. New Zealand stands poised to learn and lead by rapidly adapting, focusing on premium, provenance-certified, and diversified plant protein ingredients, and unleashing coordinated investment in infrastructure, processing, and R&D.

Building a national roadmap, regional hubs, and multi-sector partnerships will position New Zealand as a global leader in high-value, sustainable protein ingredients for the future food system.