



Beyond the Farm Gate: Rethinking New Zealand's Economic Future

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Executive Summary

New Zealand's economy has long been built on two key pillars: agriculture and tourism. These industries have shaped our identity, driven our export earnings, and provided jobs for generations. But neither can keep growing indefinitely. Agriculture is facing land constraints, environmental regulations, and shifting trade dynamics, while tourism, while incredibly strong, has proven to be volatile and, like farming, is limited by infrastructure and environmental capacity. If both are reaching their natural limits, what comes next?

This paper argues that we should focus on export earnings—not just GDP. As a small, trade-dependent nation, New Zealand relies on imports for manufacturing, energy, and technology. To sustain these imports, we must maintain strong export revenue. Historically, agriculture and tourism have carried that burden, but their future growth is uncertain. What's our long-term strategy if these industries can't expand further?

Lessons from Global Agriculture

My travels revealed two opposing approaches to food production. In Brazil, agriculture is treated as a limitless industry—vast land expansion, high-intensity production, and massive investment driving exponential growth. By contrast, in the UK and the Netherlands, farming is being deliberately constrained. UK farmers are paid not to farm, shifting land into conservation under ESG (Environmental, Social, and Governance) policies. In the Netherlands, high land values and strict environmental regulations mean traditional farming is increasingly unviable, forcing a pivot toward high-value niches and supply chain control.

The developed world appears comfortable outsourcing food production, much like how manufacturing moved offshore. The UK now imports 40% of its food, up from 20% in the 1980s, while the Netherlands has built a food empire not by producing food, but by dominating the supply chain—importing, refining, and redistributing global products. Despite being 1/200th the size of Brazil, the Netherlands exports more food, largely because it controls logistics, processing, and distribution rather than sheer production.

New Zealand's Position: More Like the UK and Netherlands than Brazil
New Zealand is far more like the UK and Netherlands than Brazil. We don't have millions of hectares waiting to be farmed, and our environmental policies mean expanding production comes with significant trade-offs. In fact, we are losing farmland, not gaining it. Since 2017, over 260,000 hectares of sheep and beef pastoral land has been converted to forestry (Orme,



2024). Sheep numbers are at historic lows, and processing plants like the Alliance Smithfield freezing works have closed due to a lack of supply.

At the same time, global trade policies are shifting. The EU's Farm to Fork Strategy is tightening environmental standards on imports (Wesseler, 2022), while the UK's free trade deals with Australia and South America make our dairy and red meat exports less competitive. China buys 40% of our dairy and 30% of our red meat, but this reliance on one major trading partner presents risks.

New Zealand will always produce exceptional food, but our future growth in agriculture is likely to be linear, not exponential. With limited expansion potential, what's our strategy beyond agriculture and tourism?

The Path Forward: A National Conversation

If New Zealand's traditional industries are hitting natural limits, we must start a serious conversation about the next 25–50 years. This paper does not provide an answer but asks the questions:

- Should we follow Ireland's lead, using tax incentives to attract high-value industries like technology and finance?
- Should we invest in processing and logistics, ensuring that more of the value from our agricultural exports stays in New Zealand instead of being captured offshore?
- Could we position ourselves as a leader in renewable energy, digital innovation, or advanced manufacturing?

The UK's experience is a warning about what happens when food production is deprioritised without a backup plan. The Netherlands proves that owning the supply chain can be as valuable as farming itself.

New Zealand must actively shape its economic future—we can't assume agriculture and tourism will carry us forever.

It's time to ask: What comes next?



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Foreword

I never sought out this topic. Originally, I had planned to research innovative ways farmers could turn waste into resources—solutions to make the most of what others might overlook or discard. But standing in an endless field in Brazil, I realised there was a much, much bigger story to tell. What I saw on that Brazilian farm wasn't just impressive—it was the future of large-scale food production unfolding right before me. Their machinery was enormous, their operations seamless, and their ambitions limitless. It was as though someone had taken the concept of farming as I knew it and stretched it to a scale I hadn't even considered.

This isn't to say that New Zealand doesn't have a strong future in food and fibre production—it absolutely does. Our growers and systems are world-class, and our products consistently find demand in the most competitive global markets. New Zealand's reputation for excellence in agriculture has been earned through generations of hard work, innovation, and determination. The problem, though, is that we might be reaching the limits of our current model. Our agricultural development began in the 1880s, and over the decades, we've perfected our farming systems. But while we've been refining, other nations—particularly developing ones—are only just getting started. And they're starting with a blank slate, gearing up in ways that we, as Kiwi farmers, might struggle to fully comprehend.

Take Brazil, for instance. Farming there feels electric—buzzing with excitement, scale, growth, and investment. There's an energy in their approach that's contagious. Everything is bigger, faster, and more ambitious. It's farming on steroids, designed for a world hungry for scale and efficiency. In contrast, back in New Zealand, farming often feels more introspective and more niche. The challenges Kiwi farmers face are less about expanding outward and more about protecting what we already have: navigating property ownership complexities, regulatory hurdles, and the ever-present push for sustainability.

What became clear to me in Brazil is that there are now two distinct versions of farming emerging globally. One is expansive and growth-focused, driven by technology, investment, and the endless possibilities of untapped resources. The other is more constrained, rooted in tradition and operating within a framework of high standards and expectations—both regulatory and cultural. New Zealand falls firmly into the latter camp. We are exceptional at what we do, but our model is increasingly one of perfection rather than expansion.



I've reflected on this a lot since my trip. It's easy to feel a sense of pride in New Zealand's sophistication in both agriculture and tourism. We've reached a level of excellence in these industries that few can match. But here's the thing: sophistication also signals maturity. And maturity, in a global economy, can be both a strength and a warning sign. What I mean is this—while we can and should be incredibly proud of what we've achieved, we need to ask ourselves a bigger question: *What's next for New Zealand?*

We've built a strong foundation on the twin pillars of agriculture and tourism, and these industries will always play a key role in our economy. But if we want to ensure a stable and prosperous future—one with real longevity—we need to start thinking about what else New Zealand can do outside of these two traditional economic mainstays.

I appreciate that I'm merely sharing my view—my opinion, for what it's worth. You could argue, quite fairly, that I am simply crystal ball gazing. And yes, you'd be right; there is a significant risk of confirmation bias in a debate that touches as many prickly shards of emotion as this one. This isn't just about farming; it's about identity, community, tradition, and the future of our country. It's about the existential questions we face as a nation—questions that are as much about where we've been as they are about where we're going.

The irony of arriving at this realisation while travelling on an agricultural scholarship is not lost on me. Here I was, halfway across the globe, visiting farms, delving into the intricacies of food production, and immersing myself in the world of agriculture—and yet, the deeper I looked, the clearer it became that this wasn't just a story about farming. It was a story about what lies beyond it, about how New Zealand, a country that has perfected agriculture and tourism, might now need to step outside of these realms to secure its future.

This is not a suggestion to abandon our roots. Far from it. Farming and tourism will remain essential pillars of our economy and our identity. But we can't ignore the fact that the world is changing. Global economies are increasingly driven by innovation, technology, and knowledge-based industries. And the question we need to ask ourselves is this: *How do we, as a small but dynamic nation, carve out a space in this future?*

So, with that hazy but necessary preamble out of the way, my topic is:

Beyond the Farm Gate: Rethinking New Zealand's Economic Future



This isn't just about farming, tourism, or GDP figures. It's a question about identity, ambition, and what kind of country we want to be. It's about recognising our strengths, acknowledging our limitations, and daring to think beyond what we already know. New Zealand has always been a nation of pioneers. It's time to embrace that spirit again and ask ourselves: *What comes next?*



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To all those who have contributed, challenged, and supported me along the way—thank you. This paper is just the beginning of an important conversation, and I am grateful to have had so many brilliant minds help shape it.



Objectives

- Export earnings vs GDP – As a small, trade-dependent nation, New Zealand requires strong export earnings to fund essential imports like manufacturing and energy.
- Reliance on two pillars – Our economy is heavily reliant on agriculture and tourism, the only two sectors generating significant export revenue.
- Agricultural maturity & tourism limits – Farming is reaching its productive ceiling, while tourism has natural constraints, raising questions about long-term growth.
- Future of agriculture – Advances in GMO, precision ag, and automation may drive efficiencies, but larger competitors will benefit more due to scale.
- Beyond market premiums & diversification – We've explored value chain control, branding, and premium positioning, but is this enough to sustain growth?
- What's the long-term plan? – If agriculture has peaked, what industries will support New Zealand's economy in the next 25–50 years? What conversations and strategies are happening now to prepare for this shift?



Chapter One: A World of Contrasts and Realisations

I began this journey expecting to refine my understanding of agricultural efficiency—of how different nations approach productivity, sustainability, and market positioning. Instead, I found a far more complex picture that extends beyond the farm gate and into the very fabric of national economies. The biggest lesson? Agriculture is evolving rapidly, and countries are adapting in dramatically different ways. For New Zealand, this global shift presents a challenge we have yet to address fully.

Since those first frozen lamb and mutton carcasses were shipped in 1882 from our shores to England, we have spent the last 140 years refining our agricultural model. Adapting to new markets, optimising land use, and improving productivity. But there is no escaping the reality that we are approaching the upper limits of production. Our peak livestock numbers are now behind us—lamb numbers, in particular, continue to decline, and even as genetic advancements and precision agriculture improve efficiency, these are likely to produce steady, linear growth rather than exponential expansion.

Meanwhile, in countries like Brazil, agriculture is still ramping up. The scale of production is almost unfathomable, with vast tracts of land being brought into cultivation and an investment mindset that prioritises expansion. The Netherlands, by contrast, has taken a different path, focusing on premium products and optimising for high-value export markets. This is underpinned by Rotterdam's strategic location, being the port that opens into the EU. Other countries, such as the UK, have seen agriculture shift from being an economic priority to a secondary concern behind environmental and social policy changes.

Each approach has strengths and weaknesses, but they all reinforce a fundamental truth: primary production alone is unlikely to be the economic driver that propels New Zealand forward in the next 25 to 50 years.

The Fork in the Road

I believe New Zealand finds itself at an inflection point. Our agricultural industry is world-class, but its growth potential is no longer boundless. A report from MPI in 2020 noted: "Historic trends of New Zealand's food and fibres sector performance, combined with known information about the prevailing headwinds, including those generated by COVID19 and climate related factors (such as droughts), suggests that without continued transformation, the food and fibres sector will grow at a significantly slower rate than to



date." (Ministry for Primary Industries, 2020). My point is, even as we extract more value from our land and continue to improve efficiency, we must acknowledge that the era of exponential production growth is behind us. The question we must ask is not whether agriculture will remain a pillar of our economy—it will—but rather, can it continue to deliver the level of economic growth we need in the coming decades?

It is tempting to think that technological advancements—better genetics, precision agriculture, AI-driven automation, and advanced farm management practices—will be enough to drive the next wave of agricultural growth. And to some degree, they will. Genetically modified organisms (GMOs), improved breeding programs, and selective genetics will lead to continued gains in yield, animal productivity, and disease resistance. AI-powered precision agriculture will reduce input costs, minimising fertiliser, sprays, and water usage while increasing efficiency. Autonomous machinery and robotics will decrease labour costs, allowing farms to operate with fewer workers and lower overheads.

However, while these innovations will increase efficiency and productivity, they are not unique to New Zealand. All of our global competitors will benefit from the same advances—and in many cases, they are already well ahead of us in their adoption.

Brazil's enormous, industrial-scale farms are already integrating AI-driven machinery, precision planting, and automated logistics to lower costs. The Netherlands' highly controlled greenhouse and indoor farming models continually refine yields in a limited land environment. An excess of \$200B USD of Venture capital has been invested in agricultural R&D in the last decade, with the United States, Australia, and China being strong recipients of this capital (Fildes, 2025). With venture capital funding major research projects into the likes of autonomous farming systems and building data lakes that tomorrow's AI tools will use to grow the highest yields possible

This is where the real challenge lies: New Zealand must implement every available technological advancement simply to keep up—just to maintain our existing competitive position on the global stage. We are not innovating into open, unclaimed territory; we are racing to stay competitive in a field where others already have a head start.

Yes, we will see continued increases in milk solids per cow, carcass weight per animal, pasture growth efficiency, and crop yields per hectare. But these increases will be linear, not exponential. We are fine-tuning an already



optimised system, squeezing marginal gains from land that is already being farmed to its near-maximum potential.

Contrast this with countries that still have millions of hectares of undeveloped land, like Brazil and parts of Africa, where agricultural expansion can double or triple output through sheer land conversion. For them, growth is still exponential—they are adding land, infrastructure, and production capacity at a rate we simply cannot match. Not only this, but they are also in proximity to major markets that make freight and relationship management cheaper and more efficient. For New Zealand, the question is no longer “How do we grow exponentially?” but rather, “How do we remain competitive as the world around us continues to scale?”

Furthermore, the environmental and regulatory landscape in New Zealand places additional constraints on how we expand.

1. Carbon emissions targets are tightening, meaning herd sizes and stocking rates cannot simply be increased.
2. Freshwater regulations are limiting fertiliser use and runoff, capping productivity in some of our most intensive farming regions.
3. Land is actively being removed from traditional agriculture, with sheep and beef farmland increasingly converted into forestry/carbon credits.
4. Our labour market is shrinking, and restrictions on immigration make it harder to find the workforce needed for large-scale production.

These are not constraints that countries like Brazil, Argentina, or parts of the US are facing to the same degree. While we are working within tighter margins, they are still scaling up and expanding.

This brings us to the realisation we must confront: New Zealand agriculture will continue to grow, and our economy needs it to, but its growth will be steady and linear—not transformative and exponential. We will remain a world-class food producer, but we will not be 10x our agricultural output in the next decade. If we are already close to maximum production potential, and if the next wave of technological advancements will serve only to maintain our global competitiveness rather than dramatically expand our industry, then what does this mean for our broader economy?

If agriculture is no longer our primary engine of growth, where does the next economic frontier lie? If we accept that our ability to scale farming is limited, then what must we do to ensure that New Zealand remains a high-income, globally competitive economy in the decades ahead?



These are the questions that must now be asked—not in a way that diminishes the role of agriculture but in a way that encourages further investment and drive, recognises its limits, and seeks a broader strategy for national economic prosperity.

Our agricultural sector is still one of the best in the world—but it cannot be the only thing we rely on.

The same can be said for tourism. For decades, our breathtaking landscapes and unique cultural offerings have positioned New Zealand as a premier destination. However, tourism is an inherently volatile industry, highly sensitive to global economic shifts, geopolitical events, and, as we have recently seen, pandemics. Like agriculture, it remains vital—but it is not a silver bullet for long-term economic resilience. I'll touch more on tourism shortly.

If these two industries have been our cornerstones, we must now ask: what will be the next pillar of economic growth? What industries or innovations will define New Zealand's export economy in the coming decades? This is not a call to abandon our strengths but rather an urgent invitation to expand our thinking.

Drawing from Global Lessons

Across my Nuffield travels, I observed a clear divide between developing and developed economies when it comes to agriculture's role in national prosperity. In my time spent in Georgia, Zimbabwe, and Brazil, I saw firsthand how agriculture remains fundamental—not just as an economic driver but as a crucial source of employment, food security, and national stability. In contrast, my time in Australia, the UK, Scotland, the United States, and the Netherlands reaffirmed my belief that in developed nations, agriculture's role is steadily diminishing as economies diversify into higher-value industries like technology, finance, and energy.

Agriculture as the Backbone of Developing Economies

I spent time in developing nations like Georgia, Zimbabwe, and Brazil, where agriculture is still a central pillar of economic activity. It became obvious to me that:

1. A Large Percentage of the Population is Directly Involved in Farming
 - In these countries, farming isn't just an industry—it's a way of life and a necessity for survival. Large portions of the population depend on agriculture, either for subsistence or employment,



and there are few alternative career paths, particularly in rural areas.

2. Agriculture Drives Export Earnings and GDP
 - I witnessed how primary production dominates national economies, with vast areas dedicated to cash crops such as coffee, soy, maize, and livestock. Unlike New Zealand, where agriculture is an advanced, high-value industry, in these countries, it is still largely about scale and expansion.
3. Expansion is Still Possible
 - In Brazil, I spent time on farms where they were still bringing land into production at a scale that dwarfed anything in New Zealand. While we are at the point of fine-tuning our systems for marginal gains, Brazil is still expanding exponentially—increasing land use, production capacity, and global market share.
4. Government Policy Focuses on Food Security
 - Food security is a major political issue in developing nations. While developed countries are shifting focus to sustainability, emissions targets, and land retirement, countries like Zimbabwe and Georgia still see agriculture as an essential part of national stability.

The Declining Role of Agriculture in Developed Economies

The contrast in the developed nations I visited—Australia, the UK, Scotland, the US, and the Netherlands—was striking. Agriculture, while still important, no longer underpins these economies in the way it does in developing nations.

1. Economic Diversification and Higher-Value Industries
 - In these countries, I saw firsthand how technology, finance, and energy have overtaken agriculture in economic significance. Unlike New Zealand, where farming still dominates export earnings, these nations have built additional pillars of wealth creation.
2. Labour Market Shifts and Urbanisation
 - One of the most noticeable trends I observed was that fewer people are working in farming. Young people are gravitating toward higher-paying, less physically demanding industries like IT, energy, and financial services. In contrast, New Zealand still relies heavily on rural labour and seasonal workforces to sustain



agriculture.

3. Agriculture is No Longer a Pathway to Wealth

- I had conversations with farmers who acknowledged that land values and operational costs have made farming an increasingly marginal business. This was particularly evident in the UK and the Netherlands, where environmental and social governance (ESG) policies are actively restricting agricultural expansion and encouraging farmers to sell land or shift into conservation programs.

4. Food Imports and Changing Priorities

- In contrast to New Zealand's focus on producing and exporting food, I noticed that many developed nations are importing more of their food needs rather than prioritising domestic production. The Netherlands, for example, while an agricultural powerhouse in logistics and food processing, imports a significant portion of its raw food ingredients rather than producing them at home.

New Zealand's Unusual Position

What became clear to me on my travels is that New Zealand is an outlier. Among developed OECD countries, we remain one of the most reliant on agriculture for export earnings. *"It was pastoral farming that ensured New Zealand achieved one of the highest standards of living in the world and it remains the only OECD country that owes its economic position to a bioeconomy based on pastoral farming, which provides nearly 50% of export value"* (Caradus, 2021). Unlike our economic peers, we have not transitioned to a fully diversified economy—we are still deeply agronomy-focused.

New Zealand has all the hallmarks of a modern, developed country, yet we continue to rely on an economic model that most of our OECD counterparts have outgrown. Unlike the UK, Australia, or the US, where tech, mining and finance dominate GDP, New Zealand still depends heavily on primary production.

This raises some uncomfortable but necessary questions:

1. *Can New Zealand remain an agricultural powerhouse while other developed nations are shifting away from farming?*
2. *Are we missing opportunities to diversify into higher-value industries, as many of our OECD counterparts have done?*
3. *If agriculture reaches its natural limits, what will replace it as our primary export engine?*



I firmly believe that New Zealand's agriculture will continue to be a world-class industry, but we must be realistic about its growth potential. We are not Brazil—we cannot expand exponentially. We are not the Netherlands—we do not have the same infrastructure to dominate global food logistics. Instead, we must determine what our version of economic adaptation looks like.

Reframing the Conversation

As we move through this paper, we will explore the nuances of production efficiency versus market optimisation, the implications of government policy, and the challenges and opportunities presented by global trade dynamics. But every chapter will circle back to the fundamental question: *what comes next for New Zealand?*

It is my belief that we are approaching the natural limits of what agriculture alone can provide as the backbone of New Zealand's economy. Tourism, while undeniably valuable, carries its own vulnerabilities—susceptible to global economic cycles, geopolitical shifts, and, as recent history has shown, pandemics. But beyond these external threats, there is another reality that few seem to acknowledge: tourism, much like primary production, has its own ceiling.

My wife and I farm on the outskirts of Queenstown, arguably New Zealand's most well-known tourism hub. Here, we live with the clear benefits of a thriving visitor economy—jobs, investment, and opportunities for local businesses—but also the very real pressures that come with it. The influx of tourists drives demand for food, retail, and services, which has helped fuel the success of businesses like mine. I don't claim to be a tourism expert. However, I've built businesses that directly support and benefit from its growth, and we employ more than 50 people in food production and retail operations. I understand the economic engine that tourism provides, but I also see its limitations firsthand.

At a certain point, unchecked growth risks tipping the balance from sustainable prosperity to something far less manageable. There is a threshold beyond which tourism can start to erode the very appeal that makes it so lucrative—when infrastructure strains under demand, when environmental and social costs begin to outweigh economic gains, and when a region's identity starts to shift under the weight of mass tourism. Queenstown is already grappling with many of these issues: congestion, housing shortages, and environmental pressures, all compounded by the sheer volume of visitors (RNZ, 2025).



It is, therefore, my view that we are moving towards a point where tourism growth, if left unchecked, could become unhealthy for the long-term stability of both the industry and the country. Just as we have recognised the importance of regulating our agricultural sector—limiting nitrogen use, controlling herd numbers per hectare, restricting water use, and ensuring sustainable spray applications—we will inevitably find ourselves having to regulate tourism in much the same way. The conversation around carrying capacity, environmental limits, and infrastructure strain is already beginning, and it is only a matter of time before tourism, like farming, faces hard constraints on expansion.

My point is this: we cannot keep adding more jets, airports, hotels, taxis, and restaurants to the equation and expect infinite economic returns. There is an upper limit to what tourism can contribute to export earnings, just as there is with agriculture. And when we reach that limit—whether through environmental pushback, social resistance, or simple market saturation—the question will become: *what else does New Zealand have to offer?*

This is not a question of turning away from agriculture or tourism, but rather of recognising that for a nation's economy to thrive in the long term, it must evolve. If our two primary export earners are both nearing their natural ceilings, then it is imperative that we start considering what else can drive our economy forward in the next 25 to 50 years.

To understand why I have framed agriculture and tourism as the two primary pillars of New Zealand's economy, it is essential to distinguish between GDP and export earnings. While GDP measures the total economic output of a country, including domestic consumption and government spending, export earnings tell us what is bringing foreign wealth into New Zealand. It is export earnings that ultimately determine our ability to pay for imports, manage our trade balance, and sustain economic growth beyond our borders.

When we look at New Zealand's export earnings, two industries dominate: primary production and tourism. Primary production—including agriculture, horticulture, forestry, fishing, and related manufacturing—accounts for well over half of our total export revenue. In 2014, food products alone made up 55% of the total value of exports, while wood products contributed another 7% (Wilkinson & Morris, 2015). This trend has remained consistent in subsequent years, reinforcing that our wealth as a nation is still fundamentally tied to our ability to produce and export primary goods.

The second-largest contributor is tourism, which is classified as an export industry because it brings foreign currency into New Zealand. In the year



ending March 2023, international tourism's overall contribution to New Zealand's total exports of goods and services was 11.4 percent an increase of 9.0 percentage points from the previous year (Stats NZ, 2024). This makes it one of our most valuable foreign exchange earners, supporting 188,000 full-time-equivalent jobs, or 7.5% of the workforce.

Beyond these two industries, New Zealand does have other sources of export earnings, including manufacturing, technology, education services, and financial services. However, these remain relatively small in comparison. Manufacturing, for instance, contributed around 12% of GDP in 2017, but its export earnings are largely tied to food and beverage processing—an extension of primary production. Other sectors, such as renewable energy, IT, and financial services, are emerging but not yet significant players in the export economy.

This is why I have settled on export earnings as the key measure of economic importance in this paper. It is export industries that drive new money into the economy, rather than simply circulating wealth within the country. If we are looking for a third pillar to complement agriculture and tourism, it must be an industry that contributes meaningfully to our export base—bringing in foreign income, creating high-value jobs, and ensuring New Zealand remains competitive in a globalised economy.

This distinction is crucial because domestic economic activity (reflected in GDP) does not necessarily create long-term national wealth. An economy that is too heavily reliant on internal consumption risks becoming unsustainable, especially if it relies on debt to fuel growth. This is why we must focus on what we sell to the world, not just what we produce for ourselves.

Understanding this difference is the first step in shaping the conversation about what New Zealand's economic future should look like. If we accept that agriculture and tourism are the primary pillars of our export earnings and that both industries are facing natural limits to their expansion, then we must ask: what industries can emerge to provide the next wave of export-driven economic growth? This is the challenge that lies ahead.



Chapter Two: Production Efficiency vs. Market Optimisation

Here, we explore how New Zealand can position its food and fibre exports, weighing up the trade-offs between scale-driven commodity production and high-value, niche marketing. While continuing to push into premium markets and refining our value proposition is essential, we must also recognise that this is not an endless well of opportunity. Our exporters have already made significant strides in capturing market premiums and differentiating New Zealand products through provenance, sustainability, and quality. But how much further can we push this strategy?

My travels revealed stark contrasts in how different nations tackle the efficiency vs. marketing debate. From Brazil's scale-driven farms to the Netherlands' high-value niches and from the challenges of Zimbabwe's limited infrastructure to the UK's environmental priorities, each approach highlights the trade-offs between efficiency and optimisation.

The Case for Production Efficiency: Lessons from Brazil

Brazil is the poster child for scale and efficiency. Even in its somewhat infancy (*Brazil's agricultural systems really only kicked off in the 1960s – prior to this, Brazil was a food importer. It is now among the top five world producers of some 36 agricultural products (Klein, 2019)*), its agricultural sector operates like a well-oiled machine, with vast fields stretching to the horizon and machinery that dwarfs anything seen in New Zealand. The focus here is on maximising output—whether it's soybeans, beef, or other commodities. Brazil's natural resources, such as ample arable land and a favourable climate, make this approach feasible, but it's the country's investment in technology and infrastructure that truly sets it apart.

I spent a month in Brazil, immersing myself in an agricultural landscape that was almost impossible to comprehend through a New Zealand lens. One visit, in particular, redefined my understanding of what *scale*—or scale at a global level—really looks like. I spent time with a family-owned farming empire with 800,000 hectares of productive, arable land. That's not just land holdings—this was 800,000 hectares that were *combine-ready*. Let that sink in.

This one farming business alone produced a crop of soy, followed by a crop of maize every season, operating on a scale that would put the entire arable production of New Zealand to shame. And this was not just brute-force farming—this was a sophisticated, highly scientific operation. The farm had its own research and development facilities, running advanced science



laboratories to produce its own inoculants for seed treatments, plant protection solutions against threats like wasps, and enhancing seed germination through their own manufactured Trichoderma. They were not just growing crops; they were engineering their success from the microbial level upwards.

Their infrastructure was equally staggering. Thousands of square metres of fully concreted, temperature- and humidity-controlled storage facilities, complete with massive gantry cranes, held tens of thousands of tonnes of their own screened seed, carefully stored in one-ton bags for the next season's planting. Every stage of production, from genetics to storage, was managed in-house to ensure efficiency, reduce dependency on external suppliers, and maximise profitability.

And here's the most striking part: this was just one of several family-owned operations, each producing more in a single season than New Zealand's entire arable sector. Their scale wasn't just large—it was *unfathomably* large by our standards.

It was impossible to witness this level of production without asking myself: *what does this mean for New Zealand?*

Our agricultural sector has long been defined by its efficiency within the constraints of our land size. We have built a reputation for quality over quantity, focusing on optimising our systems rather than expanding them. While this model has served us well, seeing Brazil's sheer scale forces an uncomfortable question: *Can we continue to compete in global commodity markets when others are playing at a level so far beyond our capacity?*

Of course, Brazil's model is not without challenges. Environmental degradation, particularly deforestation in the Amazon, remains a serious concern. Large-scale farming comes with sustainability risks that New Zealand is unlikely to accept under our current agricultural ethos. Furthermore, Brazil's reliance on exports, especially soybeans, makes its agricultural sector vulnerable to market fluctuations and shifts in global demand.

But the lesson from Brazil is clear: in a world where agriculture is increasingly defined by scale and efficiency, New Zealand must be realistic about where we fit. Our strengths lie not in sheer volume but in *how* we produce, the value we extract from our land, and the premium we place on sustainability, quality, and branding.



Brazil's model underscores the power of scale in driving economic growth, but it also highlights why New Zealand cannot—and should not—compete on those terms. Instead, we must focus on what sets us apart. The question is, *what does that look like in a world where scale dominates?*

The Case for Market Optimisation: Lessons from the Netherlands

If Brazil represents the brute force of agricultural scale, the Netherlands represents the power of strategic positioning, efficiency, and market intelligence. Despite its small landmass, the Netherlands has leveraged its geographic location to become one of the most significant players in global food logistics. Its success is not built on sheer land availability or production volume but rather on its ability to *move, process, and optimise* food in ways that most nations do not.

At the heart of this success is Rotterdam Port, one of the most important food distribution hubs in the world. The port serves as the primary gateway for foodstuffs entering Europe, allowing the Netherlands to act as the middleman between global producers and the lucrative EU and UK markets (Peters, 2020). The Netherlands has mastered food logistics so well that it is one of the largest exporters of bananas in the world—despite not commercially growing a single banana tree. Instead, the fruit arrives via Rotterdam, where they are stored, processed, ripened, and then redirected to European markets. This speaks to a different kind of agricultural success—one not dependent on primary production but on the value created through processing, supply chain management, and trade efficiency.

This ability to move and refine food rather than grow it is what sets the Netherlands apart. Their expertise in logistics and infrastructure ensures they remain a powerhouse in the global food trade, even as they face increasing pressure on their own farmland.

The Squeeze on Land and the Shift in Agricultural Priorities

The Netherlands may be one of the most efficient agricultural nations on Earth, but it is also running out of room. With urban sprawl creeping into prime agricultural land and land prices exceeding €100,000 per hectare (Times, 2024), farmers face mounting pressure to justify their operations against other, often more lucrative, land-use options. Unlike countries like Brazil, where expansion is the default, Dutch farmers are finding that their future depends on *optimisation and adaptation*.



One of the biggest shifts comes from **Environmental, Social, and Governance (ESG) policies**, which are increasingly shaping agricultural land use in the Netherlands. In some cases, farmers have the option to sell their dairy farms to the government for land retirement as part of broader efforts to curb emissions and improve environmental outcomes. These buyback schemes have sparked fierce debate, forcing farmers to weigh short-term financial gain against the long-term viability of food production in the country (Westhoek & Boezeman, 2024).

Meanwhile, strict phosphate and nitrogen regulations make maintaining traditional livestock operations harder. The Dutch government is actively pushing to reduce emissions from agriculture, and as a result, many farmers are facing restrictions on herd sizes, fertiliser use, and land management practices (Tullis, 2023).

Finding Opportunity in High-Value Niches

Despite these challenges, the Netherlands remains a global leader in high-value agricultural products, particularly horticulture. Some farmers, rather than fighting the changing landscape, have found immense success by shifting into specialised industries that capitalise on the Netherlands' infrastructure, climate, and market access.

One of the best examples of this is the daffodil bulb industry, which has become an incredibly lucrative sector. The Netherlands dominates the global trade in flower bulbs, exporting vast quantities of high-quality tulips, daffodils, and other ornamental plants to markets worldwide. This isn't large-scale commodity farming in the traditional sense—it's precision agriculture driven by expertise, branding, and premium pricing.

Farmers who have pivoted into these high-margin industries have managed to sidestep some of the biggest challenges facing traditional dairy and livestock producers. They have traded mass production for value-added specialisation, proving that innovation and strategic thinking can create pathways to success even in an environment of high land costs and regulatory constraints.

Lessons for New Zealand

The Dutch model offers valuable insights into New Zealand. Unlike Brazil, where scale is the key to success, the Netherlands thrives on *market*



positioning, efficiency, and value creation. Their ability to dominate food exports without necessarily being a dominant food producer forces us to rethink the role of logistics, processing, and trade expertise in the agricultural economy.

New Zealand already exports premium food products, but are we optimising the full value chain? Are there lessons to be learned from the Dutch model of food processing, logistics, and market intelligence? Could we be doing more to extract value from what we already produce rather than simply growing more?

At the same time, the Netherlands also serves as a warning. As land becomes more expensive and environmental regulations tighten, traditional farming models face increasing pressure. New Zealand is not immune to these challenges. If we reach a point where agricultural expansion is no longer viable, will we be prepared to pivot towards high-value, niche industries the way the Netherlands has?

The Dutch have proven that success in agriculture is not just about growing food—it's about how you process it, how you move it, and how you position it in the global marketplace.

The Trade-Offs of Each Approach

Both production efficiency and market optimisation come with inherent trade-offs, and nowhere is this clearer than in the contrasting approaches of Brazil and the Netherlands.

Brazil's scale-driven agriculture allows it to dominate global commodity markets, producing vast quantities of soy, maize, beef, and other exports at a cost per unit that smaller nations cannot match. The country's landmass, climate, and investment in mechanisation have made it an agricultural powerhouse capable of feeding millions while keeping prices low. However, this model is not without its flaws. It faces criticism for its environmental practices, particularly deforestation in the Amazon, and it is vulnerable to commodity price fluctuations, as its export-driven economy is highly dependent on global demand.

By contrast, the Netherlands has taken a market optimisation approach, focusing on high-value niche markets and leveraging its geographic position as Europe's food gateway. The country has refined food logistics to an art, making Rotterdam a critical hub for distributing food across the EU and the UK. However, this high-value, niche-focused model comes with limitations.



The extreme cost of land (over €100,000 per hectare) makes expansion nearly impossible, and stringent environmental policies, such as nitrogen and phosphate regulations, place increasing restrictions on traditional livestock farming. As a result, many Dutch farmers are either exiting agriculture altogether—selling their land to the government for environmental retirement—or pivoting into more lucrative specialty crops like daffodil bulbs.

The Power of Supply Chain Control: How the Netherlands Dominates Without the Storytelling

One of the most striking lessons I took from my time in the Netherlands was how much of their agricultural success is built not on brand positioning or storytelling, but on their sheer control over the value chain. Unlike New Zealand, which emphasises provenance, sustainability credentials, and the clean, green narrative, the Netherlands has built a food and agriculture empire through logistics, sourcing power, and distribution efficiency.

The Dutch don't need to grow everything themselves to be a dominant global food player. Instead, they have positioned themselves as Europe's food hub, leveraging their geographic location, infrastructure, and regulatory access to the EU market to control supply chains and dictate terms.

Rotterdam: The Gateway to Europe

At the heart of this model is Rotterdam, Europe's largest port, which functions as the central hub for food and agricultural imports into the European Union. The Netherlands has perfected the art of sourcing, processing, and redistributing food at scale, often with no connection to Dutch primary production at all.

Sourcing and Supplying, Not Just Producing

Dutch agribusinesses have built dominance by controlling sourcing, supply contracts, and processing facilities rather than relying on any one product or production method. This model allows them to source food at the best price globally, process it efficiently, and then redistribute it into high-value European markets under private labels or large-scale contracts with retailers.

Contrast this with New Zealand, where we rely heavily on premium branding and storytelling to differentiate our products in international markets. Our advantage is based on quality, sustainability, and provenance, but we often lack control over the final stages of the value chain once our products leave



our shores. The Dutch model, by comparison, does not depend on emotional narratives—it is built purely on efficiency, logistics, and access to key markets.

Lessons for New Zealand

What the Netherlands has achieved raises a crucial question for New Zealand: Have we neglected control of our own supply chains?

- Should we be looking at ways to own more of the global supply chain rather than just producing high-quality raw goods?
- Could New Zealand leverage its food production expertise to become a distribution and logistics hub for the Pacific Rim and Asian markets?
- Should we be investing more in processing and trade infrastructure, rather than relying on overseas partners to extract value from our products?

The Netherlands has proven that controlling the value chain can be just as powerful—if not more so—than growing the best product. New Zealand must decide whether we are content to remain a high-value producer at the mercy of global logistics networks or whether we should start owning more of the supply chain ourselves.

Where Does New Zealand Fit?

For New Zealand, these trade-offs are magnified by our unique position. Our agricultural sector is globally competitive, producing high-quality dairy, meat, and horticultural products that are well-regarded in international markets. However, our small size and geographic isolation mean that we cannot simply scale up in the way Brazil has. We don't have millions of hectares to bring into production, nor do we have the climate for year-round cropping on the same scale.

At the same time, our high environmental standards and consumer-driven markets push us towards a model that more closely resembles the Netherlands. New Zealand farmers already face increasing regulatory pressure around water use, nitrogen runoff, and carbon emissions. These challenges will likely intensify over the next few decades, making it increasingly difficult to expand traditional farming operations.

But the question remains: *can we find a balance between the two?* Is there a middle ground where we can achieve efficiencies of scale while maintaining the quality, environmental sustainability, and market positioning that sets us apart?



New Zealand's Current Model: A Hybrid Approach

New Zealand has traditionally positioned itself somewhere between these two extremes—we are neither fully committed to Brazil's scale-driven commodity model nor control the logistics-heavy, value-chain-dominating model of the Netherlands. Instead, we have pursued a hybrid approach, combining large-scale production efficiency with an emphasis on premium, high-value products.

Our dairy industry is perhaps the best example of this. Fonterra, our largest dairy cooperative, operates at a global scale, benefiting from economies of scale in milk collection, processing, and exports. It competes in the global market through cost efficiencies and high production volumes, much like large commodity producers. However, at the same time, New Zealand's dairy sector also tries to capture value through branding, differentiation, and premium-positioning strategies—for example, in specialty cheeses, premium milk powders, and high-end nutritional products.

Fonterra's Strategic Shift: Selling Its Consumer Brands

Recently, however, we have seen a significant shift in strategy, particularly with Fonterra's looking to sell its consumer dairy brands (Beckford, 2024). This move has been framed as a way to return shareholder value today, simplifying the cooperative's focus and allowing it to concentrate on its core strength—ingredients and commodity dairy exports rather than branded consumer products. While this provides a short-term financial return for shareholders, if it moves ahead it will be fascinating to see how this plays out in the coming decades.

Historically, many of the world's largest food companies have moved in the opposite direction—toward greater control of branding and consumer reach. In the Netherlands, for example, FrieslandCampina has long pursued downstream market integration, ensuring that its products are not just raw dairy ingredients but also household brands sold directly to consumers. By contrast, Fonterra's divestment signals a retreat from that part of the value chain.

This raises several critical questions:

1. Does stepping away from branded consumer products make us more vulnerable to commodity price cycles?



- Fonterra is effectively doubling down on its strength as an ingredient supplier, but this also means greater exposure to global market fluctuations in dairy prices.
- 2. Will New Zealand still be able to extract the same level of value from its dairy industry?
 - Without ownership of premium brands, Fonterra will have less control over pricing, marketing, and consumer demand, potentially limiting how much value stays in New Zealand.
- 3. Does this move signal a broader shift in New Zealand's agricultural strategy?
 - If our largest cooperative is prioritising scale and efficiency over brand ownership, does this suggest that New Zealand is moving further toward a commodity-driven export model, rather than a high-value, brand-led approach?

This concept stands in contrast to the Dutch model, where food giants have maintained strong consumer brands, ensuring greater control over the final product's positioning in the market. It also diverges from strategies seen in countries like Ireland, where dairy cooperatives such as Kerrygold have invested heavily in global brand recognition, ensuring they capture a greater share of retail value (Davis, 2024).

Only time will tell whether Fonterra's proposed sell down will prove to be a prudent move or a missed opportunity. If the global dairy landscape becomes increasingly competitive—and if other nations move further up the value chain—New Zealand may find itself more reliant on bulk ingredient exports while others profit from the final consumer sale.

The broader question remains: Is New Zealand content to remain a world-class producer of raw ingredients, or should we be fighting to own more of the value chain?

Similarly, our red meat industry has carved out a reputation for high-quality lamb and beef, commanding premium prices in international markets. New Zealand beef is marketed as grass-fed, free-range, and antibiotic-free, while our lamb has long been positioned as a high-end product in premium supermarkets and restaurants across Europe, North America, and Asia. In more recent years, New Zealand King Salmon has followed a similar path, marketing its farmed salmon as a premium, sustainably raised product with high Omega-3 content and superior taste.

This high-value positioning has allowed New Zealand exporters to achieve better margins than commodity producers, but there is a fundamental



challenge with this model: our production volumes are still large enough that we must also participate in the commodity market.

While niche markets exist for ultra-premium beef, lamb, and salmon, the vast majority of New Zealand's protein exports are still sold in bulk at prices dictated by global supply and demand dynamics. There is only so much a consumer will pay for protein, and while premium branding allows for a price lift, it does not completely insulate us from the realities of commodity market fluctuations.

The Limitations of the Premium Model

New Zealand exporters have successfully positioned our proteins in high-value segments, but there are clear limitations to how far this can go:

1. Global Protein Prices Have a Ceiling
 - No matter how well-branded or high-quality New Zealand's beef, lamb, and salmon are, there is an upper limit to how much consumers are willing to pay for protein. While niche consumers will pay a premium for specialty products, mass-market buyers—such as supermarkets, food service chains, and major retailers—still work within global pricing benchmarks.
 - This means that while our protein exports achieve price premiums, they still track closely to international commodity price movements.
2. We Are Still Producing at Scale
 - Unlike ultra-niche food producers in small-scale luxury markets, New Zealand's protein industries are still exporting significant volumes, which means we are forced to compete in the commodity space.
 - For example, our beef and lamb exports to China, our largest meat market, must compete with South American suppliers like Brazil and Argentina, who can sell at lower costs due to their sheer scale of production.
3. Trade Disruptions and Consumer Preferences Add Risk
 - Being highly export-dependent means that New Zealand's protein industries are vulnerable to shifting global demand and geopolitical changes.
 - Changes in consumer preferences—such as consumer interest in plant-based proteins or sustainability concerns—could reshape demand over time.



A Balancing Act: Premium Positioning in a Commodity-Dominated World

New Zealand's approach to protein exports is, by necessity, a balancing act. We market our products as premium, high-quality offerings, but we also rely on global commodity markets to absorb the majority of our production. Unlike boutique, small-batch producers, we must ensure that large volumes of meat and seafood find buyers at competitive prices, which means competing in both premium and commodity markets simultaneously.

The challenge for New Zealand is how to extract maximum value while still operating within a system that ultimately treats protein as a commodity.

1. Can we move further up the value chain, processing and selling more finished products rather than bulk exports?
2. Are there opportunities to develop more exclusive, ultra-premium categories that allow us to decouple further from global commodity pricing?
3. How do we manage the risks associated with increasing competition from lower-cost producers?

This reality reinforces a broader economic question: If our protein exports cannot escape the limitations of the commodity market, and if there is a ceiling on price growth, then where does the next wave of economic expansion come from?

The challenge for New Zealand is to refine this hybrid approach. We need to ensure that our pursuit of scale doesn't come at the expense of sustainability or quality. At the same time, we must explore new ways to optimise our market positioning, leveraging our reputation for innovation and environmental stewardship to secure a competitive edge.

Conclusion: New Zealand's Place in the Global Agricultural Economy—My Perspective

From my travels and experience, I've come to see that New Zealand sits in an unusual and somewhat uncertain position in the global agricultural economy. We don't have Brazil's ability to scale production exponentially, nor do we have the Netherlands' proximity to major markets and dominance over supply chains. Instead, we seem to flip-flop between commodity production and premium brand marketing—without fully committing to either.



To me, this dual identity is both an advantage and a vulnerability. We have built an agricultural economy that is genuinely world-class, but I don't believe we have a long-term strategy that fully accounts for where we are headed over the next 25 to 50 years. We've been lucky that our land, climate, and expertise have carried us this far, but I think the next few decades demand something more deliberate.

The Need for a 25–50 Year Plan

From where I stand, New Zealand's agricultural model must evolve. The way we've approached food production over the past century will not sustain us indefinitely. The next 25 to 50 years require bigger thinking and tougher decisions.

There are a few questions I keep coming back to:

1. Are we a commodity producer or a premium brand marketer?
 - Do we fully commit to a high-value, premium strategy where we focus on smaller-scale, ultra-branded, and value-added products?
 - Or do we accept that we must compete in the global commodity markets and build a supply chain model that maximises volume and efficiency?
 - Can we do both at once—or does this lead to a dilution of strategy, where we are neither the cheapest nor the most premium?
2. What is our competitive advantage in a future where scale and logistics dominate?
 - If we cannot expand production volumes exponentially like Brazil, how do we continue to grow our agricultural sector?
 - If we do not control global supply chains like the Netherlands, how do we ensure our products remain valuable and accessible to key markets?
3. How do we ensure resilience as consumer preferences shift?
 - If the demand for red meat declines due to changing dietary trends and sustainability concerns, what is our backup plan?
 - If alternative proteins, lab-grown meats, or synthetic dairy products become mainstream, do we resist, adapt, or pivot into new industries?

Right now, I don't believe New Zealand has a clearly defined long-term strategy for its agricultural economy. That's not to say that people aren't thinking about it—because they are—but as a country, I don't think we have



fully confronted the reality that we are neither big enough to dominate global commodity markets nor positioned well enough to control the world's food supply chains.

That means we must be exceptionally strategic in how we navigate the next few decades.

1. Do we double down on premium, value-added food production, ensuring that our exports are less vulnerable to price fluctuations and commodity cycles?
2. Do we invest in building out our own supply chains, ensuring that we retain more value within New Zealand instead of losing margin to offshore processors, distributors, and retailers? Or do we start looking at entirely new economic opportunities beyond food production to secure our long-term future?



Chapter Three: Land Use and Ownership in a Changing World

Land is the foundation of agriculture. It dictates what can be produced, how efficiently it can be done, and ultimately, how profitable an operation can be. Yet, across the world, the ability to access, utilise, and develop land is under pressure. Whether through government regulations, urban sprawl, environmental restrictions, climate change, or market forces, the traditional model of land ownership and use is being challenged and reshaped.

New Zealand, like many other agricultural nations, faces critical questions about the future of land use. As we approach the upper limits of agricultural expansion, we must consider how land will be utilised in the decades ahead—not just for farming but for the broader economy.

Lessons from my travels highlight the many ways in which land ownership and use are being redefined across different countries. From the Netherlands' soaring land prices to the instability of land tenure in Zimbabwe, the fragmentation of farms in Georgia, and the capital-driven land market of the UK, there are clear trends emerging that could signal what's ahead for New Zealand.

The Global Shift in Land Use

During my travels, it became clear that farmland is no longer just about agricultural production. Increasingly, land is being pulled between competing interests—environmental policy, urban expansion, capital investment, and alternative land uses. While each country I visited had its own unique pressures, the broader trend was the same: agriculture is no longer the automatic priority for land use.

The Netherlands: A High-Stakes Balancing Act

Few places illustrate the economic pressures on farmland as starkly as the Netherlands. Here, land has become a scarce, high-value asset, not just for farming but for urban development, industrial use, and environmental policy objectives. With land prices approaching €100,000 per hectare (Times, 2024), expansion for traditional farming operations is often economically unviable. For many Dutch farmers, the choice is either to pivot into ultra-high-value niche production—such as daffodil bulbs or intensive greenhouse horticulture—or to consider selling their land altogether.

At the same time, government intervention in land use is increasing. Environmental policies aimed at reducing livestock numbers, nitrogen



emissions, and water pollution have led to government buyback schemes, where farmers can sell their land for conversion into conservation areas or other non-agricultural uses. This has created deep uncertainty for traditional dairy and livestock farmers, many of whom have found themselves forced into difficult decisions.

Some farmers have chosen to exit the industry entirely, selling their land to the government and retiring from agriculture. Others have pivoted into alternative land uses that align with new economic incentives, such as green energy projects, carbon sequestration, or high-margin specialty crops. However, for many in traditional farming, there is a lingering sense that the industry is being pushed to the margins of economic relevance, caught between economic realities and regulatory pressures.

While Dutch farmers remain some of the most efficient and technologically advanced in the world, their ability to compete in global commodity markets is increasingly constrained. The Netherlands has responded by moving away from sheer production and instead focusing on controlling food supply chains and trade logistics. Yet, even as the country excels in food distribution, there is an open question about what the future of Dutch farming itself looks like in the face of continued environmental and economic pressures.

The United Kingdom: A Nation Moving Beyond Agriculture?

In the United Kingdom, the shift in land use is taking on an even more profound character—one that suggests a nation moving beyond agriculture as an economic priority. Compared to other countries I visited, the UK displayed the clearest signs that food production is no longer at the centre of economic or policy decision-making.

Here, farmland is increasingly being treated as a capital asset rather than a productive resource. Many of the largest rural estates are owned by high-net-worth individuals and families, corporations, or investment funds, not necessarily because they want to farm but because they see farmland as a stable, long-term store of wealth (Riley, 2023). The implications of this are significant.

Firstly, this shift has pushed land prices higher, making it harder for new farmers to enter the industry. Tenant farmers have been hit particularly hard by tax changes that favour landowners who farm their own land, as they receive tax exemptions that tenants do not. As a result, more land is being held by investors rather than working farmers, reducing opportunities for young or aspiring farmers to secure leases or transition into ownership. This



trend is gradually squeezing out the next generation of farmers, making it increasingly difficult for them to establish themselves in the industry.

Secondly, post-Brexit subsidy changes have fundamentally altered farming economics. For decades, British agriculture was heavily supported by the EU's Common Agricultural Policy (CAP), which provided direct subsidies based on production (Bateman & Balmford, 2018). Following Brexit, the UK government has shifted its subsidy structure, offering incentives that increasingly favour environmental and conservation-focused land use over active farming. (Environment, 2018)

Many landowners have taken advantage of these incentives, retiring large portions of their farmland into conservation projects. Some estates have even transitioned almost entirely out of farming, turning to eco-tourism, carbon credit schemes, and government-backed land restoration programs.

The contrast between this approach and that of more agriculturally-driven nations like Brazil or New Zealand is stark. While countries like Brazil continue to expand their agricultural footprint, the UK appears to be consciously stepping away from food production as a national priority.

For some, this is economic pragmatism—why farm sheep at razor-thin margins when the government will pay you more to plant trees or create biodiversity zones? But for others, it raises more profound questions about food security and national economic strategy. If less and less land is dedicated to farming, what does that mean for Britain's long-term ability to feed itself?

Perhaps the most striking realisation from my time in the UK was that there seems to be an acceptance—either explicit or implicit—that the country's economic future lies outside of agriculture. Unlike in New Zealand, where food production is still central to national identity and export earnings, the UK appears to have moved past the idea that farming is a core economic driver.

In the United Kingdom, the trajectory of agriculture has shifted markedly over the past few decades. In the mid-1980s, the UK achieved a food self-sufficiency rate of approximately 78%, meaning it produced the vast majority of its own food. By 2021, this figure had declined to around 60% (Statistics, 2024). Several factors, including population growth, urban expansion, and changes in dietary preferences, influence this reduction.

The evolving perception of agriculture within the UK's economic framework is a significant contributor to this trend. Unlike nations where farming remains



central to identity and economy, the UK appears to have deprioritised agriculture in favour of other sectors. This shift is evident in land ownership patterns, where large estates are increasingly acquired by high-net-worth individuals who view farmland primarily as a stable investment rather than a productive asset. This investment-driven approach has led to rising land prices, making it challenging for new and existing farmers to expand operations.

Post-Brexit policy changes have further complicated the agricultural landscape. The transition from EU-derived subsidies to new domestic schemes has introduced financial uncertainties for farmers. In 2023, many English farms experienced significant income declines due to extreme weather and subsidy cuts, with cereal farms seeing a 73% reduction and dairy farms a 68% (Statistics, 2024). These challenges have prompted some landowners to repurpose agricultural land for conservation projects or other non-farming uses, aligning with government incentives but reducing the land available for food production.

The decline in self-sufficiency suggests a broader acceptance of outsourcing food production, paralleling the UK's earlier shift of manufacturing operations overseas. This strategy leverages global supply chains to meet domestic food demands, allowing the UK to focus on sectors perceived as more economically advantageous. However, this approach raises questions about food security, especially in the face of global disruptions. While diverse import sources can enhance resilience, reliance on external production also exposes the UK's agricultural policy, which centres on making smart choices in a changing world. By opting to connect more with the global food market, the nation is prioritising economic diversification rather than merely relying on home-grown produce. This shift illustrates a growing comfort with food imports, akin to many developed nations' approach to the likes of manufacturing. It reflects how the UK is navigating food security and its economic identity in today's interconnected world.

Over time, the UK has shifted its economic priorities away from self-reliance in food production toward industries that generate higher wages and greater economic returns, such as finance, technology, and professional services. London, for example, has cemented itself as a global financial hub, attracting investment and high-paying jobs that contribute significantly to the country's GDP. Similarly, the UK has fostered a thriving technology sector, with cities like Cambridge and Manchester emerging as innovation centres for AI, biotech, and software development. This strategic pivot reflects a broader trend seen in many developed nations—prioritising industries that deliver higher per-capita earnings over those traditionally associated with primary



production. While this transition has strengthened the UK's economy in some areas, it has also diminished the role of agriculture, raising important questions about long-term food security and rural economic sustainability.

The New Zealand Context: A Finite Resource Under Pressure

New Zealand has long benefited from secure land ownership, strong regulatory frameworks, and political stability—factors that have enabled our agricultural sector to thrive. Unlike countries where land tenure uncertainty or political instability deter investment, New Zealand's farmers and agribusinesses have been able to make long-term decisions with confidence. However, the pressures facing farmland globally are beginning to manifest here in new ways, and while we don't share the same risks as Zimbabwe or Georgia, our advantage is not something we can afford to take for granted.

Political Stability: A Competitive Edge

From my travels, it became clear that stable land ownership and governance are fundamental to a thriving agricultural economy. In Zimbabwe, the consequences of land reform policies have created a deeply uncertain investment climate. The redistribution of commercial farmland—often without clear legal frameworks—has undermined confidence in property rights, making it difficult for farmers to access finance or reinvest in their land. Many large-scale farms, once highly productive, have struggled due to lack of capital investment, weak infrastructure, and unclear land tenure agreements.

In Georgia, a different but equally problematic challenge exists. Short-term land leases and fragmented ownership structures make it difficult to achieve scale, secure investment, or modernise farming operations. Without consolidated land parcels and long-term certainty, it is difficult for Georgian farmers to justify investment in infrastructure, irrigation, or high-value agricultural systems. The result is a sector that remains underdeveloped despite its potential.

New Zealand, by contrast, has built its agricultural success on clear land ownership, legal protections, and a stable political system. Our reliable financial sector enables farmers to borrow, invest, and innovate, knowing that their land is a secure asset with long-term value. This level of certainty has underpinned our ability to compete on the global stage, despite our geographic isolation and lack of scale.

However, we should not assume that our land-use framework will remain unchanged forever. As competing pressures mount—from urbanisation,



regulation, environmental policy, and shifting investment trends—New Zealand must ensure that our land remains an enabler of economic growth, rather than a constraint on it.

Urban Expansion and Land Values: A Shifting Landscape

One of the most visible pressures on farmland in New Zealand is urban expansion. As our cities grow, productive agricultural land near urban centres is being repurposed for housing, infrastructure, and commercial development. We see this in regions like the Canterbury Plains and South Auckland, where once-thriving agricultural hubs—such as Lincoln, Templeton, and Pukekohe—are now increasingly under pressure from residential and industrial expansion.

The reality is that land close to cities will always be more valuable for housing and industry than for farming. This pushes productive agriculture further out, increasing transport costs, reducing efficiency, and forcing a transition away from traditional farming models. Unlike large-scale nations such as Brazil, New Zealand does not have vast tracts of undeveloped land to expand into. Our best farmland is already in use, and as it gets absorbed into urban areas, we must ask:

1. *How do we ensure that our best agricultural land remains available for food production?*
2. *Should we be using policy tools like the Resource Management Act (RMA) to protect high-value food-producing regions?*
3. *Or is it inevitable that market forces will dictate land use, regardless of food security concerns?*

Land as an Investment Rather than a Productive Asset

One of the most striking lessons from the UK was the way farmland is increasingly viewed as a capital investment rather than a productive asset (Livingstone, Gallent, Hamiduddin, Juntti, & Stirling, 2021). We may well be beginning to see signs of a similar trend emerging in New Zealand.

Large-scale corporate ownership of farms, investment funds acquiring rural properties, and foreign investment in land are all shifting the way land is held, valued, and used. In some cases, this creates opportunities for capital investment and professionalisation of farming. But in other cases, it raises concerns about land being removed from productive use, particularly when the primary motivation for ownership is capital gains or for lifestyle/amenity value rather than agricultural output (Livingstone, Gallent, Hamiduddin, Juntti, & Stirling, 2021).



Should farmland be protected for productive use, or is it inevitable that market forces will determine its future? And if corporate ownership and investment funds become the dominant players, what does this mean for family farms and the long-term culture of New Zealand agriculture?

Looking Ahead: What Role Will Land Play in Our Economic Future?

While agriculture will always be a cornerstone of our rural economy, we must acknowledge that factors outside of farmers' control increasingly constrain its ability to drive exponential economic growth.

One of the most significant trends reshaping our agricultural landscape is the large-scale conversion of productive farmland into forestry for carbon capture. According to recent reports, approximately 261,000 hectares of sheep and beef farmland in New Zealand have been converted to forestry between 2017 and June 2024 (NZ, 2024). This represents a substantial loss of land for traditional livestock farming, further reducing the potential for agricultural expansion.

What this means is that our ability to find scale in traditional livestock farming is increasingly constrained—not just by environmental policies or market pressures but by the physical availability of suitable land. Once a farm is converted into permanent forestry for carbon offsetting, it is unlikely to return to pastoral farming. This raises critical questions: *What does this mean for our food production capacity? How will this impact rural employment? And if sheep and beef farming continues to decline, what happens to the infrastructure that has supported it for over a century?*

The Shrinking Sheep Industry: A Long-Term Decline with Structural Consequences

Nowhere is this shift more apparent than in the decline of New Zealand's sheep population. The number of sheep in the country has been falling for decades, and as of June 2024, the national flock sat at approximately 23.31 million—a 4.3% decrease from the previous year (NZ, 2024). This ongoing reduction is more than just a statistical trend; it has real economic and structural consequences for the wider supply chain.

New Zealand's shrinking sheep population is putting meat processing facilities under pressure. These plants rely on consistent throughput to maintain economies of scale. As stock numbers decline, processing costs rise, making



reinvestment harder and leading to aging infrastructure, inefficiencies, and closures.

Alliance Group's Smithfield Plant closure in Timaru is a clear example. Once a major employer, the plant struggled with reduced livestock supply, making operations unsustainable (Steele, 2024). With fewer processors competing for stock, farmgate prices are squeezed, leaving farmers with less negotiating power and longer wait times (Murphy, 2006).

Smithfield's closure may well be part of a broader trend. As sheep numbers decline and land use shifts, processing capacity contracts threaten rural economies, regional jobs, and New Zealand's red meat competitiveness.

The effect cascades into rural employment and communities. Fewer animals mean fewer jobs in processing plants, fewer transport contracts, and reduced demand for services that support the industry—from livestock agents to fencing contractors and shearing teams. This creates a broader economic challenge for rural New Zealand, one particularly difficult to address if farming is no longer considered a long-term growth sector.

Competing Land Uses: The Challenge of Balancing Economic Priorities

As land is progressively diverted away from traditional sheep and beef farming toward other uses—whether carbon forestry, urban expansion, or alternative land investments—the reality is that we cannot rely on agriculture alone to drive our economic future. The Netherlands has already encountered this issue, with dairy farmers selling land to the government for proposed environmental buyouts (Symons, 2023), while the UK is seeing large estates transitioning into conservation-focused enterprises.

New Zealand will inevitably have to navigate this same tension between economic productivity, environmental goals, and market realities. Do we allow land to be dictated by the highest immediate financial return, even if that means a long-term reduction in food production? Or do we look at ways to maintain a balance between land use, ensuring a resilient food system while still meeting climate commitments?

Preparing for an Economy Beyond Primary Production

New Zealand holds an enviable position globally—we are geopolitically stable, have a well-functioning legal system, and enjoy secure land ownership rights. Compared to countries like Georgia and Zimbabwe, where



political and economic instability has hindered agricultural investment, New Zealand's stability has long been one of our greatest strengths. It has allowed us to build a globally competitive agricultural sector, attracting investment and enabling long-term planning.

However, despite these advantages, we are now pushing up against the productive limits of our farmland. Unlike Brazil, which continues to expand its agricultural frontier, New Zealand's most productive land is already in use—and, in many cases, we are losing it to urban expansion, forestry, and environmental conservation initiatives. With livestock numbers declining and land being diverted away from food production, it is no longer realistic to expect agriculture alone to drive the next wave of economic growth. There are growing parallels between New Zealand and both the Netherlands and the UK. Like the Netherlands, our land values are rising, making expansion difficult and pushing farming towards higher-value, niche industries. And, like the UK, increasing regulation is reshaping land use, with environmental policies and urban development shifting the balance of what is considered the "best use" for land. We must now ask ourselves: what does this mean for New Zealand long-term?

One of the clearest warning signs of what happens when agriculture contracts can be seen in the closure of Alliance Group's Smithfield Freezing Works in Timaru. This plant, once a vital processing hub for the South Island's red meat industry, was forced to shut down due to declining livestock numbers. Without enough sheep and beef coming through, the facility could no longer operate efficiently, and reinvestment became economically unfeasible (Steele, 2024).

The implications of this are far-reaching. When processing plants close, farmers lose competition for their stock, leading to lower farmgate prices. This, in turn, makes livestock farming less profitable, accelerating the shift away from traditional farming. Rural communities lose jobs, infrastructure, and economic momentum, while New Zealand as a whole becomes increasingly reliant on imported processing capacity or foreign-owned food supply chains.

Critical Questions for New Zealand's Future

If agricultural production is no longer expanding, how do we sustain rural economies? Do we double down on value-added industries, investing in food processing, logistics, and premium branding, or do we begin to see rural land use shift away from farming altogether?



If farmland is being converted into residential or commercial property, do we embrace this shift or regulate against it? Are we prepared to lose significant portions of productive land, or do we need a structured land-use strategy that protects key agricultural regions?

How do we balance agriculture with environmental objectives? Can we support a strong food production sector while also meeting sustainability goals, or will policy decisions gradually phase out traditional farming as a dominant land use?

Can we learn from the Netherlands? Rather than relying on scale and raw production, can New Zealand build new logistics, processing, and value-added industries that allow us to capture more economic value from what we already produce?

These are not just questions for farmers—they are economic questions for New Zealand as a whole. The future of land use will determine whether rural communities thrive or decline, whether we remain an agricultural nation or transition into something new, and whether we create sustainable economic growth beyond just farming and tourism.

If we continue to lose processing capacity, livestock numbers, and productive farmland, we may find ourselves at a tipping point—one where New Zealand's status as an agricultural powerhouse is no longer a given.



Chapter Four: The Role of Government Policy and Global Markets

Government policy is one of the most powerful forces shaping modern agriculture. It dictates what can be farmed, how land can be used, and, in many cases, whether farming remains a viable business at all. Across the world, different governments have taken dramatically different approaches—some prioritising productivity, others environmental objectives, and some attempting to juggle both. The intersection of agriculture, government policy, and global market forces is increasingly determining the future of farming, and nowhere is this clearer than in the United Kingdom, where ESG (Environmental, Social, and Governance) policies and subsidy structures are fundamentally reshaping the sector.

The English Model: ESG Policies, Subsidies, and the Slow Death of Traditional Farming?

England's post-Brexit agricultural policy has been one of the most significant shifts in global farming policy in recent years. No longer bound by the Common Agricultural Policy (CAP) of the EU, the English government introduced new Environmental Land Management Schemes (ELMS) to reshape the way farmers receive financial support. Unlike the previous system, which was largely based on direct subsidies tied to production, the new model incentivises environmental stewardship, rewilding, and non-agricultural land use.

For some farmers, this presented an opportunity. But for others, it has felt like the slow, grinding death of traditional farming.

I visited a 600-acre farm in England where this transition was playing out in real-time. The farmer had been an early adopter of herbal ley, a type of rotational pasture that fits within ESG policy frameworks and qualifies for subsidy payments in exchange for taking land out of full-scale production. When he initially enrolled his farm, there were no restrictions on how much land could be converted, and he successfully pushed all 600 acres into the scheme. This meant that, in the eyes of government policy, his entire farm was now classified under an environmental programme rather than food production.

However, in the months that followed, the rules changed. The government realised that large-scale transitions of farmland into non-productive uses could have unintended consequences—specifically, a threat to national food security. New regulations were introduced, capping the amount of land



that could be converted to 20% of a holding, but because he had already transitioned his entire farm before the rule change, his subsidy payments remained intact.

This created an interesting paradox: while neighbouring farms still had to keep at least 80% of their land in food production, he was effectively paid not to farm. His land remained locked in an environmental scheme, and his income was secure.

With his agricultural revenue effectively fully subsidised, he made the next logical step: he converted every single shed and outbuilding on the farm into alternative income streams. Office space, storage units, holiday lets, and long-term accommodation—every structure on the property was generating income, but none of it was related to farming.

At face value, this might sound like an innovative business model. But what does this mean for the future of English agriculture?

The Risk of Government Incentives Creating a Farming Exit Strategy

The farm I visited was not an anomaly. Across the UK, incentives are increasingly rewarding farmers for stepping away from production, either by retiring land into conservation schemes or shifting their business models toward non-agricultural income streams. On paper, this looks like a progressive approach to environmental management. However, in practice, it raises serious concerns:

A Slow Decline for Traditional Farming?

As more farms transition away from food production, those that remain face increasing pressure to stay viable. Meat processing plants, feed suppliers, and rural service industries all depend on a critical mass of production to operate efficiently. When farm numbers shrink, supply chains weaken, economies of scale erode, and costs rise for those still producing.

This creates a compounding effect—as fewer farms remain, processing plants may consolidate or shut down, reducing competition for livestock and further squeezing farmgate prices. As stated previously, the Alliance Smithfield freezing works closure in Timaru is an early warning sign of that happening here in New Zealand when production declines beyond a sustainable threshold.



A Subsidy-Dependent System

The shift from market-driven farming to a subsidy-reliant model creates dependency on government payments, which could change with future political shifts. Farmers locked into ESG schemes may find themselves without a viable way back into production if subsidies are reduced or withdrawn.

Reduced National Food Security

If enough land transitions out of farming, the UK will increasingly rely on imported food, making it more vulnerable to supply chain disruptions. This shift means that farmland is being treated as a financial instrument rather than a resource for food production.

New Zealand's Future: Learning from the UK's Experience

What is happening in the UK offers an important lesson for New Zealand. While we are not yet at the same stage, similar policy pressures are beginning to emerge.

1. Land conversion to forestry and carbon farming is already reducing the availability of productive farmland.
2. Environmental regulations are increasing restrictions on land use, particularly around water, emissions, and nutrient management.
3. Discussions around subsidy-based support models (such as payments for ecosystem services) are beginning to gain traction.

The key question for New Zealand is: can we implement sustainability measures without making farming unviable? If policies push too far in one direction, we risk creating an incentive structure that pays farmers to stop farming—much like what is happening in the UK.

New Zealand must also consider the broader economic implications of shifting too much land out of production. As we have seen with falling sheep numbers and the closure of processing plants, once an industry shrinks beyond a certain point, it becomes increasingly difficult to sustain. If incentives continue to erode the scale of food production, we may find ourselves in a position where we must import more food, while exporting less.

While environmental goals are essential, they must be balanced with economic realities. The challenge for policymakers will be ensuring that sustainability measures do not inadvertently lead to a slow dismantling of New Zealand's agricultural economy—especially at a time when our ability to expand production is already limited.



Global Markets: How Policy Shapes Trade Competitiveness

Beyond domestic policy and land-use changes, global trade agreements, sustainability policies, and shifting consumer expectations are increasingly critical in shaping New Zealand's agricultural future. While we have long enjoyed favourable access to key markets, the landscape is evolving rapidly. Sustainability requirements, ethical production standards, and carbon emissions tracking are becoming embedded in trade policies—creating both new barriers and new opportunities for New Zealand exporters.

1. The European Model: Sustainability-Driven Trade Policies

The European Union (EU) and the United Kingdom (UK) have historically been important export destinations for New Zealand's dairy, red meat, and horticultural products. However, recent policy shifts are raising the bar for environmental compliance, sustainability, and traceability in food production.

The EU's Farm to Fork Strategy: A New Trade Barrier?

The EU's Farm to Fork Strategy, part of the European Green Deal (Wesseler, 2022), aims to create a more sustainable and climate-neutral food system. This initiative includes:

1. Tighter restrictions on agricultural emissions and fertiliser use
2. Higher welfare standards for livestock
3. Stronger traceability and sustainability reporting requirements

For New Zealand, these policy shifts could impact export competitiveness, especially if we are unable to meet evolving EU standards. While our environmental credentials are strong compared to many global competitors, regulatory misalignment could create trade barriers.

For example, if New Zealand's carbon emissions framework for agriculture does not align with EU expectations, our dairy, beef, and lamb exports could face additional tariffs, quotas, or certification requirements. This is particularly relevant given our reliance on pasture-based farming, which—while sustainable in many ways—still contributes to methane emissions.

Additionally, EU consumers and retailers are increasingly demanding supply chain transparency (Mol, 2015). Supermarkets and food distributors are prioritising products with certified low-carbon footprints, regenerative farming practices, and ethical sourcing guarantees. If New Zealand's exports fail to meet these expectations, our premium market positioning could be at risk.



Policy as a Driver of Economic Change

The role of government policy in agriculture is not just about regulation and compliance—it is about shaping the long-term trajectory of the sector, determining whether it thrives, adapts, or slowly declines. Policy decisions have far-reaching consequences, extending beyond farmers and landowners to rural communities, supply chains, national food security, and the broader economy. The UK's experience serves as a cautionary tale, illustrating how well-intentioned policies aimed at promoting sustainability and environmental goals can inadvertently undermine food production and push farmers out of agriculture altogether.

The effects are irreversible when policies begin to incentivise land retirement over land productivity. In England, the shift from direct production-based subsidies to environmental land schemes (ELMS) has led to a situation where farmers are increasingly paid not to farm (Kay, 2022). While this may achieve short-term environmental objectives, it is fundamentally altering the structure of the rural economy in ways that may not be fully understood for years to come. The result is a gradual but persistent deindustrialisation of farming, where farms transition from producing food to becoming managed landscapes.

For New Zealand, the warning is clear: we must ensure that our sustainability goals do not come at the expense of long-term food security and economic stability. There is no doubt that environmental considerations must be prioritised—climate change, emissions reductions, and water quality are legitimate and necessary concerns—but they must be balanced against the need to maintain a productive and competitive agricultural sector. If sustainability measures are implemented in a way that makes farming increasingly unviable, then we will see the same slow erosion of food production that is now occurring in the UK.

Finding the Balance: Sustainability Without Sacrificing Production

The key challenge for policymakers is striking the right balance between sustainability and productivity. Policy should not be purely restrictive, focusing only on limiting production through environmental compliance measures. Instead, it should take a proactive approach to supporting innovation, efficiency, and market competitiveness. If New Zealand's maximum production potential is already near its peak, then future growth must come from value-addition, technology adoption, and premium positioning in global markets—not simply from limiting farming activities.



The risks of getting this balance wrong are significant:

1. A gradual reduction in national food production, leading to increased reliance on imported food—potentially from countries with lower environmental and welfare standards than New Zealand.
2. Economic decline in rural communities, as fewer farms remain viable and agricultural processing infrastructure struggles with lower throughput.
3. Higher food prices, as domestic supply shrinks and New Zealand competes for global food imports.
4. A weakening of New Zealand's global trade position, as our traditional strength in food exports is eroded by policy-driven constraints on production.

A More Strategic Approach to Agricultural Policy

To avoid these risks, New Zealand's agricultural policies must be future-focused and strategic. Instead of simply following the UK model of risking reducing production loss through subsidy-driven land conversion, our government should take an approach that:

1. **Supports Value-Added Growth:** Encourages the development of high-value food products, branded exports, and premium-market differentiation, similar to the Netherlands' approach to food logistics and processing.
2. **Invests in Agricultural Technology:** Provides incentives for precision farming, regenerative agriculture, and productivity-enhancing innovation rather than just restricting existing methods.
3. **Maintains Land for Productive Use:** Ensures that environmental policies do not result in excessive land retirement, which could permanently reduce food production capacity.
4. **Aligns with Global Market Trends:** Recognises that export markets are increasingly requiring sustainability credentials and supports farmers in achieving these standards without sacrificing profitability.
5. **Strengthens Food Security Considerations:** Ensures that policy decisions factor in long-term food supply resilience rather than prioritising environmental objectives in isolation.

Conclusion: The Role of Policy in Shaping New Zealand's Economic Future

Government policy is more than just a regulatory framework—it is a powerful economic lever that determines whether industries grow, shrink, or evolve. As we've seen in the UK, policy decisions can create unintended economic



shifts that take decades to reverse. If policymakers do not strike the right balance between sustainability, economic viability, and market competitiveness, New Zealand's agricultural sector could follow the same slow decline.

England's shift away from production-based subsidies toward environmental land management schemes (ELMS) has reshaped its agricultural landscape, in some instances paying farmers to stop farming. While this may achieve environmental goals, it has also led to a decline in domestic food production, increased reliance on imports, and a growing subsidy dependency among farmers .

New Zealand must take these lessons seriously.

We are already seeing:

1. Farmland being lost to forestry and carbon farming as a result of emissions reduction policies.
2. Tighter environmental regulations making traditional farming more complex and expensive.
3. Processing plants are closing due to declining livestock numbers, which threatens rural employment and the long-term viability of food production.
4. International markets embedding sustainability standards into trade policies, meaning compliance is no longer optional but a requirement for export success.

Finding the Balance: Sustainability Without Sacrificing Production

New Zealand cannot afford to take a reactionary approach to agricultural policy. Instead, we must be proactive in designing a system that protects both environmental and economic interests. If sustainability measures are implemented without considering their economic impact, we risk creating policies that make farming unviable rather than sustainable.

The key to a strong agricultural future lies in:

1. Supporting Value-Added Growth – Moving beyond commodity exports to high-value, branded food products that capture more market share and profitability.
2. Investing in Agricultural Technology – Leveraging precision agriculture, regenerative farming, and automation to increase efficiency while reducing environmental impact.



3. Maintaining Land for Productive Use – Ensuring that incentives do not drive large-scale land conversions away from food production.
4. Aligning with Global Market Trends – Positioning New Zealand as a leader in sustainable agriculture to secure premium trade opportunities.
5. Strengthening Food Security Considerations – Recognising that policy decisions should not jeopardise domestic food production in pursuit of environmental goals alone.

The Bigger Picture: What Comes Next for New Zealand's Economy?

If New Zealand's agricultural growth is reaching its natural limits, and if tourism faces volatility due to global economic cycles and environmental pressures, what is the long-term plan for economic expansion?

The UK's experience highlights the risks of allowing agriculture to contract without a strong replacement industry, but its circumstances are very different from New Zealand's. The UK has specialised in professional services, with London as a global financial hub, and has a domestic population of 60 million people, alongside direct access to European markets. While the decline of UK agriculture raises concerns about food security and rural economies, the country has been able to offset these changes with high-value industries that generate strong wages and economic growth.

New Zealand, however, does not have the same economic structure or population base. If primary industries contract here, the consequences could be far more material. We do not have 60 million people driving local demand, nor do we sit on the doorstep of one of the world's largest trade blocs. If agriculture declines without another backstop—beyond tourism—what fills the gap?

This presents a twofold challenge for New Zealand:

1. *How do we ensure farming remains viable while meeting sustainability goals?*
2. *What industries will drive economic growth beyond agriculture and tourism over the next 25 to 50 years?*

New Zealand has long excelled at adapting to changing global dynamics. But adaptation requires foresight, strategy, and decisive action. The time to shape the next chapter of our economy is now—before the decisions are made for us.



Chapter 5 Conclusion: The Next Chapter for New Zealand's Economy

When it comes to export earnings, New Zealand has long depended on two key industries—agriculture and tourism. These sectors have shaped our national identity, sustained both rural and urban communities, and kept our economy resilient through changing times. But as I've explored throughout this paper, I can't ignore the sense that both industries are reaching a point of maturity—where further growth is becoming increasingly difficult.

Agriculture, the backbone of our economy, may be reaching its natural limits. Productive farmland is shrinking, lost to urban expansion, forestry incentives, and increasingly restrictive environmental policies. Meanwhile, tourism—while still a major revenue driver—comes with its own challenges. Simply adding more flights and increasing visitor numbers isn't necessarily a sustainable strategy. The industry remains highly vulnerable to global disruptions, whether economic downturns, pandemics, or growing environmental pressures. Both sectors need to continue to play a crucial role in our economy, but we can't assume they will keep delivering the growth we need indefinitely. It's time to start thinking about what comes next.

So, what does that mean for our future?

It's clear to me that New Zealand's economic future must extend beyond just farming and tourism, but that doesn't mean stepping away from these industries. Agriculture and tourism will always be critical to our success, and we must continue to invest in and strengthen them. However, relying solely on these sectors leaves us vulnerable. Like a stool, our long-term stability depends on having a third leg—something that not only complements our existing strengths but also provides resilience when agriculture and tourism face limitations.

What that third leg looks like isn't a single answer—it could be a combination of industries that harness our geopolitical stability, clean energy potential, strong institutions, and skilled workforce. Whether it's technology, advanced manufacturing, renewable energy, or financial services, we need to actively encourage, promote, and invest in a diverse range of opportunities to ensure our economy remains strong, adaptable, and future-focused.

I don't pretend to have the answers, but I do believe we need to start asking the right questions. What will drive our economy over the next 25 to 50 years?



And are we actively shaping that future, or just hoping things will work themselves out?

New Zealand's Strengths: A Foundation for Growth

Unlike many nations grappling with instability, corruption, or resource conflicts, New Zealand has fundamental advantages that position us well for economic diversification.

Stable Land Ownership and Political System

Compared to countries like Zimbabwe and Georgia, where land tenure issues and political instability undermine investment in agriculture, New Zealand offers secure property rights, transparent regulations, and a functioning legal system. This has enabled our primary industries to flourish, giving farmers and businesses confidence to invest long-term. However, as we have seen with the conversion of farmland to carbon forestry, rising land prices, and increasing regulatory constraints, there are signs that our traditional model is under pressure.

Geopolitical Safety

In an era where global trade wars, resource conflicts, and economic nationalism are disrupting economies, New Zealand remains a neutral, well-regarded global player. Our geographic isolation, once considered a weakness, is now an advantage, offering security from major conflicts, stable governance, and a reliable food supply. In a world that is becoming increasingly uncertain, could New Zealand leverage this position to attract new industries, global talent, and investment?

A Country That People Want to Visit (and Live In)

New Zealand has long capitalised on its stunning landscapes, unique biodiversity, and adventure tourism industry. But can we extend this appeal beyond tourism? What if we positioned ourselves as a destination for global talent, entrepreneurs, and high-net-worth individuals seeking a safe, innovative, and high-quality place to live and do business? If technology and knowledge-based industries become the third leg of our economy, how do we ensure New Zealand is positioned as an attractive location for these sectors?

Proven Export Capabilities—But Where is the Value Going?

Despite our small size, New Zealand has successfully built an export-driven economy, demonstrating our ability to market premium food and fibre products internationally. However, as seen in Fonterra's shift away from consumer brands, much of the value-add is being captured offshore, while New Zealand remains vulnerable to commodity price swings. Similarly, while



our beef, lamb, and salmon command premium prices, we remain tied to the limitations of global protein markets. If we cannot simply scale up production, then how do we ensure more of the value stays within New Zealand rather than being captured overseas?

Parallels with the Netherlands and the UK: Are We Moving in the Same Direction?

New Zealand's land-use trends suggest we may be following a path similar to the Netherlands and the UK—both nations where agriculture has become increasingly constrained by land values, regulations, and economic diversification.

The Netherlands: Controlling the Value Chain Instead of Expanding Production

With land prices exceeding €100,000 per hectare, the Netherlands has been forced to shift away from traditional farming expansion and instead focus on ultra-high-value niche industries, logistics, and supply chain control. This has allowed them to remain a dominant player in global food markets without needing to increase production.

Should New Zealand learn from this model? Rather than relying on sheer volume, should we be focusing on processing, logistics, and market positioning to capture more value from what we already produce?

The UK: The Risk of Farming Becoming Secondary

In contrast, the UK has deprioritised food production, it would appear that land is being treated as an investment asset rather than a productive resource. Post-Brexit subsidy changes have encouraged shifts towards conservation projects and non-farming land uses, reducing self-sufficiency from nearly 80% to around 60%, and this trend is likely to continue in the UK (Statistics, 2024).

With similar environmental policies emerging in New Zealand, are we at risk of sleepwalking into the same trajectory—where farming becomes a secondary concern, and rural communities lose economic viability?

The closure of the Alliance Smithfield Freezing Works in Timaru highlights the real risks of agricultural contraction without a clear alternative economic strategy in place. If livestock numbers continue to decline, we will likely see further consolidation of processing plants, reducing competition for farmers, squeezing prices, and impacting rural employment. If this trend continues, what does the future look like for our rural communities?



The Irish Example: Can New Zealand Learn from Their Strategic Approach?

Ireland provides an interesting case study. Historically reliant on agriculture and manufacturing, Ireland made a deliberate choice to expand into technology and finance, using tax incentives to attract major global businesses like Apple, Google, and Facebook. While not without controversy, the impact has been undeniable—Ireland now has one of the highest GDP per capita rates in Europe (Tallon & Kraemer, 2014).

New Zealand is not Ireland, but the core lesson is valuable: economic shifts don't just happen—they are planned. Rather than waiting for external pressures to force change, Ireland proactively positioned itself as a global business hub.

Could New Zealand take a similar approach? Should we be offering targeted tax policies, R&D incentives, or regulatory advantages to attract high-value industries? And if so, which industries align best with our existing strengths?

I will not attempt to answer this question.

Instead, I am urging everyday Kiwis to engage with it—challenging the notion that our future must mirror our past—and exploring other options to build export revenue.

This is not a decision for the government alone, nor should it be left to market forces to decide by default. We must confront the reality that agriculture and tourism, while still critical, may not provide the same level of economic growth they once did. Rather than waiting until change is forced upon us, we can proactively shape our next move. Do we double down on food and fibre innovation? Do we attract global industries like technology, finance, or renewable energy? Or do we rethink how we add value to the products we already produce, ensuring more of the economic benefits stay in New Zealand? These are not easy questions, but ignoring them is not an option. Now is the time to debate, strategise, and plan for the next chapter of our economy—before circumstances decide for us.

What a National Conversation Must Address

1. What do we want New Zealand to be known for beyond agriculture and tourism?
2. Every prosperous economy has a core identity. Switzerland is known for banking, pharmaceuticals, and precision manufacturing. Ireland has



become a global hub for tech and finance. What should New Zealand's economic identity be?

3. Should we double down on food and fibre innovation and become a global leader in agriculture and food technology?
4. Should we focus on attracting global businesses, leveraging our political stability and low corruption to create a safe haven for investment?
5. Could we be a leader in renewable energy, positioning ourselves as a green economy that exports knowledge, technology, and expertise?
6. How do we create policy settings that encourage new industries?
7. Should we look at tax incentives like Ireland, lowering corporate tax rates to attract investment?
8. Do we need to rethink our regulatory environment to ensure we remain competitive for global businesses and entrepreneurs?
9. Are we doing enough to encourage research and development, ensuring that high-value industries emerge within New Zealand rather than being developed overseas?
10. How do we build economic resilience in a changing world?
11. Climate change, geopolitical instability, and global market shifts mean that nations must be adaptable. How do we ensure New Zealand's economy is future-proofed?
12. Should we be investing in industries that are less vulnerable to economic cycles, such as technology, advanced manufacturing, or digital services?
13. How do we balance sustainability with economic growth, ensuring that our transition to a low-emissions economy does not come at the cost of our economic stability?
14. What does a thriving rural economy look like in 2050?



15. If agriculture is no longer an expanding industry but rather an optimised one, how do we ensure rural New Zealand remains economically strong?
16. Should we diversify the role of rural communities, incorporating agri-tech, research, and renewable energy projects into traditional farming regions?
17. Are we prepared for the social consequences of economic shifts—declining rural populations, changing employment patterns, and shifts in land use?

Who Needs to Be Part of This Conversation?

For this national conversation to be meaningful and effective, it cannot be confined to policy think tanks and corporate boardrooms. The future of New Zealand's land, economy, and agricultural sector affects all of us, and a wide range of voices must be involved to ensure we develop a strategy that reflects the interests of all New Zealanders.

Iwi and Māori Agribusiness

Iwi and Māori agribusinesses are central to this discussion. Māori have significant landholdings across the country and a deep, intergenerational relationship with the land. Many iwi-led enterprises already operate highly successful farming, forestry, and fisheries businesses, and their perspective on sustainable land use, economic resilience, and kaitiakitanga (guardianship of the land) will be critical in shaping future land-use policies. As the Treaty partners and long-standing stewards of Aotearoa's natural resources, iwi must have a seat at the table to ensure their land, cultural values, and economic interests are properly represented.

The Agricultural Sector

Farmers, agribusiness leaders, rural communities, and processors must play a major role in shaping New Zealand's food production future. They are the ones directly affected by land-use changes, environmental policies, and shifting global markets, and their insights are essential in determining how we maintain a strong primary production sector while adapting to economic and environmental pressures.

The Business Community

Entrepreneurs, investors, and corporate leaders beyond agriculture must help identify new industries and economic opportunities. If New Zealand is to diversify its export base, then business leaders must be at the forefront of



developing industries that complement or extend beyond traditional primary production.

The Government and Policymakers

Parliament must take an active role in facilitating a long-term strategy for land use and economic resilience. Rather than reacting to short-term political or environmental pressures, the government must work alongside industry, iwi, and communities to set policies that ensure food security, environmental sustainability, and long-term economic growth.

Educators and Research Institutions

Universities, tech incubators, and research hubs must play a key role in identifying and developing growth sectors. Whether through advancing agritech, improving land use efficiency, or fostering entirely new industries, New Zealand's future economy must be underpinned by innovation and a highly skilled workforce.

The Wider Public

Everyday New Zealanders must be part of this discussion—this is about jobs, wages, food prices, housing affordability, and the economic future of our children. If New Zealand's economic base is shifting, then all Kiwis have a stake in deciding what kind of future we want to build.

The choices we make now will shape New Zealand's land use, food security, and economy for generations to come. If we fail to engage all voices in this discussion, we risk drifting into change rather than shaping it—and that is a risk we cannot afford to take.

Avoiding Complacency: The Risk of Doing Nothing

If New Zealand fails to actively engage in this conversation, we risk economic stagnation. Relying too heavily on two industries that are naturally constrained will make us increasingly vulnerable to external shocks. If global demand for red meat declines, if tourism faces future restrictions due to climate policies, if export markets become less favourable, what then?

Some nations proactively shape their future, while others wait for circumstances to force their hand. New Zealand has a choice to make—do we plan now for economic diversification, or do we wait until a crisis forces us to scramble for alternatives?



There is no single right answer to the question of what our third economic pillar should be. But what is clear is that we must begin discussing it—openly, critically, and urgently.

The Path Forward: A Call to Action

This conversation is not about replacing agriculture and tourism; it is about complementing them. It is about ensuring that in 50 years, New Zealand is still a thriving, competitive, and economically secure nation.

The best time to start this conversation was a decade ago. The second-best time is now.

If we accept that agriculture and tourism alone will not sustain us into the next 25-50 years, then it is time to ask:

1. *What is New Zealand's economic future?*
2. *What will be our third pillar?*
3. *And how do we begin shaping that future today?*

We have the resources, the talent, the stability, and the global reputation to build something extraordinary.

My final question is:
Will we?



References

- Bateman, I. J., & Balmford, B. (2018, December). Public funding for public goods: A post-Brexit perspective on principles for agricultural policy. *Land Use Policy*, 79, 293-300.
- Beckford, G. (2024, November 11). *Fonterra pushes ahead with sale of Anchor, Mainland brands*. Retrieved from <https://www.rnz.co.nz/>:
<https://www.rnz.co.nz/news/country/533434/fonterra-pushes-ahead-with-sale-of-anchor-mainland-brands>
- Caradus, J. R. (2021, November 17). Pastoral agriculture, a significant driver of New Zealand's economy, based on an introduced grassland ecology and technological advances. *Journal of the Royal Society of New Zealand*, Pages 259-303.
- Davis, D. P. (2024, June 10). *Fonterra's consumer sell-off a setback for NZ innovation*. Retrieved from <https://newsroom.co.nz/>:
<https://newsroom.co.nz/2024/06/10/fonerras-consumer-sell-off-a-setback-for-nz-innovation/>
- Environment, S. o. (2018, February). *Health and Harmony: the future for food, farming and the environment in a Green Brexit*. Retrieved from Gov UK:
<https://assets.publishing.service.gov.uk/media/5a952ad9e5274a5b849d3ad1/future-farming-environment-consult-document.pdf>
- Fildes, N. (2025, January 28). *How Australia became a test bed for the future of farming*. Retrieved from Financial Review: <https://www.afr.com/companies/agriculture/how-australia-became-a-test-bed-for-the-future-of-farming-20250128-p517rc>
- Kay, A. (2022, January 9). *ELM puts domestic food production at risk, warns parliamentary committee*. Retrieved from <https://www.farmersguardian.com/>:
<https://www.farmersguardian.com/news/4085196/elm-domestic-food-production-risk-warns-parliamentary-committee>
- Klein, H. S. (2019). *Feeding the world: Brazil's transformation into a modern agricultural economy*. Cambridge University Press.
- Livingstone, N., Gallent, N., Hamiduddin, I., Juntti, M., & Stirling, P. (2021). *Beyond Agriculture: Alternative Geographies of Rural Land Investment and Place Effects across the United Kingdom*. London: Land.
- Ministry for Primary Industries. (2020, July). *Fit for a Better World*. Retrieved from MPI:
<https://www.mpi.govt.nz/dmsdocument/41319-Fit-for-a-better-world-Background-analysis-on-export-earnings-in-the-primary-sector>
- Mol, A. P. (2015, November 16). Transparency and value chain sustainability. *Journal of Cleaner Production*, 107, 154-161.
- Murphy, S. (2006). *Concentrated Market Power and Agricultural Trade*. EcoFair Trade Dialogue Discussion. Retrieved from q.
- NZ, B. &. (2024, August 20). *Sheep and cattle numbers down as carbon forestry, drought and low prices continue to impact sector*. Retrieved from Beef & Lamb:
<https://beeflambnz.com/news/sheep-and-cattle-numbers-down-carbon-forestry-drought-and-low-prices-continue-impact-sector>
- Orme, P. (2024, October 23). *Land-use change from pastoral farming to large-scale forestry Update*. Orme & Associates Limited. Retrieved from Beef & Lamb:
<https://beeflambnz.com/news/latest-land-use-change-report-reinforces-need->



- Wesseler, J. (2022). The EU's farm-to-fork strategy: An assessment from the perspective of agricultural economics. *Applied Economic Perspective and Policy*.
- Westhoek, H., & Boezeman, D. (2024, February 28). *No deal on farming: lessons from the Netherlands*. Retrieved from <https://www.iddri.org/>:
<https://www.iddri.org/en/publications-and-events/blog-post/no-deal-farming-lessons-netherlands>
- Wilkinson, V., & Morris, T. (2015, November). *THE INVESTOR'S GUIDE TO THE NEW ZEALAND FOOD & BEVERAGE INDUSTRY*. Retrieved from MBIE:
<https://www.mbie.govt.nz/assets/aaefdb3085/investors-guide-nz-food-beverage-industry.pdf>