The Global Meat Market: A New Zealand Perspective

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Importance of Exporting

New Zealand is a long, narrow and geographically remote country. As is well known, its livestock populations outnumber its human population. New Zealanders each consume on average around 17 kg (37 lb) of lamb and mutton and 30 kg (66 lb) of beef and veal each year – compared with less than 0.5 kg (1 lb) of lamb and about 30 kg (66 lb) of beef and veal for the average American.

New Zealand exports over 90% of its lamb production and over 80% of its beef production.

However, while New Zealand accounts for nearly three quarters of world trade in lamb it accounts for only 7% of world production. In beef, New Zealand accounts for just over 1% of world production and a less than 10% of world trade. Over the more than 120 years since New Zealand's first meat exports occurred to address a surplus, meat producing industries have developed to competitively produce quality food products for consumers. With a population of around 4 million, the vast majority of those consumers live outside New Zealand, so delivering to those consumers necessarily requires exporting, which presents many challenges.

History of Exporting

There are presently around 40 million sheep, 5 million beef cattle and 5 million dairy cattle in New Zealand. The first sheep arrived with the first European (British) settlers in the 1830s. As farmers raised their sheep primarily for wool, they retained for as long as possible the lambs that were born and the flocks multiplied rapidly. By 1871, the sheep flock had reached 9.7 million, while the human population was 250,000. Just 10 years later the human population had nearly doubled to 490,000 but the sheep flock had more than tripled to just less than 13 million.

At the time, there was only a very small market for the surplus sheep but on the other side of the world, the industrial revolution in the Britain had resulted in the rapid growth in industrialized cities often without enough food to eat. However, the two countries were over 19,000 km (12,000 miles) apart, a trip of four months by sea. Safely getting food to the other side of the world was a significant challenge. Nevertheless, there were pioneers prepared to attempt it.

In 1880, refrigeration experiments were carried out. These experiments led to a trial shipment of 4,909 frozen sheep and lamb carcasses departing the South Island aboard the SS Dunedin on 11 February 1882. Though the 98-day journey was eventful, on arrival the cargo was considered to be "as perfect as frozen meat could be" and was sold for double its value in New Zealand.

By 1891, there were 17 processing plants located throughout the country with the capacity to handle 3.5 million carcasses a year – compared with just fewer than three million processed in the United States in 2003.

For the next 20 years, New Zealand's industry produced increasing quantities. When the First World War began, Britain called on New Zealand to produce all it could. Under a government contract, New Zealand had a guaranteed buyer and received prompt payment. Production expanded further.

In 1920, the government contract ended but New Zealand still had about a year's production in cold stores and production continued to grow. This resulted in wall of meat heading to Britain, including over one million carcasses that were transferred to Britain from the US. The resulting marketing chaos led to the establishment by act of parliament of the New Zealand Meat Producers Board, which had the power to control the export meat trade under the Meat Export Control Act.

The Board set about introducing orderly marketing of New Zealand meat in Great Britain, which was effectively New Zealand's only export market. In particular, the focus was on improving the efficiency and controlling costs in the

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supply chain. By 1939, about 9 million carcasses were sold in the UK compared with around 4 million in 1922.

In the late 1920s, the Board arranged trial shipments to Canada and the US, leading to 30,000 tons being exported by 1928-29. Any thoughts of developing that opportunity were short-lived, when the US doubled the import duty the following year, which effectively choked off the trade.

During the first 15 years of the Board's existence there were initiatives to promote New Zealand Lamb, to improve the efficiency of the supply chain and increase quality by standardising grade marks throughout the country and fixing a minimum number of carcasses that could be shipped in one parcel. Prior to this development, entrepreneurial spirit led to every shipper, exporter and processing plant having its own multiplicity of marks to identify and differentiate its product. The result was that considerable inefficiencies occurred in handling and re-handling of the product as individual parcels, which often consisted of only one carcass.

Shipping contracts were agreed for periods of two to three years, and coordination led to significant annual savings. Shipping freight-rate negotiations continued to be a role for the Board for nearly another 50 years.

Sea freight remains the predominant method of transport, but air freight was used from the mid 1960s. Lamb was regularly shipped by air to Canada in the late 1960s to put fresh lamb into retail stores during periods when the domestic supply was not available. Nevertheless, economics and improved sea shipping technologies mean sea freight remains the dominant method of transport.

At the outbreak of the Second World War in 1939, New Zealand and Britain agreed to negotiate annual bulk purchase agreements covering all New Zealand's meat exports, and freight rates were fixed by the British government. During the war there was extensive food rationing with much of the domestic British lamb directed to the major centres producing weaponry and munitions. New Zealand Lamb was widely available elsewhere – albeit subject to rationing.

Following the war, Britain remained the major market. That New Zealand Lamb could be delivered to the housewife more cheaply than that produced in the UK was a tribute to New Zealand's effective farming and marketing structures, but inevitably led to tensions. By 1950, the Board felt it should explore markets outside the UK. The two governments mutually agreed that some two percent could be exported to other markets. By the mid 1950s, markets were found throughout the world, including in Canada and the US, and marked the start of diversification that led to New Zealand now exporting to over 100 countries.

In 1958, the arrival in the US of the first shipment of boxed beef was nervously awaited by representatives of the New Zealand government and industry. A year earlier the rigorous US inspection procedures had resulted in some rejections of carcass product. Though the consignment passed inspection, the 80-lb cartons meant that stevedores used hooks to unload each carton resulting in damage. The solution mandated by the Board was standardization on a 60-lb carton.

To establish and develop the market for New Zealand Lamb, the Board determined that consistent supply was critical, so, using its statutory powers, it established a single company to manage the marketing of New Zealand Lamb. Thus started the development of a market, which is now the fourth largest by volume.

New Zealand's first beef shipment to Japan occurred in the late 1950s but it was unsuccessful. Mutton was better received. New Zealand was seeking outlets for the steady increase in production resulting from a growing sheep flock, the Japanese were seeking meat protein, and mutton was not subject to import restrictions.

Even while Britain's entry to the European Community (EC) was still being negotiated in the early 1970s, New Zealand's free and unrestricted entry to the UK changed. The UK introduced a duty of a little over £9 per ton, which was set to double and then treble over the following two years. New Zealand objected but the British were adamant that the duty would be applied. At the time, all other countries of the European Economic Community (EEC) effectively prevented imports of New Zealand Lamb by applying a range of measures including quantitative restrictions, fixed and variable duties and import licensing.

When Britain entered the EC on 1 January 1973, New Zealand's focus on trade barriers increased. At the time, New Zealand still exported over 280,000 tonnes (nearly 90%) of its lamb, 14,000 tonnes of beef and over 40,000 tonnes of variety meats to the UK. The beef trade disappeared overnight and New Zealand Lamb was subjected to the Common External Tariff of 20%.

In 1980, a voluntary restraint agreement (VRA) was agreed between New Zealand and the EC. New Zealand exports were restricted – to a total that eventually increased to 245,500 tonnes following EC enlargement – in return for a reduction of the duty – to 10%. In 1988, when a review of the EC sheepmeats regime began, a further volume reduction was sought by the EC. A temporary, four-year derogation was agreed with even lower volume (205,000 tonnes), a removal of the duty and restrictions on growth in chilled lamb exports from New Zealand to the EC.

During the GATT Uruguay Round, the VRA was converted to a Tariff-Rate Quota (TRQ) and expanded – to 225,000 tonnes initially.

In the early 1970s President Nixon lifted all quotas on imported beef. But soon after, cattlemen successfully lobbied for a countercyclical measure that would restrict imports in years when domestic production increased. The new Meat Import Law (MIL) came into existence at the end of 1979. Also during the late 1970s and into the 1980s, the US lamb industry lobbied hard for protection and petitioned the administrations for countervailing duty relief. In late

1982, the US sought from New Zealand (and other countries) a "voluntary restraint agreement" (VRA) under the 1979 MIL.

Restricted by such controls on access to its major markets New Zealand looked to develop alternatives. These included the Soviet Union and other eastern bloc countries – for beef and mutton – and members of the European Community – from Germany and France in the north to Greece in the south – for lamb. It also involved pushing into the retail sector in the UK as that market developed. Improved shipping services, containerization and changes to the domestic UK supply of lamb, as the EC's Sheepmeat Regime, the forerunner to the EU's Common Agricultural Policy (CAP) encouraged production, all proved important factors. Much of the development work was done by the New Zealand Meat Producers Board, but in addition many private entrepreneurs were encouraged to seek out markets in all corners of the world – the Middle East, the Pacific Islands, South America.

In 1985, New Zealand adopted an anti-nuclear policy that effectively prevented US Navy vessels from using New Zealand ports. In response the US withdrew New Zealand's "most favored nation" status, which required material injury to be proven in countervailing duty petitions. Almost immediately the US lamb industry petitioned the Department of Commerce alleging New Zealand producers, processors and exporters received subsidies. Commerce determined certain programs were countervailable as subsidies, notwithstanding that the New Zealand government had in its late 1984 budget removed overnight the vast majority of government support and that different measures with similar effects were operating in the US. A countervailing duty (CVD) equivalent to US$0.18/lb was applied. After a number of reviews, the CVD was deemed de minimis and Commerce instructed the US Customs Service not to collect the duties from 23 October 1990. However, the CVD was not formally removed from the US books until 1995 following a final International Trade Commission (ITC) review prompted by the New Zealand Meat Board.

Just three years later, the US industry filed a petition alleging lamb was being imported in such increased quantities as to be the substantial cause of serious injury or threat thereof to the domestic industry. Following its investigation, the US International Trade Commission (USITC) concurred and recommended import relief in the form of a tariff-rate quota (TRQ). President Clinton imposed a TRQ effective for three years from mid 1999. Subsequently, New Zealand (and Australia) took cases to the World Trade Organization (WTO) and prevailed. The measures were removed in November 2001, and the apparent injury suffered by the US industry was ameliorated by a $100m adjustment assistance package.

Over the 20-odd years since the early 1980s, the quality of New Zealand's access to its two major market areas – Europe and North America – has gradually improved, primarily through a combination of implementation of agreements previously made and developments in international trade policy. Nevertheless, New Zealand's meat exports to those two major markets continue to be restricted by tariff and non-tariff barriers. The industry response has been to diligently and continuously improve the quality and added-value of the product to capture the economic rent associated with tariff rate quotas. This is more evident in the lamb trade with the EU than in the beef trade with North America.

In the early 1980s over 80% of lamb exports to the EU were in carcass form, 100 years after the first shipment of carcasses. However, in the last 20 years that proportion has dropped to less than 10% as the market has developed and been developed in response to opportunities. In addition, New Zealand has responded to the market segments that desire fresh product by introducing technology that means chilled meat can be delivered from halfway round the world. The evolution has brought a number of benefits. New Zealand has captured more of the value of the product, which previously others captured and retained. By further processing the carcasses at source, market opportunities around the world could be developed to maximize returns.

Food Safety and Quality

The 1970s was a period of significant change. The US had enacted the Wholesome Meat Act in 1967 and the European Community's Third Country Veterinary Directive became significant to New Zealand when Great Britain's entry into the Community was confirmed in 1971 and took effect in 1973.

The new measures required major reconstruction. For example, one of the scheduled stages included replacing "all exposed timber in cold stores and freezers " with impervious materials and the "demolition and reconstruction of all storage facilities." The number of meat inspectors trebled. The process saw the end of wooden yards, and any permeable materials in the processing areas. It effectively meant total renovation of processing plants, almost all of which had been built in the first 20 years of the 20th century.

Though it ultimately placed New Zealand meat industry in a strong position, the experiences of this period were a stark reminder of the potential for non-tariff technical trade barriers to be imposed. Many of the standards that New Zealand was required to achieve during the 1980s are still not achieved by some parts of the domestic industry in the countries that imposed the requirements on New Zealand.

In 1982, the Meat Producer magazine, produced by the Meat Board, reported that Temple Grandin considered the New Zealand plants she visited that year "the cleanest I've ever visited." Such achievements paved the way for further improvements in quality and consistency.

New Zealand exports to over 100 countries, and complying with what are often competing standards is very challenging. Therefore, international forums, agreements and guidelines such as those of the World Trade Organization (WTO), Codex Alimentarius and the World Animal Health Organization (OIE) are vitally important to New Zealand. It is appropriate that Government provides a regulatory response to food safety. New Zealand's approach is one of risk management with a regulatory framework that specifies the food safety outcomes to be met by food producers. This is based on adoption of a science-based approach needed to meet the requirements of the over 100 countries to which the country exports meat. The model maximises industry's involvement in the safety of its products through the use of HACCP-based risk management principles.

Food quality is important also. Consumers have never had a greater range of products to choose from. The concept of food quality can include a wide and varied range of attributes. Many such as appearance, taste, texture, tenderness, convenience, smell and color require subjective appraisal. Other important factors include adherence to the specification, delivery in full and on time, production and processing methods. The final judge of quality is the consumer. For New Zealand's meat-producing industries the consumer is the only source of income. There are no subsidies or diversions, and therefore there is a total focus on meeting the needs of the market.

Given this market dependence and the competitive nature of the business, there is a very real incentive for individual firms to differentiate their activity and use quality attributes and initiatives to obtain higher prices. The ongoing financial viability of their business is a much more effective means to achieving quality improvement than through mandatory regulation.

Farming Without Subsidies – the last 20 years

This year marks the twentieth anniversary of a major shift in New Zealand agricultural policy. In November 1984, the left of center government set a budget that abolished overnight about 30 different production subsidies and export incentives. This was the first stage in a series of major market reforms introduced to the New Zealand economy. Prior to that, for more than 20 years, the New Zealand taxpayer had provided increasing subsidies to stimulate production and generate export income in attempts to defend against the oil shocks of the 1970s and the effect of Britain joining the EEC. Given the high and unsustainable levels of support, most farmers were farming for subsides. From late 1984 they had to learn to farm without subsidies. In the early 1980s, nearly 40% of farm income came in the form of government payments. One year later almost all that support had been removed.

In early 1985, the New Zealand dollar was floated having previously been pegged to the US dollar. The value of the New Zealand dollar rose sharply, placing further significant pressure on the exporting sector. Interest rates climbed as the government sought, like many other governments, to bring inflation under control. That added further pressure to the agricultural sector. By 1987, international prices had fallen but input prices continued to rise. In addition, land prices had fallen sharply from the artificially high levels that had resulted from capitalization of subsidies. The debt problems of many farmers were exacerbated.

At the time, there were official predictions that 8,000 farm businesses – about 10% of the total – would fail, but in the final analysis only about 800 or 1% of the total number were forced to sell.

The farming industry, which saw itself as the backbone of the economy, felt that the government had turned its back. However, after a few difficult years of adjustment in the late 1980s, the farming sector went on to become very productive and profitable. Far from declining, the sector's contribution to the New Zealand economy has increased. In 1986-87, agriculture accounted for 14% of Gross Domestic Product (GDP). By 1990-91 the vast majority of government support had been removed and that support remaining was on a fast-track path to removal. Agriculture contributed 13.5% of GDP. From 1990-91 to 2002-03, New Zealand's GDP grew by 43 percent – from NZ$80 billion to $114 billion. However, during this period agricultural GDP grew by 80% and increased its contribution to 17 percent of GDP. The removal of subsidies resulted in impressive productivity growth as farmers have focused on profitability based on returns from the market, not from the taxpayer.

The deregulation of the New Zealand economy also involved the progressive roll back of the powers of producer boards such as the New Zealand Meat Producers Board and considerable rationalization in the meat processing industry. In 1982, the Meat Board had used its statutory powers to intervene in the market and take total control of the export of beef and lamb. Marketing and production were restructured resulting in significant changes to ownership in the meat industry. These were extremely turbulent times but led to a sharply different processing and exporting industry by the end of the decade.

The majority of the processing industry is now owned by farmer shareholders in cooperatives or publicly listed and publicly unlisted company structures compared with the substantial foreign, mostly British, ownership of most of the twentieth century. New Zealand now has the lowest level of agricultural support in the OECD – just 1% of the value of agricultural production in 2002 compared with the OECD average of 31%[1]. The 1% is mostly made up of publicly funded agricultural research funding.

Multilateralism

As a very small country, both politically and economically, for which exporting is a vitally important part of its national income, New Zealand is understandably a very strong supporter of a multilateral approach to many issues. International multilateral forums and agreements are very

[1] *OECD in Figures: Statistics on the Member Countries, OECD Observer 2003/Supplement 1, p 26.*

important in helping to prevent unjustified restrictions on New Zealand's trade. The Sanitary and Phyto-Sanitary (SPS) Agreement negotiated during the GATT Uruguay Round is one example. The SPS Agreement is strongly supported and advocated by New Zealand and its agriculture industries because prior to its implementation SPS measures could and were often imposed with little discipline by importing countries. Indeed, it was very easy for importing countries to impose measures without considering alternative approaches or science-based risk assessments of the level of protection required and provided by countries exporting to their market. And, it was very difficult to challenge those measures.

It is easy to see the value of international standards to a nation that exports meat to the number of countries that New Zealand does, so New Zealand plays a significant role in SPS and international standard-setting fora. The concepts of equivalence, harmonization, transparency, consistency and regionalization are very valuable in that context.

Two examples:

- The Food Safety and Inspection Service (FSIS) of the USDA recognizes New Zealand's microbiological monitoring and testing program as equivalent to its Mega Reg – Pathogen Reduction; Hazard Analysis and Critical Control Point (HACCP) Final Rule, which rightly focuses on the food safety outcome rather than prescribing that New Zealand's processes are the same as those of the US, given both are operated under quite different conditions and environments.
- In 1996, New Zealand and the EU signed the New Zealand/EU Veterinary Agreement. It was partially implemented in 1997, but it took a further six years of extensive consultations and negotiations between the two to achieve full implementation, which occurred on 1 February 2003.

New Zealand's Meat Markets in 2004

With New Zealand's exports driven by profitability, high-returning markets in developed countries remain the primary targets, but New Zealand is understandably sensitive to the introduction of measures that impact on returns.

North America (the US, Canada and Mexico) remains the dominant market for beef. Indeed, the US is the largest single market for New Zealand Beef accounting for 49% of production in fiscal 2002-03. The New Zealand domestic market is a distant second at 18% of production. Canada was the third-largest market (10%) followed by South Korea, Taiwan and Japan which each accounted for 4-5% of production.

The EU is the major export destination for New Zealand Lamb. In fiscal 2002-03, 51% of New Zealand's lamb exports were shipped to the EU. Within the EU, the UK dominates. China was the second-largest export market by volume. It is followed by France and the US.

Conclusion

New Zealand has a very long history of exporting meat. Its farming and meat-producing and exporting sectors have developed in response to "the global market" and have for many years exported to over 100 countries. This has required developing responses to a wide range of political, legislative and commercial issues. Because of the very significant reliance that New Zealand has on international markets, it has a strong interest in the development, maintenance and evolution of international standards in all areas of trade. This interest is manifest in the importance New Zealand places on participation in international fora.

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