



NEW ZEALAND

Meat industry in New Zealand

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Overview

New Zealand has a sophisticated meat industry that produces outstanding, pasture-fed and naturally raised meat. The products are tender, flavoursome, healthy and customised for clients around the world.

The industry enjoys a unique combination of competitive advantages, including industry knowledge gained from a long history as farmers, world-leading research and development and support infrastructure, and stringent biosecurity standards. This combination of factors allows New Zealand to stand ahead of its competitors and consistently improve its reputation for quality and innovation in the global market.

A highly developed export industry

Meat is an important component of the New Zealand economy and its second-largest food export, worth NZ\$4.67 billion in 2006, approximately 13 percent of the country's total exports.

Beef and lamb are the major products. Other meat exports include venison, veal, goat, poultry, offal and co-products such as variety meats and sausage casings. Animal-derived raw materials from New Zealand are also sought after by the pharmaceutical and natural medicine industries.

Technical strength

New Zealand meat suppliers are committed to meeting market requirements, providing top quality products and excellent service.

New Zealand farmers receive virtually no government support, and this has driven new, efficient farming and processing methods that are internationally recognised.

This information was prepared by New Zealand Trade and Enterprise. Visit newzealand.com/business for more information about New Zealand and its export industries.



The technical competency of the industry is extremely high. Industry knows what is needed to consistently produce top quality animals – the grass types, the farm management techniques, the technology of genetics – and uses this knowledge to best advantage.

Traceable and disease-free

New Zealand's strict biosecurity controls, quality control processes, and geographic isolation have resulted in an animal disease-free status, recognised by the World Organisation for Animal Health (OIE). The OIE has officially classified New Zealand as being free of foot-and-mouth disease and rinderpest, and possessing a "negligible risk" of scrapie. New Zealand is one of only four countries to be free of bovine spongiform encephalopathy (BSE or "mad cow" disease).

To gain entry and maintain access to global markets including the European Union and the United States, New Zealand has implemented processes that meet the strictest health and safety standards in the world.

Increasing numbers of international retailers are looking for traceability – for evidence to show consumers how and where the meat has been grown, fed, fattened and processed. Electronic databases have been used by New Zealand farmers for over eight years that allow each animal to be recorded from conception to export. Many New Zealand farmers routinely use these databases as part of the quality assurance system to support meat processor/exporters' own quality assurance. This system is being enlarged with the National Animal Identification and Traceability Project (NAIT) that will standardise RFID eartags and allow for database interrogation for biosecurity.

Most meat processors are bar-coding for traceability of processed product, although new systems including RFID are also being introduced into processing plants.

Sustainable

New Zealand is one of the world's premier locations for pastoral farming. Its sheep and cattle are raised in free-range open fields year-round, and live on a natural diet of fresh pasture, grass and nutrient-rich clover – eliminating the need for grain feeding and nutritional supplements.

A temperate climate also means animals do not need energy-intensive housing during the winter months. These factors combine to make New Zealand agriculture more energy efficient and substantially less reliant on fertilisers, pesticides and energy input than practices in North Asia, Europe and North America. It also means less use of natural resources, such as fossil fuels, to provide grains and processed animal feeds.

Animal welfare

New Zealand farmers and meat processors are considered to be world leading in farm management techniques and animal health. Farmers in



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New Zealand maintain a particular affinity with the animals that provide their livelihood. Animal welfare standards are exceptionally high and are protected by legislation.

Compared with other countries, New Zealand's livestock live a more "natural" life – their freedom of movement is rarely restricted. Healthier, less stressed animals produce higher quality meat with a better colour and lower pH level.

Fast facts

Exports

- The value of New Zealand's beef, sheep, lamb and deer meat exports has increased 75 percent over the period 1989 to 2006, an aggregate increase from NZ\$2.5 billion to NZ\$4.3 billion. In comparison, quantity has remained relatively static over this period, increasing 27 percent from 614,050 to 781,123 tonnes. This indicates an increased price per kilogram achieved in key export markets.
- Approximately 90 percent of sheep and lamb and 80 percent of beef meat produced each year is exported.
- Export statistics clearly indicate that New Zealand meat exports have been trending away from products including carcasses and half carcasses and moving into products where more value is added locally – effectively shifting the value chain back to New Zealand shores.
- Approximately 99 percent of meat exports leave New Zealand shores by sea.
- New Zealand is a world leader for sheep and beef production, achieving this status without government assistance, and despite quota restrictions and trade barriers in the majority of our meat markets.
- New Zealand's key export markets for meat products have traditionally been the United States and the European Union. Together these two markets account for 54 percent of meat exports by volume in 2006.
- In 2006, 85 percent of New Zealand meat – over three-quarters of a million tonnes of processed product – went to 100 overseas markets.
- Sixty percent of beef exports went to North America and 28 percent to North Asia in the year to September 2006.
- Fifty-three percent of lamb exports went to the European Union, 13 percent to North America and 13 percent to North Asia in the September year 2006.
- Germany is New Zealand's largest single market for venison, accounting for approximately 45 percent of export earnings. The United States is the second largest single market with around 12 percent of export earnings.



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Value added and specialist products

- The New Zealand meat industry has made significant growth in moving towards value-added exports. In 2004, the industry increased its percentage of value-added exports to 65 percent, up from 51 percent in 2002. (source: Massey University Value- Added Food Study 2005).
- Today's industry is adding greater value through product development and focusing on niche marketing strategies. For example, New Zealand red meat exporters are integrating their marketing with overseas retailers to provide out-of-season product for the northern hemisphere.
- New Zealand meat processors' responsiveness to consumer demands has contributed to the growth in export value derived from cut meat products.
- New Zealand is the world's largest exporter of Halal slaughtered sheepmeat, and is a significant exporter of Halal slaughtered beef. New Zealand lamb and beef that is certified Halal has been slaughtered in accordance with the Islamic Shariah, using humane, hygienic techniques.
- Over the past decade New Zealand has introduced Wagyu herds. Wagyu beef is renowned for flavour and succulence, and fetches premium prices in many international beef markets.
- New Zealand has small organic sheep and beef industries, operating under standards developed by private sector accreditation organisations such as Bio-Gro.

Animals

- The main farmed species are sheep (41 million), cattle (9.6 million), deer (1.5 million) and goats (0.15 million). Small populations of non-traditional farming species have been introduced, including llama, alpaca, and water buffalo.
- New Zealand has the largest deer farming industry in the world. It has around half the global farmed deer population.
- There are an estimated 3,800 farms in New Zealand with deer. These farms range in size from smaller lifestyle properties to extensive stations.
- In 2002 it was estimated that there were 153,000 goats in New Zealand. Seventy-one percent of these were farmed in the North Island.

Statistics

Value of New Zealand meat exports (year ended December) (FOB millions of NZ\$)

	2004	2005	2006
Sheep or goats	2,247.60	2,377.09	2,400.92
Beef, frozen	1,691.65	1,600.21	1,562.02
Venison (yr to Nov)	188.30	211.85	251.36
Beef fresh/chilled	212.58	200.00	241.37
Edible animal offal	201.49	242.93	173.86
Poultry meat, offal	7.89	9.18	9.04
Pork, fresh or frozen	0.40	0.32	1.06
TOTAL	4,549.91	4,641.58	4,639.64

Source: Statistics New Zealand

The largest export markets for New Zealand meat are:

- United States
- United Kingdom
- Germany
- Japan
- South Korea
- France
- Belgium
- Canada
- Taiwan

Source: World Trade Atlas

Food safety

New Zealand sets the highest standards for its food producers to ensure that the country remains a world leader in food safety, applying a robust regulatory regime from farm to fork.

Because the New Zealand economy is largely reliant on agricultural exports, New Zealanders have a strong commitment to protecting the integrity of these products.

- The New Zealand Food Safety Authority (NZFSA) is responsible for all food-related legislation. It facilitates exports of food and food by-products to more than 180 countries by providing government-to-government assurances that the animal, dairy or plant export products comply with their standards, and are based on sound science and risk-based approval. Around 200,000 export certificates are issued annually by NZFSA for animal products, including seafood.



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- E-cert is world leading food safety technology. An electronic certification system, it was devised by NZFSA to track food product movements within New Zealand from one premises to another and to the importing country. This provides food security and sanitary guarantees for the most demanding importers. The technology has featured prominently in government discussions with key export markets, including the European Union and China.
- The Animal Products Act is the main piece of legislation for New Zealand food exports. NZFSA administers the act which is responsible for setting, and ensuring compliance with, standards for the primary processing and export of meat, game, seafood, honey and other animal products.
- Under the Biosecurity Act, Biosecurity New Zealand provides surveillance systems and programmes that enable assurances to be given about the status of animal and plant health.
- An extensive Domestic Food Review has been undertaken to identify the most effective means of protecting consumers, harmonising food safety legislation for New Zealand food processors, and positioning the vital New Zealand food sector for the future. The outcome of the review will be a new Food Act that will enable NZFSA to rationalise, align and streamline processes, ensure effective and consistent approaches to food safety and suitability right across the food chain, and keep compliance costs down.
- Individual companies adhere to internationally recognised and innovative quality assurance systems such as ISO. The proportion of food and beverage companies in New Zealand that are certified to ISO standards is amongst the highest in the world.
- Food sectors are developing their own environmental best practice and quality assurance programmes. For example, Deer QA is the deer industry's quality assurance programme. It encompasses animal welfare, animal health, food safety, identification and traceability and environmental issues.

Traceability

The National Animal Identification and Tracing Project (NAIT, www.nait.org.nz) project is developing a universal livestock identification system, supported by a core registry of data linking people, property and animals. It was initiated in response to increasing consumer demand for traceability, to help improve market access, and to improve tracing of stock in the event of disease outbreak, and/or other on and off-farm purposes. It is a joint government/industry project.

Examples of innovation

Productivity and efficiency

- A number of processing companies employ highly sophisticated techniques, including investigating robotics, in cutting and



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packaging meat to the exacting standards for high value export markets.

- Industrial Research Ltd (IRL) scientists are developing an automated boning room for meat processing plants. This could eliminate up to 30 percent of a butcher's time spent picking, placing and delivering cuts of meat. IRL has also developed and commercialised robot systems for processing sheep carcasses.
- IRL has already developed a human operated robot that has been found to reduce damage to the carcass.
- AgResearch scientists are working on a project to improve the health-producing attributes of meat and milk by modifying the diet of sheep to include "fattier" grasses. Initial results have shown the sheep have better feed efficiency, performing the same on 16 percent less feed, meaning greater farm efficiencies and contributing to sustainable farming practices.
- An electronic quota management system has further improved meat industry efficiency.
- Immersion chilling is a more efficient way of cooling meat. Developed by AgResearch, immersion chilling works by submerging the meat in cold fluid, allowing products to be cooled over a shorter time period, reducing exposure to microbial growth, using less energy, reducing meat cut drip loss, extending retail display life and reducing time to market.
- Significant investment in genetics and cultivars (feed) has driven increased production from lower farm areas.
- Farmers and researchers have continued to develop and improve grass types and fertilisers that enhance yields without the need for growth supplements.

Packaging

- Celentis Non-Invasive Freezing Detector measures the degree of unfrozen water in a product using low powered microwaves. It can process up to 10 cartons a minute on a conveyor belt system and is extremely safe and accurate.
- New Zealand world-leading packaging technologies enable beef to be transported chilled, by sea or air, and arrive in perfect condition. Chilled New Zealand beef continues to tenderise while being shipped. This is due to enzymes naturally present in the meat.
- Product innovations in sheepmeat include rapid-cook cuts, cook from frozen product, marinated products and sheepmeat in a variety of ready meals.

Animal health and breeding

- The \$17 million state-of-the-art Hopkirk Research Institute opened in May 2007. It focuses on the health and welfare of pastoral livestock and is a collaborative venture between AgResearch and Massey University.
- A sheep database and genetic evaluation system called SIL. Performance and pedigree information is collected on farm, to



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predict genetic merit for individual sheep. These predictions help breeders and ram buyers make selection decisions.

- FlockMaster™ is a learning and support programme designed to help sheep farmers improve productivity and lambing percentages. It is a Meat and Wool New Zealand initiative that AgResearch and PGG Wrightson will deliver.

Specialist processing – Halal meat products

- New Zealand is the world's largest exporter of Halal-slaughtered sheep meat.
- New Zealand meat processors, the Federation of Islamic Associations of New Zealand (FIANZ), and New Zealand Islamic Meat Management (NZIMM) have worked co-operatively to develop the market.
- FIANZ and NZIMM have also taken a leading role in developing New Zealand's Halal technical capabilities, processes and certification system.
- The systems are monitored by two independent Halal certifiers.

Environmental

- Meat and Wool New Zealand is a partner in the Pastoral Greenhouse Gas Research Consortium (PGGRC, www.pggrc.co.nz). The PGGRC research programme provides New Zealand livestock farmers with the knowledge and tools to mitigate greenhouse gas emissions from the agricultural sector.
- The MAF Sustainable Farming Fund supports projects that will contribute to improving the financial and environmental performance of the land-based productive sectors.
- Farming practices revolve around pasture feeding which is seasonal and essentially self-sufficient. Pasture feeding is also more akin to an animal's natural state, meaning livestock are more relaxed resulting in higher quality meat. A pasture fed diet eliminates the need for nutrient supplements and added hormones.

Industry structure

The meat industry is supported by a diverse range of internationally recognised research organisations and a number of proactive trade promotion agencies.

Meat processors and exporters

New Zealand meat processing is world-leading in technology, product quality and food safety. The industry focuses on converting premium animals into value-added meat products, which meet retail and food service demands.

There are around 100 meat exporters in New Zealand, 33 of which are also processors. There has been increasing consolidation in processing since the mid-1990s. The four major companies now supplying the



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majority of product are PPCS, AFFCO, the Alliance Group and ANZCO Foods.

There is a high degree of farmer ownership in meat processing companies. Farmers' cooperatives make up around 60 percent of New Zealand's sheep meat market and 35 percent of beef. Alliance and PPCS are both farmer-owned cooperatives. There are also a number of other privately owned and significant companies that control the balance of production.

Sheep, beef and deer farms span the country, with several of the major meat processors and exporters locating plants in Otago, Southland and Hawkes Bay.

For a list of meat processors and exporters see the Meat and Wool New Zealand trade directory:

www.mwnztradedirectory.co.nz/directory/dir/Meat%20Directory/

Industry bodies

Meat and Wool New Zealand

Website: www.meatandwoolnz.com

Meat and Wool New Zealand is funded by livestock producers through levies on all beef, sheep and goats slaughtered, and wool levies from shorn sheep. This income is used primarily to increase preference for New Zealand beef, sheep and goat meat internationally and domestically. It also helps maintain and extend trade access for New Zealand red meat, funds research and development to help improve farm returns, and provides wool technical advice.

Deer Industry New Zealand

Website: www.deernz.org.nz

Deer Industry New Zealand promotes and helps develop the deer industry, in particular venison and velvet. It has a worldwide coordination role through research and promoting quality products derived from deer.

Cervena Trust

Website: www.cervena.com

The Cervena Trust owns and manages the Cervena appellation on behalf of the venison industry, and does not trade in product. It grants licenses to the franchisees. Cervena is distinguished from all other venison by the trademarked assurance that the meat has been naturally produced, and processed in accredited plants. In order to qualify as Cervena, the animals must be three years or under and raised in the most natural way – free range on farms ranging from 200 to over 2,000 acres, fed grass with natural supplements such as hay, and given no hormones or steroids.

Meat Industry Association

Website: www.mia.co.nz



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The Meat Industry Association (MIA) represents meat processors, marketers and exporters. It promotes the interests of industry participants in matters that may impact on processing and exporting, and provides a forum for industry participants to communicate industry issues to government agencies, trade bodies and other external agencies.

Research

Meat and Wool New Zealand Sheep and Beef Council

Website: www.meatandwoolnz.co.nz/main.cfm?id=358

The Sheep and Beef Council is a farmer organisation funded by Meat and Wool New Zealand. It provides leadership in the beef industry through developing regional networks and activities that allow Meat and Wool New Zealand to identify research needs and ensure New Zealand sheep and beef farmers have the information they need.

MIRINZ Food Technology and Research Incorporated

Website: www.agresearch.co.nz/mirinzi

MIRINZ Food Technology and Research is jointly governed by Meat and Wool New Zealand and the New Zealand Meat Industry Association Inc. The MIRINZ group provides funding for red meat “industry good” projects. Its key objectives are to promote and conduct research and development, to provide research, development, advisory and consulting services to the meat and other food industries, and to publicise results of research and development and encourage the availability and adoption of new technology.

Meat Biologics Research Ltd

Website: www.nzbio.org.nz

Meat Biologics Research Ltd (MBRL) is developing innovative added value products from New Zealand meat to meet the demands of the nutraceutical and food industries worldwide. MBRL commissions leading scientific research to develop these products and to support product claims.

Research institutes

Several crown-owned research and development companies and institutes work with the meat and processing industries. These include:

- Industrial Research Ltd (IRL), www.irl.cri.nz
- AgResearch, www.agresearch.co.nz

Other private research and industry funded research organisations also exist, many in partnership with research units at the state universities, such as Lincoln University.



Regulatory bodies

The New Zealand Meat Board

Website: www.nzmeatboard.org

The New Zealand Meat Board registers meat companies to export to markets all over the world in accordance with the Meat Board Act 2004. The Board has established, and now manages, allocation systems for three country-specific tariff rate quotas for export markets, which have TRQs to be administered by New Zealand.

New Zealand Food Safety Authority

Website: www.nzfsa.org.nz

New Zealand Food Safety Authority protects and promotes public health and safety in relation to food and food-related products. It develops economic opportunities as well by facilitating access to international markets for these products.

International quotes

"I prefer New Zealand lamb because it has more real lamb flavour. I like it for its leanness too."

Josie Le Balch, chef/owner of Josie Restaurant, United States

"New Zealand lamb is by far my favourite lamb..."

Peter Gordon, co-owner of The Providores in London and expat New Zealander (source: www.asiafood.org)

"New Zealand Beef tastes as good as it looks. It tastes like beef should taste, fine in texture, juicy and succulent... It delivers on the first mouthful."

Peter Thornley, executive chef at Bracu, four times winner of Singapore Chef of the Year

"Products like Cervena fall right into today's menu mindset, which is all about taste and nutrition."

Andy Birsch, *Gourmet Magazine*

Industry contacts

AFFCO New Zealand Ltd

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Website: www.affco.co.nz

Agresearch

Website: www.agresearch.co.nz

The research partner to the New Zealand meat industry.

AgriQuality New Zealand

Website: www.agriquality.co.nz

A state-owned enterprise that provides assurance, quality and bio-security services across the food supply chain. The most accredited provider in the southern hemisphere.

Alliance Group Ltd

Website: www.alliance.co.nz

A farmer-owned co-operative that processes and exports meat.

ANZCO Foods

Website: www.angelbay.co.nz

A private company that processes and markets meat.

Blue Sky Meats Ltd and Horizon Meats

Website: www.bluesky.co.nz, www.lamb.co.nz

Blue Sky Meats is a meat processor. Its partner Horizon Meats is a specialist meat marketing company.

Biosecurity New Zealand

Website: www.biosecurity.govt.nz

DEEResearch

Website: www.deerresearch.org.nz

Deer Industry New Zealand invests considerably in DEEResearch, who in turn work closely with AgResearch and is actively involved in a range of research projects.

Federated Farmers

Website: www.fedfarm.org.nz

Federated Farmers provides a platform for policy development, farmer advocacy, lobbying, and information dissemination.

Federation of Islamic Associations of New Zealand (FIANZ)

Website: www.fianz.co.nz

This association has exclusive Halal certifying rights for all New Zealand meat exported to Saudi Arabia, the United Arab Emirates and Kuwait. Its Halal certificates are also accepted in all other countries where New Zealand products are exported.

Goat Advisory Group

Email: phyllis.mangin@meatandwoolnz.com



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A mixture of goat farmers and industry representatives, the group's role includes acting in an advisory role to Meat and Wool New Zealand on goat industry issues.

Industrial Research Ltd

Website: www.irl.cri.nz

A research partner to the New Zealand meat industry.

Massey University

Website: <http://vet-school.massey.ac.nz/>

Massey University hosts one of the top five veterinary schools worldwide.

Meat Biologics Research Ltd

Website: www.nzbio.org.nz

Meat Industry Association of New Zealand

Website: www.mia.co.nz

A voluntary trade association representing New Zealand meat processors, marketers and exporters.

Meat and Wool New Zealand

Website: www.meatandwoolnz.com

Meat and Wool New Zealand's goal is to increase domestic and international preference for New Zealand meat and wool. It engages in technical research, facilitates trade development and provides business and economic services to meat industry participants.

Ministry of Agriculture and Forestry

Website: www.maf.govt.nz

The Ministry of Agriculture and Forestry (MAF) is the government ministry that advises, regulates and informs on issues and services relating to the agriculture industry and rural affairs in New Zealand. It also seeks to enhance New Zealand's bio-security status.

AgResearch MIRINZ

Website: www.agresearch.co.nz

With over 50 years' experience, AgResearch MIRINZ provides a mix of research and development and consulting services to the red meat processing industry.

New Zealand Deer Farmers Association

Website: www.deernz.org.nz

This association assists in optimising sustainable returns in the industry, and acts as an interface to the agricultural industry and the public. All farmers producing venison or deer velvet are members.

New Zealand Food Safety Authority

Website: www.nzfsa.govt.nz



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The New Zealand Food Safety Authority (NZFSA) is responsible for the safety and wholesomeness of New Zealand meat shipped to retailer's shelves and restaurant tables throughout the world.

New Zealand Industry Training Organisation

Website: www.nzito.co.nz

The New Zealand Industry Training Organisation (NZITO) provides specialist training for the meat and dairy sectors.

New Zealand Wagyu Breeders Association Inc

Contact: Gordon Dennis, President

Phone: +64 7 315 7883

Email: g.dennis@xtra.co.nz

The association of the highly sought after Wagyu breed.

Pork Industry Board

Website: www.pork.co.nz

This board helps New Zealand pig farmers attain the best possible return for pig and pork products.

Poultry Industry Association of NZ (Inc)

Website: www.pianz.org.nz

PPCS Ltd

Website: www.ppcs.co.nz

PPCS is a farmer-owned cooperative that processes and exports meat.

Wallace Corporation Ltd

Website: www.wallace.co.nz

Wallace Corporation Ltd processes and exports meat.