



INTRODUCING NEW ZEALAND'S PRIMARY INDUSTRIES

An outline of New Zealand's primary production and regulatory system for export



Growing and Protecting New Zealand

Publisher

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OVERVIEW

New Zealand is an island nation with a temperate climate and an economy based largely on its primary industries, with exports of primary food-based products to more than 200 world markets.

Our comparative isolation means that we do not have many of the pests and diseases found elsewhere in the world. Maintenance of this pest-free status has always been a priority for the country's growers, government, and people.

Pastoral farming is New Zealand's largest primary industry and there are also significant areas of farmed trees and horticultural growing areas. From the beginning, science and its application has played an important role in developing these industries. As a result, many New Zealand agronomic and food research and learning institutes are among the world's best.

The importance of food exports to New Zealand has led to ongoing government assurance, monitoring and export documentation programmes. The first was developed for dairy products – around 125 years ago. For over 100 years the New Zealand government has provided safety and suitability assurance for dairy, meat and manufactured foods.

The role of MPI

The Ministry for Primary Industries (MPI) establishes and administers the standards and regulations that are set around New Zealand's food safety, biosecurity and primary production systems on a national basis.

Risk management and science provide the framework for MPI's regulatory systems and are guiding principles for the setting of standards. Standards are largely outcome-based, reflecting the high level of maturity and control that exists across all players in New Zealand's primary production and processing sectors. MPI and recognised agencies routinely audit and monitor aspects of these systems to ensure that standards continue to be met.

MPI employs over 2300 staff and has strong relationships with other New Zealand government agencies, primarily in the economic, border, and natural resources sectors.

Official Assurances

MPI is responsible for attesting to the safety and suitability of New Zealand exports. The official assurances (export certificates) MPI provides to foreign governments are based on verification systems that confirm standards and requirements have been met.



PRIMARY PRODUCTION SYSTEMS

New Zealand's primary production systems

Commercial businesses operating in the primary sector must meet a range of minimum standards set by Government around food safety, biosecurity, animal welfare, environmental performance, and wages and working conditions.

Food safety, biosecurity and animal welfare regulations are administered by MPI. Local government agencies (regional councils) manage and monitor the environmental performance of businesses involved in farming, horticulture, forestry, and aquaculture. Other central government agencies oversee the health and safety of workers in New Zealand.

The government does not provide direct economic support for any of New Zealand's primary sectors and plays no role in setting prices for agricultural or horticultural products. The role of government is to work with industry to assist in funding research and development programmes, education and training, as well as organise and contribute to biosecurity and pest and disease control at the community level. It also provides some assistance in the case of large-scale climatic disasters (e.g. floods). This support is managed through MPI. MPI also manages and controls the catch limits across a range of inshore, pelagic and deep-water fisheries, to ensure their sustainable use.

Livestock farming

Year-round grass growth means pastoral farming to produce dairy products, red meat and wool can be highly efficient and profitable.

Horticulture

A range of temperate crops are grown, most significantly: kiwifruit, apples, avocados, grapes for wine production, and vegetables.

Seafood

New Zealand's Exclusive Economic Zone supports significant fisheries, while aquaculture products include salmon, mussels, and oysters.

Forestry

Forestry is almost completely based around plantations of farmed trees: comprising mainly radiata pine, Douglas fir, and eucalyptus.

Other

Other primary production includes: arable and seed crops; other horticultural crops; cut flowers; and other animal products.



TRADE

Primary sector exports account for more than 70 percent of all New Zealand's exported goods.

An important part of MPI's role is to strengthen trade relations and improve market access opportunities with other countries. New Zealand is party to international treaties and agreements, facilitating the exchange of goods between countries. Many of these include frameworks for the standards or measures applied to trade in primary products.



Overview of New Zealand Primary Exports by Market Value (2016)

INTERNATIONAL STANDARDS

New Zealand is an active participant in international standard-setting bodies associated with food safety and the protection of human, plant and animal health. As part of this, MPI provides specialised scientific input into the Codex Alimentarius Commission, the International Plant Protection Convention (IPPC) and the World Organisation for Animal Health (OIE), as well as involvement in the World Trade Organisation (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures.

REGULATORY MODEL

The New Zealand regulatory model places responsibility on businesses to demonstrate compliance with the standards that MPI sets.

This encourages businesses to understand the risks associated with their products and production processes.

The current regulatory model is a preventative risk and science based system where industry has responsibility for producing safe food or other products, as well as demonstrating they have operating systems and processes in place to achieve this with Government oversight.

Role of the Regulator

MPI develops and enforces legislative standards and requirements for New Zealand's primary production and food businesses and the import and export of primary products.

In the food sector, the Ministry puts in place and enforces food safety laws and requires operators to have MPI approved and registered risk-based management programmes that are independently verified.

The Ministry also provides official assurances in the form of export certificates to foreign governments that our primary exports meet both New Zealand and additional overseas market requirements.

Verifying business compliance

Verifiers ensure businesses are operating in compliance with their MPI approved risk-based management programmes. They are accredited to ISO17020 and audited annually by internationally recognised accreditation bodies. MPI has its own verifiers, and also approves third-party agencies to carry out a range of verification functions on its behalf. A register of the MPI approved agencies is available on the website: **www.mpi.govt.nz**.

The Ministry's own Verification Services team provides verification and certification services for all meat, seafood and some dairy facilities, including issuing MPI export certificates for animal and animal products exported from New Zealand. The team also monitors imported foods, and biosecurity containment facilities for imports.

MPI Systems Audit

MPI regularly audits and monitors the overall safety and verification systems for effectiveness and efficiency, as well as assessing all third-party agencies and persons doing verification. Where necessary, MPI also carries out audits on individual operators to ensure regulatory compliance with risk-based measures.

Role of business operators

Food safety or other regulatory measures are clearly established by MPI and provided to private sector businesses. These businesses (or 'operators' under New Zealand law) are responsible for developing risk-based management programmes that achieve those outcomes. This may involve compliance with primary levels of legislation – Acts, or other official regulations and standards. Operators also undertake self-audits or inspections to ensure their programmes result in products that comply with regulatory requirements, and are fit for their intended purpose, e.g. the food they produce is safe and suitable, whether for domestic consumption or for an export market.



FOOD SYSTEM

Ninety percent of food produced in New Zealand is exported, and all food exported must first meet standards for domestic food supply.

New Zealand's food safety system ensures that safe and suitable food is available domestically and for export. Hazards associated with microbiological chemicals and physical contaminants are minimised. Packaging, labelling, storage and transport of all food products are also covered in MPI legislation that supports this system. MPI carries out system-wide audits and monitoring to ensure all growers, producers and food processors in New Zealand comply with the law.

KEY FOOD LEGISLATION

Food Act

All food sold in New Zealand must comply with the **Food Act** – which sets out standards and requirements to ensure food for sale is safe and suitable. These standards include hygienic practice, labelling, composition (substances that can be added to food), contaminants and residues and microbiological limits.

The Act requires food producers and retailers to implement documented measures and controls under a food control plan, to ensure food produced is safe and suitable. Registered by MPI, they undergo regular inspection by MPI recognised third-party agencies or local government inspectors. More information about the Food Act is available at www.mpi.govt.nz.

Animal Products Act

The **Animal Products Act** regulates the production and processing of all animal material and products in New Zealand. This includes the slaughter, processing and sale of meat, seafood, dairy, bee products, poultry and eggs and non-food products, whether for distribution on the domestic market, or for export. All animal products businesses undertaking slaughter and dressing of animals for meat, milking animals for dairy products or harvesting fish, as well as those needing export certification, must develop and follow a documented risk management programme. These are legally binding documents in which operators set out how they will manage their biological, chemical and physical hazards, and follow hazard analysis and critical control point (HACCP) principles. The programmes are registered with the Ministry and independently verified on an ongoing basis – to ensure operators continue to deliver products fit for their intended purpose.

Food produced under the Animal Products Act is considered to comply with the Food Act. More information about the Animal Products Act is available at **www.mpi.govt.nz**.

Agricultural Compounds and Veterinary Medicines Act

The Agricultural Compounds and Veterinary

Medicines Act regulates all agricultural compounds, veterinary medicines and vertebrate toxic agents, which are imported, manufactured, sold or used in New Zealand including fertilisers, pet food, animal



feed and medicines used for animal health.

Before any agricultural compounds and veterinary medicines can be sold for use in New Zealand, they must be registered by MPI under the Act.

All compounds and medicines currently registered under the Act are listed on the MPI website at www.mpi.govt.nz.

Wine Act

The **Wine Act** sets the standards for all wine operators, including grape wine, fruit wine, vegetable wine, cider and mead.

Wine producers need to have a wine standards management plan. These are documents that demonstrate how winemakers comply with the requirements of the Wine Act, including wine standards, application of hazard analysis and critical control points (HACCP) to winemaking, and recall procedures. More information about the Wine Act is available at www.mpi.govt.nz.

Australia – New Zealand joint food standards

A Food Standards Treaty which New Zealand signed with Australia in 1995, sets up a joint food standards system. Food that is able to be legally sold in New Zealand may also be sold in Australia, and vice versa. A bi-national body – Food Standards Australia New Zealand (FSANZ) – sets requirements of the joint system, especially for composition and labelling. More information on FSANZ can be found at www.foodstandards.govt.nz.

Organic labelling

The Ministry endorses organic certification to some specific markets under the Official Organic Assurance

Programme. Organic products exported under the programme must be produced in accordance with general regulatory requirements for their product type as well as the Programme standard and any overseas market requirements for organic products.

More information on MPI's organic products policy is available at **www.mpi.govt.nz**.

Halal Animal Products

Halal animal products are an important part of New Zealand's primary production and exports.

New Zealand was the first non-Muslim country to establish commercial slaughter of halal meat, and currently exports to more than 70 halal markets around the world, particularly the Middle East and South East Asia.

The Animal Products (Overseas Market Access Requirements for Halal Assurances) Notice sets out the standards and performance criteria for processing establishments producing halal animal products for export as well as the competencies required for anyone performing halal slaughter or certifying the halal status of the exported products.

Establishments undertaking halal slaughter in New Zealand and their products must be certified by an Approved Halal Organisation. These organisations are authorised by MPI to supervise halal operations at establishments. They assess and approve halal programmes, processing establishments and slaughter personnel, and provide certification for halal meat products.

MPI regularly audits all Approved Halal Organisations, and maintains a list of these on the MPI website at www.mpi.govt.nz.



FOOD MONITORING AND SURVEILLANCE

MPI monitoring and surveillance programmes help confirm the effectiveness of New Zealand chemical residue and microbiological controls and practices, ensuring they do not breach any regulatory thresholds. They also monitor for biological contaminants in animal products such as pathogens and biotoxins, ensuring minimum food safety requirements are met.

Monitoring programmes

The following monitoring programmes are applied (especially to animal products) – whether for export or domestic distribution:

National Chemical Residues Programme

The National Chemical Residues Programme monitors chemical residues in live animals and animals sent for slaughter, and tests food products from animals, birds, farmed salmon, ocean fish and honey. It tests for registered veterinary medicines and agricultural compounds, deregistered agricultural chemicals that are persistent environmental contaminants, and banned or restricted substances and toxic agents.

National Chemical Contaminants Programme

The National Chemical Contaminants Programme monitors milk and dairy products to confirm that residue or contaminant levels do not exceed acceptable limits for New Zealand and export markets. The programme tests a wide range of agricultural compounds and veterinary medicines.

National Microbiological Database

The National Microbiological Database (NMD) is a mandatory industry programme for New Zealand primary processors of meat, poultry, game and ratites. Samples are collected weekly and analysed for pathogens such as salmonella and campylobacter. MPI holds the results of these tests in the National Microbiological Database, and provides industry with feedback on their performance and overall trends.

Food Residue Surveillance Programme

The Food Residue Surveillance Programme complements the other programmes by surveying foods that are not included in those programmes for pesticide residues and chemical contaminants. It covers food produced in New Zealand and imported food, including primary produce and processed food.

The programme assists with the development of new food safety measures or review of existing schemes, and identifies potential food safety issues.

Imported Food Monitoring Programme

The Imported Food Monitoring Programme is an annual programme of surveys for selected hazards in imported foods to check that regulatory imported food controls are working. Monitoring activities in the programme include scanning, surveys, audits and intelligence gathering. Monitoring can be specific to the food, region, manufacturer or hazard.

Seafood Monitoring

Food safety monitoring programmes for seafood includes the Shellfish Biotoxin Monitoring Programme, which tests for algal toxins in bivalve shellfish, in addition to the testing conducted under the National Chemical Residues Programme for contaminants. If contamination or a risk of contamination is identified, then surveillance measures are put in place.

Laboratory Testing

MPI approved laboratories carry out testing and regulatory sampling of food products to ensure products meet New Zealand minimum food safety requirements and any additional overseas market access requirements. All laboratories testing animal products and material intended for domestic and export markets must meet ISO17025 requirements as applied by International Accreditation New Zealand (IANZ) . This ensures operating systems are working and achieving the desired results.

Extensive quality controls are in place to ensure the laboratory results are valid. Regular audits of the laboratories are conducted by IANZ and by MPI. Additionally the laboratories must take part in international proficiency studies, as well as conduct extensive internal quality control under independent quality managers to ensure that reported results are accurate.

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(E-CERT) ELECTRONIC CERTIFICATION

MPI uses an electronic certification system (e-cert) to provide appropriate certification and governmentto-government assurances for animal and plant products exported from New Zealand. The animal products e-cert system has since been adopted widely and is now international best practice.

E-cert has significant advantages over a paperbased system. These include:

- tracking the market eligibility and status of products from the time they are produced until they are exported, which helps facilitate traceability of all products;
- increasing the robustness of pre-certification verification checks, by keeping product

information in one secure place (MPI's firewalled computer systems);

- speed and accuracy in conveying official assurances;
- enhancing the integrity of certification by allowing overseas border authorities secure access to e-cert (in MPI's computer system) to validate certificates on-line, which significantly reduces the opportunities for fraudulent paper certificates to be created;
- allowing overseas authorities to down-load consignment details securely and accurately into their own databases.



BIOSECURITY SYSTEM

New Zealand's geographic isolation has allowed a unique natural environment of flora and fauna to develop. When farm animals, pasture plants and crops were introduced here by human settlers, they found a place which was absent of many of the pests and diseases that might affect them.

New Zealand places great importance on biosecurity to protect and maintain our unique natural environment and avoid damage to our agriculture, forestry, and seafood industries.

The **Biosecurity Act** controls all goods that come into New Zealand and gives MPI a range of powers and duties to help manage the risks associated with incoming aircraft or vessels, people and goods. The Act is designed to ensure protection of the economy, environment, animal, plant and human health from unwanted pests and diseases.

The Hazardous Substances and New Organisms Act regulates the deliberate import of new organisms into New Zealand.

Biosecurity in New Zealand is not a single line of defence at the border. It is an end-to-end multi-layer system that begins offshore, is strengthened at the border and continues post-border – where it becomes a joint effort between central government, regional councils, industry, community groups, and the general public.

Pre-border biosecurity

Having pre-border and early risk reduction measures in overseas countries strengthens MPI's ability to address biosecurity risks before they reach the border.

MPI applies risk analysis in a systematic way to identify pre-border biosecurity risks associated with any imports. The analysis assesses likelihoods and consequences surrounding risks, and calculates appropriate control measures to manage them.

MPI also participates in international standardsetting to develop measures that protect human, plant and animal health. MPI also negotiates agreements to facilitate biosecurity cooperation.

Import Health Standards

- Import Health Standards say what requirements must be met before risk goods can be imported into New Zealand. These may include requirements for heat or cold-treatment of imported foods, disease-testing of animals, and inspection of used vehicles before shipment.
- MPI communicates these standards to exporting countries, who then ensure their products meet New Zealand requirements prior to export.
- MPI's import health standards and guidance for meeting their requirements are available on the MPI website at www.mpi.govt.nz.

Border biosecurity

All goods must have biosecurity clearance before they are allowed access to the country. Clearance is carried out by MPI staff or accredited agents, who check incoming goods against the import health standards. MPI staff also check that passengers, aircraft, vessels (hulls and ballast water), and other items coming into the country are free of the pests and diseases of concern.

Some goods are cleared at their port of arrival or the Auckland international mail centre; other goods are held in secure transitional facilities until cleared. Such facilities are often owned and operated by third parties, and are subject to biosecurity surveillance and audit against MPI standards.

Border inspections by MPI operate on a targeted system based on risk profiles. Risk profiles are generated on the basis of many criteria including: risk item pathway, the nature of the item, country of origin and previous compliance history of the person or company sending the item. High risk items may be subject to 100 percent inspection while low risk items will receive much lower levels of inspection.

Post-border biosecurity

MPI's biosecurity surveillance programmes assist the early detection of pests and diseases before they can become established in New Zealand – making their management, control and eradication more effective. These programmes also give ongoing assurance of New Zealand's pest and disease free status.

Biosecurity surveillance programmes

A strong primary production economy, along with our freedom from many pests and diseases, means that New Zealanders are well aware of the need for vigilance with unwanted organisms.

MPI's surveillance system involves a range of 'active' programmes that look for specific pests or monitor high risk sites; and 'passive' ones that involve communities of specialists and the wider public in providing early advice to MPI of suspected incursions. Farming and growing communities are particularly active in this area.

Targeted surveillance programmes – look for specific organisms (e.g. avian influenza), or sometimes a group of related organisms (e.g. invasive tramp ants), in specified hosts, habitats or regions (e.g. port environs, marine high-risk surveillance, apiary surveillance).

Pathway surveillance programmes – target high-risk sites for pests, diseases and risk organisms. High-risk sites such as seaports, airports, transitional cargo facilities and popular tourist spots are visited at a specified frequency and surveillance is conducted for any new pests, diseases or risk organisms present (e.g. fruit fly surveillance traps).

The general surveillance system – (also known as passive surveillance) provides early detection of exotic and emerging pests and diseases across all animals and wildlife in New Zealand. Members of the public, farmers and growers, researchers, veterinarians and laboratories are encouraged to report any signs of unusual pests or diseases. A number of reports are made to MPI's exotic pests and diseases hotline, which receives around 700 calls a year with roughly a third requiring further investigation by trained veterinarians and MPI incursion investigators.

Readiness and response to incursions

MPI has developed government-wide biosecurity

response plans for major threats not present in New Zealand such as Queensland fruit fly or foot and mouth disease, as part of its biosecurity readiness. These, along with other readiness programmes, ensure MPI is prepared to respond immediately to high-impact incursions should they occur.

MPI's biosecurity response system is focused on effective and efficient decision-making processes, as well as ensuring sufficient capacity and skills are available to manage any incursion of exotic pests or diseases. Biosecurity field responses use a Coordinated Incident Management System and tap into a nation-wide network of government and private sector organisations – giving access to the right people and equipment for a swift response.

Biosecurity partnerships with industry

From 2014, partnerships have been developed between government and primary industry sectors to better prepare for biosecurity responses. These 'Government Industry Agreements' (GIA) involve the Ministry and sector partners sharing costs and making joint decisions for readiness and response activities.

GIAs foster Government and industry having a common understanding of the biosecurity system, through sharing of information, skills, and resources. They also allow the Ministry to gain a realistic idea of industry priorities and capabilities, and allocate resources accordingly – resulting in a capacity for faster and more efficient responses.

More information on GIAs can be found at: **www.gia.org.nz**.

Pest management

MPI leads a robust pest management system to prevent or reduce the damage from pests and diseases that have established here. The system involves many others – including central and local government agencies, industry groups, landowners and members of the public. As system leader, MPI ensures the system works as intended and that others participate in a meaningful way.

ANIMAL WELFARE

New Zealanders strongly value good animal husbandry and ethical treatment towards all animals.

The Animal Welfare Act recognises animals are sentient and require owners and persons in charge of animals to attend properly to their welfare. Animals covered by the Act include all vertebrates (and some of their foetal or early life stages), octopus, squid, crab, lobster and crayfish (including freshwater).

The Act places much emphasis on prevention, and clearly establishes the obligations on animal owners to meet the physical, health and behavioural needs of animals, as appropriate to the animal species, circumstances and environment. The needs include:

- proper and sufficient food and water;
- adequate shelter;
- the opportunity to display normal patterns of behaviour;
- physical handling in a way which minimises the likelihood of unreasonable or unnecessary pain or distress;

• protection from, and rapid diagnosis of injury or disease.

Animal welfare regulations issued under the Act set directly enforceable standards. In addition, detailed codes of welfare have been developed, including for transport, commercial slaughter, and a range of farmed and other animal species.

Codes of welfare set minimum standards, which are used to support enforcement of the Act, as well as recommended best practices which encourage higher standards of animal welfare.

Education and Enforcement

MPI jointly enforces the Animal Welfare Act and regulations with the Royal New Zealand Society for the Prevention of Cruelty to Animals. Farmers, veterinarians and the general public are encouraged to report poor animal husbandry or animal abuse and complaints are investigated, and prosecuted or penalties applied as appropriate.

In addition, MPI works with industry, the veterinary profession and others to promote regulations and codes of welfare so that everyone working with animals understands their obligations.



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