

3. CHARACTERISTICS AND MARKET REQUIREMENTS OF FOOD AND AGRICULTURAL PRODUCTS

3.1 Background

The products prescribed under the *Export Control Act* have predominantly been of animal and plant origin with food products being the majority covered. The Committee reviewed the industries concerned, the importance of exports to their viability, the international trade arrangements and the likely future developments affecting exports of these products. These are covered in this chapter.

3.2 Current Product Coverage

As noted in Chapter 2, there are currently eight commodity programs covering a range of food and agricultural products. In 1998-99 Australia's food exports totalled some \$16 billion. Of this amount, specific programs under the Act covered \$12.7 billion the details of which follow:

Table 3.1: Australian Exports certified by AQIS

1998-99	Value of Exports Certified by AQIS (\$million)
Dairy	2,044
Fish	1,231
Grains	4,959
Live Animals	556
Meat	3,277
Horticulture & dried fruit	625
Total	12,692

Source: AQIS

Value of all food exports (\$million)*	16,074
Percentage certified by AQIS	79%

* Source: ABS 1999 (includes beverage and live animal exports)

3.3 Reliance on Exports

Figures 3.1 and 3.2 illustrate the importance of exports to the viability of Australia's leading agricultural based industries.

Figure 3.1 Australian Production and Exports 1998-99: By Volume

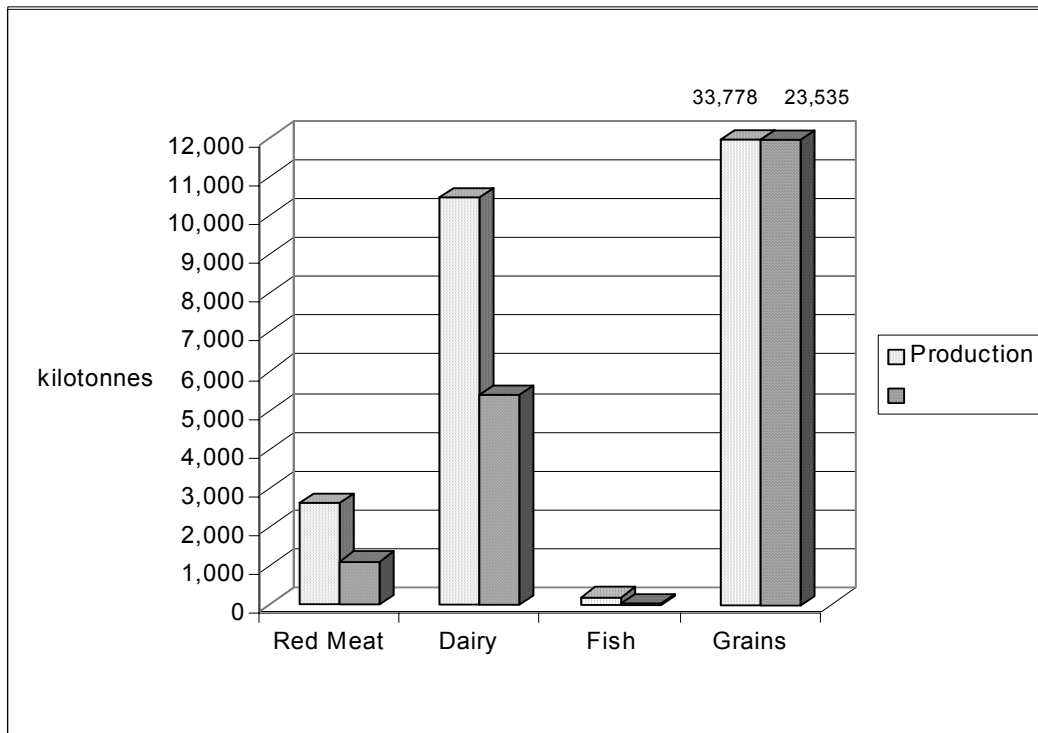
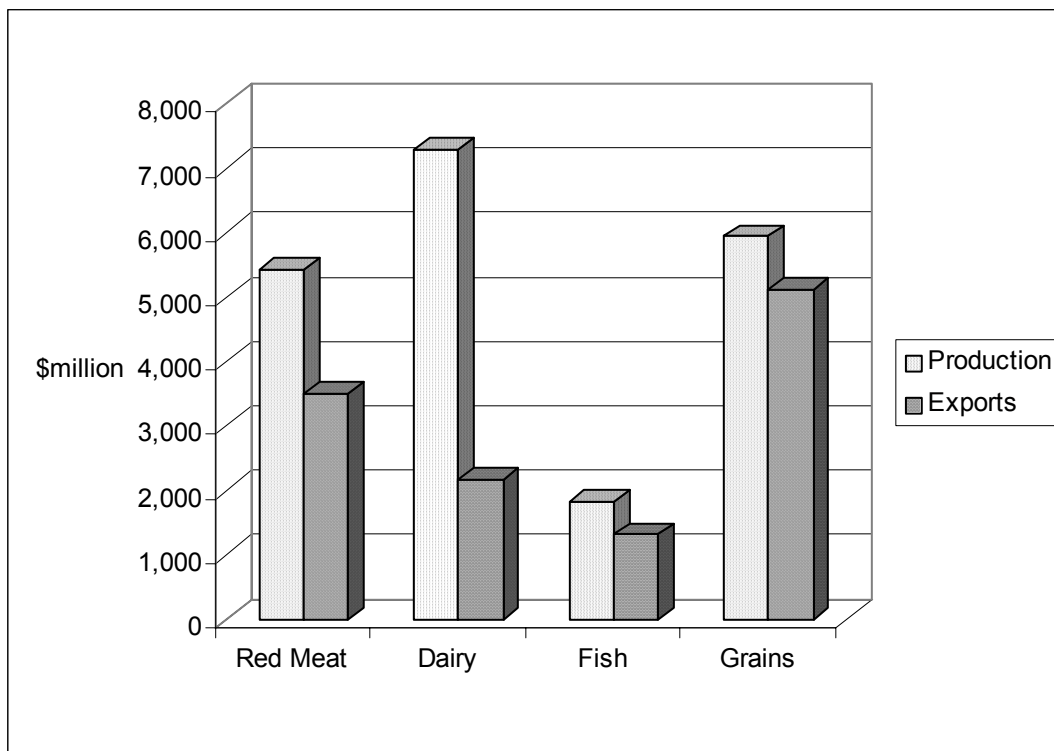


Figure 3.2 Australian Production and Exports 1998-99: By Value



Source: ABARE and ADC (both)

Loss of access to overseas markets, or even the threat of such loss in one or two individual markets, would severely affect the performance and outlook for each of the above industries.

3.4 Characteristics of the Export Industry

World trade in food and agricultural products is more complex and involves greater government intervention than trade in most other manufactured products and services. This complexity and involvement stems from the desire of governments to avoid risks associated with such products—risks to human health, threats to animal welfare and perceived dangers to plant life and the environment.

Many of the risks originate from the characteristics of the products, for example:

- many of the products are biologically active when traded, eg dairy products,
- most of the food products are perishable, eg meat, grains,
- many require special storage and/or transportation arrangements, eg chilled and frozen foods, and
- risks to human health associated with the products are not necessarily physically conspicuous, eg pesticide residues.

The variation both between and within the various agrifood commodity groups is immense. Product is exported from the raw state in bulk through every degree of processing and packaging to the high value added, ready to consume product. Branding also exhibits similar variation, from generic industry or statutory authority brands, to highly promoted proprietary brands including international brands of the multinational participants.

The red meat industry epitomises the complexity within some commodity groups, with more than 300 cuts being possible from a single carcass. The processed food industry has its own complexity due to the seasonal nature of some raw materials used and the necessity to use often multiple sources for such raw materials. Such complexity means that the scope for misdescription and mislabelling is significant, hence the desire exists for some form of control mechanism on trade description in order to maintain the integrity of the system.

The differences among the manufacturers themselves and the varying stages in maturity of the commodity sectors must also be considered. The various industry sectors are in different stages of maturity, from the long established wheat, beef and dairy sectors to the newer groups of horticulture and organic produce. Within the agrifood sector, there exists the full spectrum of small to large, single product to multiple commodities, single site locally owned to multiple site multinational manufacturers. In some industries there is also a large monopoly statutory authority seller.

3.5 Importing Government Requirements

Within Australia the risks associated with the production and sale of food and agricultural products is addressed by a range of local, State and Commonwealth government legislation. Overseas governments have similar laws and monitoring arrangements for their domestic production.

The majority of overseas countries also have standards applicable to imported food and agricultural products, but because production and trade is initiated offshore the importing countries look to the exporting countries to ensure that requirements are met. This transfer of responsibility necessitates, as a minimum, the extension of domestic standards to exports. Further, if different or special standards have been set by the importing country, exporters have to establish specific arrangements to ensure compliance with them too. Such undertakings are made under both multilateral and bilateral agreements.

3.6 Multilateral Agreements

The major international arrangements regulating trade are those established under the World Trade Organisation (WTO), and as a member Australia is obliged to comply with its rules and provisions. These include specific provisions covering the prohibition of export controls but authority to allow measures 'necessary to protect human, animal or plant life or health' or relating to the 'conservation of exhaustible natural resources'. The provisions also allow measures 'necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of the Agreement including . . . the prevention of deceptive practices'.

The 1994 Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement) implemented with the establishment of the WTO, sets out rules for trade in food and other agricultural commodities in regard to animal, plant and human health. It accords a special status to standards elaborated by organisations such as Codex Alimentarius Commission (Codex), the International Plant Protection Convention (IPPC) and the Office International des Epizooties (OIE), while allowing countries to maintain more restrictive measures, provided these are based on a scientific risk assessment. The 1994 WTO Agreement on Technical Barriers to Trade (TBT Agreement) and the SPS Agreement were designed to limit the arbitrary or unjustified use of non-tariff barriers to trade by defining how technical barriers to trade may be used legitimately.

Codex is the international inter-governmental body that develops food safety and commodity standards to facilitate trade and promote consumer safety. It is not compulsory, but signatories do not depart from it without very good reason. The Codex Alimentarius Commission was established in 1962 by the Food and Agriculture Organization (FAO) and the World Health Organization (WHO) of the United Nations. Australia has always been an active participant. Whilst member countries have been committed to the principles of Codex since its establishment, use of Codex standards was rather arbitrary until the conclusion of the GATT Uruguay Round and the adoption of the SPS and TBT Agreements. Codex standards also provide a bridge between the

facilitation of trade and domestic standards for local consumers. Governments frequently adopt Codex norms directly into national regulations, as is the case with many of the developing countries where resources and expertise for food standard setting are limited. Governments may use Codex standards as the basis for developing domestic standards. In Australia, ANZFA has a statutory obligation to take into account international standards when developing measures for inclusion in the Food Standards Code.

3.6.1 WTO Requirements other than Health

Other WTO obligations including anti-dumping, countervailing, customs valuation and safeguards are also relevant to Australia's export control regime through, for example:

- meeting particular requirements for customs valuation requirements of other countries (eg this could extend to cooperation to prevent fraudulent practices), and
- meeting anti-dumping or countervailing minimum price undertakings or the like.

These and other relevant provisions require Australia to ensure that there is an enforceable legal system that will allow for export controls to be applied in certain situations to facilitate access to other markets under WTO rules.

3.7 Bilateral Agreements

Australia's commitment to these multilateral agreements is supplemented by bilateral agreements with all major trading partners. These bilateral agreements set out the requirements which have to be met before importing countries will approve entry of particular products to their markets. A brief summary of the requirements of some of Australia's major trading partners is set out below.

European Union

Certificates are required for exports to the EU for the large majority of live animals and animal products, and most food products. The requirement for certification is based on prescriptive EC Veterinary Directives, which define in detail the processes to be complied in the preparation of the product, the inspection itself, and the issue of the certificate. The certificates themselves generally have very prescriptive statements that must be verified by a government inspection and certification body. An exception is organic produce for which the EU has approved non-government inspection and certification, although AQIS is still required to audit these third party inspection providers.

United States

Historically the US has required strict adherence to US statutory requirements.

The US Department of Agriculture's (USDA) Food Safety Inspection Service (FSIS) administers meat and poultry products under the Federal Meat Inspection Act and Code of Federal Regulations. These regulations specify that importers must meet standards equivalent to those applied to US domestically produced products.

The US Food and Drug Administration (FDA) under the Federal Food, Drugs and Cosmetics Act is responsible for the regulation of most non-meat products (apart from eggs). This Act requires that products must be prepared in accordance with the provisions of the Act or other equivalent statute.

US imports of animal and plant products are controlled under legislation administered by USDA's Animal and Plant Health Inspection Service (APHIS). Again equivalence is based on US standards although APHIS does permit third party inspection regimes which are underwritten by exporter governments.

Canada

Canada's system and requirements for regulation of agricultural and food products are similar to those utilised by the United States, including that importers must meet equivalent standards to domestic producers and be certified by the government of the country of origin. Standards are set and administered by the Canadian Food Inspection Agency (CFIA) which is part of the Department Agriculture and Agrifood, and the Canadian Department of Health.

South Africa

The basic requirement is certification by the government of the exporting country.

Republic of Korea

Korea requires government to government agreements and export government certification as a pre-requisite for most imported food.

Japan

Japan requires government to government agreement and exporting government certification for most imports of food and agricultural products.

Taiwan

Government certification is currently required, and the *Export Control Act* has had a positive impact on market access.

Thailand

Most food and agricultural products require an import license from Thai authorities and government certification by the exporting country.

Philippines

Exporting government certification is a requirement for imports of food and agricultural products into the Philippines.

Malaysia

Imports of food into Malaysia are subject to an import permit system and approval to import is based on the adequacy of food safety controls in the country of origin. This includes the competent certification authorities having the necessary legislative powers to control imports including powers of inspection.

Vietnam

Vietnam law or regulations do not specifically require government certification, with the exception of dairy produce, which requires certification by an Australian government agency for access.

Indonesia

Imports of agricultural products into Indonesia are granted approval based on the ability of the exporting country to guarantee adequate controls on veterinary health and food safety. Indonesian authorities prefer that such guarantees be provided by a government inspection and certification agency, although SGS has been heavily involved in certifying for Indonesia.

Non-WTO Countries

A substantial amount of trade occurs with countries that are not members of the WTO. In these cases, trade may be regulated by bilateral arrangements, which are negotiated between Australia and the respective countries. As a general rule if a country requires a bilateral agreement, certification by the government of the exporting country will be included in the agreement.

3.8 Likely Future Requirements

There are many signs to suggest that importing country health hygiene and related requirements will intensify progressively rather than liberalised in the immediate to short term. The signs include:

- general increase in consumerism and the accompanying demands by governments for companies to improve standards in health, hygiene premises, animal welfare and the environment,
- the publicity and subsequent public awareness of risk to human health in recent years, including the outbreak of BSE (mad cow disease) in the UK, E coli 0157 food poisoning episodes in the USA and Japan,
- the emerging public debate about genetically modified foods,

- continued improvements in the speed, accuracy and intensity of analytical methods which have provided confirmation of contamination and/or presence of residues that were previously undetected,
- continuing public focus on food irradiation as a method of preservation,
- the need to alter systems for meat, dairy, fish and processed foods in order to accommodate HACCP approaches, because of rising consumer concerns with food borne pathogens,
- the tendency in all countries to look for new ways of justifying protection against imports as traditional approaches such as quotas and tariffs have been negotiated away, and
- new organisms of concern/spread of known pathogens or organisms.

In the past, health and hygiene issues associated with international trade have been administered largely as an adjunct to production under the auspices of agricultural and production related ministries. In the future the responsibility is likely to shift to consumer affairs and health ministries. Such a change has already occurred in the European Union.

The rapid growth in electronic communication via the Internet has dramatically accelerated the flow of information between countries. In the past, knowledge about export failures has often not been extended beyond the immediate countries and/or companies directly affected. Consumers and governments are now increasingly demanding greater transparency and the Internet has provided the means of instant communication. This means that shortcomings in performance by an individual company, or more importantly an individual country, will be known to all trading partners virtually instantaneously, and therefore failures in one country will have repercussions in others.

There will be an increase in competition for export trade as the world's economy continues to grow. Examples of this include both the US and EU entering non-traditional markets in Asia.

Consumer expectations will continue to extend beyond the traditional health and safety issues to areas such as animal welfare and the environment.

International bodies such as WTO and Codex will continue to develop uniform measures such as SPS and TBT agreements and major exporting nations will continue with their efforts to liberalise trade.

There will be an increase in globalisation of the agrifood industry through merger and acquisition. Vertical integration will continue as evidenced by the investment of Japanese companies in our beef industry and the continued global expansion of major international supermarket chains with their house brands. Large companies with substantial market power are also setting up their own food administration systems in parallel with the Government-based systems.

Individual Australian agrifood industries will continue to be more reliant on export for growth due to domestic market saturation and our already high per capita consumption of commodities such as sugar, wheat and beef.

3.9 Emerging Issues

There are already a number of emerging issues which the *Export Control Act* will need to take into account. These include trade in Genetically Modified Foods (GMFs) and products containing genetically modified organisms (GMOs), irradiation, animal welfare and E-Commerce. Each of these developments will impose new demands on the administration of the Act.

In order to be proactive, it will be necessary for Government and Industry to deal with these emerging issues by developing appropriate strategies that incorporate:

- prediction,
- identification,
- description,
- risk analysis,
- legislative implications, and
- competition implications.

3.9.1 Genetically Modified Foods

The production of GMFs involves the incorporation or modification of one or more genes from other sources (either natural or synthetic) into the food either via a raw material or a living organism. The aim of the technique is to enhance existing characteristics or to introduce advantageous new traits. The technique allows the introduction of DNA from non-related species, which could not be achieved by conventional breeding programs.

The export of genetically modified products as raw produce and as part of further processed products is a new issue to challenge the scope of the *Export Control Act*. Issues such as segregation of product, identification and trace-back, and potential regulatory failure will have a major effect on the credibility of Australia's export regulation.

It is possible that other legislation will set standards, with these being called up by export regulation. There may be special conditions for which export regulation may need to cater (eg wind-blown pollen contamination).

It is apparent that the application of the Act to the export of genetically modified produce will be heavily dependent on the import requirements of overseas governments.

Consideration of Government policy on GMFs is ongoing as this Report is published.

3.9.2 E-Commerce

Fast becoming a business reality because of its delivery of efficiency gains and cost savings, E-Commerce will be a major tool of world trade in the near future. However, the reaction of some organisations has been slow, and legislative changes have lagged behind technical changes.

The potential benefits of E-commerce have been recognised by State Governments, which have advocated that the *Export Control Act* take account of new technology and changing global business systems such as E-commerce and Internet use.

The Commonwealth Government's Internet 2001 objective was announced in the Prime Minister's *Investing for Growth* industry statement in December 1997. The aim of the initiative is to 'deliver all appropriate Commonwealth services electronically on the Internet by 2001'. Regular surveys will ascertain the readiness of Commonwealth agencies to deliver appropriate services electronically. The first survey was completed in the first half of 1999, and it is anticipated that future surveys, and/or interviews with agency representatives, will be conducted every six months leading up to the 2001 deadline.

3.9.3 E-Commerce in Exports

As mentioned previously, the electronic export documentation system (EXDOC) has been in operation for meat since 1992 and dairy since 1998. The stated intention of AQIS is to gradually develop it for other groups (see 3.9.4 below).

AQIS and the Australian meat industry are proposing a uniform common approach to the identification of all trade units of edible and non-edible product (eg carcase, carton). EAN-UCC numbering, bar coding and Electronic Data Interchange (EDI) have been identified as the enabling technologies for unambiguous identification, tracking, management and control of the flow of meat products through the supply chain.

By capturing information, either directly or through linkages to databases, about the history of the product from production through processing, tracing capability is almost instantaneous. Further, barcodes have the capacity to be substituted for shipping marks in the health certification process. The shipping mark links the logistic item with the health certification of the traded product. Benefit from such use will be derived through savings in labour and materials to apply shipping marks and reduction in rejections for illegible or no shipping marks.

When a barcode is linked with automated data capture and EDI, a uniform common approach to numbering and barcoding enables electronic commerce.

Benefits of the use of barcodes may be categorised into five areas: Meat Safety; Export Integrity and Certification; Electronic Commerce and Innovation; Co-Regulation; and Industry Competitiveness.

Meat Safety – Barcoding offers the tools for achieving the key food safety concept of Paddock to Plate.

Export Integrity and Certification – Use of barcodes facilitates the export effort of industry by improving the integrity of the certification process through product identification and thus accountability, improving the accuracy of information being transferred onto the health certificate (the current system relies on manual counting with associated errors), and providing a sound basis for product traceability and trackability.

Electronic Commerce and Innovation – Barcoding operates within electronic media and thus supports ongoing automation in the supply chain. It provides a basis for facilitating business transactions and export certification.

Co-Regulation – Facilitates using industry managed systems for achieving regulatory outcomes.

Industry Competitiveness – Industry will derive benefits in the form of better utilisation of resources, improved stock management, improved information transfer and hence will be able to provide a more timely and cost effective service to its clients.

All stakeholders are keen to see progress in the uptake of electronic export documentation. The Committee is of the opinion that AQIS should ensure that a high priority is maintained in this area, particularly in relation to making the system universally applicable to the stakeholder base.

3.9.4 Export Documentation

AQIS has run its electronic export documentation system (EXDOC) since 1992. This system interfaces with the Customs EXIT system and its use by meat exporters is mandatory. EXDOC was specific to the meat industry but is now being enhanced to accommodate the needs of other industries. The system is Internet mail-enabled. The Committee has been informed by AQIS that EXDOC meets all current Government policy specifications relating to electronic commerce. Reported benefits of the system have been containing costs and expediting turnaround times. Output is generated under the UN agreed Electronic Data Interchange For Administration, Commerce and Transport (UN EDIFACT) standards for the sanitary/phytosanitary certification (SANCRT) protocol.

Evolution is continuing, and includes the development of a single electronic window for export documentation, involving Customs and AQIS. There are individual industry consultative mechanisms (Electronic Documentation Working Groups) considering proposed enhancements. There is a need, in some cases, for alignment between EXDOC and the business practices in industry.

Stakeholders are keen to see progress in the uptake of electronic export documentation and the Committee is of the opinion that AQIS should ensure that a high priority is maintained in this area, particularly in relation to making the system truly universally applicable to the stakeholder base. See 6.2.13 for further discussion.

3.9.5 Animal Welfare

Animal welfare is another important emerging issue, and has been signalled by the WTO for inclusion in the next round of multilateral trade discussions. Animal welfare issues are relevant to industry both in their own right and because of the link between animal welfare and animal health. The *Export Control Act* does not have a role, specifically, as a mechanism to control animal welfare, but it does have a role in the delivery of appropriate product to consumers, and it is interactive with other relevant Commonwealth and State legislation.

3.10 Committee's Assessment of Key Points

- *Impromptu abandonment of the Export Control Act could put some of the \$13 billion in value of Australia's exports at risk. The major focus of growth in the food industry is now exports, hence facilitation of exports will be of significant importance to the Australian economy.*
- *Most countries importing food from Australia require certification by a Commonwealth agency. AQIS performs this role under the authority of the Act.*
- *Consumer demands for assurance on food safety will increase because of the threat posed by 'invisible' risks such as pesticide residues and some microbiological contamination.*
- *Adoption and development of E-Commerce is a significant opportunity for both industry and government to reduce the costs and complexity of trading arrangements including certification of export goods.*