

Ensuring Australia's system of food regulation supports growing food export industries: Food Export Taskforce

Discussion paper response

Box 1 Discussion points: Australian food exports

A.1 What has been your experience in accessing or expanding international markets for food exports over time?

Research to underpin science evidence is critical for supporting market access:

Global markets have become increasingly aware of food safety issues and understanding and managing such risks is important for accessing these export markets. Our experience has indicated there are great benefits in conducting research to provide evidence around food safety risks and demonstrate the safety of Australian food products. Global markets including both international governments and customers expect scientifically sound evidence to support food safety claims. An excellent case study to show how research has been able to support market access through understanding food safety risks has been demonstrated by the red meat industry in relation to exporting to the USA and other global markets. Changing regulations around the importation of red meat into the USA in response to public health issues related to foodborne pathogens required an in depth understanding of their risks in the Australian context. Research conducted by Meat and Livestock Australia, CSIRO, University of Tasmania and other research institutes was critical to inform risk managements systems in Australian red meat production and to provide scientific evidence supporting the safety of Australian red meat which enabled ongoing access to global markets. For further information, see impact assessment case study in Appendix 1.

A.2 How does the reputation of the Australian food system bear on these efforts?

Australia's reputation is currently good but is under threat:

Australia has an excellent reputation for producing safe food, although domestically the data is showing there may be some challenges, particularly in relation to the incidence of salmonellosis and campylobacteriosis which are on the rise and are high compared with other similar countries. The National Foodborne Illness Reduction strategy is targeting a reduction of foodborne illness associated with these two microorganisms.

Other developing countries are also improving their food safety and regulatory systems so Australia will need to innovate and increase effectiveness in this area to remain globally competitive.

A.3 What do you view as the key risks to export market success?

Providing science evidence to inform decisions around policy, regulation and overall food safety risks:

The ability to provide evidence in support of risk management decisions around food safety issues is critical for ensuring market access.

Part B: Regulation of food in Australia

Box 2 Discussion points: Regulation of food in Australia

B.1 Do you have examples where the domestic regulatory environment has facilitated exports?

We are not aware of any examples but have seen export market drivers and international regulations, particularly around food safety, influence changes at the domestic level (e. g. USA "Mega Regs" leading to the implementation of HACCP systems in red meat production).

B.2 Do you have examples of emerging risks that may warrant an industry or regulatory response?

Emerging risks requiring industry and regulatory responses include 1. adoption of new technologies and 2. growing export in sectors that may have greater food safety challenges:

1. New technologies, such as whole genome sequencing and genomic profiling of foodborne pathogens, are defining food safety risks in different ways and this has great potential to disrupt current regulatory systems around the globe. Molecular risk assessment of foodborne pathogens based on specific genetic targets is already under consideration in the European Union and USA which will redefine what constitutes a foodborne hazard. Food regulations will need to keep pace with these new definitions as well as technologies that are more sensitive to detecting foodborne hazards. Defining what constitutes a foodborne hazard and the level at which it causes a threat will need to be reassessed as technologies to define foodborne hazards improve. Some of these issues are discussed in greater detail at [V.MFS.0415 Final Report - Meat & Livestock Australia](#)

2. The potential increase in exports of horticulture products may also warrant both an industry and regulatory response. Currently the horticulture industry is not subject to a Primary Production and Processing standard, although many sectors within the horticulture industry are subject to their own specific industry guidelines for food safety. However, fresh produce in the main has been identified as a particular risk as there are few decontamination or processing steps before consumption to limit or remove foodborne hazards and produce food safety relies heavily on through chain controls. The horticulture area is therefore an area that should be carefully considered in relation to future industry and regulatory responses in relation to food safety and market access.

B.3 What are the implications for Australia's rapidly changing export profile and trade environment for Australian regulatory settings?

Australian regulations will need to be reactive to a changing world:

The Australian regulatory system will need to be updated to align with international markets and regulatory systems and to be responsive to changes that new technologies and research to ensure regulations remain fit for purpose.

Part C: Emerging issues and challenges

Box 3 Discussion points: emerging issues and challenges

C.1 What, if any, are the implications of these consumer and market developments for regulatory and other policy settings?

Traceability is important to ensure an adequate regulatory system that can react rapidly to food fraud and food safety incidents:

Traceability systems do not prevent foodborne hazards entering the food chain, but rather serve as a vehicle to remove potentially contaminated food from the supply chain if contamination is detected or expected. The most effective approach to limiting food safety incidents is to prevent the hazard from entering the food chain which is a challenge that is worthy of attention as it provides significant benefits over relying on traceability systems alone to control food safety hazards. Regulations targeted at prevention of food contamination are more likely to have impact in ensuring consumer demands around food safety are met.

C.2 How can industry and government cooperate to ensure information is efficiently captured and duplication is minimised?

A national approach to food safety regulation and implementation will increase efficiency and ensure that duplication is minimised:

A national coordinated approach to food safety regulation could be of benefit to both industry and regulators. The current system of state based enforcement of food regulation provides the potential for inconsistent and differential interpretation and implementation of food regulations. This results in complexities to multistate industries which may need to meet different requirements and levels of audits in different states/territories.

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SECURING MARKET ACCESS FOR AUSTRALIAN BEEF PRODUCTS

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The Australian beef and cattle industry contributes approximately \$16.85 billion to the national economy¹. The majority of Australia's meat produce is exported². Ready access to a diverse range of international markets provides the foundation for continued prosperity of the sector. Over the past 10 years, CSIRO has contributed various scientific research activities, worth between \$2.5M to \$6M, through the MLA/AMPC food safety program, collaborating with the red meat industry, government departments, universities and commercial laboratories domestically and internationally.

The Challenge

The global market for meat products is evolving and demand for food safety and quality assurance is higher than ever. In order to maintain and enhance Australia's reputation as a clean and green provider, the Australian red meat industry recognizes the benefits of acting collectively on food safety, market access and product integrity issues.

The Response

CSIRO conducts scientific research activities to understand food safety risks and to highlight the superior safety and quality risk management systems in place within Australia's red meat industry. CSIRO research:

- Demonstrated low prevalence of pathogenic bacterial *E. coli* O157 and non-O157 in Australia's production systems.
- Assisted in demonstrating equivalence of O157 testing program with Food Safety and Inspection Service which resulted in a minimisation of costs of meeting market access conditions for the USA.
- Determined that Australian O157 isolates are of lower human pathogenic potential and consequently less likely to be involved in O157 disease outbreaks.
- Demonstrated low prevalence of antimicrobial resistance in *Salmonella*, *E. coli* and *Enterococcus* sourced from beef cattle, dairy cattle and veal. This confirmed that Australian cattle production practices are not responsible for the development of resistance to antimicrobials of critical or high importance in human medicine.
- Demonstrated the shelf-life of vacuum packed products was longer than existing market allowances.
- Confirmed that the quality and integrity of Australian beef primals exceed technical trade barriers in specific export markets.

The Impact

- CSIRO's research provides knowledge that enables the red meat industry to offset threats and to ensure the industry is best prepared to avoid potential costs associated with foodborne disease outbreaks and reputational damages. The MLA food safety program was evaluated by Marsden Jacob Associates, demonstrating a net benefit of \$148.3 million to the industry with a benefit-cost ratio of 2.4:13. Benefits arise from cost savings or avoided cost, increased profit and premiums on meat sales and lower numbers of food safety incidents.
- CSIRO research outcomes to date have contributed to the Australian beef industry's strategic objective to create new market opportunities or cost saving through reductions in technical barriers to trade of \$250 million by 2030.
- CSIRO's research continues to enhance the long-term sustainability of the red meat industry. Our research has addressed the challenges of premium product shelf-life extension, increased access to export markets through compliance with regulatory criteria and reduced the raw material waste.

FOR FURTHER INFORMATION

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REFERENCES

- ¹ MLA Beef Fast Facts, 2017.
- ² Market Access, the industry impact – MLA report 2015.
- ³ MLA safety program review, 2015.

