Summary report

Technical review and comparison of red meat integrity systems – how does Australia stack up against the world?

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Executive summary

Background

Australia has long held a global reputation of strong leadership in the implementation of integrity systems. Nearly 20 years ago, Australia set the international standard for livestock traceability with the implementation of the National Livestock Identification System (NLIS). Five years later, in 2004, the Livestock Production Assurance (LPA) program was introduced, again setting the global standard for on-farm food safety practices. Both NLIS and LPA are complemented by National Vendor Declarations (NVDs), a mechanism that enables the recording and sharing of livestock management and movement history through the value chain. Together these programs represent the primary components of the on-farm Australian red meat integrity system. These systems are vital to minimising the risk presented by food safety and product integrity issues on farms to Australian businesses in this sector.

Ultimately, people who enjoy Australian red meat trust that it is safe to eat, that it has been ethically produced and is of a high quality. This trust is not something left to chance – it has been earned over time and is a direct result of the foresight and investment by industry in developing robust, verifiable systems to underpin the globally recognised credentials of Australian red meat.

While Australia's integrity system continues to achieve its intended purpose, it is recognised that there is a need to proactively embrace innovation and be ready for the future. There is also the opportunity to undertake a stocktake and compare systems in other countries so Australia can learn from the improvements implemented in these key red meat producing countries.

Project Objectives

1. Complete a global scan of other countries that have implemented traceability and product assurance systems and models to support similar outcomes to Australia's red meat integrity systems.
2. Assess the technical capability and sophistication of these systems including how they identify and assess risks, how controls are determined and how performance is measured at both a business/individual and industry level.
3. Assess overall success (or not) of these systems to manage compliance and biosecurity or food safety incidences, how major breaches (if any) have been handled (including impacts to market access) and the subsequent reputation of the system's/that country's product.
4. Review any strategic roadmaps that might exist for assessed systems and how these align or differ with the Australian red meat integrity system's future direction.
5. Compare and contrast the systems assessed including their key strengths and weaknesses vs the Australian system and provide recommendations on opportunities for Australia's integrity systems to stay world leading.

Scope

Integrity systems that underpin the reputation of Australian red meat are broad in scope and include those managed by the Federal and State Governments, Statutory Authorities, Industry (through MLA and ISC), Industry Associations, AUS-MEAT and commercial entities. These integrity systems apply along the full length of the supply chain from inputs into the production sector through to retail/export.

Likewise, the scope of international integrity systems that could be reviewed for learnings is also broad – both by country (producer and consumer) and by product (beef/lamb and competitor products such as pork, chicken, seafood and even fresh produce).

Equally importantly the scope of elements within these integrity systems is broad - as integrity, particularly from a consumer's perspective, can be viewed as everything other than price – product safety, consistency, quality, / provenance, traceability / animal welfare and environment / disease status / non-natural additives in supply chain etc.

For this review the scope was narrowed to focus on:

- those elements of product integrity systems that, in Australia, would be managed on farm by industry (rather than government) and reasonably be seen as the responsibility of ISC. This would include those elements of supply chain integrity that go beyond farm gate through to abattoir such as NLIS and LPA but are managed by ISC;
- on farm integrity systems that facilitate achieving the vision in the Integrity System Strategic Plan and provide pre abattoir provenance information for consumers of the future;
- a focus on cattle and sheep but with learnings from pork, chicken, seafood and fresh produce when possible; and
- a focus on the following countries – Brazil, EU / Ireland, Japan, Korea, NZ, USA and Uruguay but capturing information from other countries where possible.

Refining the scope, as above, in no way discounts the importance of integrity systems in other areas on the supply chain. The end product (beef and lamb) is judged by customers and consumers irrespective of where any integrity issue arises – the adage that a supply chain is only as strong as its weakest link certainly applies to red meat integrity systems.

Comparison of commonalities and differences

This study confirms that there is much in common in red meat integrity systems across the countries reviewed – the differences are often seen in the alternative methods used to address specific country circumstances in achieving common goals.

Key commonalities

The overarching commonality is the objective of all systems to achieve livestock traceability to minimise the impact of an exotic/endemic animal disease incursion/outbreak. Then there are commonalities in how this is achieved. The systems:

- operate nationally.
- are underpinned by legislation.
- cover relevant animal species (bovine / ovine).
- have devices to provide animals with a unique or group identification (ID).
- record all movements of animals.
- have a database to hold the relevant data.
- have penalties for non-compliance
- are looking to improve by simplifying administrative challenges through amalgamating multiple components into a single streamlined system

Key differences

The key differences noted were:

- Some cover all animals, others include a subset of animals.

- Some are run by the government, others by industry/commercial entities.
- Some are funded largely by users of the system and others by the government.
- Some have an additional objective of enhancing consumer confidence – not just on reducing the impact of animal disease incursions/outbreaks.
- Some have the responsible entity as the property while others have the person who manages the animals.
- Some require annual reports on all animals held on a property while others do not.
- Some mandate electronic (RFID) devices while others mandate visual tags.
- The degree of redundancy built into the system e.g. some systems have duplicate ID devices and others only one and some systems capture the same information multiple times and in multiple ways.
- The extent of information required to be gathered is different across systems e.g. some systems require births to be registered while others require animals to be registered before leaving the property of birth.
- Some systems mandate that traceability be carried through to cuts at retail while others end at the carcase stage.
- Some countries have national on-farm Quality Assurance (QA) schemes as an element of the integrity system while others do not.
- Some systems require the vendor to certify the product integrity of the animal (chemical use, HGPs etc) while others do not.
- The way that compliance is enforced and ensured is different across systems e.g. some systems require extensive use of veterinarians and the extent of compliance checking varies across systems.

Future Changes

Another commonality is that all systems are looking to improve by simplifying the administrative challenges through amalgamation of multiple components into a single streamlined system.

Likewise, all systems are aware of the need to meet consumer/customer expectations for provenance information and provide carcase feedback back to producers to improve production.