

INDONESIA BIOSECURITY SUPPORT PROJECT

Final project results

In 2022, Foot and mouth disease (FMD) and Lumpy skin disease (LSD) were introduced to Indonesia, resulting in economic loss and poor animal health outcomes for farmers and businesses across the country.

Indonesia is Australia's largest export market for live cattle, with over 50% of cattle exported by sea from Australia destined for the Indonesian feedlot sector. Many businesses that receive Australian live export cattle were negatively impacted by FMD and LSD and both diseases pose an ongoing threat to the viability of these industries, despite the availability of vaccination.

Project objectives

This project was developed to support the Indonesian feedlot industry to implement and maintain cost-effective and sustainable biosecurity practices. The question being answered by this work was:

“What biosecurity practice changes are required for individual feedlots and abattoirs receiving Australian live export cattle to remain profitable and sustainable in the face of ongoing outbreaks of FMD and LSD in Indonesia?”

Methodology and approach

The project was delivered by a team of Australian and Indonesian veterinarians and supported by communications and management experts with experience in live cattle exports, the Indonesian feedlot industry, and FMD control in Southeast Asia.

Key activities included:

- > development of high-quality technical materials, available in English and Bahasa Indonesia.
- > workshops on understanding disease transmission.

Project partners

The project was funded jointly by

- > Australian Government's Department of Agriculture, Fisheries and Forestry (DAFF)
- > Meat & Livestock Australia (MLA)

Implementation was led by Ausvet with invaluable support from MLA and Gapuspindo (The Indonesian Cattle Business Association).



- > LSD workshops focusing on the complex vector control challenges associated with this disease.
- > project update webinars.
- > site visits, risk assessments and tailored recommendations reports.

Results

The project team visited 21 feedlots, 11 abattoirs and two ranch sites that receive Australian live export cattle (~75% of the industry). A total of 228 customised recommendations were made to feedlots and 70 recommendations to abattoirs. Example recommendations made to several facilities include:

- > Ceasing daily disinfection of pens with live animals in favour of cleaning and disinfection less regularly or only between batches of animals when pens are vacant.
- > Creating low and high biosecurity zones to reduce the risk of people, vehicles or equipment introducing disease through unnecessary contact with feedlot animals.
- > Implementing visitor risk assessment so visitors at a high risk of carrying infectious disease are restricted in their access.
- > Ensuring lairage at abattoirs remains under 48 hours.
- > Appropriately disposing of carcass waste (condemned parts) through burial or burning at abattoirs.

Two rounds of workshops were conducted to ensure that industry was provided with the most up to date information and training. Each round was delivered at three sites across Indonesia to improve access.

Eleven high quality technical information summaries were developed to complement workshops, site visits, risk assessments and reports. Four technical manuals and two videos were also published.

All these outputs were produced in both English and Bahasa Indonesia and available online and in physical formats.

The project team has drafted three papers for submission to peer-reviewed journals to ensure this experience is captured and available for future reference.

- > **Of the 228 recommendations made to feedlots and abattoirs, 65 and 75% respectively of these were being followed approximately six months after the initial risk assessment and site visit.**
- > **For feedlots, this went up to 75 per cent approximately 12 months after the initial risk assessment and site visit.**
- > **This demonstrates industry-wide practice change as a direct result of the project.**

Overall, the project has:

- > Led industry-wide refinement of biosecurity practices - not just for FMD and LSD, but more broadly beneficial.
- > Reduced industry-wide inappropriate use of disinfectant leading to better economic and health outcomes (human, animal and environmental).
- > Improved overall understanding of disease transmission for the future.
- > Created confidence in the appropriateness of biosecurity practices.

Conclusion and next steps

The Indonesian and Australian cattle industries have both benefited from the improvement in biosecurity measures delivered through this project.

However, there is still a lot of important work to do. The project team recommends the following:

- > Continued technical support to the Indonesian feedlot industry, extending to other causes of poor performance.
- > Support for extension activities in smallholder communities neighbouring feedlots.
- > Pilot biosecurity accreditation for feedlots who meet a particular standard.
- > Provide support for Indonesian feedlot animal health personnel to undertake further education and training.
- > Ongoing investigation into the impacts and efficacy of FMD and LSD vaccines.

