

INDONESIA BIOSECURITY SUPPORT PROJECT



Disease situation

Both foot and mouth disease (FMD) and lumpy skin disease (LSD) entered Indonesia in early 2022 and since then, cases of FMD have occurred in a number of feedlots. LSD has also been reported in feedlots in Sumatra. It is unlikely that either disease will be eradicated from Indonesia in the short-term.



Cost of FMD and LSD outbreaks

When FMD enters a feedlot, morbidity approaches 100% and affected businesses suffer significant economic loss caused by drops in daily average gain that don't appear to fully recover even when clinical signs resolve, and lost revenue due to premature salvage and emergency slaughter.

Early economic analysis conducted as part of this project estimates that the cost of **an FMD outbreak in a 1000 head feedlot ranges from A\$150,000 to A\$500,000 per outbreak depending on the interventions in place**, particularly how many animals are not fully protected by vaccination during the outbreak. The cost of LSD outbreaks may be less but still significant.



Cost of managing risk

Because animals are constantly moving in and out of feedlots and the FMD infection pressure in Indonesia is high (at least until there is widespread, sustained vaccination), feedlots are likely to experience more outbreaks in the upcoming years, particularly if their biosecurity is not sufficient. **Relatively low profit margins mean that most feedlots will not be financially viable if they cannot prevent consecutive outbreaks of FMD and LSD.** However, biosecurity interventions to prevent disease incursion are also expensive, especially if their efficacy is questionable and when they need to be implemented for many years.

Overall project delivery in the first 12 months

- > Australian and Indonesian experts have assessed biosecurity on-site and provided tailored solutions for improvements at over 30 intensive cattle facilities.
- > Three interactive workshops on disease transmission theory for staff from 26 different feedlots have been delivered.
- > Over 15 technical factsheets on relevant topics have been produced.
- > Several webinars and presentations have been delivered to key industry stakeholders.



Sites visited by biosecurity experts

JUNE 2022 - APRIL 2023

LEGEND

- Feedlots
- Abattoirs
- Breeding centres
- Abattoirs/feedlots/breeding centres in close proximity

Key findings to date

- > **All feedlots visited are taking biosecurity seriously.**
- > FMD outbreaks have occurred in some feedlots with severe economic impact.
- > 'Overspends' are common including **a lot of money spent on disinfectant use that is ineffective** (e.g spraying pens with live animals in them).
- > Common biosecurity gaps include **high volumes of potentially contaminated vehicles entering and traversing sites without proper decontamination** and visitor access granted without routine risk assessment.



Upcoming activities

The next stage of the project will focus on quantifying the practice change resulting from project recommendations. However, at this early stage we expect some of the following to be key project outcomes.

- > **Up to A\$1.37 million** of projected savings across 20 sites (Up to A\$72,850 per site) due to a single recommendation to move from daily pen spraying to twice weekly pen decontamination (cleaning, followed by disinfection) over a period of five years. ¹
- > **5 + outbreaks prevented** due to the recommendation to avoid accepting local cattle into the feedlot, even if they appear healthy and vaccinated with project savings of \$A750,000 as a result. ²
- > **Improved biosecurity through practice change** in areas such as buffer zoning and flow of vehicles on site resulting in savings of at least A\$750,000 in outbreaks prevented. ³

1 Moving from daily spraying to twice weekly pen decontamination will not increase the risk of disease outbreaks but will greatly reduce the cost of disinfectant use.

2 There is some complacency due to a reduction in the frequency of outbreaks. Some feedlots are therefore considering commencing the acceptance of local cattle, if they are healthy and have eartags indicating recent vaccination. If this practice occurs frequently, outbreaks will occur when animals are incubating disease (prior to clinical signs) and immunity from their initial round of vaccinations has waned.

3 This estimate is conservative given that 14 feedlots have received reports with recommendations, and we expect FMD to remain in Indonesia for at least the next 3 years, placing constant infection pressure on these businesses.