



CONFINEMENT-FREE FARROWING AND LACTATION SYSTEMS

DEVELOPING COMMERCIALY VIABLE, CONFINEMENT FREE FARROWING AND LACTATION SYSTEMS

Project Participants

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Problem

Farrowing crates can improve the welfare of neonatal pigs by providing warmth and reducing the risk of piglets becoming cold, dying from starvation, or being overlain by the sow. However, these crates restrict the ability of the sow to move around and perform pre-farrowing behaviours such as nest-site selection, nest building activity. They are also viewed in a negative light by the public. A confinement-free farrowing pen needs to be designed to meet the needs of both the sows and piglets while remaining commercially viable.

Value for Producers

The implementation of new confinement-free farrowing systems in Australian pig sheds, such as PigSAFE, results in comparable performance to sows and piglets housed in the current farrowing crate system while allowing sows to perform maternal behaviours. Additionally, the implementation of confinement free farrowing systems could encourage improved public perception of pig farming.

However, further research needs to be completed to reduce the number of overlain piglets in the PigSAFE system to ensure economic viability.



Results

The PigSAFE system is comparable to the current farrowing crate system being used across the industry. There was a slight increase in growth rate of piglets in the PigSAFE system, but a creep feeder needs to be developed which can be protected from the sow.

The PigSAFE system meets the biological needs of the sow. Sows are not constrained at all during farrowing and lactation. They are able to move around and perform maternal behaviours such as nest building. The nest design in the PigSAFE pen was successful at promoting sows to farrow in the designated nest area, regardless of season.

Piglet survival was not improved in the PigSAFE system, with a trend toward higher mortality due to piglets being overlain by the sow. Piglet survival will need to improve to increase the commercial viability of the PigSAFE system, and allow for recuperation of the higher construction costs.

The two-stage system (moving sows into group lactation housing) had a similar number of piglets weaned, and overall (farrowing and lactation) piglet mortality when compared to the current Australian farrowing systems. However, piglet growth rate and weaning weight were reduced in a two-stage system which may be due to cross suckling, increased socialisation and activity and lower feed intake of sows in group housing after 14 days.

Further research needs to be completed to investigate pen modifications which reduces the risk of piglets being overlain by the sow.

More Information

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Confinement free lactation system



PIGSAFE system