

PigSustain: Assessing the resilience of the UK pig industry

Research capability

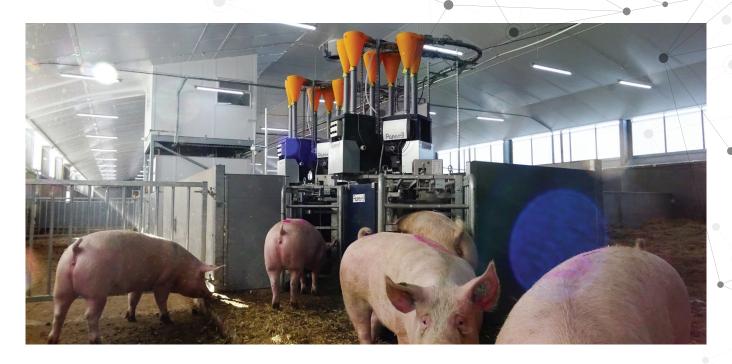
> National Pig Centre

The UK's largest and most advanced facility for research into pig nutrition, behaviour, welfare & health, and production systems.

Challenge •

Globally, pork is the largest meat industry. As the human population continues to grow, pork production will need sustainable intensification. Led by the University of Leeds, the PigSustain project is using a multi-disciplinary, integrated systems approach to model and assess the resilience of the UK pig industry to ensure any future intensification is balanced with improved animal health & welfare.





Action

PigSustain is unique in that it brings together many areas of research that would not normally be done together in the same project, from economics and business, health & welfare, computer vision, to social research.

The project includes developing a cutting-edge, automated computer vision system capable of collecting real-time information 24/7 on health, welfare and productivity on-farm. The system has been developed with a view to making it commercially available, with outputs for vets and farmers to understand the changes that have taken place within pens over a period of time.

The advanced surveillance system developed within the PigSustain project is one of the many technological features to be trialled within the new National Pig Centre, developed by CIEL in partnership with the University of Leeds. The facility permits round the clock monitoring of pig behaviour and welfare at all stages of production and allows early detection and intervention of any issues arising.

The centralised integration of multi-stream data inputs from across the production cycle enables detailed analysis both in real-time and retrospectively, to enhance productivity and trial new standards for UK herds to ensure sustainable intensification is balanced with the highest welfare standards.

Impact

Over and above improved animal health & welfare and productivity gains, a sustainable pig industry means consumers can continue to benefit from high quality, nutritious food that is readily available at an affordable price. The project also presents an opportunity to educate and inform the wider public about the issues around intensification of agriculture, climate change, and animal health and welfare, and how it could potentially impact on them in the future.

PigSustain is funded through the Global Food Security's 'Resilience of the UK Food System Programme', with support from BBSRC, ESRC, NERC and the Scottish Government.







