



Improving pig system performance through a whole system approach (PigSys)

Partners Univ. Kassel, DE; SEGES, DK; LLU, LV; SLU, SE; UNEW, UK; IFIP & INRA, FR

Problem(s) addressed in the project

Animal welfare and performance; Data handling and fusion (big data management); Resource and energy demands in pig production; Production management and climate control on pig farms; Life Cycle Impact Assessment; Emission, waste and carbon footprint

Objectives

- Development of a centralised decision support system (DSS);
- Development of an integrative system model
- Development of animal-based environmental control system
- LCA and LCCA
- Stakeholder engagement

Interim research findings

Core architecture of the data warehouse is functional Appropriate models was developed to link animal and building performance based on data from the involved partners'; Machine vision monitoring is functional; Technical solutions for cooling of pigs was tested; LCA frameworks with the ability to evaluate pig production systems are functional; Stakeholders have been informed and involved in the project

Future research and activities

- Integrating farm data recording systems to the warehouse system
- Development of sensors fusion and integration of animal welfare into the climate control system
- Economic analysis of existing frameworks
- Develoment and circulation of training materials for the involved farmers and technology providers

Funding











PIGS



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