EU-PLF
Bright Farm by Precision Livestock Farming

www.eu-plf.eu

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Overview

• The EU-PLF Project
• Project results
• Impact
• Lessons learnt
• Potential of technologies for animal health and welfare
What is Precision Livestock Farming (PLF)?

Management of livestock farming by continuous automated real-time monitoring/managing of production/reproduction, health and welfare of livestock and environmental impact.
The EU-PLF Project
Approach and objectives

• PLF installations on farms: 10 pig farms, 5 broiler farms, 5 cow farms
• Data collection and analyses
• Start 4 spin-off companies
• Determine added value of PLF technology through the value chain
• Generate a **practical blueprint**: A manual on how to implement PLF technology in a farm
20 Farmers

1 Dissemination partner
EAAP - Italy

3 Industrial partners
- Fancom - the Netherlands
- GEA FT - Germany
- Nutrition Sciences - Belgium

3 Research institutes
- INRA - France
- ARO - Israel
- Teagasc - Ireland

6 Universities
- KU Leuven - Belgium
- SLU - Sweden
- University of Bristol - UK
- Unimi - Italy
- RVC - UK
- WU - the Netherlands

6 SME’s
- SoundTalks - Belgium
- PLF Agritech - UK
- Xenon - Belgium
- Abrox - Spain
- Syntesa - Spain
- M&M Corporation - Belgium

3 Research partners
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6 Universities
Project results
Video-based monitoring of broiler behavior – Validation

**Conclusion:** Events in a broiler house could be detected using top-view image analysis with an accuracy of 95.24%.
Infection Monitoring by On-line Pig Sound Analysis

![Graph showing cough index over time with key events.]
Dissemination of results

- Website – [www.eu-plf.eu](http://www.eu-plf.eu)
- 4 newsletters
- Social media
- 44 invited keynotes
- e-course and EU-PLF blueprint: website
- 1 week PLF course in Zaragoza
- Documentaries on Euronews, Arte, ...
- 44 publications (23 of which were scientific)
Impact of project

- Testimonies of farmers
- Visibility of continuous automated PLF approach versus yearly visits
- Potential business models for this approach
- 4 successful start-ups
- Creation of blueprint = website

Four spin-off companies

- Organised events in search for start-up teams
  - 22 teams were selected and coaching started

Creation of the Blueprint

- Will have a common platform with the e-learning course
  - Blueprint: 30 minutes
  - e-learning course: 30 hours
Main success factors

• Best expertise in the EU brought together
• Interaction between Industry & Research
• Collaboration with European farmers
• 4 start-up companies created
• Good collaboration between part of the research partners
• Collaboration between some of the academia & research institutes, farmers, big companies, SME’s, start-ups
Potential of technologies for animal health and welfare
In the future PLF can...

• Improve animal health and welfare with good economy and reduced environmental impact
• Increase transparency of animal production
• Demonstrate to consumers the real animal welfare in both “natural livestock farming” and “industrial livestock farming”
• Bring new business models to the livestock chain
• Turn sensor data into more relevant information for farmers
Thank you

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