EU - PLF

Smart Farming for Europe
Value creation through Precision Livestock Farming

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The partners

KU LEUVEN — KU Leuven, Belgium

SLU — Swedish University of Agricultural Sciences, Sweden

University of BRISTOL — University of Bristol, UK

INRA SCIENCE & IMPACT — National Institute for Agricultural Research, France

UNIVERSITÀ DEGLI STUDI DI MILANO — University of Milan, Italy

A.R.O., The Volcani center, Israel

cagasc — Agriculture and Food Development Authority, Ireland

Royal Veterinary College University of London — The Royal Veterinary College, UK

WAGENINGEN UR *For quality of life* — Wageningen UR, The Netherlands

Fancom *forward thinking* — Fancom BV, The Netherlands

SoundTalks — SoundTalks NV, Belgium

PLF Agritech EU Ltd — PLF Agritech Europe LTD, UK

Xenon new technologies — Xenon New Technologies GCV, Belgium

ABROX — Abrox, Advances Technology, Spain

SYNTESA — Syntesa sp/f, Feroe Islands

nutrition sciences — Nutrition Sciences NV, Belgium

EAAP — EAAP, European Federation of Animal Science, Italy

M&M Corporation — M&M Corporation, Belgium

GEA — GEA Farm Technologies

EU-PLF is designed to bring **P**recision **L**ivestock **F**arming tools from the lab to the farm, for the benefit of animals, farmers, consumers, industry and environment
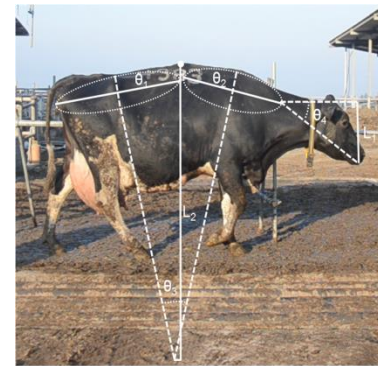
The overall objective of the **EU-PLF** project is to bring available **PLF** tools from the lab to the farm. The process of making those tools operational for the end-user in dairy, pig and poultry farms will be studied and a generic procedure (blueprint) will be created that will help people in the future to translate Precision Livestock Farming concepts into operational tools. This blueprint represents a manual for farmers and high tech SME's that are keen to develop and use **PLF** tools. It will be a reference tool offering pragmatic guidance on how **PLF** systems can be applied on farm level in order to create value for the farmer and other stakeholders.

Precision Livestock Farming is based upon using monitoring systems (through image and sound analysis techniques and sensors) to follow the animal's health status and welfare and detect diseases and disorders at an early stage. By automating the process, the farmer is able to receive real-time information on his livestock which is most valuable for him to manage and optimise animal production in a fast and accurate way.

Why do we need PLF ?

The size of livestock farms increased dramatically in recent times, that resulted in large number of animals cared for by decreasing number of livestock producers. Thus, farmers are finding increasingly difficult to take care of the animals in a satisfactory manner. This may result in a decreased technical and economic performance of the farm and lower welfare for the animals.
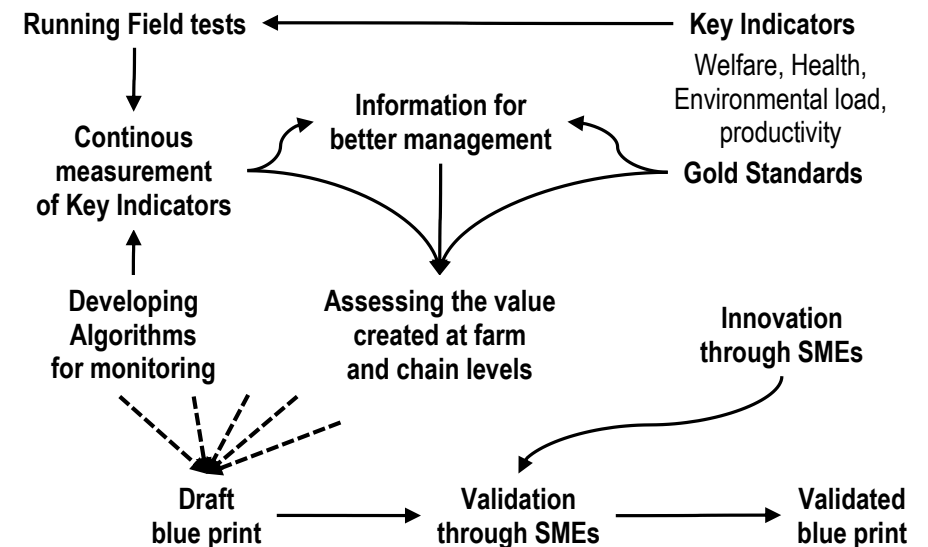

Precision **L**ivestock **F**arming could assist livestock producers through automated, continuous monitoring of the animals. The observation data can be translated into key indicators on animal welfare, animal health, productivity and environmental impact. A number of **PLF** tools have been developed at laboratory levels and as prototypes; they now have to be developed into services for the end-users in the farm.

What we will do

Highly experienced European teams from different disciplines with a proven track record in animal and **PLF**-related fields, including animal scientists, veterinarians, ethologists, bio-engineers, engineers, social scientists and economists, have joined forces with leading industrial market players in the livestock industry and high tech SME's to deliver a useful **PLF** blueprint. A competition for SME's and starters will be organised and the best ideas will get funding to design a **PLF**-prototype using their high tech innovative solutions. In collaboration with a leading industrial **PLF**-partner, the selected SME's and starters will use the blueprint to bring their prototype to farm level.