



**ClearFarm**

**PRACTICE ABSTRACT**

## **What is Precision Livestock Farming and what can it bring to animal production?**

Precision Livestock Farming (PLF) is the **use of advanced technologies** to reduce labour and to monitor and **optimize farming processes**. It is based on the use of sensors capable to monitor a vast range of variables with an interest for animal welfare, environmental impact and productivity.


These technologies provide **real-time data** of individual animals and groups of animals as a whole, that allow to monitor their welfare status and make sure that a fast reaction will occur to solve specific problems.

There are different technologies developed for monitoring pig and dairy cattle farms. For instance, sensors installed on animal or in the nearby environment can detect sudden change in animals' behaviour, such as in feeding, drinking, rumination, moving, vocalization or productivity. Moreover, the physical state of the animal, such as temperature, progesterone level or rumen pH can be monitored by thermal cameras, automatic milking stations or rumen boluses respectively, to give some examples.

### **Contact us**

 <http://www.clearfarm.eu/>

 +34 93 581 2854

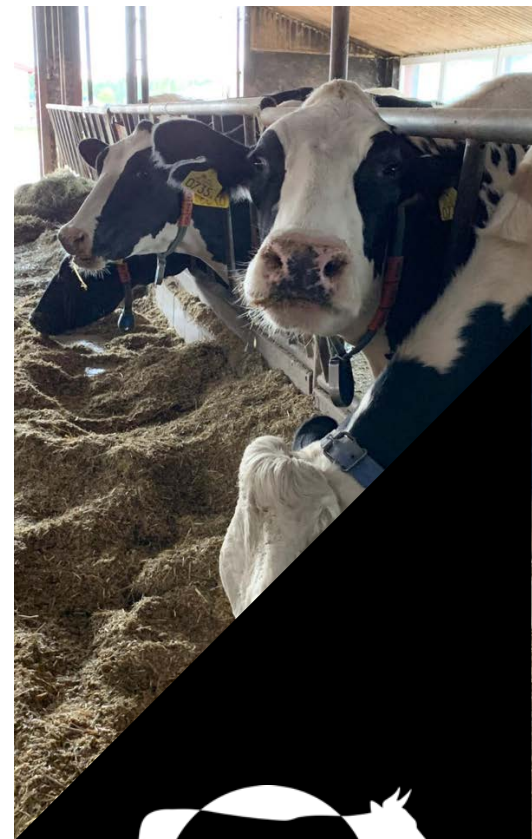
 [clearfarm@uab.cat](mailto:clearfarm@uab.cat)

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PLF systems generate large volumes of on-farm data that has the potential to **support farmers, retailers, consumers and other players along the supply chain to assess welfare and make better choices**. However, there is still the need for an integration of the different aspects of animal welfare into a single outcome that could better assist stakeholders.

ClearFarm will develop a connected platform, based on an integration of welfare indicators monitored by sensors and systematically collected indicators, offering the highest range and sensitivity to provide easy to understand welfare information.

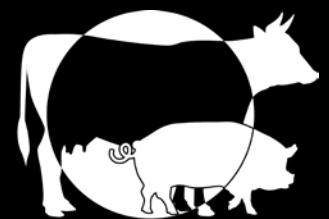


## SENSORS

-  collars
-  RFID tags
-  microphones
-  environmental sensors
-  others

## INDICATORS

-  EMISSIONS
-  ENERGY
-  LIGHT
-  TEMPERATURE / HUMIDITY
-  FEED
-  WATER
-  HEALTH
-  BEHAVIOUR



**ClearFarm**



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 862919.