





HappyCow FIWARE Short Profile

May 2016

# High Potential Initiatives Profiles

# **Accelerator**

**Smart Agrifood** 



# **Project and Organization**

Happy Cow Connecterra

### 2.1 Country

The Netherlands



### 2.2 Project Abstract

Project Happy Cow aims to develop hardware and software for a cloud based Estrus detection system for dairy farms with a special focus on organic dairy farms. Its approach is based on using the Internet of things leveraging the FI-Ware platform. An increase in the cost of production, abolishment of the quota system will put pressure on dairy farmers to find new ways to optimize their farm production. Estrus detection is one of the fundamental optimization points in operations and can save farmers significant amounts of money, up to €250/year per cow. While current detection systems provide adequate accuracy, they are mostly based on algorithms designed for indoor/shed base farms. Furthermore, the business model is based on monolithic implementations based on devices that require fixed capital investments. These systems are usually out of reach of small to medium sized farms. Also, the technology is fixed and cannot be adapted to changing farmer needs and scale. In the future it is anticipated that farms will need to optimize their facilities for greenhouse emissions, animal welfare and production per cow require systems which not only measure but also provide a scientific basis for prediction and control. Sensor based solutions will be required to scale and adapt to these needs. For farmers, an optimal solution would be to invest in systems that can adapt and morph as the needs change. In order to detect estrus and animal behavior, the Happy Cow solution uses sensors mounted on cows connected to a cloud services platform providing a unique approach to estrus detection leveraging deep learning, life-time data storage and FI-Ware integration to enable new services based on sensor networks. The Happy Cow approach is transmutable to different scenarios within the farm environment and currently does not have any direct competition.

#### 2.3 Sector

Agriculture, Forestry and Fishing







### HappyCow FIWARE Short Profile

# 2.4 Target Market

B<sub>2</sub>B

# 2.5 Business Model

Usage fees model; Subscription model

| SMART CITY SOLUTION         | NO  |
|-----------------------------|-----|
| CLOUD SOLUTION              | YES |
| SOCIAL MEDIA SOLUTION       | NO  |
| MOBILE SOLUTION             | NO  |
| BIG DATA/ANALYTICS SOLUTION | YES |
| IOT                         | YES |

# 2.6 Website

http://www.connecterra.io