Creation a pig sector comprehensive data management platform

Summary

In the meat sector, pork represents about 95% of sacrifices made in Catalonia, and is positioned as the most important within the agricultural sector and Catalan agriculture industry. That is why we must pay special attention not only to preserve their economic activity; also with the aim of improving some of the precarious conditions that characterize the sector. Even though the sector has become more international in the last years, all the procedures remain the same.

For the execution of this project, it has been created an operative group able to present the experience and skills required by the sector. This group is formed by FECIC and PORCAT two non-profit entities that represent the sector in all and each of its different phases.

We want to be able to give guarantees of food safety and quality, so to achieve this, it is important that there is a connection between different records and data generated along the food chain

Along the food chain, a lot of records are generated on farms, transport, slaughterhouses ...

It consists in a set of records that are not connected to each other, but they keep an important relation to each other. This connection , would help us to identify the main errors and weaknesses of the sector and contribute to an overall improvement of the final product.

There are records stored on paper, receipts or invoices; are data that do not represent in itself a tool with which we can work directly.

Records almost double the information in different formats, basically because they target different audiences. These facts, together with others who have appeared throughout the field study, eventually represent a significant loss of information and time for operators.

The high volume of records generated, many of them repeatedly, constant and daily became a high volume of information that farms and slaughterhouses can not analyse or use for their own benefit, so this fact, doesn't facilitate their processing.

We need to change the format in which they find these records (monitor the system), in order to structure more all this information that would be included in a single space and format.

The main idea is to integrate all these data in a "Big Data", which allows us to know in real time all the information that may be of interest not only in terms of food safety, but also in terms of productivity and economic returns.

The creation of this platform will allow us to manage as an integrated way this data generated in the sector. We may be able to identify which are the main factors involved positively in an improvement in both food Safety, Quality and production profitability, highlighting what factors must be strengthened.

Knowledge of traceability and what happens in real time, should allow us to detect the source of the problems, weaknesses in the sector and any discrepancies between assessment criteria or procedures that may exist.

Objectives

The high number of records that are generated, entails an unnecessary administrative overhead. We want to end the current documentary bureaucracy that characterizes the sector, and derive all this information in creating an efficient management tool.

The purpose of this project is to develop a working tool that allows us to align all the data records generated on farms, slaughterhouses and during transport,and be able yto have a depht vision of the traceability in the alimentari chain, which at the same time, let us not only identify what are the main problems affecting the sector, but to go further, and find what are the causes, and be able to make proposals for improvement.

Following the same line of finding a constant for the sector improves, the existence of a platform of this nature will allow us to connect and relate the performance presented by different farms and slaughterhouses, with the titles, qualifications or certificates in biosecurity, animal welfare or other variables that may have, in order to see which of these distinctions can provide an overall benefit to the industry, offering greater guarantees and improved production efficiency.

Currently, there is no system that allows us to detect, in real time, certificates or qualifications that can really contribute to an improvement in the quality, safety or productivity.

Considering also that there may be many variables and factors that determine a difference in the performance of a company, what we want is to end with these information gaps generated, and improve communication between the different links that forms the food chain.

Our idea goes further than create a database, because we don't want to create static store information. What we want, it is to manage a complex set of data and records, among which there is no direct connection.

This information, structured and accessible, will enable the operator of the farm or slaughterhouse, to obtain a practically daily report about which one is the situation of their company.

Having a large database (Big Data), which collects and centralizes the different records, controls and certificates that exist in the pig sector, ranging from farm to slaughterhouse, through transport, can make performance and functionality of this information, to enhance productivity and to take better advantage in the use of resources

Thus, we can get a better view of the entire production chain, and give an added value of all of these data and records that are generated, in order to improve their management, and obtain improved competition and productivity for the sector.

Conclusions

The idea of improving communication and get more performance information generated at the different points in the chain, will give a more consolidated vision for the international market. We can offer a more unified sector where all the information generated has meaning and value. This Big Data, enable us to offer better guarantees in Health, Quality and Management of the sector, and it will streamline production processes with improved profitability.

After analysing the sector, based on the field study, it has highlighted the lack of digitizing of some records, mainly on farms, even though some of these are already in a start scanning with the GTR system (Gestio Telemàtica Ramadera), which nowadays is implementing the DARP, there are still many records following an old system without a good utility that reveals the need to initiate a substantial improvement in the management of the sector.

The large number of records that are generated entails an unnecessary administrative overhead. We want to end the current documentary bureaucracy that characterizes the sector, and derive this information in creating an efficient management tool. Creating a scheme to ensure the integration of the whole process the production of food from its origin may represent the first step towards updating and improving the sector.

This large database will allow us to detect, for example , where and why most of the seizures are generated, and determine whether the development of a harmonized model for the control of SVO in slaughterhouses or farms is necessary (depending on where the largest number of casualties are given) , it would be interesting also to harmonize the action guidelines of carriers, and others who may be involved secondarily in the chain. Or to be able to access relevant information,as disinfection centers where they went trucks carrying the animals, or differences which may represent more or less staff turnover within a company, among many other variables.

The platform will share information, tools and resources for data processing and development of joint projects, accelerating convergence between industrial and ICT sectors. The result will be specific applications and services that enable progress towards a digitized and interconnected industry - Industry 4.0-, which will favour the efficiency of production processes and business competitiveness.

Thus, processes accelerate innovation to create products with high added value in key areas. The launch of this new project, which will create a platform for comprehensive management industry data (Big Data) has the ability to offer a range of additional services to simple data entry, and in turn makes it possible to store large volumes of information.

Additional services that can offer this infrastructure will help us to develop algorithms and other processing of the data. In short, what we are looking for, it is to evolve the sector made a digitized format, allowing us to position ourselves at the same level as the large European producers at the level of management, innovation, quality and safety

Operational Group Leader

Entitat: **FEDERACIÓ CATALANA D'INDÚSTRIES DE LA CARN (FECIC)**

E-mail de contacte:
administracio@fecic.es

Tipologia d'entitat:
Agrup. o assoc. d'empreses/indústries forestals

Keyword-category

Territorial scope

Animal husbandry and welfare	**Province**	**County**
Farming practice	Barcelona	Barcelonès

Project dissemination *(publications, seminars, multimedia...)*

Project website

Other project information

Project period

Starting date (month-year): Novembre 2015

End date (month-year): Setembre 2016

Project status: *Finalised*

Approved budget

Total budget:	**28.500,00 €**
Funding source DARP:	*11.371,50 €*
Funding source EU:	*8.578,50 €*
Own funds:	*8.550,00 €*

With the support of:

Id. projecte: 72 2015

Suport for the establishment of Operational Groups. Call 2015

September 2016