A multi-actor approach to develop solutions for animal welfare monitoring

The acceptance of producers and consumers is essential for the adoption of technological solutions to improving animal welfare. Therefore, using the methodology of Design Thinking, ClearFarm gathered different profiles involved in the value chains of dairy cattle and pig products so that their needs and sensitivities were fully represented to ensure that the newly developed technological solution fit into their requirements.

In this sense, a sequence of events, both focus groups and co-creation workshops, were organized with consumers, producers, retailers, regulators, academics, animal welfare organisations and policy makers. First, six consumer focus group discussions were conducted in three European countries. The workshops were held identically in Spain, the Netherlands and Finland, involving 56 participants in total who knew only a little about the production cycles of pigs and dairy cows, and about PLF technology.

The next step was to interview 45 stakeholders from the most important stages of the value chains. They were confronted to the consumers’ ideas, concerns, demands and suggestions of how to implement PLF practices in the pigs and dairy cows value chains.
After understanding the consumer’s needs, the requirements and opportunities for companies and the technological and institutional constraints, ClearFarm organized **online workshops with key stakeholders and partners of the project**. A total of 18 online workshop sessions were conducted, following a design thinking approach: one technical trial, one introductory workshop session, ten creation sessions with working groups and a final session of ideation with five breakout sessions.

The aim of these workshops was to **designed blueprint solutions, based on Precision Livestock Farming, to provide easy to understand information on animal welfare status**, as well as other environmental and economic sustainability information, to producers and consumers. Seven challenges were discussed:

- the integration of measurable indicators and standards,
- innovative technology,
- the value propositions towards consumers,
- the decision-making in the production chain and in policy,
- the connection to animal welfare organizations,
- the data management and protection and
- the unintended impact of the system itself.