Releasing the Potential of ICT in Milk and Beef Value Chains

ICT is transforming agri-food sector and huge amount of data is produced daily. However, so far, the utilization of animal health and welfare data by agri-food value chain stakeholders has been hampered by considerable challenges.



SustainIT aims to identify technological, economic, social and institutional barriers of widespread adoption of animal health and welfare related ICT, and to develop conceptual solutions and business models for ICT adoption in milk and beef value chains. SustainIT uses multi-actor approach by engaging dairy and beef value chain, value network, ICT, and public sector stakeholders in the Living Labs established in Germany, Sweden, Finland and Estonia.

SustainIT Living Labs

The Living Labs are tools for stakeholder engagement, collaboration and problem solving, but also help to steer the project focus. The initiation of the Living Labs is part of the project and aims for a long-term network that enables new synergies during the project and beyond.

The SustainIT Living Labs have two-layered structure:

- 1. The research team meets regularly in a central, overarching Project Living Lab. This Living Lab focuses on a continuous, cross border co-learning process, the research agenda and methodological approaches.
- 2. In each country, the local research team has additionally initiated a Living Lab with the value chain stakeholders. This Living Lab focuses on the identification barriers related to widespread ICT adoption, the creation of solutions and building a network.

In the first half of 2021, the core research team worked on the methodological approach for the country Living Labs. This included specifying the aims, organization, and training of team members for effective stakeholder engagement. The first national Living Lab meetings took place in Sweden in July, followed by Living Labs in Germany, Estonia and Finland in October and November.

Animal health and welfare data review

Animal health and welfare data analysis kicked off in 2021 with review on availability of cattle health and welfare data in Finland, Estonia, Sweden and Germany, and analysis of existing technologies for the data collection. The comparisons were made on the types of registries and databases for animals, animal health and welfare in each country, the data collected, data ownership and data access and challenges. Number of animal health and welfare related databases covered by the analysis was five in Finland, Germany and Sweden, and two in Estonia.

The preliminary analysis of databases indicates that in Finland and Sweden most databases have been initiated and managed by the co-operatives and associations including dairies, advisory organizations and cattle farm associations. The databases have thus been generated and are being operated by farming-related non-governmental organizations. In Estonia and Germany, databases have been initiated by governmental organizations or offices, although currently they may be run by (state-owned) companies. In Finland, the databases and various applications have been developed by the same ICT company, and data is transferred between the databases fluently. Estonian database system is the youngest. Germany has animal health database connected to quality certification system for beef.

Relevant link(s)

SustainIT webpage https://sustainit.ee/LinkedIn

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