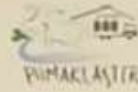
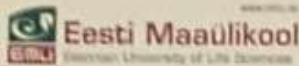


Releasing the potential of ICT for sustainable milk and beef cattle value chains



Summary

SustainIT addresses the availability and use of animal health and welfare related ICT to strengthen the viability of dairy and beef cattle value chains (VC). By engaging multiple stakeholders in Living Labs, a basis of observation, learning and understanding is formed to support wider adoption of ICT. SustainIT provides conceptual solutions for major challenges and opportunities, guides for future policy actions, VC collaborations and networks as well as management practices to enhance the use and applicability of animal health and welfare related ICT innovations. Better understanding of institutional pressures and barriers will help to address potential solutions for data standardisation, reduced costs, better availability and exchange of data that in turn will contribute to better public policy and governance.

Main objectives

- Identify institutional, economic and social barriers of wider adoption of ICT in relation to animal health and welfare in cattle VC.
- Develop new conceptual business models that use ICT to respond to consumer and societal expectations.
- Create recommendations for governance of innovation ecosystems to release the full potential of ICT in dairy and beef VC.

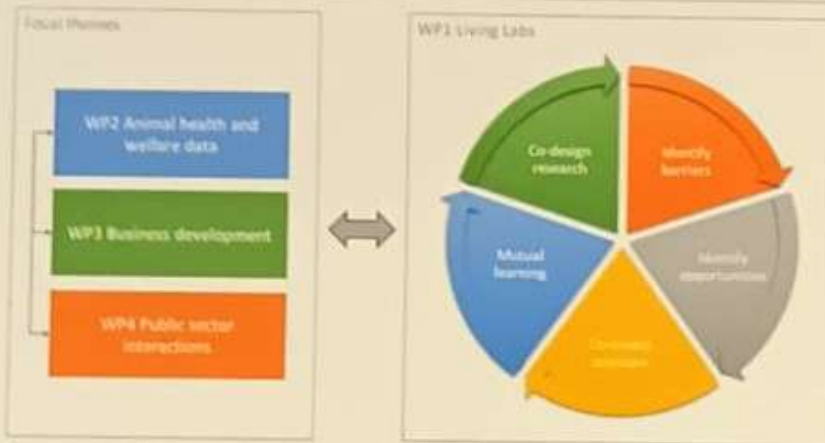


Fig. 1: Conceptual approach of the project

Living Labs

- Living Labs provide a unique operational innovation platform to co-create solutions, intensify cooperation, simplify information flows, and for co-learning.
- Living Labs and their coordination structure established in Germany, Sweden, Finland and Estonia.
- Partners trained in active participation methods.
- Active participation of cattle VC stakeholders in exchange, co-learning, and communication in the Living Labs.

Animal health and welfare data

- Digitalization of the animal health and welfare sector is starting to develop, but has still underexploited potential of integrating existing databases.
- Diverse institutional settings and structures of existing animal welfare and health databases in project countries pose context-specific challenges for the interoperability of the existing databases.
- Main actors of existing animal health and welfare databases, country-specific institutional settings, and data usage in cattle VC segments: animal registries (state); livestock and milk performance testing, health and treatments cooperatives and/or state); risk analysis (state); processing industry; certification agencies.
- Internationally harmonized health status codes are needed to ease data transfer from farm level herd management softwares to central databases.
- At the national level health status codes are in use by the central databases in Finland, Sweden and Estonia.

Business development

- Demand for animal health and welfare data is still limited.
- A growing awareness and request for information among younger generation.
- Consumers prioritize minimal use of antibiotics and general good health status of animals. This data is to a large extent available in existing databases
- Abundance of labels and information is not informative for consumers.
- Business models that incentivise cross-system exchange of data and information in cattle VCs are needed.

Public sector interactions

- Collaboration with impactful Data Initiatives (e.g., Gaia-x, national agricultural big data initiatives) and Digital Innovation Hubs offers potential for the development of multi-actor, co-creative platforms that facilitate the transfer of knowledge between micro-, meso- and macro-levels.
- Business and governance models are needed that enable a sustainable and practical integration of ICT applications, co-learning, and successful development of innovation ecosystem.

