



Bridging Science and Practice: Insights from the CATALYSE Pilot Chapters on Dairy and Alternative Products

Helena Stoffers & Ghazal Nemati



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Project funded by



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Research and Innovation SERI**



**UK Research
and Innovation**

This project has received funding from UK Research and Innovation (UKRI)

Introduction: Food Safety

Food safety is a critical aspect to **ensure** that the food we consume is **free** from harmful **contaminants**.

According to the WHO, contaminated food causes **600M cases of foodborne diseases** and **420K deaths** every year, resulting in **33M healthy life years lost**, and this is possibly an underestimation.

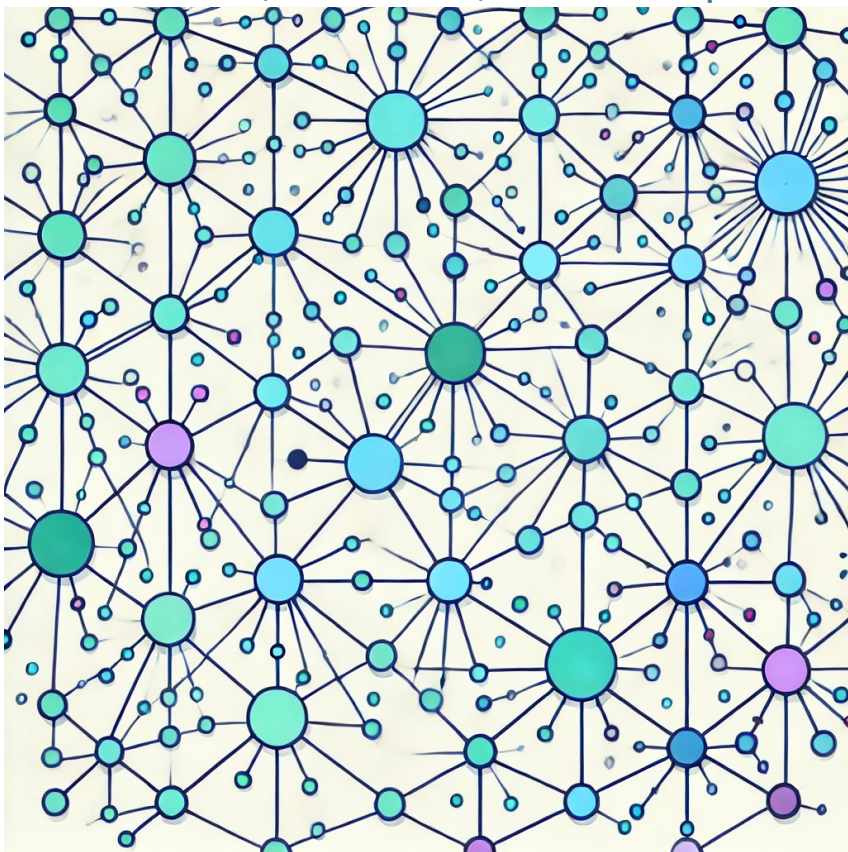


A 2019 World Bank report states US\$110B is **lost** each year in **productivity** and **medical costs** due to unsafe food in low- and middle-income countries.

Contaminated product recalls affect benefits and create food waste.

What is our challenge?

Building Bridges Across Authorities,
Industries, Academia, and Startups



Facilitate & Educate

Sorting, Validating, and Simplifying the
Abundance of Information



Collect & Translate

Main facts

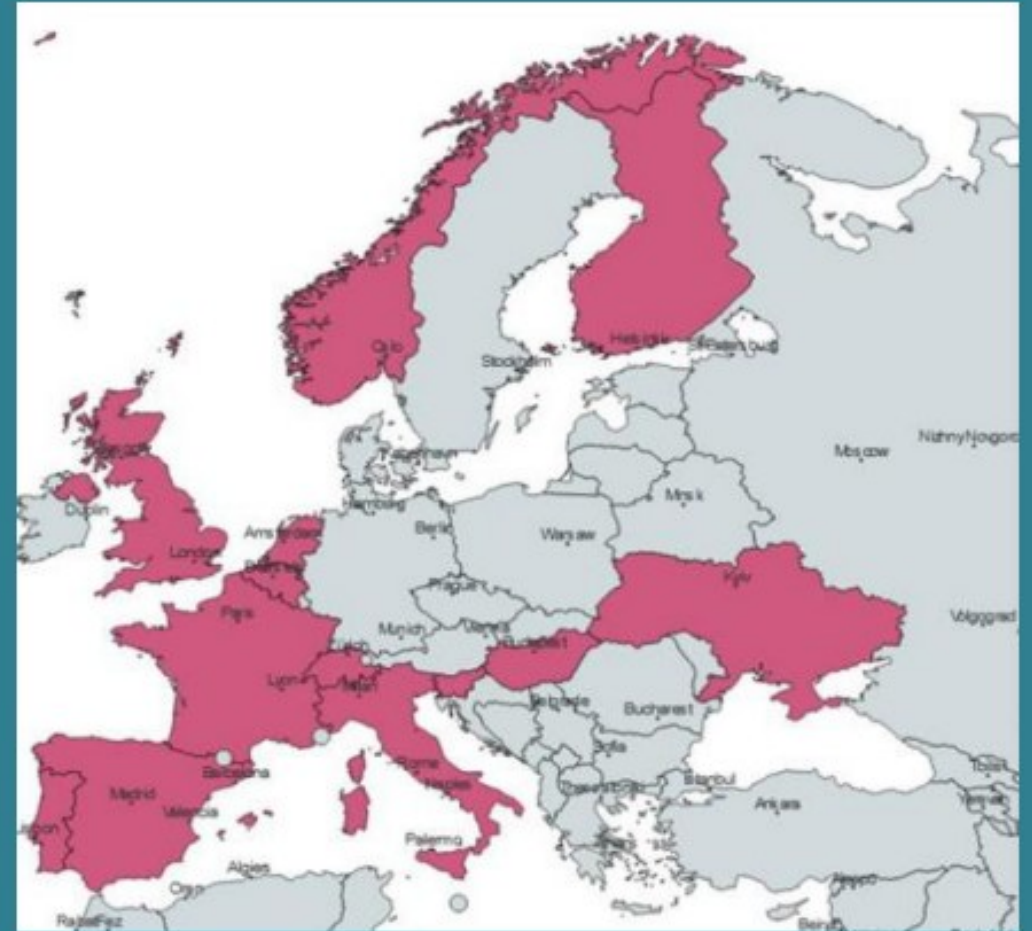
Call: HORIZON-CL6-2023-FARM2FORK-01-12

Thematic network ensuring food safety by translating research & innovation into practice

3 years project: 01/01/2024 - 31/12/2026

17 partners representing the food system (research and academia, industry associations, national regulatory bodies)

13 countries (Italy, Portugal, Belgium, The Netherlands, Norway, Spain, Hungary, Finland, Slovakia, United Kingdom, France, Ukraine, Switzerland)



17 partners from Authorities, Academia, Industry, Society

Project Coordinator



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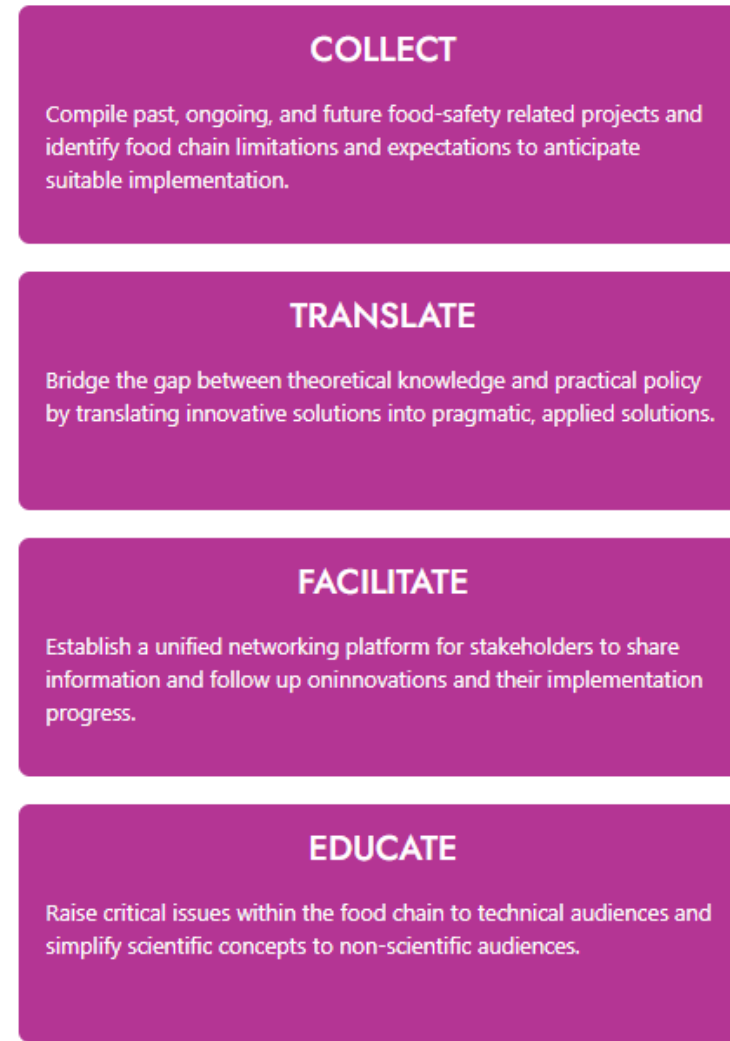
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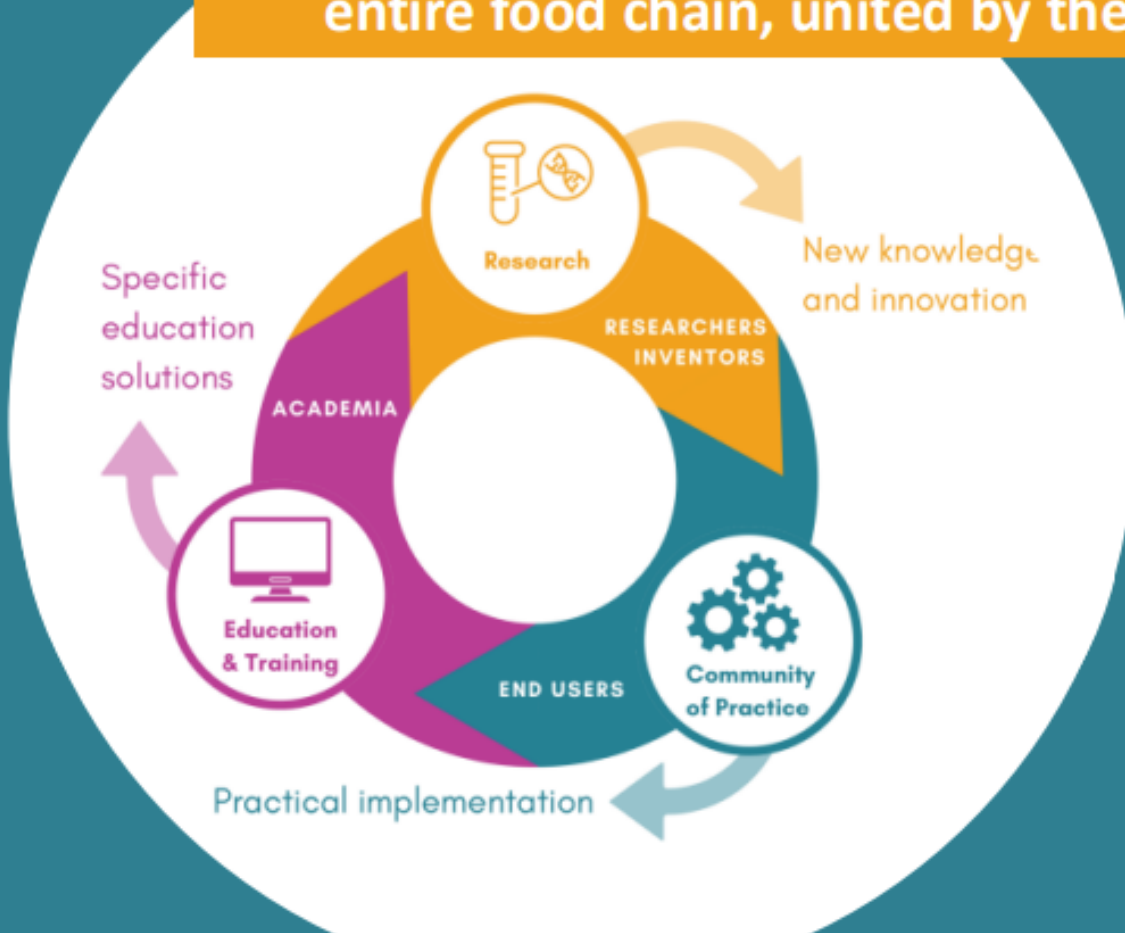
CATALYSE – Working model

EXPECTED RESULTS

1. Prioritised list with needs from end-users
2. List of high potential innovations
3. Searchable knowledge database
4. Vivid **Community of Practice**
5. High quality education program
6. Better connections between end-users and innovators
7. **Improved uptake of new innovations in food safety**



CATALYSE AIM: create a strong, sustainable, and inclusive community, both online and in practice, to address the diverse needs of stakeholders along the entire food chain, united by the common goal of ensuring food safety.



CATALYSE will develop a **platform** to facilitate the dissemination, application, and full utilization of new knowledge and innovative solutions created by the **scientific and business community** within the food system.

CATALYSE will also create effective channels to **connect knowledge and innovation ecosystems in food safety**, linking all stakeholders.

CATALYSE will play the vital role of bringing together the key players in the food ecosystem to collaborate and support the transfer of innovation for food safety into practice

Community of Practice (CoP)

*“CoP are groups of people who **share a concern or a passion** for something they do and **learn how to do it better** as they **interact regularly**.”*

Etienne Wenger

This community collaborates to learn, exchange experiences and improve their skills.

Give voice to the stakeholders/members in the CoP



Bridging Science & Practice: Comprehensive Database on food safety and innovations

Agroscope,cheese,
Dairy & alternatives

Matchmaking
Innovative Startups

Practice-Oriented
Training & videos

Webinars, On-
site events

Welcome
About CoP

Food Safety feed
(CoP)

Chapters

Innovations in
Food Safety

Resources
(repository)

Educational
materials

Events

Newsletter; articles, events, AI & tech

Sharing Emerging Risks & Detection Methods

Interactive Blog & Q&A, knowledge exchange

Success Stories , Best Practice of members

Influence on Research Priorities& legislations



News

Regular updates and highlights on food safety innovations, events, and community news.
Loop of monthly news/updates



Blog for experts

Opinion articles on Food Safety

Interviews



Posts of Stakeholders

Sharing space (announcements, webinars, job opportunities)
Collaborative space (ongoing projects, partnerships opportunities, collabs for research)



Feedback section

Improvement area (suggestions)

Satisfaction survey

Suggestion of new topics/resources/chapters

Members
express needs

partnerships global research
& innovation projects

Working model Agroscope

Capillary sys. & mutual trust

Education & Sustainability

Innovation & science



Connect the dots & COP

WP3, practical scientific source + R&D

Innovation & science

- Collection of around 13'000 strains
- Free antibiotic resistance genes
- Free of genetic modifications



- Design Thinking Group → Patent
- “proof of concept”
- Support Registration at the European Patent Office new Innovation

Innovation & Renovation of Cultures

Co-Creation → Patent
→ Co-Creation

Cutting-edge scientific : BSL3

tradition for the future : culture collection

- To model pathogens behavior in a real food
- Highly flexible infrastructure for milk, meat, plant-based food

- Promotion of artisanal production
- 40 different cultures



WP4, Consulting artisanal Cheese producers : Build trust

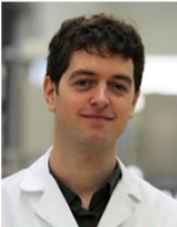
(translate science to practice)

Capillary sys. & mutual trust

Wissenstransfer Milchverarbeitung



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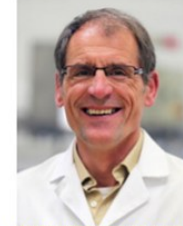
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➤ Our services

- ✓ **600** consultations / year
- ✓ **140** training courses/year

➤ Our products

- ✓ **75%** SMEs
- ✓ **1350** Alps farmers in summer



Building a Community of Practice: The Agroscope Dairy & Cheese Model

- Farmers & Producers
- Agencies & Associations
- Authorities
- Universities



75%

Market Reach

Swiss cheese dairies
using Agroscope's
microbial cultures

600+

Annual Consultations

Direct support to
producers

50+

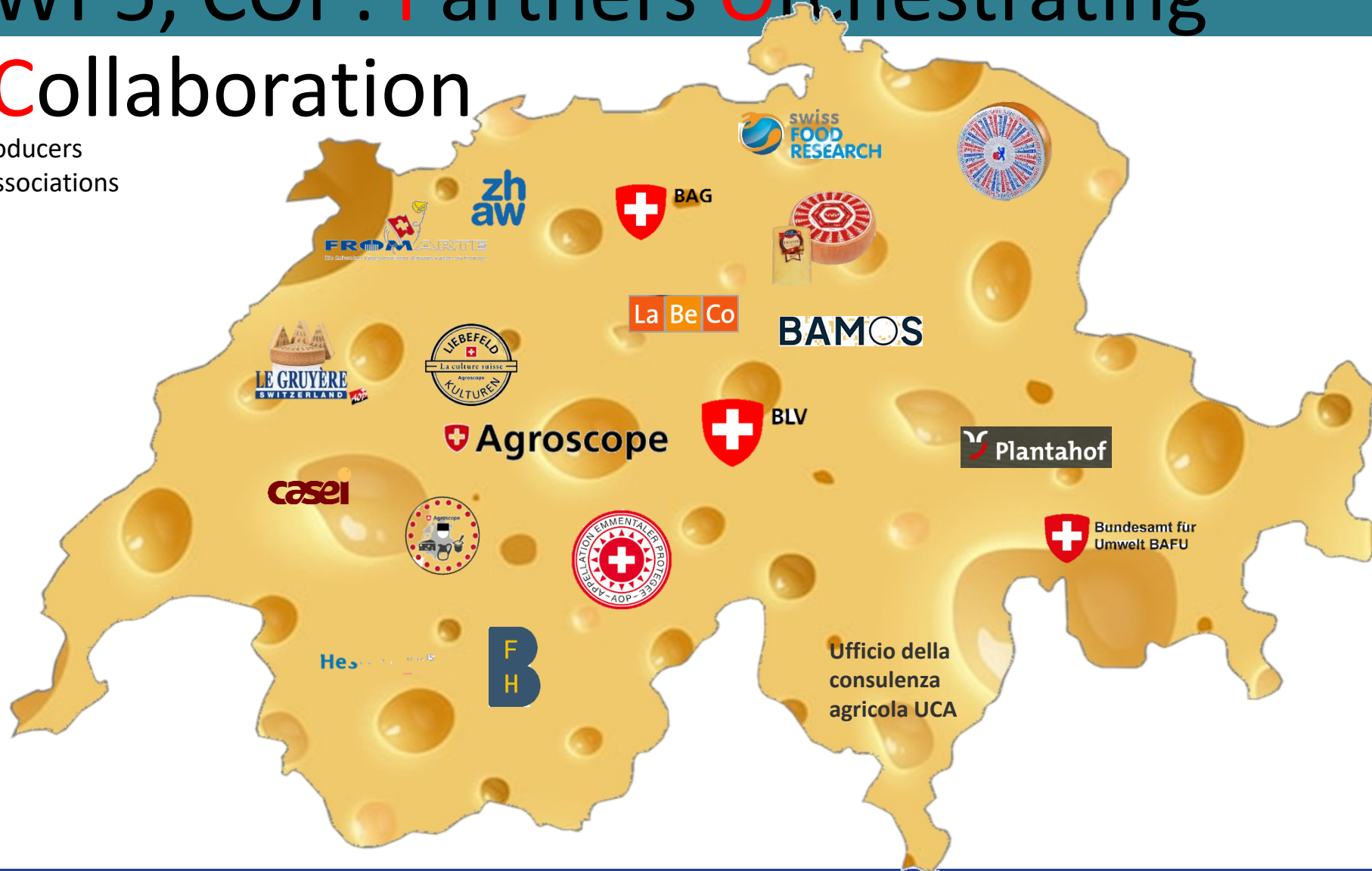
Training Sessions

Knowledge transfer
each year



WP5, COP: Partners Orchestrating Collaboration

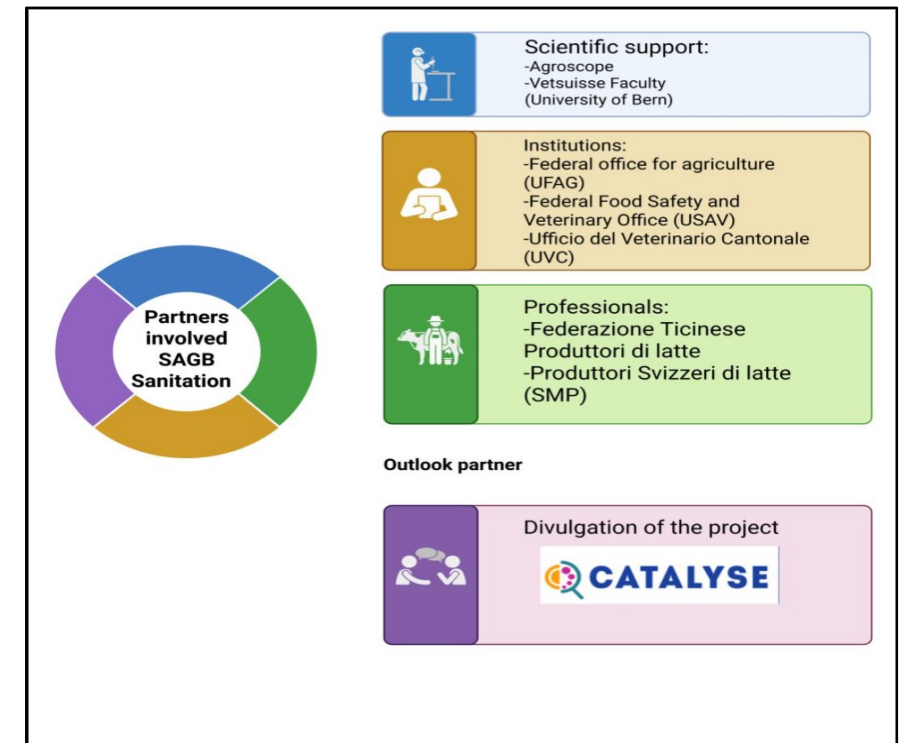
- Farmers & Producers
- Agencies & Associations
- Authorities
- Universities



Case Study: from Innovation Mastitis Sanitation to Practices



Coming : Frontiers | veterinary science – community case study



Collection of recent Publications Shared with the CoP

Selection of 120 practical publications for the CoP homepage Dairy & Alternatives

Mineral Oil Hydrocarbons in Dairy Products

Table of Contents

- Introduction 1
- Use and Input Sources 2
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Author

Jan-Erik Ingenhoff



Introduction

For some time now, mineral oil hydrocarbons in foods have been the subject of intense discussion. Also regularly confronted with measurable residues of mineral oil hydrocarbons, the dairy sector is being called upon to determine potential input sources and to use targeted measures to prevent their transfer to foods.

The term 'mineral oil hydrocarbons' (MOH) describes a complex mixture of various substances containing between 10 and 50 carbon atoms. According to their nature, MOH are divided into two groups: 'MOSH', which represent the fraction of mineral oil saturated hydrocarbons, consisting of paraffins and naphthenes, and 'MOAH', which represent the mineral oil aromatic hydrocarbons substance group.

Agroscope good food, healthy environment

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Agroscope

Agroscope Transfer




Agroscope Magazine

ATALYSE Welcome Food Safety feed (CoP) Innovations Resources

Start typing to search...

Publications

- A hazard does not always equate to a risk. Cronobacter is a rare opportunistic pathogen and the greatest risk is only for a small sub-population of infants and only associated with powdered infant formula or human breast milk.
- Cost effectiveness of interventions toward improving microbial food safety of chicken meat along supply chains in Burkina Faso and Ethiopia.
- Inactivation of salmonella, enterococcus faecium and natural microbe on dry food matrices with microwave-driven plasma-processed air.
- Ranking factors affecting the decontamination efficacy of non-thermal plasma: The approach of dissipated power per plasma volume through machine learning modeling.
- Systematic risk ranking of microbiological hazards in infant foods.



Good Farming Practices

Agroscope Science | No. 197 | 2024



FACE Conference 2023

Opportunities and risks for raw milk products

A Scientific synthesis of the 2023 Conference of the FACENetwork

Authors

Hans-Peter Bachmann, Walter Bisig, Marie-Therese Fröhlich-Wyder (Scientific Programme Committee)

Partners

Fromarte, Grangeneuve

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From Emerging Risks to Innovation: Sharing Knowledge through the CATALYSE CoP

3 September 2025 | 13:30–15:00

FROM EMERGING RISKS TO REAL TIME SOLUTIONS IN FOOD SAFETY



This 90-minute webinar highlights how scientific innovation can be transformed into practical, scalable solutions to strengthen food safety across the entire system – from farm to fork.

The webinar is organised by CATALYSE CoP, Agroscope, Universidade Católica Portuguesa (UCP), and International Life Sciences Institute (ILSI) Europe.

Event agenda

1	13:30 Introduction to CATALYSE - <i>Helena Stoffers & Ghazal Nemati</i>
2	13:35 CATALYSE Community of Practice – Catalysing food safety innovations for all - <i>Diana Fonseca</i>
3	13:50 <i>Listeria monocytogenes</i> : Are all strains (equally) pathogenic? - <i>Paula Teixeira</i>
4	14:10 Meal2Muscle: Beyond quantity – Why protein quality truly matters - <i>Charlotte Egger</i>
5	14:25 Hepatitis E virus transmission through meat products - <i>Reimar Johné</i>
6	14:45 Impact of pH and temperature on the infectivity of avian influenza viruses in fermented raw milk products - <i>Nicole Lenz-Ajuh</i>

Speakers



Organized by

- CATALYSE CoP
- Agroscope
- UCP
- ILSI



Agroscope Outlook: Next Steps in CoP Development and Engagement



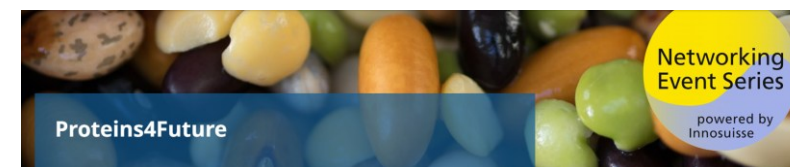
World Cheese Awards

Bern, November 2025 • 5,000+ cheeses from 50+ countries



Alternative Proteins Event

Bern, November 2025 • Focus on SMEs and start-ups



Milk Day

Bern, November 2025 • Focus on recent research in dairy

7 June

Food safety:
science in action

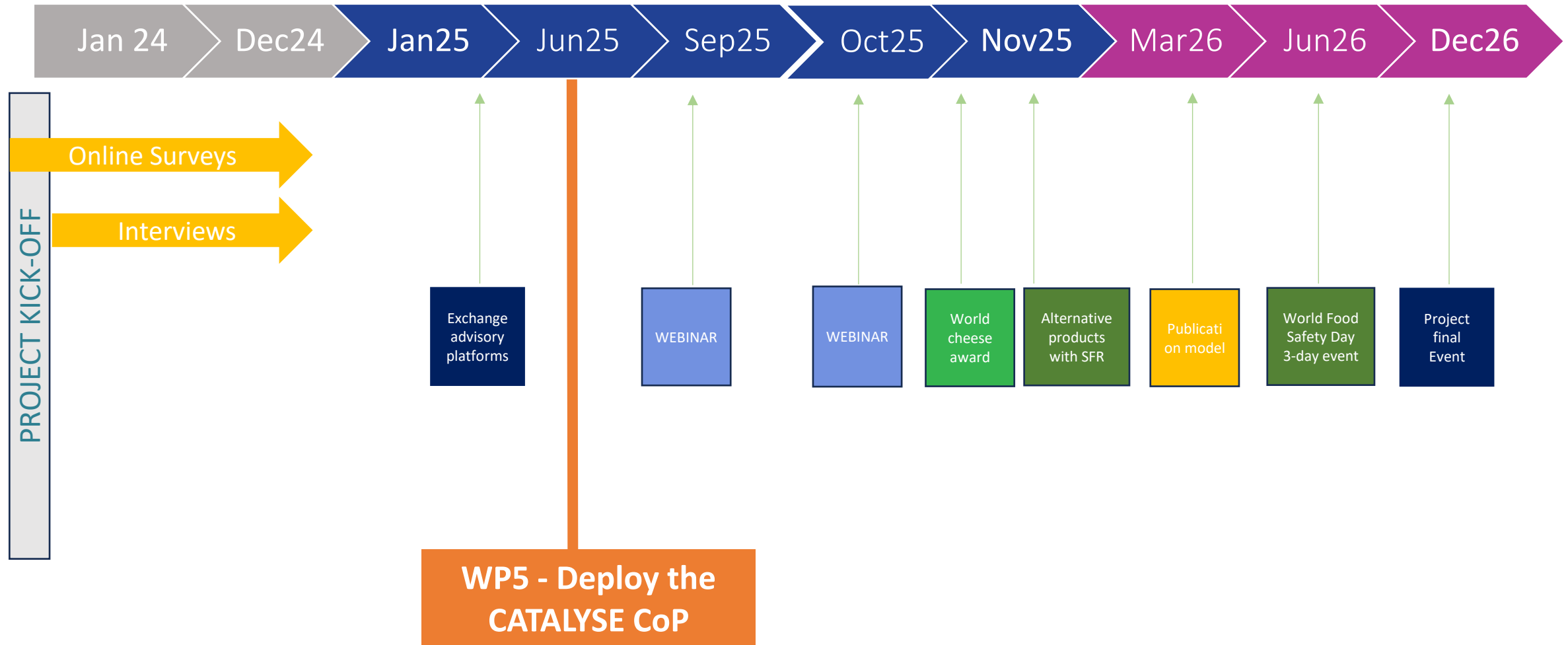


WFSD & BSL3 visit

8-10 Jun 2026 • Industries, SMEs, Experts and biosafety Net works



Agroscope Outlook for 2025–2026



- Menti
- Noemi
- Other presentations





CATALYSE

Catalysing scientific innovation into food safety action

www.thecatalyseproject.eu



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General Assembly Meeting M12



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This project has received funding from UK
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From Swiss Dairy Pilot to European Excellence and Collaboration

