



# CATALYSE

Catalysing scientific innovation into food safety action

## An introduction to the CATALYSE project

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Co-funded by  
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Project funded by



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,  
Education and Research EAER  
State Secretariat for Education,  
Research and Innovation SERI



UK Research  
and Innovation

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

# Presentation outline

1. Introduction on food safety
2. Description of the approach
3. Expected results
4. Results of WP2
5. Connect with the Catalyse partners



**Catalysing scientific  
innovation into  
food safety action**



# Introduction on food safety

- **Food safety** is a critical aspect of the food sector, as it is essential 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 years of healthy lives 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.
- Also, contaminated product recalls affect profits and create **food waste**.



# Introduction on food safety

- Research in recent years has driven immense advances, but **barriers** exist that can impede knowledge sharing among food system actors, hindering innovation in food safety.
- Overcoming these barriers requires a **concerted and interdisciplinary effort involving industry, regulators and researchers** to discuss and identify food safety priorities and how these can be translated into applying innovative solutions.
- This can strengthen the resilience of food companies by implementing alternative strategies **to maintain and/or increase quality and productivity**.



why  
freezing  
@ -18°C?

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# Ambition of CATALYSE

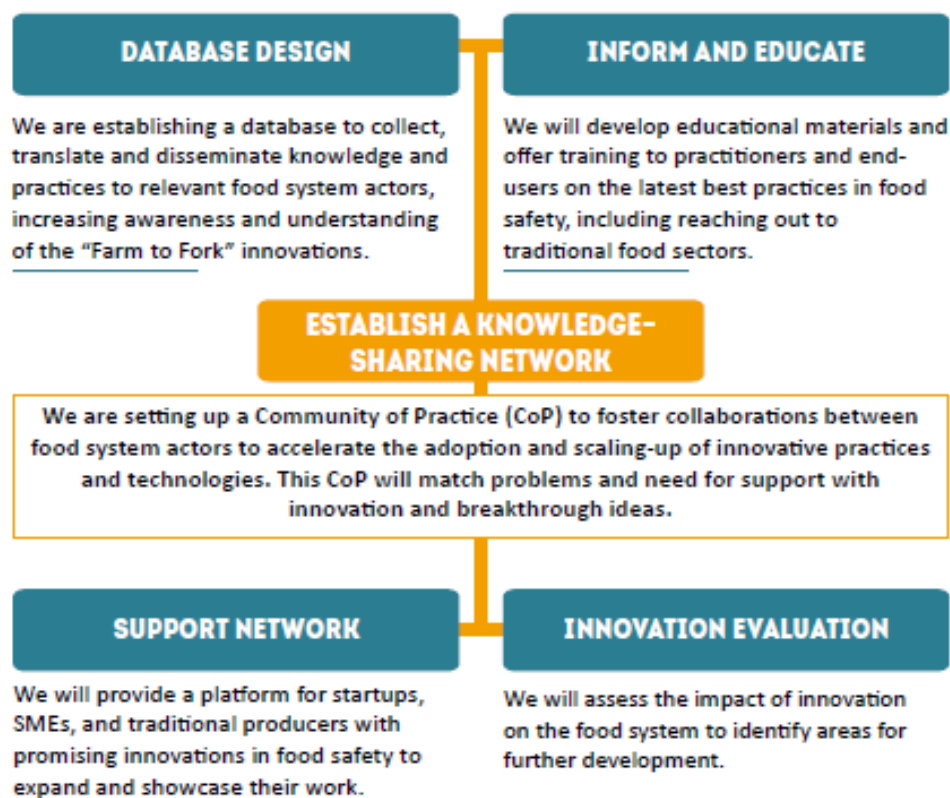
- The ambition of CATALYSE is to accelerate the **uptake of knowledge and innovative solutions** that promote food safety by end users.
- To achieve this, CATALYSE is determined to encourage **end-users, such as food authorities and food processors** to prioritise and support innovation in the food system.
- **To support start-ups and SMEs with promising innovations** in food safety - testing methods, testing technologies, solutions to improve food safety.





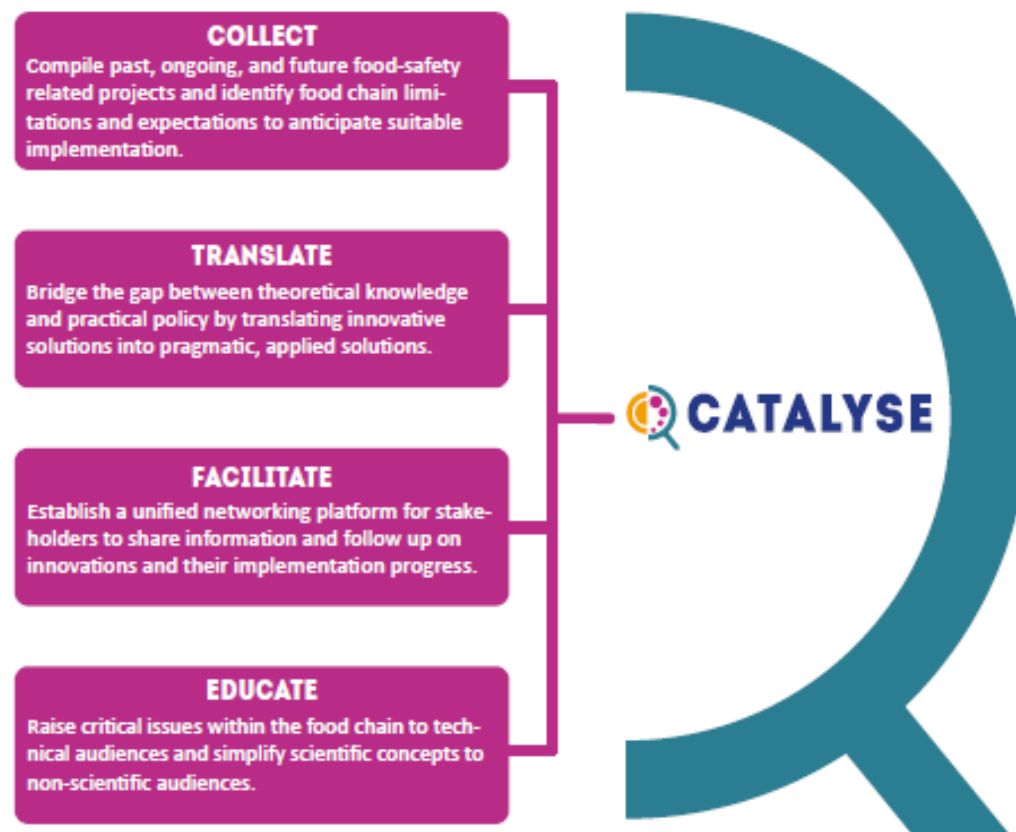
## OUR AMBITION

Our ambition is to accelerate and make more efficient the uptake of knowledge and innovative solutions that promote food safety by the food system actors. We seek to bridge the gap between the silos of innovators, practitioners, regulators and end-users.

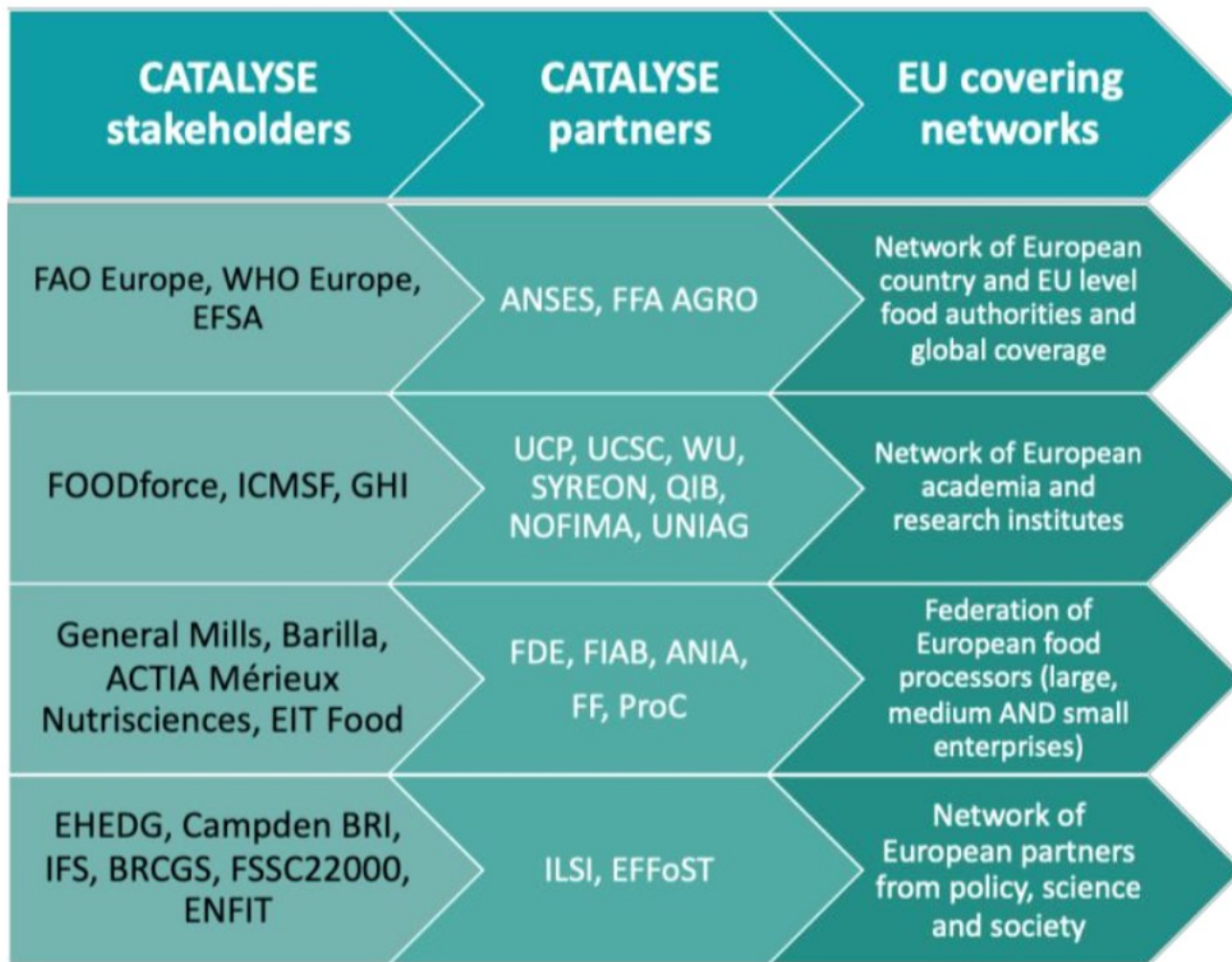


## OUR METHODOLOGY

Our working model - "Collect – Translate – Facilitate – Educate" will help improve food safety across Europe, by effectively translating research and innovation into practice, bringing together the Farm to Fork value chain actors to ensure fair, healthy and environmentally friendly food systems.



# The CATALYSE approach



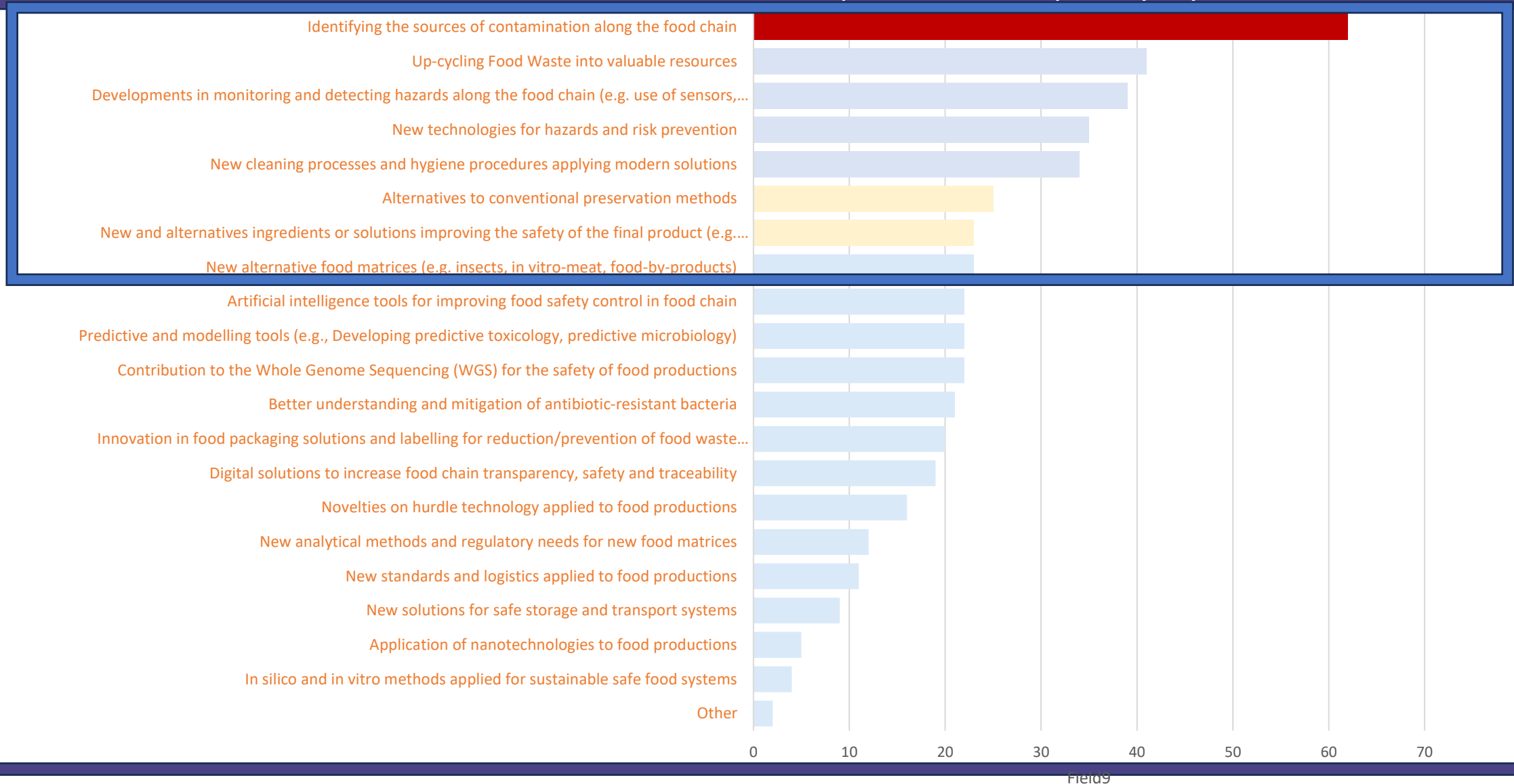
Catalyse will have European-wide coverage over the four main stakeholder categories:

- Authorities,
- Academia,
- Industry,
- Society.



# Engagement Stakeholder:

Areas where Stakeholders have recently observed innovations or solutions that address critical needs and need to be adopted more frequently/by more stakeholders



Welcome  
About CoP

Food Safety feed  
(CoP)

Chapters

Innovations in  
Food Safety

Resources  
(repository)

Educational  
materials

Events



## 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

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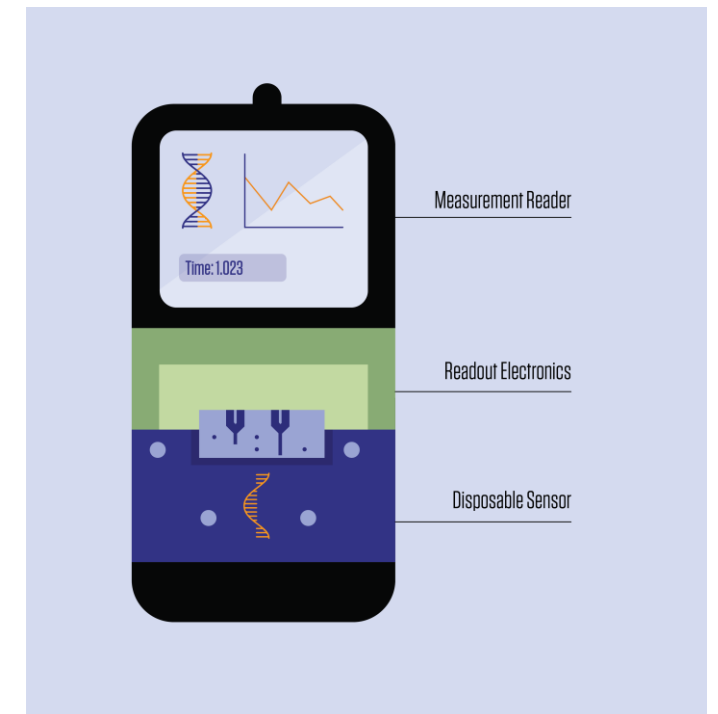
# Expected results



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.**

## Analytical methods:

1. More accurate analytical methods,
2. More efficient analytical methods,
3. Portable analytical methods,
4. Rapid testing methods.





## Alternative sterilisation methods:

1. Mild processing methods,
2. Combinations with sonication (eg. Sonosteam),
3. Use of UV light (eg. LYRAS),
4. Super chilling,



# Innovations

Digital technology applications:

1. Bioinformatics of sequences,
2. Visual quality inspections powered by AI,
3. Robotics: safer hygiene inspections,
4. Real time temperature loggers,
5. Predict Risks in Your Supply Chain with AI,



# Innovations

## Shelf life extension:

1. Bio2Coat Natural Preservation Technology,
2. Saveggy plant-based edible coatings,
3. Mimica: Temp-sensitive freshness indicator,
4. Keep-it: shelf-life indicator for food,

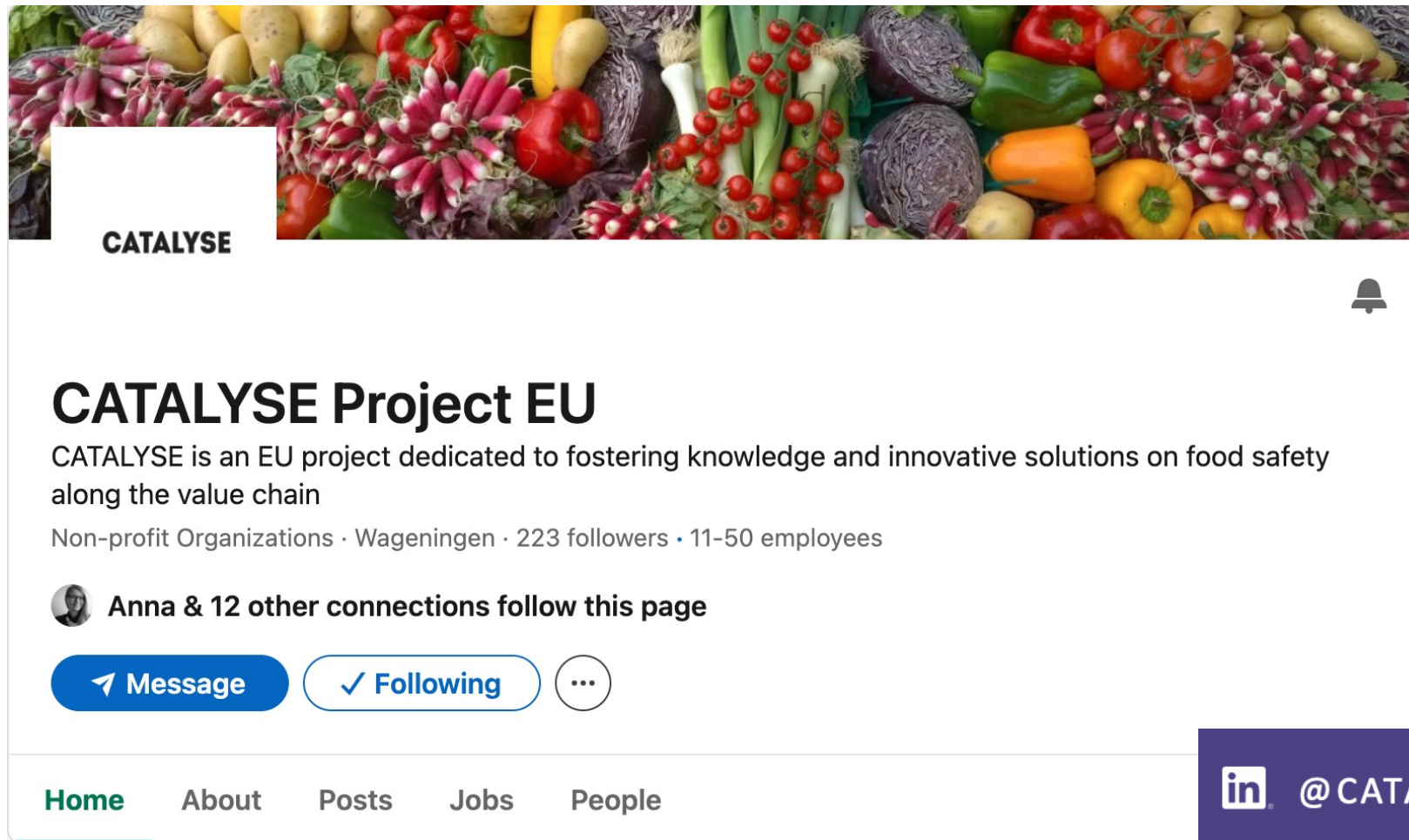


# Connect with CATALYSE



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# CATALYSE on social media:



To do: Go to Twitter  
and LinkedIn right  
now and start  
following us!

 @CATALYSE Project EU

 @CatalyseEU

**CATALYSE**

[www.thecatalyseproject.eu](http://www.thecatalyseproject.eu)



# Connect with CATALYSE

Fill in our  
survey!



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State Secretariat for Education,  
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