



Horizon Europe

FARM2FORK Project

Enhanced and cost-effective
biosecurity in livestock
production

Evelien Biebaut (UGENT)



Funded by
the European Union

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BIOSECURE

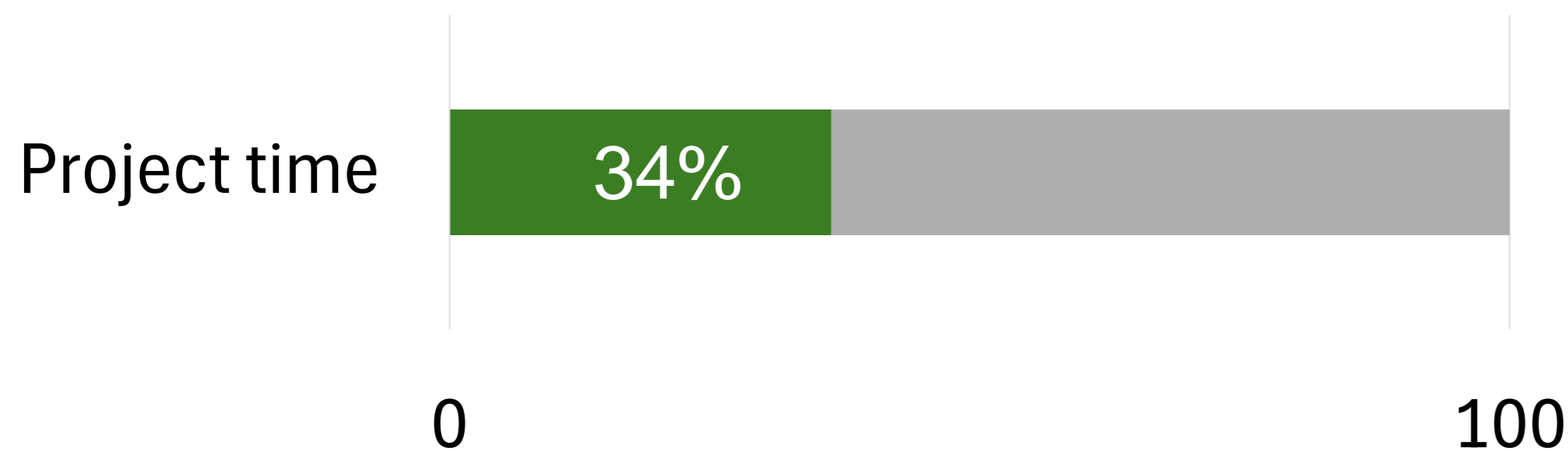
➤ 17 partners from 12 European countries

- Universities
- Private companies
- National animal health and agriculture authorities

➤ Biosecurity in livestock production

➤ 5 million Euros

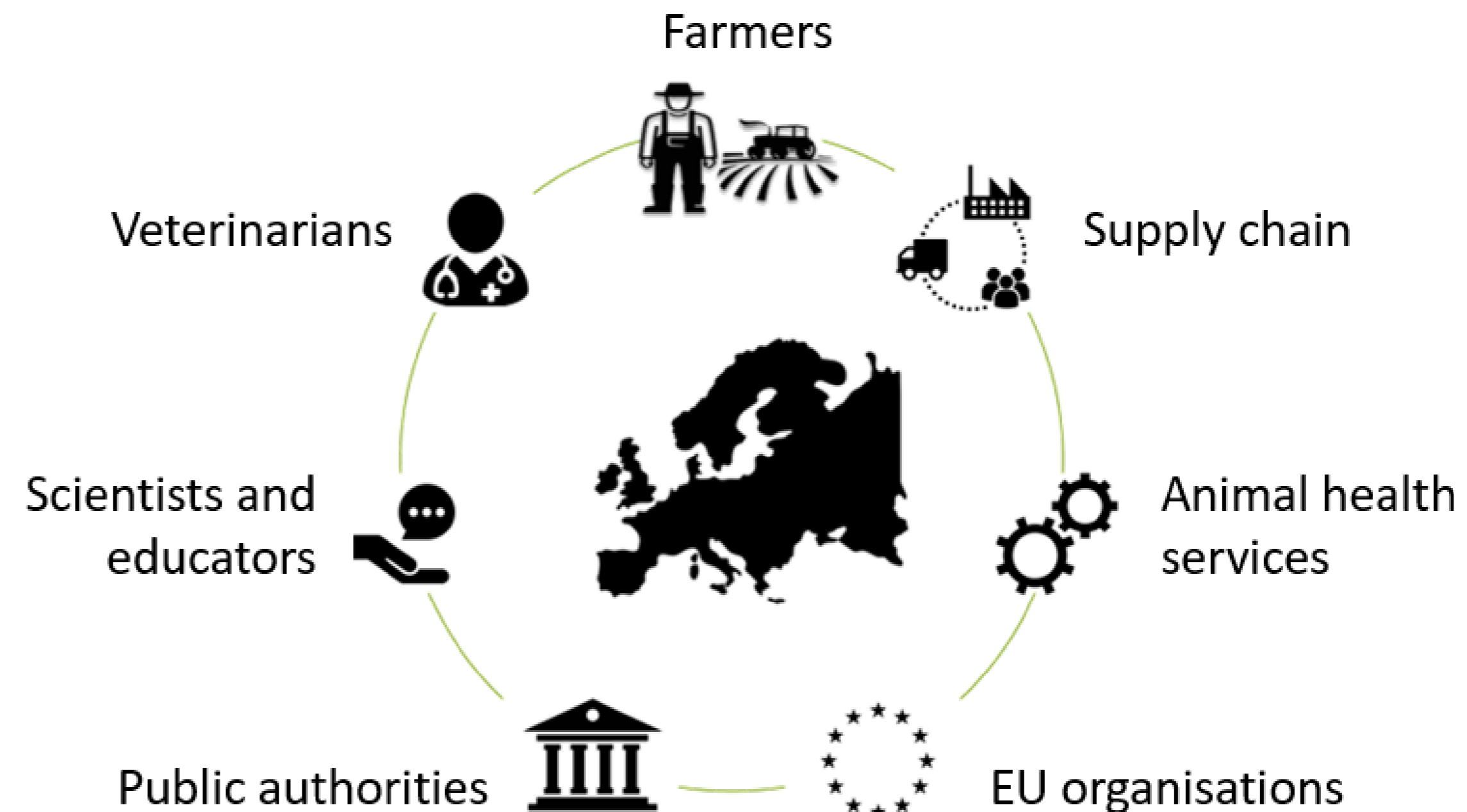
➤ 4 years (2023-2026)



Goal of BIOSECURE

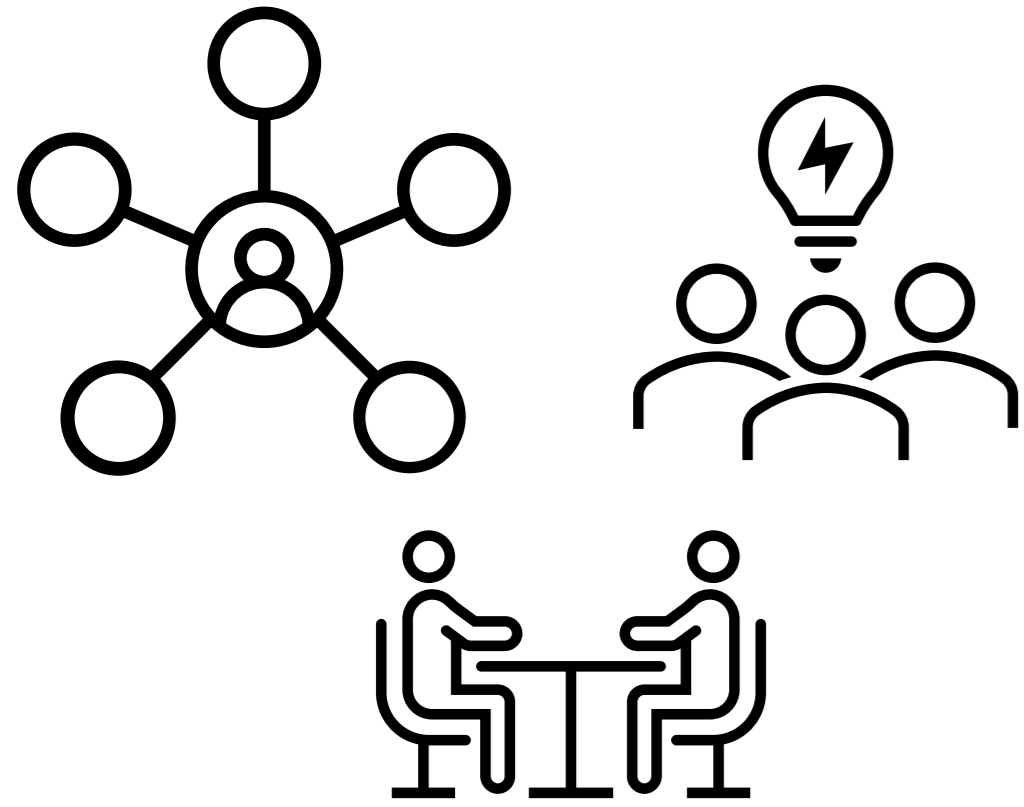
Improve the ability of decision-makers in livestock farming to **understand, prioritise and implement evidence-based, cost effective, and sustainable biosecurity management systems** in different livestock production chains.

- 5 main objective
- 7 work packages



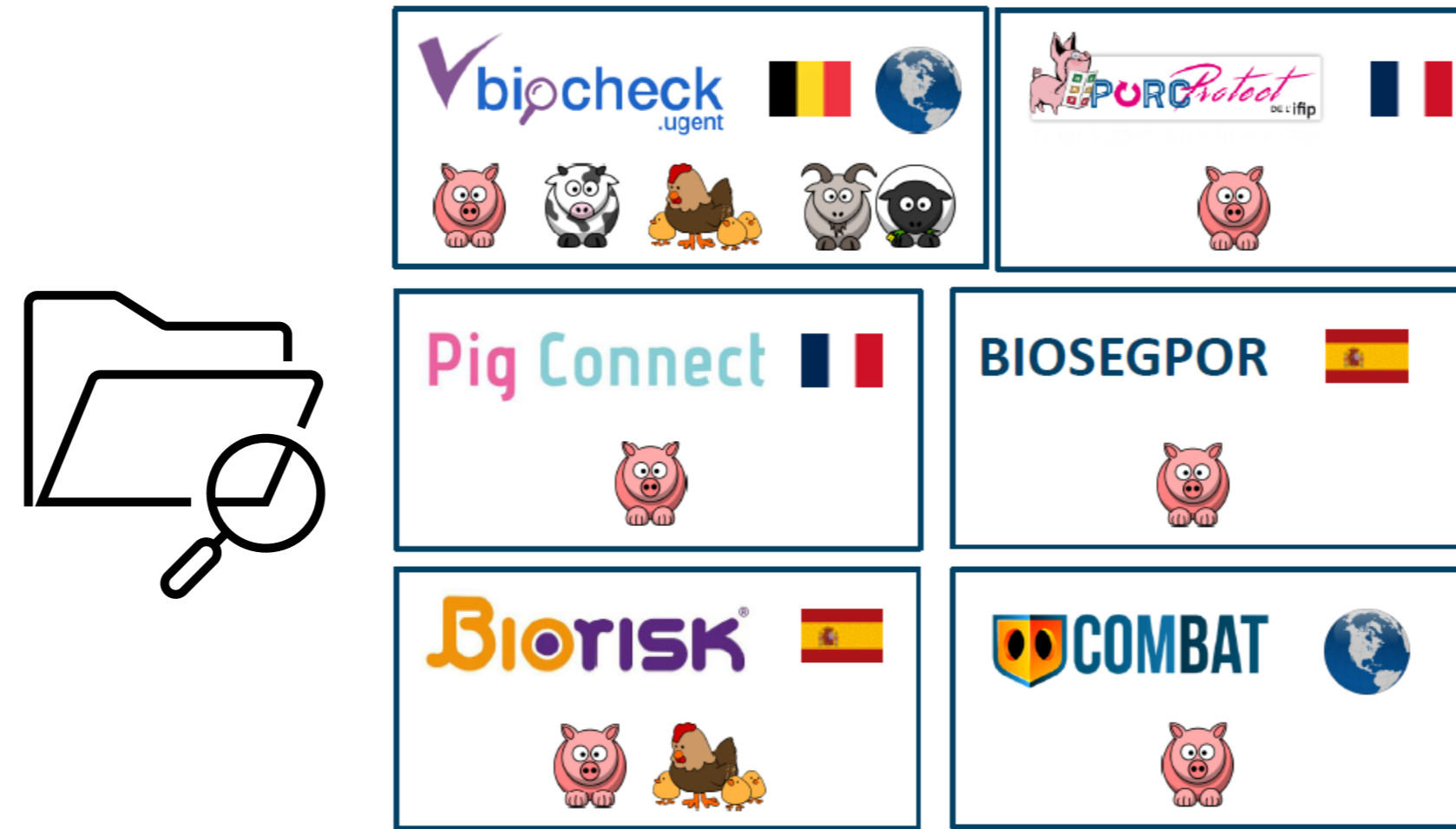
Work packages

WP1



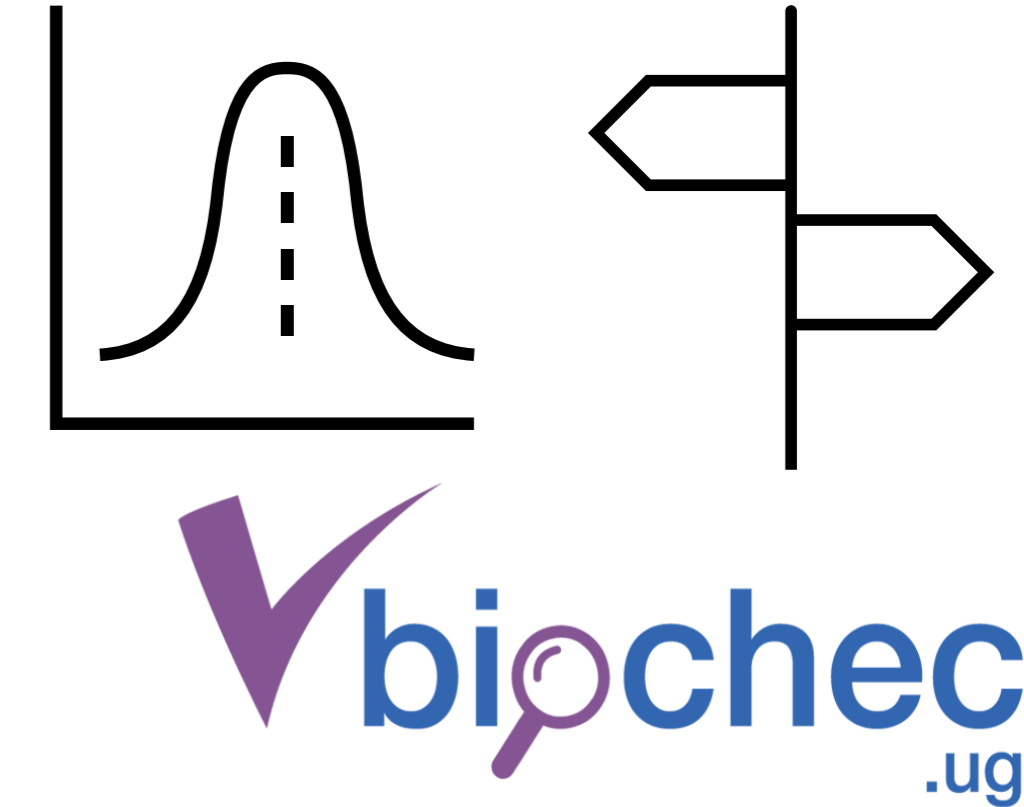
Multi-actor network

WP2



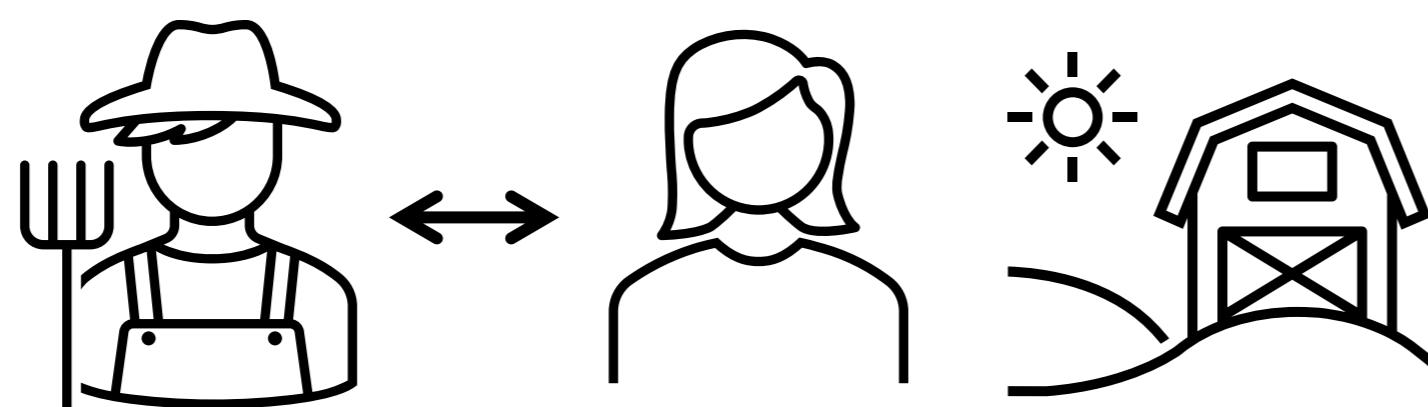
Collecting existing information

WP3



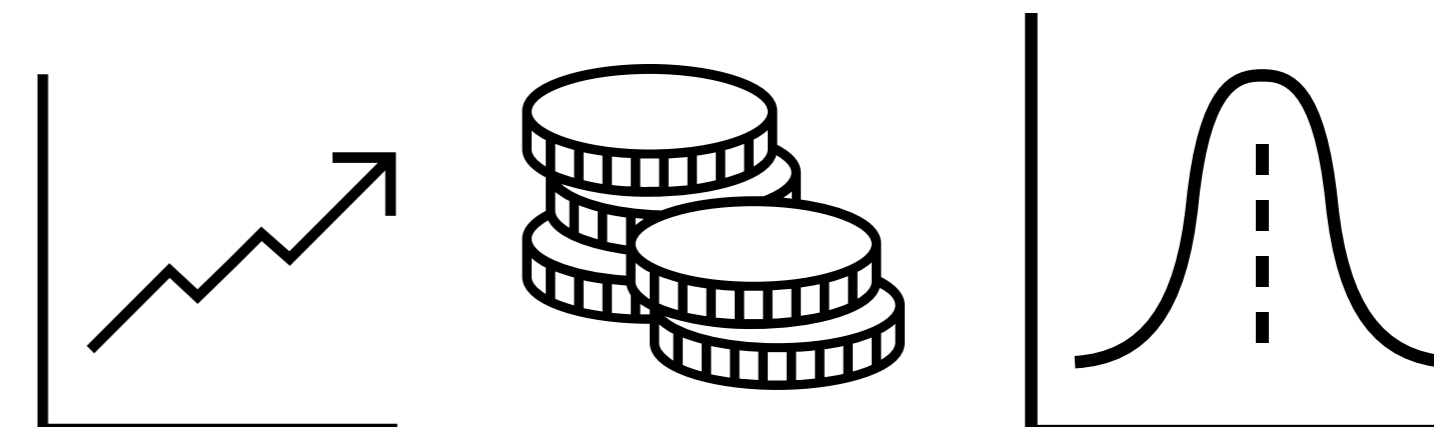
Quantifying biosecurity at farm level

WP4



Field and experimental studies

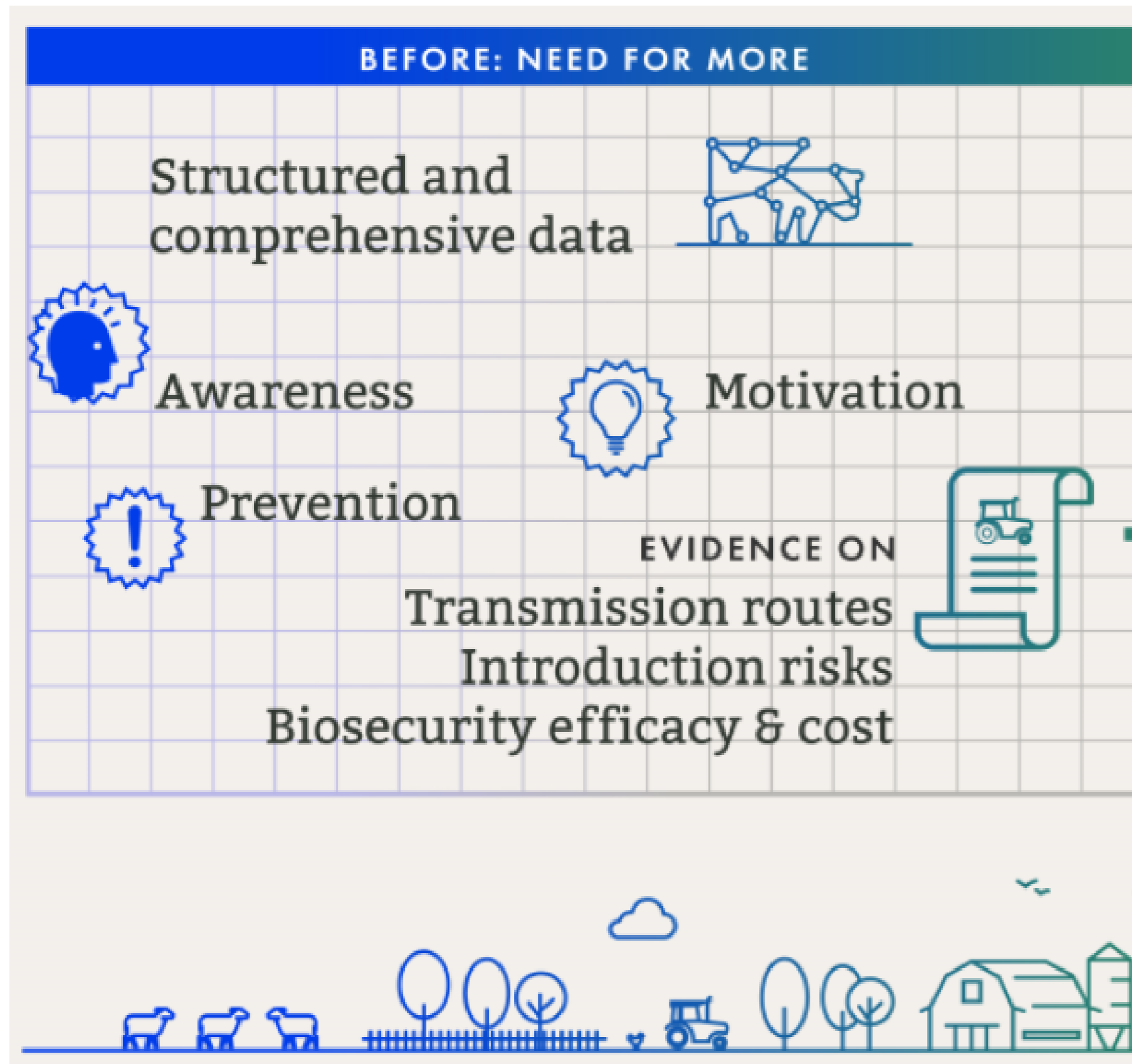
WP5



Socio-economic impact at sector level

Impact of BIOSECURE

➤ Biosecurity-specific impact



- Analysis of complementary and conflicting effects of herd level biosecurity practices and animal welfare

How?

- Interviews – workshops
- Online – face-to-face
- Stakeholders
(farmers: Sweden – Spain – Ireland)
- Welfare and biosecurity specialist
- epidemiologists

Goal?

- Identify contradictions and barriers
- Identify possible solutions
- Identify critical control points



- Practical input for the field!
- Policy related communication

BIOSECURE: animal welfare

Association between animal welfare and biosecurity measures in intensive pig production in Ireland (Carla Gomes & Barbara Terezo)

➤ Two datasets were used in the study:

- Biocheck.UGent - commercial pig farms - 2018 to 2023

- Assessing **biosecurity** on the farms



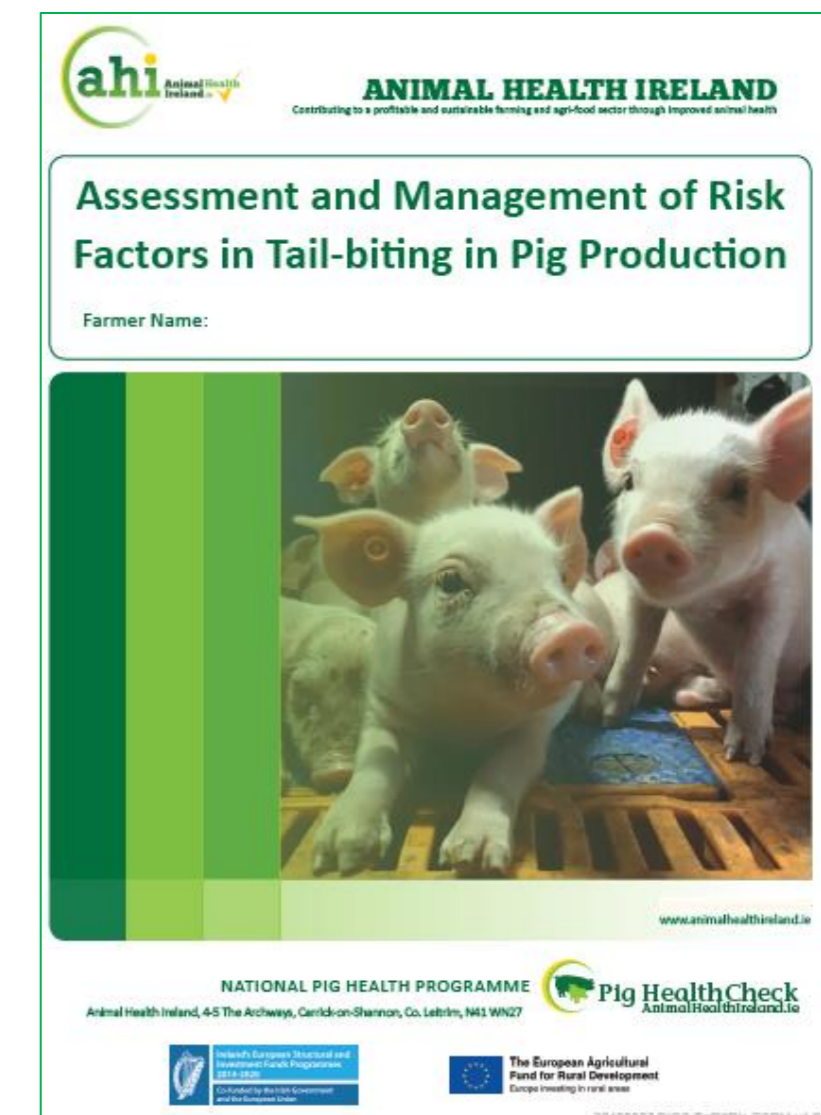
BIOCHECK PIGS

Pigs



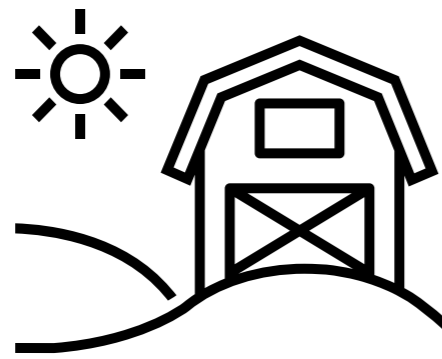
- Tail biting risk factors assessment protocol (developed in Ireland and based on the WebHAT tool) of commercial pig farms from 2019 to 2023

- Assessing the presence of **tail biting risk factors**



Association between animal welfare and biosecurity measures in intensive pig production in Ireland (Carla Gomes & Barbara Terezo)

➤ Records from the biosecurity and tail biting risk assessments were matched per farm - year covering: 2020 to 2023



366 farms



783 record

➤ Two types of models were explored to test for associations:

- Linear mixed models: biosecurity scores as dependent variables
- Mixed effects logistic regression: presence or absence of risks for tail biting as dependent variables

Association between animal welfare and biosecurity measures in intensive pig production in Ireland (Carla Gomes & Barbara Terezo)

➤ Main findings and conclusion

- **Mixed picture** in terms of positive and negative associations between biosecurity and animal welfare. In most of the models an **increase in biosecurity was associated with a decrease in the risk for animal welfare**, albeit that was not always the case.
- Animal welfare protocol used needs to be **improved/more training given** as most or the variability in some of the models is due to assessors.
- Other (more objective) ways of **assessing animal welfare** should be explored.

BIOSECURE: animal welfare

- We are looking for participants in 1 online and/or 1 in-person meeting in 2025 or 2026.
- Participants will be selected to have a broad coverage in species and geographical origin
- Workshops concern
 - Identification of conflicts and solutions for animal welfare and biosecurity
 - Pigs – poultry – ruminants
- Travel expenses will be reimbursed if selected

Contact: Tijs Tobias (t.tobias@gddiergezondheid.nl)



Our partners



More BIOSECURE information



<https://biosecure.eu/>



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Supporting livestock farming decision-makers in implementing evidence-based, cost-effective, and sustainable biosecurity management

B I O 
S E C 
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Thank you!

Any questions?