



Funded by
the European Union



BETTER

COST Action CA20103: **B**iosecurity **E**nhanced **T**hrough
Training **E**valuation and **R**aising Awareness

WG1 – Mapping biosecurity measures applied on
farms and transport across Europe

Jasna Prodanov-Radulović – Scientific Veterinary Institute 'Novi Sad' (Serbia)

Telmo Nunes -Faculdade de Medicina Veterinária Lisboa (Portugal)

WG1 Mapping biosecurity measures applied on farms and transport across Europe

- ✓ **understanding how biosecurity measures are applied** in the different cattle, pig and poultry production systems across Europe in order **to identify existing knowledge gaps and ways for improvement.**

The first objective of this working group was to map the implementation of biosecurity measures in livestock holdings and in animal transport.

- Task 1.1: Review of biosecurity measures applied on cattle, pigs and poultry farms and on animal transport across Europe.
- Task 1.2: Online survey for selected experts on biosecurity measures that are applied on cattle, pigs and poultry farms and animal transport across Europe.



The Start of WG1 Activities in 2021

- Due to the unfavorable epidemiological situation (COVID-19), the first meeting of WG1 was held online on October 21–22, 2021.
- During the first year (2021–2022), short online WG1 meetings were organized
- ✓ The main goal was to enable participants to get to know each other (where they work, what they do, and whether they are involved in national projects related to biosecurity), to foster connections, encourage active participation, and motivate members to take on tasks aligned with their specific areas of expertise.
- An important objective was to establish a network of biosecurity experts across different animal species from the participating countries.

Participatory approach for the first WG1 online meeting – Jamboards in 3-breakout rooms for different animal species

WG1 participation during the first day

- pig group: 15 participants from 9 countries
- cattle group: 7 participants from 6 countries
- poultry group: 7 participants from 5 countries

31 participants (including room secretary)

BETTER WG1 Mapping biosecurity measures applied on farms and transport across Europe

Who we are
Use the sticky notes to write your name and country

BETTER WG1 Mapping biosecurity measures applied on farms and transport across Europe

Who we are
Use the sticky notes to write your name and country

BETTER WG1 Mapping biosecurity measures applied on farms and transport across Europe

Who we are
Use the sticky notes to write your name and country

COST Action CA15101
Enhanced Through Training Evaluation and Raising Awareness (BETTER)

Map the implementation of biosecurity measures in animal production systems and in animal transport



First working session objectives (breakout room by species)

- Discuss the approach for the review
- Identification of people available to participate in:
 - Identification of data sources of biosecurity measures implementation
 - Data analysis
 - Report writing



BETTER

First face-to-face Meeting at the Faculty of Veterinary Medicine in Lisboa, Portugal, 8-9 June, 2022

- At that time, 66 participants were registered on the WG platform with an interest in working in WG1
- At the WG1 meeting, we had 30 participants from 15 countries



1 Kjetil Kvitelsen NORWAY
 2 Ingrid Tøftaker ingrid.toftaker@nmbu.no NORWAY
 3 Tine B. Klem NORWAY tklem@vetinst.no
 Enver CARUSOGLU TURKEY ecarusoglu@uludağ.edu.tr
 ALESSANDRA BACCARILLO ITALY alessandra.baccarillo@unipi.it
 6 GIUDITTA TILLI ITALY giuditte.tilli@phd.unipi.it
 7 Mehmet Murat Doğan TURKEY muratdogan@3mit.com
 8 Ziba Grosčakova Slovakia gresack@scs.zjlc.sk
 9 Andrea Lubiana SLOVAKIA lubiana@vet.sk
 10 Naim Deniz AYAZ TÜRKİYE naimdenizoguz@ktu.edu.tr
 11 Georgios Arsenos GREECE arsenosp@vet.auth.gr
 12 Artur Zbikowski POLAND artur_zbikowski@sggw.edu.pl
 Karol Paulowski POLAND karol.paulowski@sggw.edu.pl
 Marta Leka PORTUGAL marta.leka@uiof.pt
 Moniek Ringenier Belgium moniek.ringenier@ugent.be
 VINCENT PORPHYRE France vincent.porphyre@cirad.fr
 Fátima CORREIA France fatima.correia@ip-leiria.pt
 Blerta Mehmeti Kosova blerta.mehmedic@uni-pr.edu

18 Margarida de Castro Bruck, Spain, MARGARIDA DE CASTRO @UAB CAT
 20 Isabel Cunha Machado, Portugal isabel.cunha@afg.uporto.pt
 4 Diogo Brito Gonçalves Portugal Diogo.Brito@Pigchamp-pro.com
 22 Amélie DESVARS-LARRIVE AUSTRIA ameli.desvars@vetmeduni.ac.at
 23 Mathias DELPONT France MATHIAS.DELPONT@ENVT.FR
 27 Aleksandar Dopovski, MACEDONIA adodovski@FHM.UKIM.EDU.MK
 28 ILIAS CHANTZIARAS, BELGIUM ilias.chantziaras@ugent.be
 16 Denis Pepić, Montenegro vetprom@t-com.me

24 JOŽE STARIC - SLOVENIA joze.staric@vf.uni-lj.si
 28 MARINA ŠTUKELJ SLOVENIA MARINA.STUKELJ@VF.UNI-LJ.SI
 29 Slavica Jtrajkovic Serbia slavica.jtrajkovic@p.zs.ac.rs
 30 BRANISLAV KURELJUSIĆ - SERBIA BRANISLAV.KURELJUSIC@YAHOO.COM
 (15) countries
 SERBIA, PORTUGAL, SLOVENIA, MONTENEGRO, BELGIUM, NORTH MACEDONIA, FRANCE, AUSTRIA, SPAIN, NORWAY, TURKEY, ITALY, GREECE, POLAND, UKRAINE

Understand how biosecurity measures are applied in livestock production systems across Europe

- ✓ **Focus to commercial farms – industrial production**
- ✓ **Develop the template to map biosecurity practices across Europe for each species**

To facilitate organization and operational efficiency, WG1 was divided into three subgroups:

POULTRY SUB-GROUP *Led by* Alessandra Piccirillo (University of Padua, Italy), Guiditta Tilli (Università degli studi di Padova, Italy), Ilias Chantziaras (University of Ghent, Belgium)



CATTLE SUB-GROUP *Led by* Telmo Nunes (Faculdade de Medicina Veterinária, Portugal)



PIG SUB-GROUP *Led by* Jasna Prodanov-Radulovic (Scientific Veterinary Institute Novi Sad, Serbia)



Identify which biosecurity measures were addressed in the national legislation of European countries for the three main intensive animal production categories



- In the summer of 2022, WG1 subgroup leaders worked actively on the development of the questionnaire/survey— initiative from cattle sub-group led by Telmo Nunes.
- Sub-groups experts poultry-pig-cattle



Biosecurity other than regulation (i.e., industry)

- Compulsory by other than law

Biosecurity compliance

- Percentage (%) of implementation according to national literature or existing databases



Development of a questionnaire per species



| | Biosecurity categories | Number of measures in the category |
|----------------------|---|------------------------------------|
| External biosecurity | The farm location and environment | 2 |
| | The access and control of visitors | 8 |
| | Workers and foreign labor | 3 |
| | Purchasing policy – introducing new animals | 6 |
| | Purchasing policy – introducing animal products | 1 |
| | Introducing equipment | 1 |
| | Control of transport vehicles | 5 |
| | Manure removal | 1 |
| | Control of feed and water | 2 |
| | Pest control | 2 |
| Internal biosecurity | Cadaver management | 1 |
| | Cleaning and disinfection | 9 |
| | Handling sick animals | 2 |
| | Disease management | 8 |
| | Total number of measures | 51 |

Biosecurity measures

1. Mandatory by law

=> yes / yes, to some farms / no

2. Mandatory by industry

=> yes / no



Participatory approach



Country focal points coordinators – in charge for collecting data in each country

- BETTER participants from different countries were identified as contacts for completing the questionnaire— Country Focal Points (CFPs) — an initiative led by Ilias Chantziaras (Ghent University, Faculty of Veterinary Medicine, Belgium) - continuously provided support to all WG1 sub-groups.
- ✓ We successfully established a network of experts from the countries participating in the COST Action BETTER.
- ✓ In the autumn/winter 2022, the pilot studies were conducted for each animal species (special thanks to all country volunteers) and detailed instructions on how the country focal points (CFP) should complete survey were set.

Development of a questionnaire per species



| | Biosecurity categories | Number of measures in the category |
|-------------------------|---|------------------------------------|
| External biosecurity | The farm location and environment | 2 |
| | The access and control of visitors | 8 |
| | Workers and foreign labor | 3 |
| | Purchasing policy – introducing new animals | 6 |
| | Purchasing policy – introducing animal products | 1 |
| | Introducing equipment | 1 |
| | Control of transport vehicles | 5 |
| | Manure removal | 1 |
| | Control of feed and water | 2 |
| | Pest control | 2 |
| Internal biosecurity | Cadaver management | 1 |
| | Cleaning and disinfection | 9 |
| | Handling sick animals | 2 |
| | Disease management | 8 |
| | Total number of measures | 51 |

Biosecurity measures

1. Mandatory by law

=> yes / yes, to some farms / no

2. Mandatory by industry

=> yes / no



Participatory approach



BETTER

Meeting in Ghent, Belgium, 7- 8 February 2023

Pig – poultry - cattle subgroup: a data collection tool designed to capture biosecurity practices applied in animal production systems was presented and discussed

- Aquaculture sub-group has also been integrated into WG1.

Instructions on how to fill in this file

- 1) Please fill in the country below
Country: Italy (IT)
- 2) Fill in Database_Biosecurity/Population Write the answers (yes/partially/no) according to the poultry category in which a biosecurity measure is mandatory BY LAW or not. Report any other
- 3) Fill in Database_Biosecurity/Other Write the answers (yes/partially/no) according to the poultry category in which a biosecurity measure is mandatory BY OTHER THAN LAW or not. Re
- 4) Fill in Database_Biosecurity/Frequency Write the implementation rate (%) according to the survey you retrieve data. Duplicate the sheet as many surveys as you consider
- 4) Consult the glossary for definitions

If you have any problems filling in the survey feel free to contact: [Alessandra Piccirillo, alessandra.piccirillo@unipd.it](mailto:Alessandra.Piccirillo@unipd.it)

Once you have finalised the document:
6) Save the document as an excel file and as "Database_WG1_Poultry_Country.xlsx"
7) Submit the file through the google form link, here.

Deadline: 28th February 2023 (all this excel file filled in by that day)

Instructions on how to fill in this file

- 1) Please select the country below
Country:
- 2) Fill in database A External biosecurity, regarding pig production data in the European country Write the answers y
- 3) Fill in database B, regarding internal biosecurity measures in pig production in the European country Write the
- 4) Consult the glossary for definitions

If you have any problems filling in the survey feel free to contact me: [Jasna Prodanov-Radulovic.jasna@niv.ns.ac.rs](mailto:Jasna.Prodanov-Radulovic.jasna@niv.ns.ac.rs)

Once you have finalised the document:
6) Save the document as an excel file and as "Database_WG1_Pig_Country.xlsx"
7) Submit the file through the google form link, here

Deadline: 28th February 2023 (all this excel file filled in by that day)

Cattle introductions
Cattle that are introduced into the herd are isolated in quarantine facilities
Quarantine facilities are separate from the area where the rest of the herd is kept
Animals are tested (for specific diseases) before entering the farm
Animals are tested (for specific diseases) after entering the farm in the quarantine facilities
Cattle are purchased only from farms with an equal or higher health status

Visitors and staff
All staff are exclusive to the farm (i.e., not shared with other farms)
Visitors that are not essential to have contact with animals, such as salesman, advisors, etc, are not allowed to have contact with the animals
Visitors that require contact with animals such as veterinarians, hoof-trimmers, etc, are provided with boots/shoe covers on the farm
Visitors that require contact with animals such as veterinarians, hoof-trimmers, etc, are provided with overalls on the farm

Vehicles (dead animals, etc)
Dead animals and/or animal materials are collected by a rendering vehicle
The rendering vehicle can remove dead cattle without entering the farm perimeter
Transport vehicles for animals, feed, supplies, maintenance etc. are only permitted to enter the perimeter of the farm once properly disinfected
Transport vehicles for animals, feed, supplies, maintenance etc. are only permitted to leave the perimeter of the farm once properly disinfected
Transport vehicles for out-going (i.e., slaughter, feedlots, etc) arrive empty (i.e., without other animals) to the farm

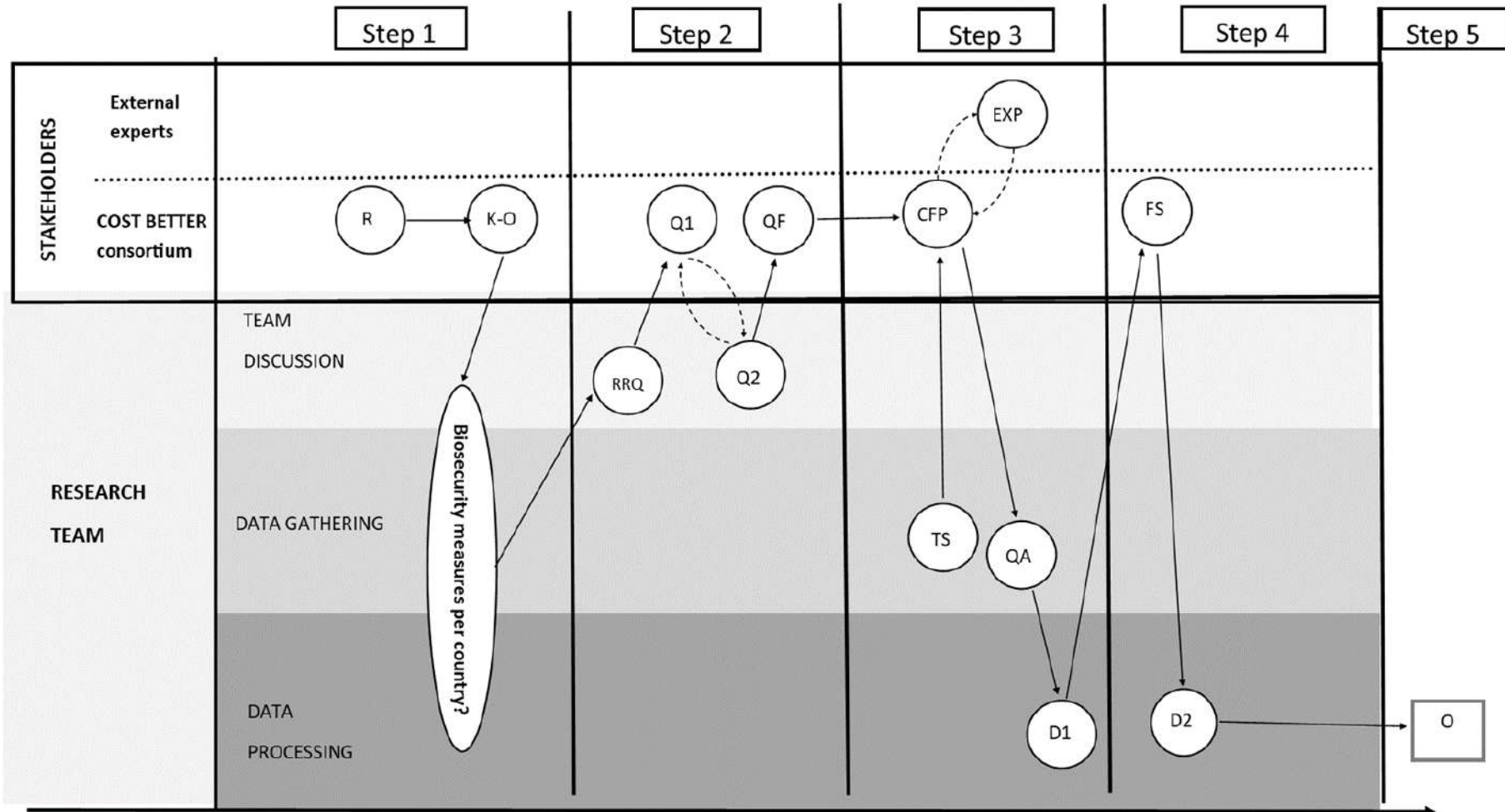
Neighbors
There is a perimeter fence (or natural barrier) around the farm
Contact with cattle from other herds during grazing is not allowed
Measures are in place to prevent the direct contact between cattle and wildlife
Measures are in place to prevent the direct contact between cattle and other livestock species

Progress of WG1 Activities in 2023:
we initiated group discussions on the next steps.

The second objective of WG1 to identify which biosecurity measures can be implemented in a realistic, cost-effective and sustainable manner in extensive livestock systems and settings with low resources, such as backyard production.

Task 1.3: Review of biosecurity measures implemented in extensive livestock systems and on backyard production.





R: initial research question—can you identify knowledge gaps in biosecurity in livestock production in Europe and ways for improvement?

K-O: Kick-off meeting of COST BETTER

RRQ: refine R- which measures per country (legislation, other) are in place? identify questions

Q1: Questionnaire (external revision rounds) Q2: Q1 revised

I-D: In-depth interviews

QF: Q2 pilot-tested in two countries, finalized

CFP: country focal points recruited to fill-in QF

TS: tutorials provided to the CFPs on how to fill QF

EXP: Experts (e.g. goverment officials) contacted

QA: QF answered

FS: Feedback session (semi-structured interviews to validate the answers)

D2: final database

O: Output (Dissemination)

WG1 STSM grants in 2023

Topic 1: Biosecurity mapping in **pig production systems** in Europe

Aim: to analyse and summarise survey results within the activities of the pig subgroup, originated from Task 1.1. Host Institution: Scientific Veterinary Institute "Novi Sad" (Serbia)

Topic 2: Biosecurity mapping in **cattle production systems** in Europe

Aim: to analyse and summarise survey results within the activities of the cattle subgroup, originated from Task 1.1. Host Institution: Faculty of Veterinary Medicine (Portugal)

Topic 3: Biosecurity mapping in **poultry production systems** in Europe

Aim: Review on biosecurity in poultry production in different European countries

Host Institution: University of Padua (UNIPD), Department of Comparative Biomedicine and Food Science (BCA), Agripolis Campus, Viale dell'Università 16, 35020 Legnaro (PD) - Italy



Short-term Scientific Missions

Topic 1: Biosecurity mapping in pig production systems in Europe

- Evelien Biebaut, Ghent University, Belgium

Topic 2: Biosecurity mapping in cattle production systems in Europe

- Bojan Milovanović, Institute of Veterinary Medicine of Serbia, Serbia.

Topic 3: Biosecurity mapping in poultry production systems in Europe

- Ilias Chantziaras, Ghent University, Belgium.
- Marta Leite, University of Coimbra, Portugal.

The second objective of WG1 was to identify which biosecurity measures can be implemented in a realistic, cost-effective and sustainable manner **in extensive livestock systems** and settings with low resources, such as backyard production.

This objective was approached through the following tasks:

- Task 1.3: Review of biosecurity measures implemented in extensive livestock systems and on backyard production.
- Task 1.4: Workshop about biosecurity measures that could be implemented in extensive livestock systems and on backyard production.



BETTER

BETTER COST Action Meeting in Tirana, June 20-21, 2023

- Challenges on implementation of biosecurity in smallholder farms in the Balkan region
- Aquaculture (WG1 presentations)- Identified leader and participants for sub-group in Aquaculture (Dušan Palić)
- Small ruminant subgroup was proposed as a new WG1 activity (Slavča Hristov)
- Poultry sub-group: Current status of biosecurity legislation in the European poultry sector (Alessandra Piccirillo and Giuditta Tilli)

Start with : Definitions of extensive systems - country differences

Countries – to provide descriptive definitions of extensive livestock systems as a starting point

- Questionnaire/Survey for data collection – to create in the similar way, previous to be starting point for new one

WG1 Planning of activities for 2023-2024

- ✓ **STSM+CFP** - to validate and analyze collected data, results from cattle-pig-poultry surveys in commercial production system
- ✓ To start with mapping different extensive systems in the countries



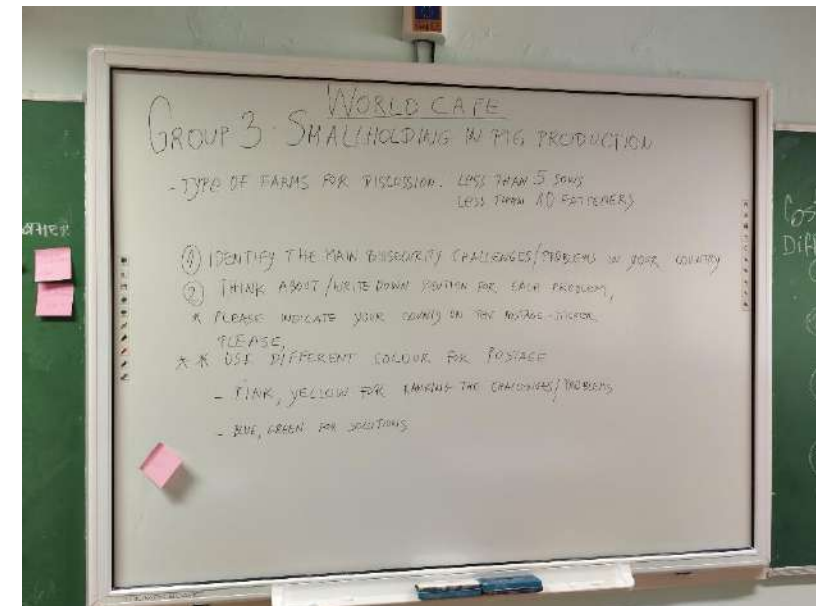
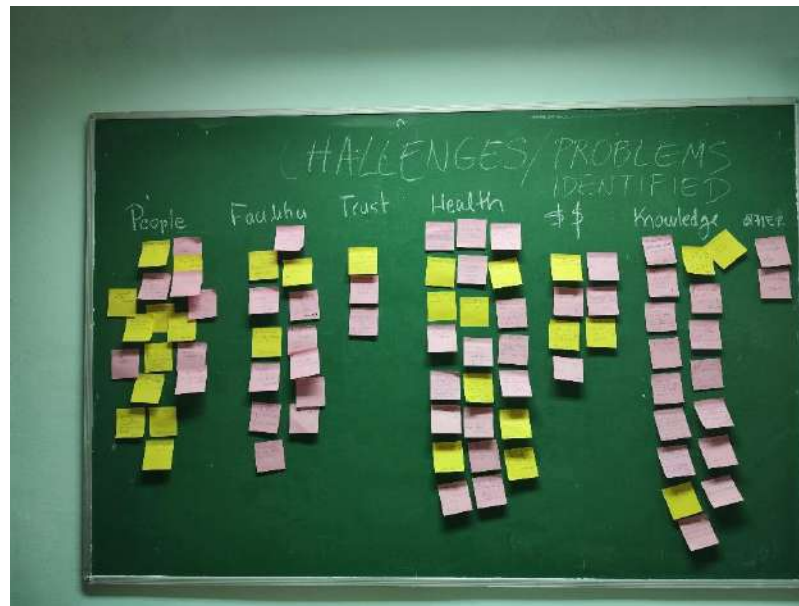
BETTER WG1 World café in Tirana:

“Biosecurity practices to be applied in production systems in which is more challenging to implement biosecurity”

The discussions were conducted in four main groups (poultry, pigs, cattle, small ruminants), plus one group on aquaculture.

We defined the structure and the number of small farms in relation to the animal species

The participants were asked **to identify the main problems/challenges and then potential solutions** to these. We also talked about the cost/effort required for these and what solutions could have the most impact.



WG1 Small Group meeting University of Belgrade-Faculty of Agriculture, Belgrade-Zemun, September 25-26, 2023

WG1 Discussion about results of World café on biosecurity practices to be applied in production systems in which is more challenging to implement biosecurity

✓ **new ideas how to provide in Task 1.3:**

Review of biosecurity measures implemented in extensive livestock systems and on backyard production.

Meeting decisions and following actions - **2 questionnaires/surveys to be develop**

- One for the CFP asking about the legislation of small-scale farms/backyards in the country. Led by: Evelien Biebaut, Ghent University, Belgium (BE), Alessandra Piccirillo, University of Padua, Italy (IT), Ilias Chantziaras Ghent University, Belgium (BE), Jasna Prodanov-Radulovic, Serbia (RS)
- One for the field vets for all species (ruminants/pigs/poultry) asking about the knowledge of the small scale farms, the implementation and importance of BS measures,... Led by: Inge Santman Berends, Netherlands (NL), Telmo Nunes Portugal (PT), Bojan Milovanovic Serbia (RS), Fernando Duarte-Godoy, Spain (ES)



WG1 | Identified objectives for surveys

1. How are small scale farms defined in the different countries by law or by general use
2. Map the presence of biosecurity legislation for small scale farms in the different countries
3. Survey to identify biosecurity measures in small scale farms according to vets



BETTER



Meeting in Padua, Italy February 6-7, 2024

- ✓ Small scale farm questionnaire (poultry, pigs, cattle) was created and finalized by Evelien Biebaut (Ghent University) in cooperation with the WG1 small core group members
- ✓ **On line meetings** were organized with the CFP to explain the questionnaires that will be used to collect data on the definition of biosecurity legislation on small scale farms
- ✓ Presentation of survey to evaluate biosecurity in small scale farms according to vets, lead by Inge Santman-Berends

The plan:

questionnaires to be send to CFP after meeting in Padova, after we present and discuss, agree together, decide about the deadline for completing the questionnaires.

WG1 presentation results - task 1.1.

WG1 Pig sub-group: Current status of biosecurity legislation in the European pig sector
presentation by Evelien Biebaut, Belgium

WG1 Small-ruminants subgroup – proposed questionnaire, discussion how to start the activity



Meeting in Tartu Estonia, May 30-31, 2024: three different activities in progress

WG1- Survey to identify adoption of biosecurity in small scale herds led by Inge Santman-Berends
- Shared EU survey access with participants in order to translate the survey in different languages

WG1 – Definitions and biosecurity legislation for small scale farms - presentation of survey current status in pig, cattle and poultry subgroup (Evelien, Bojan and Alessandra)

- How are small scale farms defined in the different countries by law or by general use
- Map the presence of biosecurity legislation for small scale farms in the different countries



Short-term Scientific Missions

Topic 1: Biosecurity analysis of biosecurity legislation/ compliance in cattle production systems in Europe

- Host institution: GD Animal Health (Netherlands)
- Supervisor: Inge Santman-Berends

30/09/2024

05/10/2024

Julia Gabrielle Jerab, Ghent University

Data collection: the most important biosecurity challenges in small scale farming in Europe

Pages

Start

Profile

Biosecurity in backyard farms

End



COST Action CA20103: **B**iosecurity **E**nhanced **T**hrough **T**raining **E**valuation and **R**aising Awareness

Survey to identify biosecurity measures in small scale farms

Background

Nowadays, health and welfare, safety and sustainability are crucial elements for ensuring the future of livestock production. Small scale farms are playing a significant role in local food production and for personal satisfaction (hobby). They offer numerous benefits, such as providing food, promoting self-sufficiency, and connecting individuals with nature. However, these small-scale operations also face unique challenges, including biosecurity risks. In this case biosecurity refers to the practices implemented to protect animals from infectious diseases entering the premises. While often associated with large-scale commercial farms, biosecurity is equally important for small scale farms. In fact, due to their smaller size and limited resources, small scale farms can be particularly vulnerable to disease outbreaks.

New WG1 activity initiated by poultry sub-group

- CURRENT STATUS OF BIOSECURITY LEGISLATION IN THE EUROPEAN POULTRY SECTOR - ADDITIONAL DATA COLLECTION ON BIOSECURITY LEGISLATION

Lead by ALESSANDRA PICCIRILLO, FRANCESCO GALUPPO, ANDREA LACONI, CARLA GOMES, BLERTA MEHMEDI, ALEKSANDAR DODOVSKI, ILIAS CHANTZIARAS



WG1 planning:

- pig subgroup and poultry subgroup actively working on publications (industrial sector)
- systematic review on the biosecurity implementation and legislation (poultry subgroup)
- New STSM in cattle subgroup

WG1 dissemination activities: conferences, symposium

DISSEMINATION CONFERENCE

DCG

Mapping biosecurity legislation in the intensive pig production across Europe



27th International Pig Veterinary Society Congress

15th European Symposium of Porcine Health Management



Addressing the current status of biosecurity legislation in the European farm animal sector

Ilias Chantziaras

11- 15 November 2024.



ISVEE17

11-15 November 2024 • Sydney, Australia
International Convention Centre Sydney

17th International Symposium on Veterinary Epidemiology and Economics 2024
Veterinary epidemiology and economics down under in leaps and bounds



- Mapping biosecurity measures applied on different animal production systems across Europe – Progress of COST Action BETTER. Jasna Prodanov Radulović et al.

Participative Action in Novi Sad (Serbia) 20th – 23rd June, 2024



26TH INTERNATIONAL CONGRESS OF THE
MEDITERRANEAN FEDERATION FOR HEALTH AND
PRODUCTION OF RUMINANTS
FeMeSPRum

Novi Sad (Serbia), 20th – 23rd June, 2024

Programme

In the context to the 26th international congress of the mediterranean federation for health and production of ruminants (FeMeSPRum) conducted in Novi Sad (Serbia) during June, members from BETTER organized a workshop on biosecurity.

In top of providing interesting presentations on the topic, they were also able to organize a discussion with assistants related to the challenges that veterinarians face in the field to implement biosecurity and possible solutions to improve the situation in the future. Results are being analyzed and will be shared soon with the network.



**COST Action BETTER (CA20103) – AN INTERDISCIPLINARY
RESEARCH NETWORK IN BIOSECURITY IN DIFFERENT
ANIMAL PRODUCTION SYSTEMS**

Funded by
the European Union



Jasna Prodanov-Radulović, DVM, MSc, PhD
Scientific Veterinary Institute „Novi Sad“
(jasna@niv.ns.ac.rs)



26TH INTERNATIONAL CONGRESS OF THE
MEDITERRANEAN FEDERATION FOR HEALTH AND
PRODUCTION OF RUMINANTS FeMeSPRum
Novi Sad 20-23 June 2024



Start Date: 21/10/2021
End Date: 20/10/2025 (4 years)

Contact info at: <https://better.biosecurity.eu/>

Workshop on biosecurity in small farms (October 1-2, Kotor Montenegro)



BETTER

Workshop on biosecurity in small farms

During the 1st and 2nd of October, some BETTER members travelled to Kotor in Montenegro to discuss about biosecurity challenges and possible solutions in small farms.

The workshop had the participation of different researchers together with colleagues from FAO and FESASS. Really interesting discussions took place. Thanks all for your participation.



Group photo of people attending the workshop



Group discussions on how to improve biosecurity in small farms



Group discussions on how to improve biosecurity in small farms

- Develop practical strategies to implement a biosecurity improvement plan.
- Consider:
 - Cultural Considerations: How to address cultural barriers?
 - Economic Feasibility: How to implement measures within economic constraints?
 - Engagement with Veterinary Services: How to improve collaboration?
- **Deliverable:** A biosecurity improvement plan outlining strategies to improve biosecurity of small farms in the region.

BETTER Scenarios

Small Ruminant Farming in a Hilly Region



1

Cattle Farming in a Rural Valley



2

Pig Farming in a Lowland Agricultural Area



3

Development of Biosecurity Improvement Plan



WG1 Pig sub-group



Year 2025 BETTER publications

Large heterogeneity in biosecurity legislation in the intensive pig production across Europe

Evelien Biebaut ^{a,*}, Marina Štukelj ^b, Ilias Chantziaras ^a, Telmo Pina Nunes ^c, Vitalii Nedosekov ^d, Carla Correia Gomes ^c, Blerta Mehmedi ^e, Isabelle Corrège ^f, László Ózsvári ^h, Line Svennensen ^l, Elise Bernaerdt ^l, Ina Toppari ^k, Lubomira Gresakova ^l, Costanza Romanelli ^m, Maria Eleni Filippitzi ⁿ, Siv Meling ^o, Branko Angjelovski ^p, Susanne Küker ^q, Arvo Viltrop ^r, Mislav Đidara ^s, Marko Nikolić ^t, Thies Nicolaisen ^u, Eline Vink ^{v,w}, Lisa Dahlin ^x, Branislav Kureljušić ^y, Stelian Băraițăreanu ^z, Alberto Allepuz ^{aa}, Jasna Prodanov-Radulović ^{ab}

WG1 Poultry sub-group



Implementation of biosecurity measures according to legislation in intensive poultry production: An overview across 22 EU and non-EU countries

Qamer Mahmood ^a, Giuditta Tili ^{b,c}, Andrea Laconi ^b, Ronald Vougat Ngom ^d, Marta Leite ^{e,f}, Jasna Prodanov-Radulović ^g, Alberto Allepuz ^h, COST BETTER Country Focal Points/Poultry Experts ⁱ, Ilias Chantziaras ^{aa,ab}, Alessandra Piccirillo ^{b,c,ac}

WG1 Cattle sub-group

Capturing the current status of biosecurity legislation in the European farm animal sector

Manuscript draft, lead by writing team: Julia Jerab, Ghent University - Belgium (BE), Iryna Makovska Ghent University- Belgium (BE), Bojan Milovanovic Serbia (RS), Inge Santman-Berends - Netherlands (NL), Ilias Chantziaras Ghent University - Belgium (BE), Telmo Nunes Faculdade de Medicina Veterinária - Portugal (PT)

WG1 tasks and results for the last GP

- ✓ WG1 – Survey to identify adoption of biosecurity measures in small scale farms according to vets, Led by Inge Sautman Barends, draft manuscript in the final phase

After Last BETTER Meeting and WABA conference, Barcelona, Spain (June 5-6, 2025)

- Conducting STSM and final result analysis, WG1 publications



Short-term Scientific Missions

STSM

Definitions and
biosecurity legislation
for small-scale farms
(poultry, cattle, pigs)

To be continued by the end of ongoing GP

WG1 – **Definitions and biosecurity legislation for small scale farms**

Fourth Call for

Short Term Scientific Missions (STSM) and Virtual Mobility Grants (VM)

WG1

Topic 1: Definitions and biosecurity legislation for small-scale farms (poultry, cattle, pigs)

Aim: Analysis of the achieved results from the questionnaire for small-scale farms and preparation of the paper for publication.

Host Institution: Ghent University, Belgium

Supervisors: Ilias Chantziaras



Funded by
the European Union



 **cost**
EUROPEAN COOPERATION
IN SCIENCE & TECHNOLOGY

BETTER

Thank you for your
participation and great
team work !