FAO regional initiatives on avian influenza

FAO Regional Office for Europe and Central Asia

Food and Agriculture Organization of the United Nations

FAO Virtual Learning Centers

FAO Virtual Learning Centers

COORDINATION UNIT IN FAO HQ

VLC EUROPE AND CENTRAL ASIA (REU)

VLC LATIN AMERICA AND THE CARIBBEAN (RLC)

VLC ASIA AND THE PACIFIC (RAP-SAP)

VLC SOUTHERN AFRICA (SFS)

VLC NEAR EAST AND NORTH AFRICA (RNE)

VLC EASTERN AFRICA (EA)

SUMMARY OF THE REGIONAL VIRTUAL LEARNING CENTER ACTIVITIES IN EUROPE AND CENTRAL ASIA AS OF 1 JANUARY 2024

FAO Virtual Learning Centers

Food and Agriculture Organization of the United Nations

- ✓ Reach out to large audiences in remote areas

- ✓ Cost-effectiveness

- ✓ Reduced environmental footprint

- ✓ Customized: region, language, etc.

- ✓ Tutored *vs.* Open access

- ✓ Accredited

- ✓ Certified

- ✓ Promotion and strengthening regional networks

VLC REU key achievements in last 2 years

3,200 participants

50 countries

4 VLC courses accredited

2 more planned

Open access versions (ASF, HPAI)

4 in development: ASF in Serbian, and IRB (EN, TR & RU)
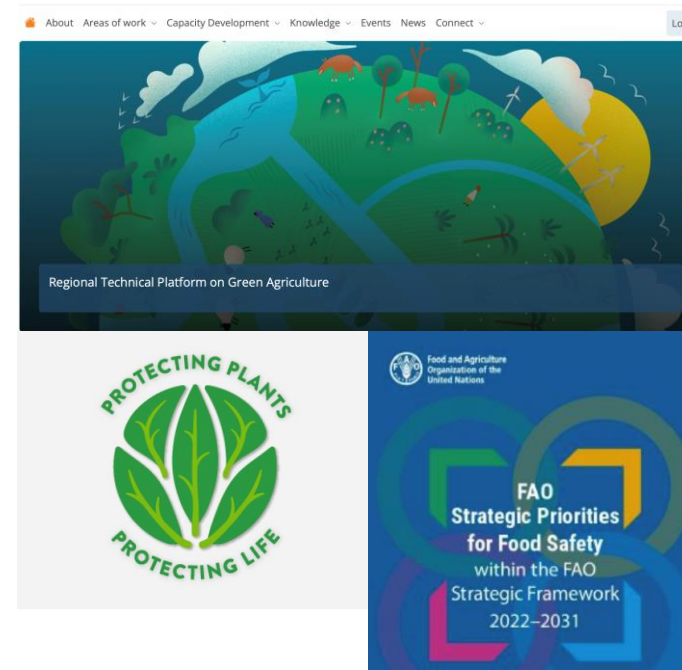
Beyond AH → OH
- Food Safety
- Plant Health
- Green Agriculture
- Food Loss & Waste

FAO Virtual Learning Centers: Online courses delivered by REU

2021 - 2022

ASF (RUS)

AI Preparedness (ENG)

AI Preparedness (RUS)

LSD (RUS)

Stamping Out (ENG)

OutCosT (ENG)

2023

ASF for Spain (2)

ASF (ENG)

AI Preparedness (UKR)

Stamping Out (RUS)

SGP (ENG)
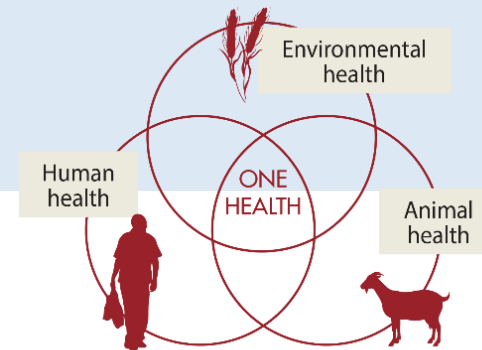

2024

Intro to One Health (ENG)

ASF (ROM)

IRB (ENG, TUR, RUS)

SGP (RUS)

AI Preparedness (ENG)

Intro to One Health (RUS)

2025 (developing/planned)

Food Loss & Waste (ENG)

Zoonoses (ENG)

Brucellosis (ENG & RUS)

Green Agriculture (ENG)

Food Safety (ENG)

Plant Health (ENG)

PPR (ENG)

Online courses on Avian Influenza

Delivery dates	Course title	Language	Number of countries	Number of participants	Status
Jan-Feb. 2022	Avian Influenza Preparedness – Global	English	90	365	Finished
Nov-Dec 2022	Avian Influenza Preparedness	Russian	14	246	Finished
Mar-Apr 2023	Avian Influenza Preparedness	Ukrainian	1	250	Finished
Feb-March 2024	Introduction to One Health	English	45 (4 sectors: PH/WL, AH, EH, FS	308	Finished
Oct-Nov 2024	Avian Influenza Preparedness	English	40	-	Ongoing
Nov-Dec 2024	Introduction to One Health	Russian	15 (4 sectors: PH/WL, AH, EH, FS)	-	Ongoing

Avian Influenza Preparedness course

Language: English, Russian and Ukrainian
(plus other languages in other regions)

8 Modules & 4-week tutored course:
❖ Week One: Introduction to AI and Epidemiology
❖ Week Two: Clinical and Laboratory Diagnosis
❖ Week Three: Prevention and Surveillance
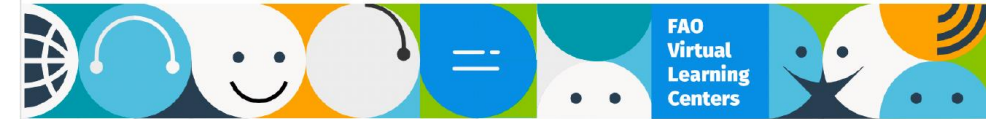❖ Week Four: Outbreak Investigation, Response and Control

Course discussion forum and webinars

VetCEE accreditation ongoing

Open access version also available

Food and Agriculture Organization of the United Nations

FAO Virtual Learning Centers

Avian Influenza Preparedness Course

The Food and Agriculture Organization of the United Nations (FAO), working together with the Friedrich-Loeffler-Institut, has developed an online training course on avian influenza (AI) preparedness. This course has been adapted, translated and delivered in multiple FAO regions to respond to the AI epidemiological situation.

COURSE LENGTH	12 hours (4 WEEKS)
PARTICIPANTS	400 (MAX)
FORMAT	TUTORED – a mix of online webinars, self-paced interactive modules, discussion forum and additional resources

Who is the course for?

The primary audience for the course is official and private practice veterinarians who are directly involved in the surveillance, detection, prevention and response to avian influenza.

What will you learn?

• Impact and importance of AI
• Epidemiology
• Pathogenesis and clinical diagnosis
• Laboratory diagnosis
• Outbreak investigation
• Prevention
• Surveillance
• Control with and without vaccination

What does the course involve?

The course is studied entirely online and will take approximately **12 hours to complete.** Around **400 participants** can take the course at the same time, and it is open for four weeks.

The course **opens with a live interactive webinar**, where trainees meet their trainers and are introduced to the course. Trainees then progress through **eight interactive modules**, enriched with photographs, exercises, and self-test questions. During the course, trainers and international experts are available through a **discussion forum** to answer questions and to lead discussions.

Towards the end of the course, there will be a second **live interactive webinar**, to discuss topics raised during the course in more detail. All trainees must complete a **comprehensive assessment and finish all the coursework.** Successful trainees are provided with a certificate.

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- Animal diseases have important economic consequences at farm, national and regional levels
- Economic consequences vary widely across countries
  - level of spread
  - duration of the epidemic
  - the structure of the livestock industry
  - control measures applied
- However...
  - Few studies
  - Results are not comparable
  - Data required, although usually available, is not routinely collated and analyzed
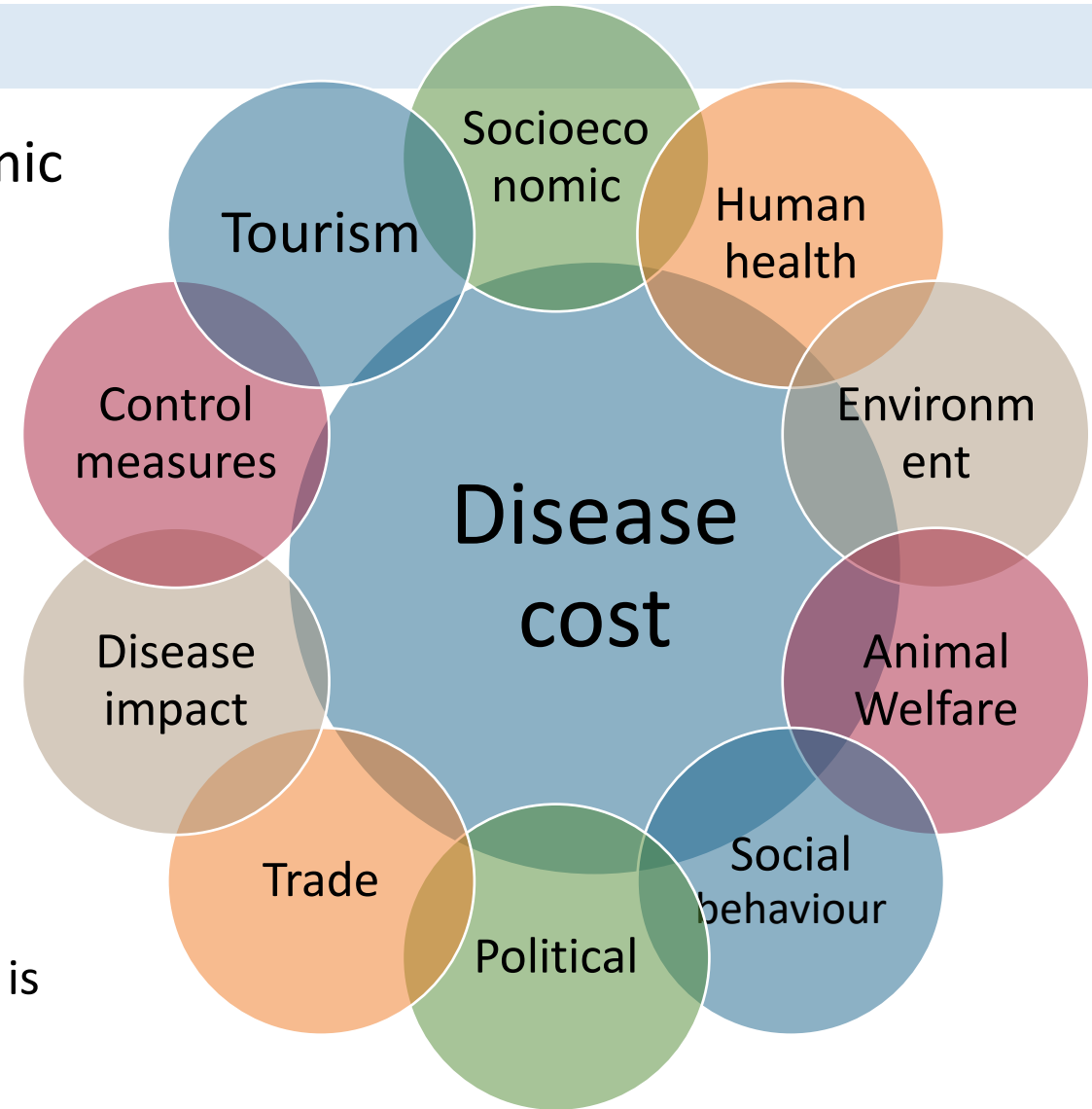
Outbreak management

*Preparedness
&
Resource allocation*

Awareness raising & Advocacy

*Prevention
&
Resource mobilization*

FAO's solution: OUTbreak COSting Tool: OutCosT

- What's the direct cost of outbreaks?

- What is the cost of disease management?

- What's the cost per activity?

- Who pays for what?

- What's the cost per production system?

- What would be the cost of alternative epi scenarios or management strategies?

- Standardized approach: Allows comparisons between outbreaks and scenarios

- Fast and low labour needs
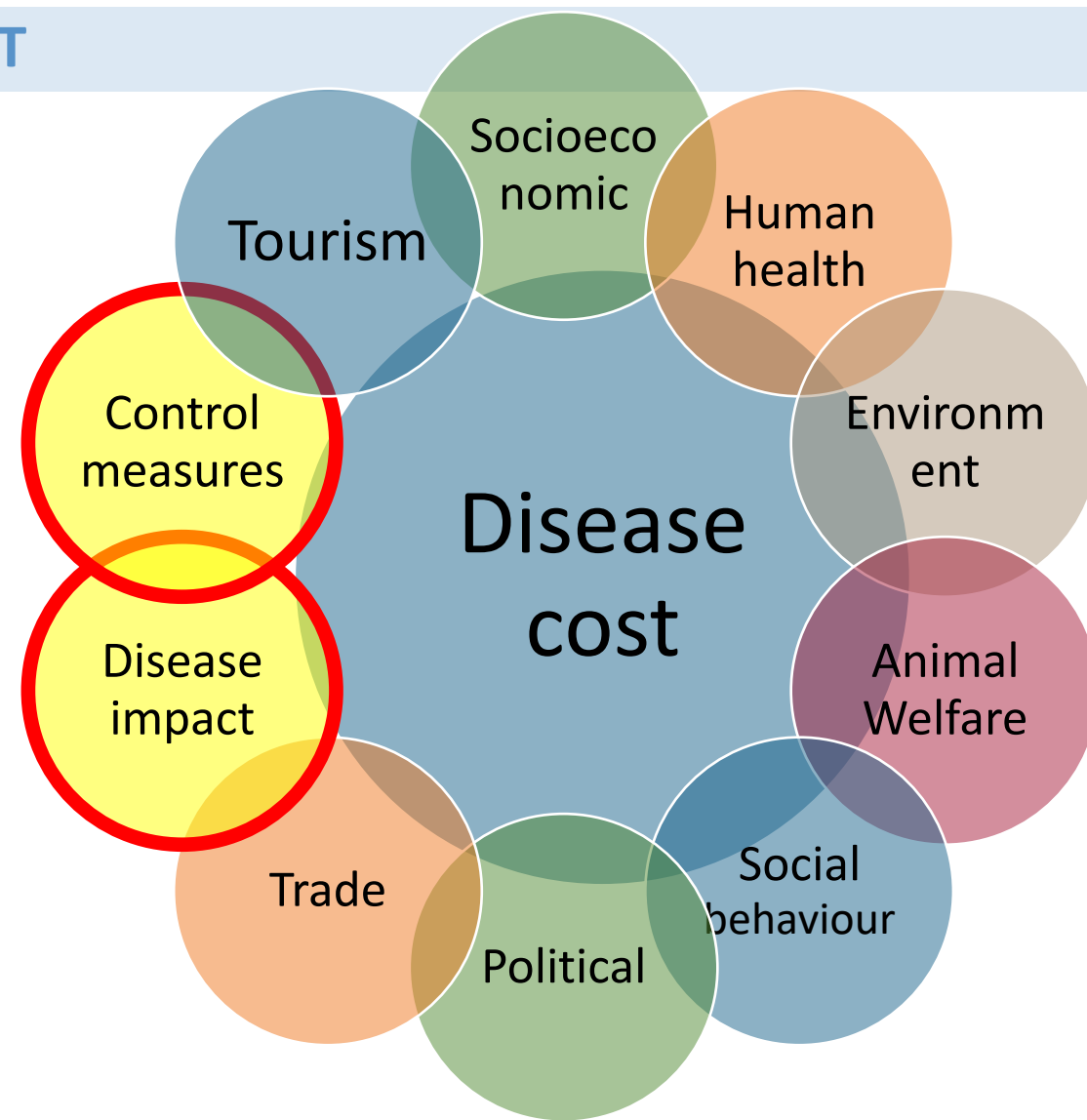
OutCosT – Key features

- Joint effort between FAO and the Autonomous University of Barcelona

- Launched in April 2022 as a new FAO corporate tool

- Excel-based

- Livestock species-specific

- Dynamic tool in continuous development

- Actual epidemics and hypothetical scenarios

- Emerging and endemic diseases

- Validated with real outbreak data

- Incorporates a simple qualitative assessment of other indirect costs

- Available online (for swine)

The Tool: Excel spreadsheet + User Guide + Template

Outputs: Other costs
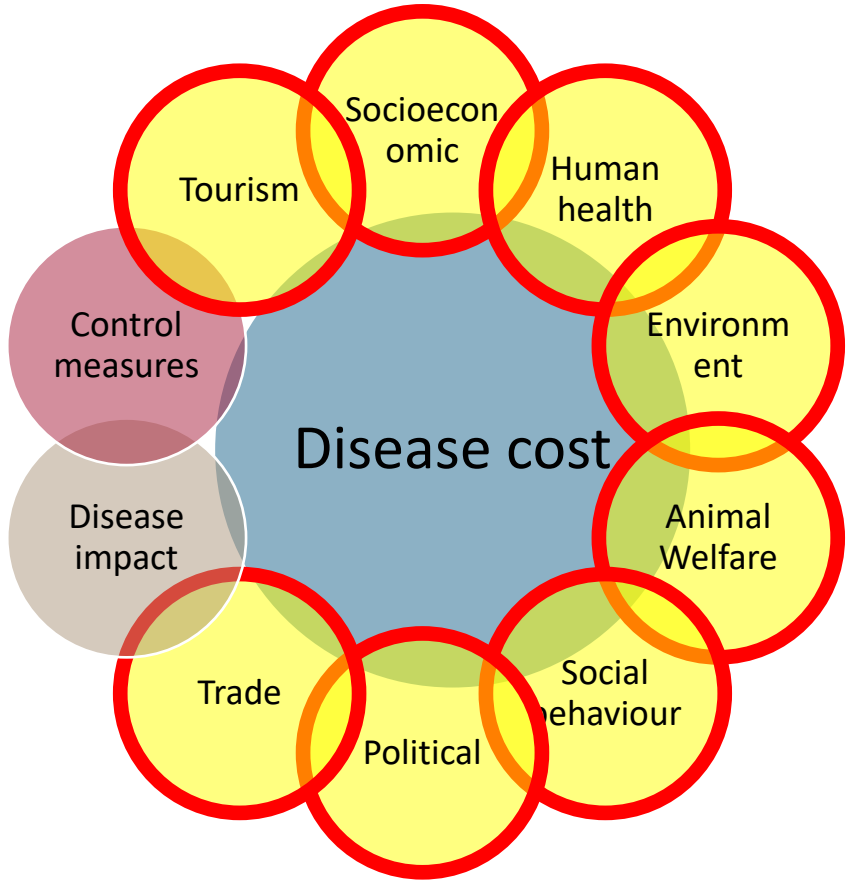
Other costs (qualitative evaluation)

Socio-economic vulnerability

	Consequences	Likelihood	Concern
Affected farms / communities do not have the adequate support	1	2	Low
Compensation for diseased / culled animals are not enough	1	2	Low
People can be forced to leave the activity	3	1	Moderate
The zone is dependent of livestock business. People can be forced to emigrate to the city	1	1	Low

Human Health:

	Consequences	Likelihood	Concern
The disease is a frequent and/or severe zoonoses	0	0	Null
Indirectly can affect the human health (increase of AMR, pollution...)	2	1	Low
The disease or the control measures increases mental disturbances of farmers and related people	2	1	Low

Environment:

	Consequences	Likelihood	Concern
Disease can also affect wildlife animals	4	2	Extreme
Disease can modify the ecological balance or affect an endangered species	1	1	Low
The control/eradication measures have an effect on the environment	1	1	Low

Animal Welfare

	Consequences	Likelihood	Concern
The disease has an important efect on the welfare of affected animals	2	2	Moderate
The control measures have an important efect on the welfare of affected animals	1	2	Low

Social Behaviour:

	Consequences	Likelihood	Concern
Reduction in the consumption of pork products (decrease of prices)	2	1	Low

OutCosT Poultry preliminary results

	Bulgaria, 2022		Bolivia, 2023		Chile, 2023		Panamá, 2023		Guinea, 2023	
Outbreaks (commercial)	18		17		175		-		111	
Outbreaks (backyard)	-		17		12		4		not included	
Animals in affected farms	738,555		591,952		1,497,259		90		412,928	
COSTS	Cost (EUR)	%	Cost	%	Cost	%	Cost	%	Cost	%
• *Outbreaks*	4 072 503	91.4%	3 780 123	70.4%	8,169,576	26.7%	106,724	22.3%	2,268,396	90.3%
• *At-risk farms*	324 344	7.3%	983 814	18.3%	15,832,693	51.7%	157,890	33.0%	17,137	0.7%
• *General population*	0	0.0%	243 397	4.5%	0	0.0%	0	0.0%	114553	4.6%
• *Surveillance (farms)*	1 472	0.0%	2 245	0.0%	0	0.0%	0	0.0%	0	0.0%
• *Wildlife*	447	0.0%	692	0.0%	847,480	2.8%	517	0.1%	19315	0.8%
• *Coordination & Others*	15 474	0.3%	318 892	5.9%	5,325,000	17.4%	86,167	18.0%	7,296	0.3%
• *Training & Awareness*	39 848	0.9%	42 476	0.8%	442,362	1.4%	126,553	26.5%	84,675	3.4%
TOTAL	4 454 087	100.0%	5,371,639	100.0%	30,617,110	100.0%	477,851	100.0%	2,511,372	100.0%
Cost per affected farm	247 449		157,989		163,728		119,463		22,625	

You can visit
the **VLCs platform** here:

https://virtual-learning-center.fao.org/

Please, contact us REU-VLC@fao.org

Food and Agriculture
Organization of the
United Nations

SUMMARY OF THE
REGIONAL VIRTUAL
LEARNING CENTER
ACTIVITIES IN EUROPE
AND CENTRAL ASIA AS
OF 1 JANUARY 2024

FAO
Virtual
Learning
Centers

Продовольственная и
сельскохозяйственная организация
Объединенных Наций

СВОДНАЯ ИНФОРМАЦИЯ
О ДЕЯТЕЛЬНОСТИ
РЕГИОНАЛЬНОГО
ВИРТУАЛЬНОГО УЧЕБНОГО
ЦЕНТРА В ЕВРОПЕ И
ЦЕНТРАЛЬНОЙ АЗИИ
НА 1 ЯНВАРЯ 2024 ГОДА

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