Enhancing resilience to support change in our food system: example of antimicrobial use reduction

Workshop ECVPH

24 September 2020 - 08:30-10:00

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AMResilience

Workshop organisers

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The participants – tell us more about you!

- Where are you working?
- What is your topic of work?
- How familiar are you with AMR and resilience thinking?

https://www.madmoizelle.com/idee-cadeau-cool-un-qui-est-ce-feministe-pour-noel-967642

https://pingo.coactum.de/316691

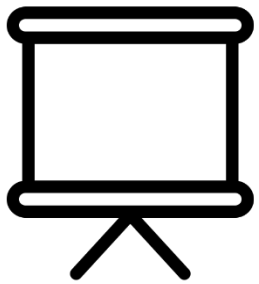
Planning of the workshop

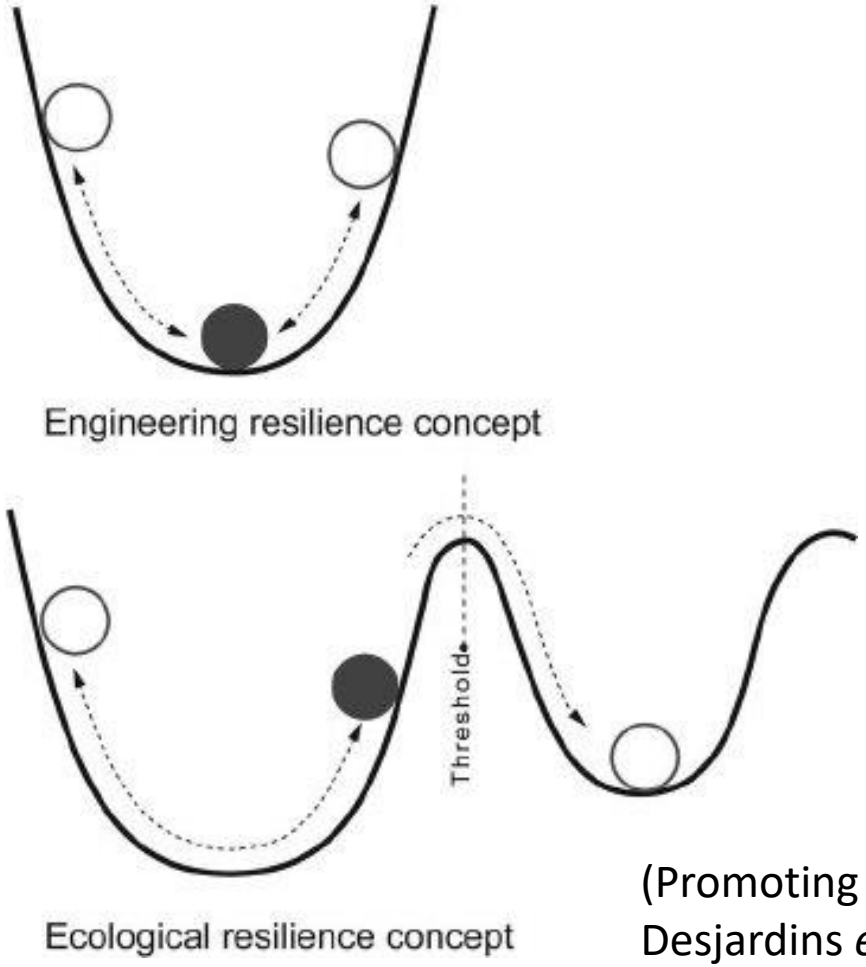
Time	Item
8.30 – 8.50	Introduction to resilience and description of the topic *How to prepare a post-AM era in the FPS?*
8.50 – 9.20	Group sessions - What makes the FPS able to implement a change from its current scheme? (strength of the system, favouring factors, resilience factors) - What would slow down a change in the system? (obstacles, weaknesses)
9.20-9.40	Feedback from the different groups
9.40-10.00	Conclusive session - What should we change in our FPS to enhance resilience towards AMR? - What message to send forward to decision makers?

FPS: food production system
AMR: antimicrobial resistance
AMU: antimicrobial use

Introduction to resilience

Let’s start with a short explanation of complex systems and resilience thinking…





(Promoting resilience, Desjardins *et al.,* 2015)

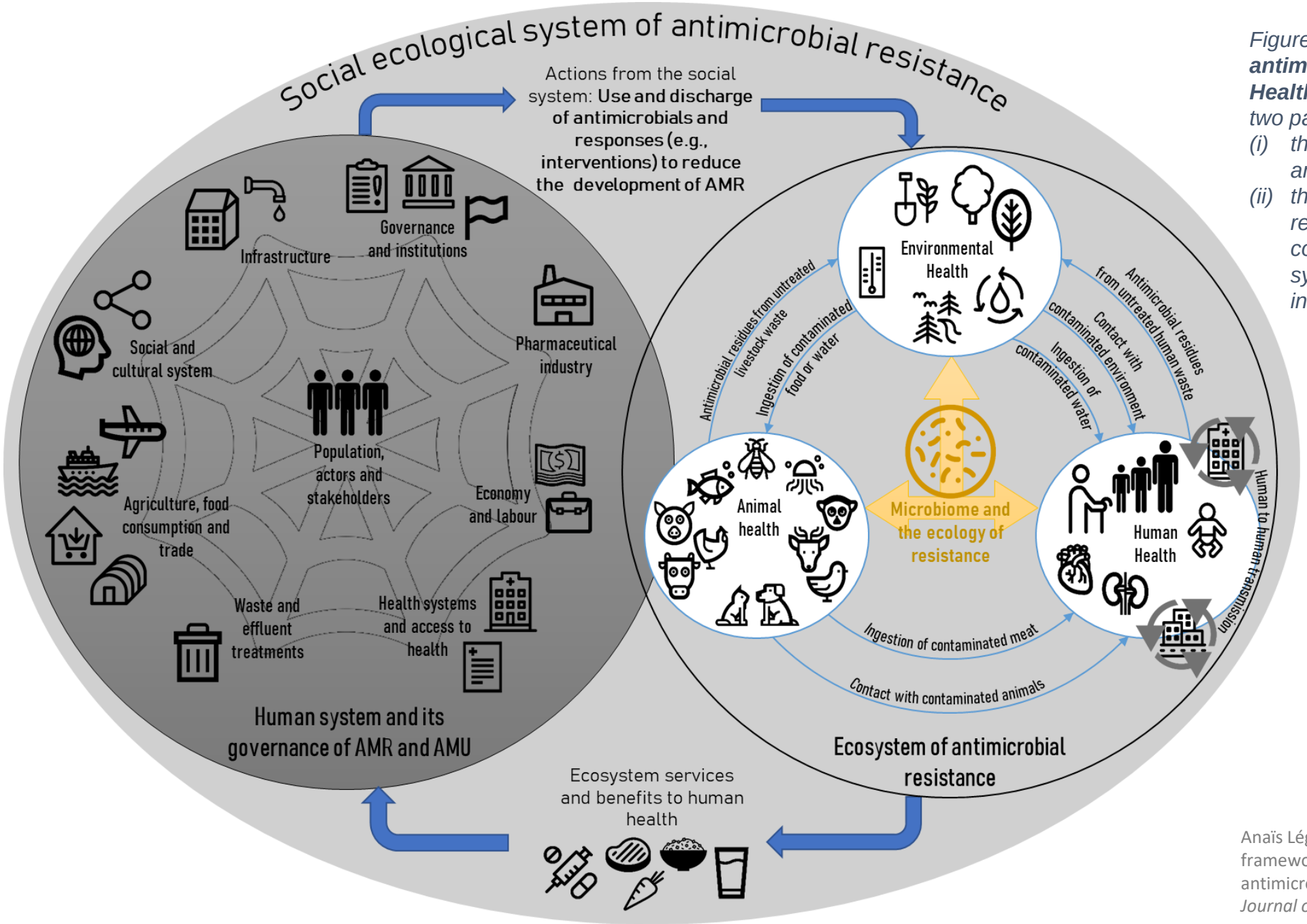


Figure: ***Social ecological system of antimicrobial resistance (AMR) in a One Health context****. The figure is organised in two parts:*

(i) the human system and its governance of antimicrobial resistance and use;

(ii) the ecosystem of antimicrobial resistance. This figure highlights the complexity of the AMR social ecological system and the diversity of potential AMR interventions.

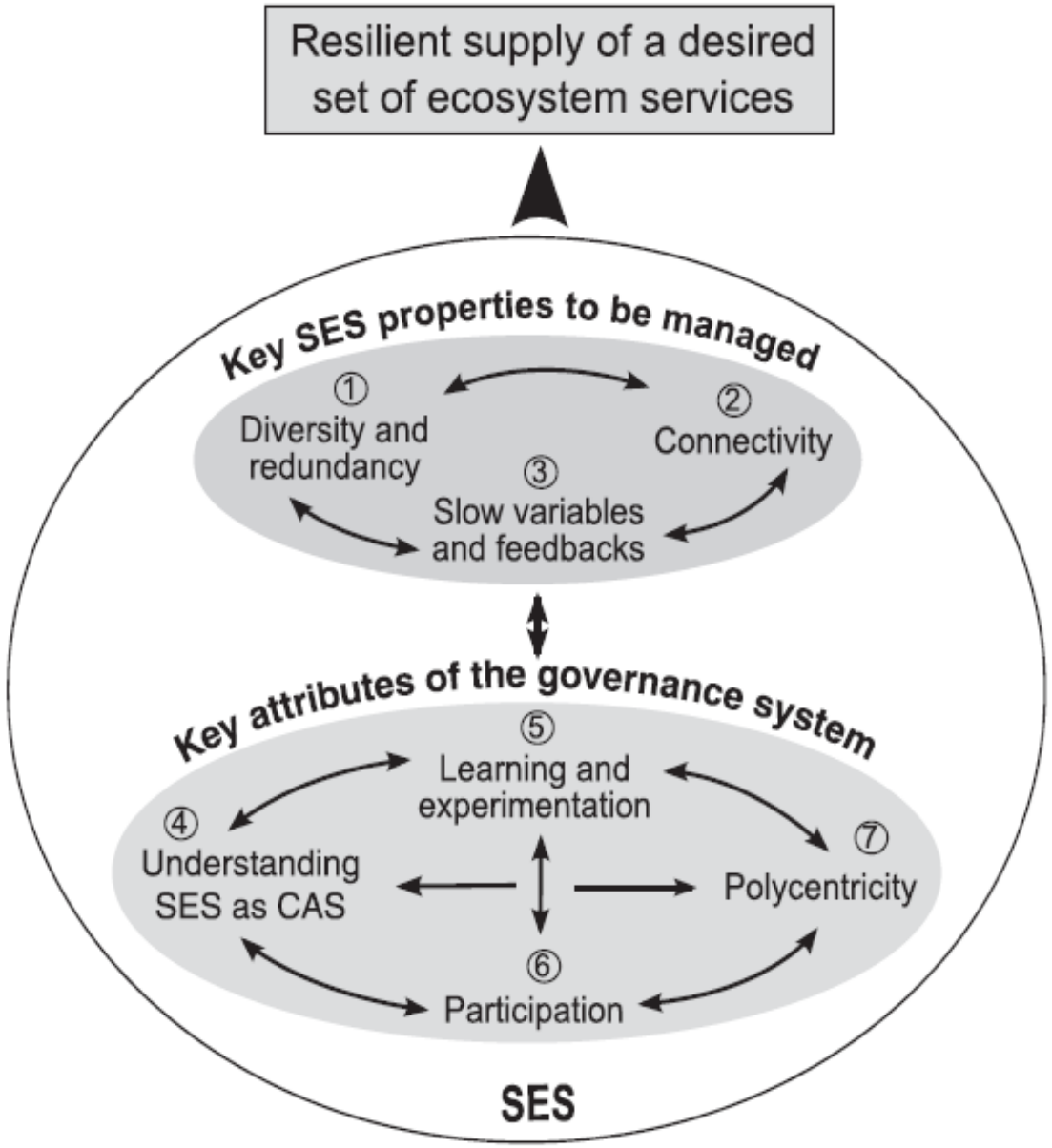
The Ecosystem part has been adaped from Chereau et al. and icons are designed by Arthur Shlain, downloaded from the Noun Project (https://thenounproject.com).

Anaïs Léger, *et al*. AMR-Intervene: a social ecological framework to capture the diversity of actions to tackle antimicrobial resistance from a One Health perspective. *Journal of Antimicrobial Chemotherapy.* In Press.

Principles for enhanced resilience

Management: actions taken to achieve goals, includes monitoring and implementation

Governance: social and political process of defining goals for the management of SES and resolving trade offs



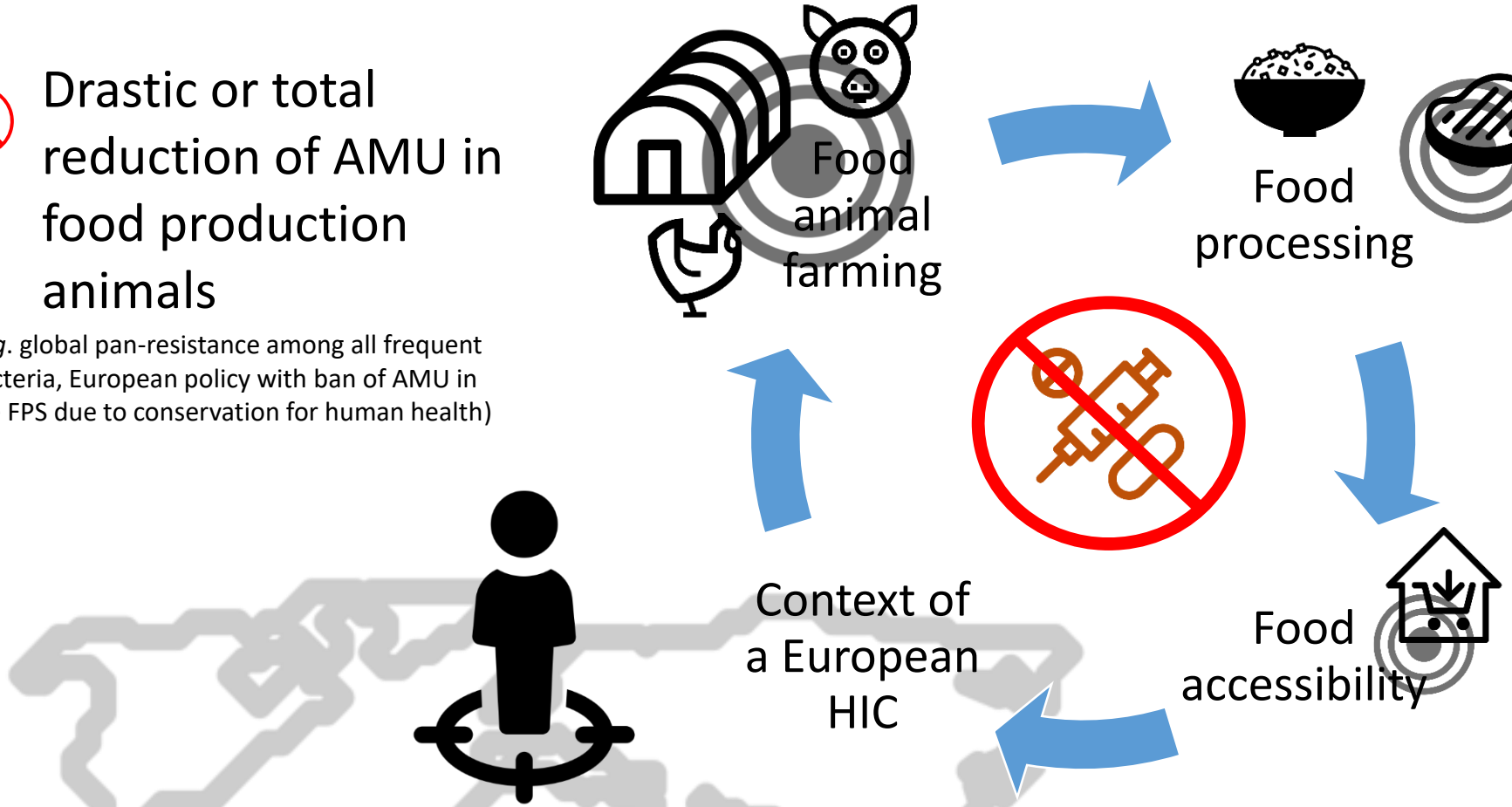
Biggs *et al*., 2012, *Towards principles for enhancing the resilience of ecosystem services*

Scenario - description

focus on the food from animal origin, following the described situation

Drastic or total reduction of AMU in food production animals

(*e.g.* global pan-resistance among all frequent bacteria, European policy with ban of AMU in the FPS due to conservation for human health)



The FPS would be highly impacted **And NEEDS TO CHANGE in a very short time and in an efficient way.**

Group work

- No focus on the consequences in the FPS or the transmission pathways of AMR
- Example based in a European country (HIC)
- Factors enhancing or stopping/slowing down change in the FPS

- Group 1

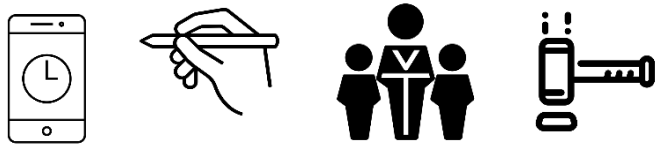
What makes the FPS able to implement a change from its current scheme? (strength of the system, favouring factors, resilience factors)

- Group 2

What would slow down a change in the system? (obstacles, weaknesses)

Group work

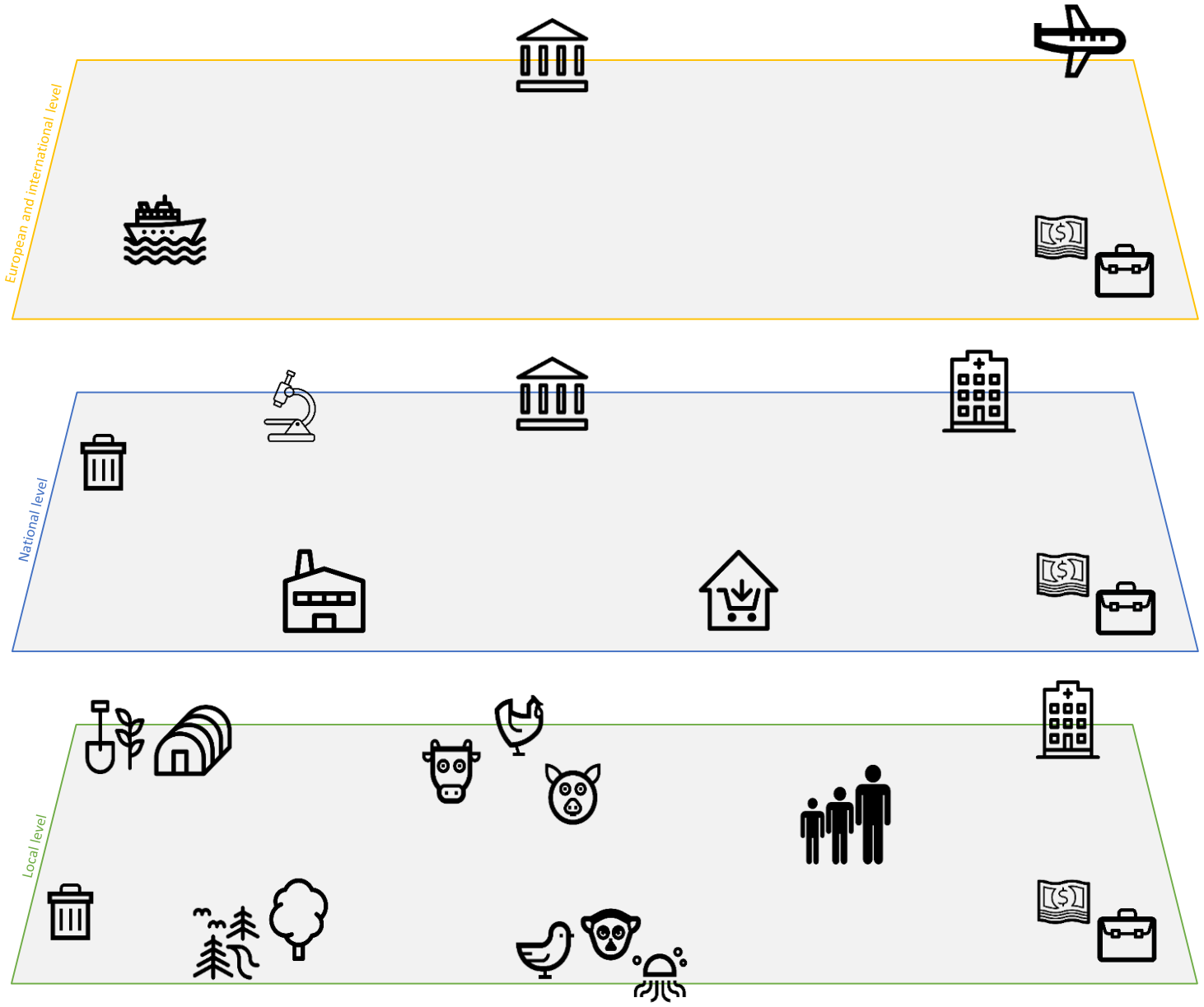
- Split in equal groups
- Distribute roles between participants



- Use the framework on slide 11 to answer the question
- At the end, take a picture of your work and send it to us

- The rapporteur will explain the results

Microbiome and the ecology of resistance



Food production system

Conclusive session

- What should we change in our FPS to enhance resilience towards AMR?
- What message to send forward to decision makers?

1- Word cloud

Share your ideas via the online tool.

Write keywords about what, to your opinion, should change first in the system!

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2- Discussion

From the results of step 1, let's share opinions!

Turn on your camera if you want to comment or add a point.
(Please not more than 3 cameras on at the same time)

Thanks to all of you for your participation!

Give us feedback about the workshop!!

https://formulaire.unige.ch/outils/limesurvey3/index.php/996722?lang=en

If you have further questions, don't hesitate to contact us!

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Interested in **complex systems** and **resilience**?
Working on **health systems, food security,** or **AMR**?
Check out our next colloquium in Geneva on Feb 2021
https://gtglab.net/resilience-studies-colloquium/