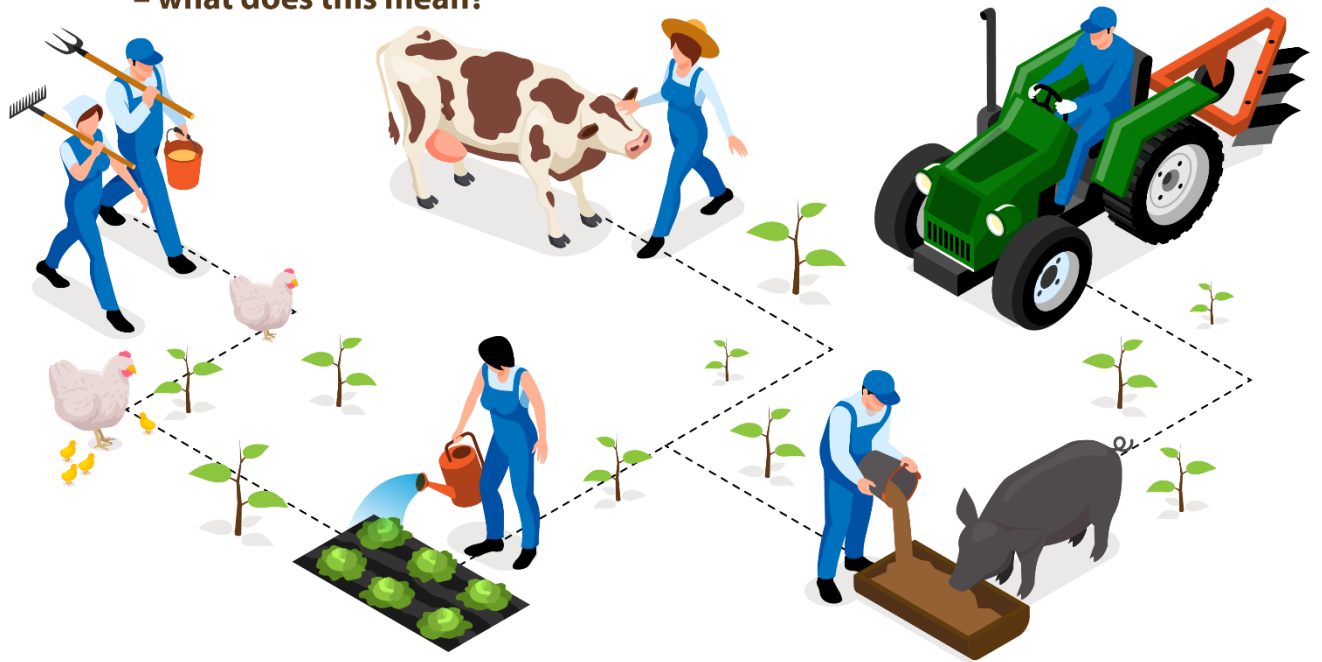


**'SUSTAINABLE LIVESTOCK SYSTEMS'**  
– what does this mean?



**13<sup>th</sup> Seminar of the Animal Task Force**  
**Wednesday 15<sup>th</sup> November 2023**  
**Brussels, Belgium + online**

# Synthesis

## Background

The EU will introduce a Framework Law on Sustainable Food Systems in 2023. In this context, what are sustainable livestock systems, which common ground could they have and how will they differ from region to region? Policymakers, civil society, NGOs, consumers, the agri-food sector and scientists all want to better define and contribute to more sustainable livestock systems. However, there is no clear definition of what a sustainable livestock system is, how to assess the state of existing systems, and the direction in which they must evolve. In the meanwhile, food security has grown in importance because of the recent crisis occurring in Europe. How to combine food security, resilience and sustainability should be at the centre of research and innovation and policy initiatives.

**This topic will explore the key attributes of sustainable livestock systems, the trade-offs and synergies between different aspects of the systems and their interactions with other parts of the food system. It will also explore how current livestock systems can evolve to be more sustainable and will examine methodologies to assess the sustainability of livestock systems.**

- The benefits and trade-offs of livestock systems from an economic, social and environment viewpoint
- Assessing the sustainability of livestock systems and its different levels
- Barriers for young farmers to enter livestock farming systems
- The role of livestock systems in rural economies and job creation
- The role of livestock systems in providing nutrient-rich and affordable foods
- Sustainability and healthy and robust livestock
- Livestock systems in the context of climate change and the effects of heat and water shortage
- Intrinsic qualities of livestock products in food and non-food uses
- The place of animal welfare concerns in sustainable livestock systems and benefits/trade-offs with the three main pillars of sustainability
- Contribution to culture
- Tools to assess and improve sustainability; e.g. development of new metrics, feeding and breeding...

## Programme

### Welcome & introduction

By Frank O'Mara, ATF President - [@FrankOMara8](#)

### Outcomes of the ATF-EAAP LFS Symposium, August 28<sup>th</sup>, 2023: Important messages & gaps in the discussion

By Jean-Louis Peyraud, INRAE - [@PeyraudJean](#) [@INRAE\\_France](#)

### Public policies: vision policy maker

By Claire Bury, Deputy Director-General responsible for Food sustainability, DG SANTE - European Commission - [@EU\\_Health](#) [@Food\\_EU](#)

### What is the most appropriate tool to measure the sustainability?

#### LCA: advantages and limits

By Hayo van der Werf, UMR SAS - INRAE - [@INRAE\\_France](#)

#### Better than LCA for evaluating agricultural production: Systems analysis because methods matter: The Nordic Case

By Harald Sverdrup, Inland Norway University of Applied Sciences - [@Hilnnlandet](#)

#### Pathways: outputs from the project

By Laurence Smith, University of Reading & SLU - [@lgps42](#) [@pathways\\_europe](#)

#### Presentation of STEP-UP

By David Kenny, Teagasc - [@DaithiK2000](#) [@teagasc](#)

### What is being used in practice by farmers on GHG mitigation?

#### An example in the Netherlands

By Marion de Vries, WUR - [@mariondev](#) [@WUR](#)

#### An example in a pig farm in Switzerland

By Antonia Ruckli, Ruckli Juniors

#### An example in Poland

By Grzegorz Brodziak, GoodValley

### The challenges of young farmers entering livestock farming

By Katharina Schobersberger, CEJA - [@\\_CEJA\\_](#)

### Panel discussion

With the speakers and the audience.

And with:

- Wolfgang Burtscher, Director-General of DG AGRI - European Commission

- Humberto Delgado Rosa, Director of Unit D - Biodiversity / DG ENVI - European Commission

Moderation by Ana Granados [@AnaGranadosChap](#) & Ana Sofia Santos [@SofiaSantosAna](#)

### Closing

By Frank O'Mara, ATF President - [@FrankOMara8](#)

**On 15 November 2023, the Animal Task Force<sup>1</sup> organised a seminar on "*Sustainable Livestock Systems: What Does This Mean?*"**

More than 200 persons attended the event, in Brussels or remotely.

Moderated by Frank OMara, Director of Teagasc, the event was vibrant and full of discussion, evaluating methodologies for the assessment of sustainability, and how livestock systems can further evolve to become more sustainable. Policymakers, civil society, NGOs, consumers, the agri-food sector and scientists, all want to better define and contribute to more sustainable livestock systems. However, there is no clear definition of what a sustainable livestock system is, how to assess the state of existing systems, and the direction in which they must evolve. In the meanwhile, food security has grown in importance.

Several speakers developed this topic and described practical solutions or systems to measure the sustainability of livestock in its different components.

Jean Louis Peyraud, INRAE emphasised the complexity of livestock systems, and outlined the challenges that continue to persist in our measurement of their environmental impact. He offered a synthesis of the ATF-EAAP LFS symposium which took place in Lyon at the end of August 2023 to discuss the different components of sustainability and how to measure it for livestock production.

Three components are interconnected to improve sustainability: diversity, efficiency and circularity. The first question developed is linked to the scale to assess efficiency. We move to productivity (maximize production without taking account of the resource consumption) to efficiency (maximise the production with minimum of inputs). You can consider the animal level itself but it is not adapted, you have to integrate all the production system. Animal maximum efficiency could be opposite to the efficiency of the global system. The second question is circularity and diversity for the provision of ecosystem services. Finally, efficiency and circularity can be hand in hand with positive trade-off. To conclude, Jean-Louis Peyraud offered to work on a common definition of livestock sustainability as a part of the next Strategic Research & Innovation Agenda of the Animal Task Force.

Claire Bury, Deputy Director-General in DG Health and Food Safety with responsibility for food safety and sustainability, put this approach in the perspectives of EU challenges and public policy. She underlined the necessity of dialog to define the next EU strategy after the Farm to Fork project. The EU must build a much more resilient food system. If we focus on livestock, we have to maintain the export position of the EU, but on the other hand we have to reduce climate and environmental impact of the agri-food chain. The demand from citizens is high (including animal health and welfare and update of the legislation - especially animal transportation -).

The presentation by Hayo van der Werf, INRAE focused on the description of LCA approach, which is a largely used and a valuable approach, and how to improve it, especially to take account of circularity and biodiversity. One way is to have an entry per ha and not per kg of product. But it is not enough and complementary specific developments are necessary.

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<sup>1</sup> The Animal Task Force (ATF) promotes a sustainable and competitive animal production in Europe. We are a public-private partnership of experts from knowledge institutes and industry representative organisations from across Europe. We work closely together with EAAP on setting the European agenda for research and innovation in the animal domain.

For more information: [www.animaltaskforce.eu](http://www.animaltaskforce.eu), <https://www.linkedin.com/company/animal-task-force/> and [@AnimalTaskFrc](https://twitter.com/AnimalTaskFrc)

Harald Sverdrup focussed on the need for systems approach in assessing farming sustainability and capturing the complexity of farming. He illustrated his topics by studies performed in Nordic countries with large integrative approach. He put on the table an ideological basis: full farm systemic estimations should be used – allocation to products inside farms are deceptive and utter nonsense. In the other hand, get the system boundaries right is necessary: impacts beyond farms with landscape, social cohesion and societal benefit must be included.

Two European projects were presented [Pathways for sustainable food](#) and [STEP UP](#) which underlined the importance of developing a holistic view to assess and transform livestock systems taking account of all the components.

In the second part of the meeting, Marion de Vries described The Netherlands approach for GHG mitigation and the ANCA tool developed to manage this topic.

Finally, innovative solutions described by visiting farmers from Switzerland and Poland in pork production, which highlighted the need for context-specific approaches.

The first one, in Switzerland, is a young farmer recently returned to her family farm to take over the family's pig business with her brother, and they have established some fantastic innovations around the rearing of pigs. They have introduced a single and intermittent suckling regime to help with the weaning process and they have some very good housing systems. The other big innovation is around the feeding system and introducing forage into the diet of the pigs.

The second, from Poland is a business unit with 12,000 sows fully integrated. They are growing all their own feed, processing that feed, and have a fully integrated farming system. Then, they return the manure usually after having gone through a biogas plant, to land that is growing the feed. They have their own slaughtering facility, they are producing their own consumer products, they have great data and use that all along the chain to measure their performance. Finally, they have a very sustainable system and have been ahead of the regulations in terms of animal welfare for many years, and put in place a very sustainable system.

These 2 examples demonstrated that there is no one size fits all: we had two very different types of pig enterprises that are doing two very different sets of things on their farms but both contributing to improving their systems in their context.

A final speech was given by Katharina Schobersberger, representing CEJA Young Farmers, on the obstacles faced by farmers under 35 (such as access to land and proper financing), as well as the need for young farmers in Europe to contribute to the Green Deal and a sustainable agricultural industry.

The final panel discussion was composed by Humberto Delgado Rosa - DG Envi, Wolfgang Burtscher - DG Agri, Jean Louis Peyraud - INRAE, Hayo van der Werf - INRAE and Harald Sverdrup, Inland Norway University of Applied Sciences.

After a summary of previous speeches by Frank O'Mara, the people on the floor developed their opinion on these contribution to the debate.

Wolfgang Burtscher underlined the difficulties to integrate all the dimensions of sustainability for the livestock and even more to extend to all food systems. In Europe, many regulations have consequences on livestock and the legislator is always considering how to reduce negative impact. We must consider more the interest and benefits of livestock for the European agricultural sector.

Humberto Delgado Rosa reminded how much it is interesting for him to work with ATF. These debates around livestock and environment are very crucial. He is convinced that sustainability is the big quest of the century for humankind. And we must take account of all the dimensions not as several layers in a wedding cake but as an integrate and unique food system notably in the current scenario where we do have a degradation of environment natural resources ecosystem services with an increasing population and the complex world. Food systems and food security are to take account on long term

objectives, not only the immediate impact on the different components. By the way we will realise that livestock has a place like one component of this complex, multidimensional system. A rich debate followed the 2 introduction speeches, covering a large number of aspects developed in previous presentations and given complementary lighting on specific points.

The videos of the ATF seminar are available on the ATF YouTube channel:

- [Part 01](#)
- [Part 02](#)

**The next ATF events, in 2024, will be on the topic “Livestock are more than food”.**