ENFASYS MOOC - Syllabus:

Sustainability Transformations in Agri-food systems

Funded by the European Union

Project funded by

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs, Education and Research EAER
State Secretariat for Education, Research and Innovation SERI

1. Course overview

1.1. Course description

Agricultural and food systems face increasing complexity, uncertainty, and sustainability challenges. Addressing them requires the ability to think, analyse, and act systemically. This means moving beyond linear, sector-specific solutions to approaches that explicitly account for interactions, feedbacks, and unintended consequences.

The ENFASYS Massive Open Online Course (MOOC) translates key project insights, concepts, and methods into an accessible learning experience for a broad audience. It is designed as an introductory course, providing learners with the essential foundations needed to engage with systemic approaches to agri-food systems, whether in research, policy, or practice. This MOOC introduces learners to the core concepts, tools, and approaches developed within the ENFASYS project to support systemic, behavioural, and participatory approaches to agri-food system transformation. The emphasis is on understanding why persistent challenges arise in agri-food systems and how systemic interventions can contribute to meaningful change.

Like other MOOCs, it is designed as a self-paced learning format for making academic content widely accessible. Through six complementary modules, learners explore systems thinking, systems mapping, systems dynamic modelling, behavioural economics, policy co-design processes, and participatory systems co-design for transformation across scales. The focus is both conceptual and applied: this MOOC equips learners with complementary analytical lenses to understand systems and processes of systems transformation, while illustrating, through concrete examples, how these concepts and tools can be applied. While the course draws on ENFASYS research and case studies, the concepts and tools introduced are transferable and applicable across a wide range of agri-food and sustainability contexts.

1.2. Who is this course for?

The course is open-access and designed for a broad audience interested in understanding and engaging with agri-food system transformation from a systemic perspective, including:

- MSc students, PhD students, and early-career researchers seeking conceptual and methodological foundations for analysing complex agri-food systems;
- Practitioners working in agri-food, sustainability, or rural development, who are involved in program design, implementation, monitoring and evaluation;
- Professionals transitioning into food systems analysis and looking to build analytical skills applicable across policy, research, and practice

Learners from diverse backgrounds: agronomy, economics, sociology, political science, environmental sciences, behavioural sciences, management, and related fields who wish to complement their disciplinary expertise with systems thinking approaches. No prior knowledge about systems thinking, modelling or behavioural science is required to follow this course.

1.3. What will you learn?

Food system transformation requires more than isolated interventions. This MOOC provides participants with the foundational concepts and basic tools needed to understand interdependencies within agri-food systems, recognise key behavioural determinants, and appreciate how coherent interventions and transformative governance processes can be designed. The course introduces systems thinking as an analytical perspective for engaging with complexity in agri-food systems. It equips learners with essential entry-level knowledge relevant for research, policy, and practice, without aiming for in-depth or specialised training. The emphasis is on building a shared conceptual foundation and analytical awareness that can support further leaning and application.

Learning Outcomes

By the end of the MOOC, participants will be able to:

- Apply key principles of systems thinking to analyse interconnections and feedback loops within agri-food systems.
- Use basic systems mapping tools to identify drivers, relationships, and leverage points including causal loop diagrams.
- Understand behavioural insights and how they inform research and intervention design in agri-food and sustainability contexts.
- Combine behavioural, systemic, and policy insights to interpret food system dynamics across multiple actors and governance levels.
- Explain the logic and value of participatory and policy co-design processes for developing coherent and context-sensitive interventions.
- Reflect critically on how ENFASYS concepts apply within their own research or practice and consider their relevance and applicability in different contexts.

2. Learning philosophy and teaching approach

2.1. Learning focused design

The course is designed for autonomous participation, without direct teacher-learner interaction. Learners can progress at their own pace and choose their level of engagement, from completing the core requirements to exploring the materials in greater depth according to their interests and needs. This flexible design acknowledges the diverse backgrounds, professional roles, and learning objectives of participants.

It encourages:

- autonomous, self-paced learning
- active engagement through exercises and reflections
- respect for diverse experiences and perspectives
- connecting theoretical tools to learners' real-world contexts

- optional peer-to-peer exchange in discussion forums

Throughout the course, learners are encouraged to relate the content to a context they are familiar with and to reflect on a complex real-world issue of their choice. This issue can serve as a continuous reference point to support cumulative learning, meaning-making and practical application.

2.2. How you will learn

Learning materials and activities include:

- Short knowledge clips (10-20 minutes; typically 3-4 per module)
- Required and optional readings (e.g. scientific articles, policy briefs, blogs)
- Additional media such as short videos or podcasts
- Optional Exercises and self-assessment quizzes
- Optional peer discussion forums

All course materials, learning activities, and discussion forums will be hosted and accessed via the Moodle platform.

2.3. Expected time commitment

The total expected workload is approximately 20-35 hours, corresponding to around 3-6 hours per module, depending on learners' engagement with readings and exercises.

The course is fully self-paced and flexible, but it is recommended to complete it within an 8-week period to maintain learning continuity. Learners are encouraged to follow the recommended module sequence to support progressive understanding.

Completion of all modules is not mandatory, though strongly encouraged to benefit fully from the learning experience. Learners may choose to focus on specific modules most relevant to their needs.

3. Evaluation and accreditation

3.1. Assessment components

Assessment in the course includes short progress quizzes at the end of each module.

3.2. Completion criteria

To complete the course and receive the certificate, participants must complete all module quizzes, and submit a final reflection and feedback survey.

3.3. Certificate

Upon successful completion of the course requirements, participants will receive a MOOC Certificate of Completion issued by the ENFASYS project coordinator. They will also have the option to join the ENFASYS community and become members of the official LinkedIn group.

4. Course policies

4.1. Inclusion, respect, integrity

The course fosters an inclusive and supportive learning environment. It is designed to be accessible to learners from diverse cultural, disciplinary, and professional backgrounds. Learners are encouraged to:

- share experiences from diverse cultural and disciplinary backgrounds
- engage respectfully with differing perspectives and contribute constructively to discussions and peer-learning activities.

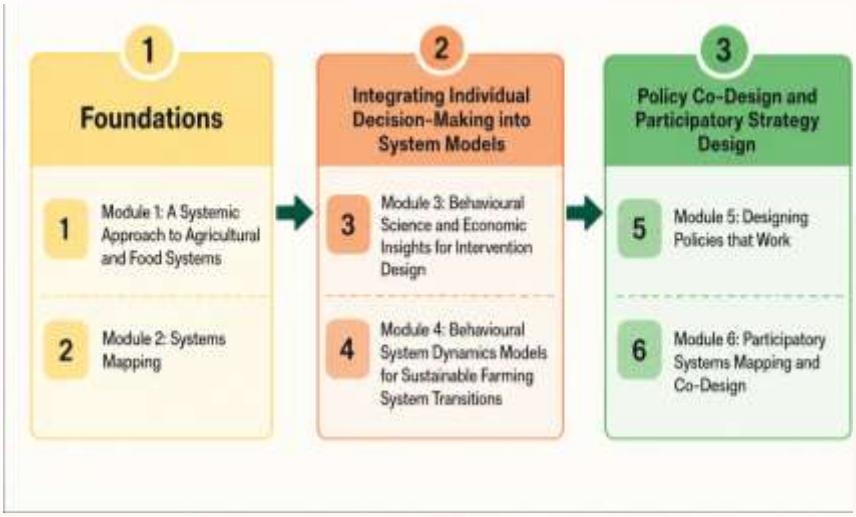
Participants are expected to provide original work in reflective assignments. All materials are open-access for non-commercial educational use, following Horizon Europe requirements.

4.2. Accessibility and Open Science commitment

In line with Horizon Europe Open Science principles, all ENFASYS MOOC materials are openly accessible and may be reused for non-commercial educational purposes. The materials will remain available beyond the duration of the project to ensure long-term accessibility and impact.

5. Course structure and content

5.1. Overview



The ENFASYS MOOC is designed as a coherent learning pathway that introduces participants to the concepts, tools, and practical applications needed to better understand and support sustainability transitions in agri-food systems. Across the course, learners are progressively guided through four stages: building foundations in systems thinking, integrating individual decision-making into system models, exploring policy co-design and participatory strategy design, and finally applying and reflecting on what they have learned.

The MOOC is organised as a progressive learning pathway. It begins with a foundations stage, in which participants are introduced to the core principles of a systemic approach (Module 1) and to systems mapping tools for representing interconnections, feedback loops, dynamic processes, and lock-ins in complex agri-food systems (Module 2). Building on this foundation, the second stage focuses on integrating individual decision-making into system models. Here, the course explores how producer and consumer behaviour can be understood through economic and behavioural perspectives, and how such insights can inform intervention design (Module 3) and be integrated into system dynamics modelling (Module 4).

The third stage addresses policy co-design and participatory strategy design. Module 5 examines how coherent, consistent, and feasible policy mixes can be designed to support sustainability transitions in complex agri-food systems, while Module 6 extends this perspective through participatory and transdisciplinary approaches, highlighting the importance of collaboration, reflexivity, and co-design in real-world transformation processes. The MOOC concludes with a final reflection and feedback survey.

The modules are organised into three to four units, and typically include:

- a video lecture or knowledge clip (approximately 10–20 minutes),

- supporting readings or other media, such as scientific articles, policy briefs, webinars, podcasts, blog posts, or case-based materials,
- an optional exercise or reflection activity,
- and a progress self-assessment quiz.

Together, these materials are intended to support flexible, practice-oriented learning and to encourage participants to connect course content to their own research, professional context, or field experience.

5.2. Module content and structure

Module 1: A Systemic Approach to Agri-Food Systems

This introductory module familiarises participants with the foundations of systems thinking and its relevance for analysing and supporting change in agricultural and food systems. The module introduces the core principles of a systemic approach and shows how they can be applied to agri-food contexts. The module begins by clarifying what is meant by a "systemic approach" and how it differs from more linear or reductionist ways of analysing agricultural and food systems. It then explores how systems thinking can be put into practice through tools such as causal loop diagrams and stock-and-flow diagrams, which help represent interdependencies, feedbacks, lock-ins, and dynamic processes.

Building on this foundation, the module shows why food-system analysis almost inevitably requires interdisciplinarity and attention to multiple scales, including territorial, value-chain, and governance scales. Finally, it examines what happens when systems thinking is used not only to understand food systems, but also to support their transformation. In this context, the module introduces the importance of participatory, transdisciplinary, and reflexive approaches, and highlights the normative choices involved in defining system boundaries, desirable futures, and pathways of change.

Participants will gain a foundational understanding of key systems concepts — such as boundaries, interconnections, feedbacks, emergence, lock-in, and scale — that underpin later modules on systems mapping, modelling, and transformation.

Guiding question: What is a systemic approach, and what does it imply for understanding and transforming agri-food systems?

Learning outcomes

By the end of this module, participants will be able to:

- define a systemic approach and distinguish it from more linear or reductionist approaches;
- explain key systems concepts relevant to agri-food systems, including boundaries, feedbacks, emergence, and lock-in;
- describe how systems thinking can be applied in practice through qualitative and quantitative representation tools;

- explain why analysing food systems systemically requires attention to interdisciplinarity and multiple scales;
- reflect on the participatory, transdisciplinary, and reflexive dimensions of systems thinking for food system transformation.

Unit overview

- Unit 1: What is a systemic approach?
  Introduces the core principles of systems thinking and clarifies what distinguishes a systemic approach from non-systemic forms of analysis.
- Unit 2: Systems thinking in practice
  Explores how systems thinking can be operationalised through causal loop diagrams, stock-and-flow diagrams, and the analysis of feedbacks and lock-ins.
- Unit 3: Interdisciplinarity and scale in food systems analysis
  Shows why food systems must be analysed across multiple disciplines, scales, and actor perspectives.
- Unit 4: From systems thinking to systems transformation
  Examines why transformation-oriented systems work must also be participatory, transdisciplinary, and reflexive.

Module 2: Systems Mapping Tools

This module introduces systems mapping as a set of practical tools to visualise and analyse complex structures, actor-relations, and dynamics in agri-food systems. . Focusing on Causal Loop Diagrams (CLDs) and Value Network Mapping (VNM), participants learn how these heuristic tools capture relationships, feedback mechanisms, and drivers of system behaviour within agri-food systems.

Drawing on ENFASYS project deliverables and existing training materials, the module combines conceptual explanation with hands-on demonstrations. Learners gain experience interpreting feedback loops, identifying lock-ins and leverage points, and understanding how static systems maps can support subsequent learning on more advanced systems dynamic modelling in Module 4.

Guiding question: How can I effectively grasp and illustrate the complex relationships and dynamics between actors within agri-food systems? How can I thoughtfully reflect on and steer purposeful change in a way that is both targeted and reflexive?

Learning outcomes

By the end of this module, participants will be able to:

- develop and interpret CLDs and VNMs to communicate the complexity of food system related challenges, by integrating diverse types of knowledge (qualitative, quantitative, experiential).
- use these maps to identify potential lock-ins, leverage points and potential interventions

- reflect on the boundedness of the representations of the systems they draw and the interventions they propose.
- become familiar with technical tools such as mural, miro, vensim to assist them in drawing such maps

Unit overview

- Unit 1: Causal loop diagrams
  Provides an overview and detailed walkthrough of the methodology for creating Causal loop diagrams
- Unit 2: Value network maps
  Provides an overview and detailed walkthrough of the methodology for creating value network maps
- Units 3 & 4: Reflection for targeted change
  Showcases both tools through an in-depth explanation of a real-world application, namely the ENFASYS case in Ireland

Module 3: Behavioural science and economic Insights for Intervention Design

This module explores how producers and consumers make decisions in agri-food systems and why this matters for sustainability transitions. It introduces the basic economic foundations of behaviour, showing how choices are shaped by prices, budgets, technical constraints, and preferences. It then adds a behavioural-economics perspective to explain why individuals respond differently even under similar conditions. Finally, the module examines how these insights can inform the design of policy instruments and interventions, drawing on the RESET framework and ENFASYS examples to show how behavioural and economic perspectives can be combined in practice.

Guiding question: How do producers and consumers make decisions in agri-food systems, and how can behavioural insights help design more effective interventions for change?

Learning outcomes

By the end of this module, participants will be able to:

- explain how producer and consumer choices are shaped by prices, budgets, technical constraints, and preferences;
- describe how behavioural factors such as risk attitudes, norms, and knowledge influence decision-making;
- distinguish between standard economic and behavioural-economic explanations of decision-making;
- analyse how different interventions, including incentives and behavioural measures, may influence producer and consumer behaviour;
- reflect on how behavioural heterogeneity affects the design of policies and transition strategies in agri-food systems

Unit Outline

- Unit 1: The economics of production and consumption
  Introduces the basic economic logic of production, consumption, and market interaction, using graphical reasoning and agri-food examples.
- Unit 2: Beyond perfect rationality: the Behavioural Economics Approach
  Explores why individuals behave differently under similar economic conditions and introduces key behavioural factors relevant to sustainable farming and food consumption.
- Unit 3: Using Economic and Behavioural Science to Design Intervention
  Examines how economic and behavioural insights can inform the design of policies and interventions, including the RESET framework and ENFASYS examples.

Module 4: Behavioural System Dynamics Models for Sustainable Farming System Transitions

This module introduces behavioural System Dynamics Models as tools for exploring how farming systems change over time. It explains how system dynamics can be used to represent not only feedbacks and delays, but also behavioural, economic, and institutional influences on transition pathways. Particular attention is given to modelling behaviour through auxiliary variables and to integrating empirical behavioural evidence, such as Discrete Choice Experiment results, into quantitative system analysis. Drawing on ENFASYS examples, the module shows how behavioural SDMs can be used to simulate policy pathways and support the design and evaluation of interventions for sustainable farming systems.

Guiding question: How can behaviour be explicitly integrated into System Dynamics Models to better understand and support sustainability transitions in farming systems?

Learning outcomes

By the end of this module, participants will be able to:

- explain the basic logic of System Dynamics Models as tools for analysing change over time in complex systems;
- describe how behavioural mechanisms can be represented within system dynamics models;
- understand the role of auxiliary variables in linking system conditions to individual decision-making;
- explain how empirical behavioural evidence, such as Discrete Choice Experiment results, can be translated into quantitative model inputs;
- interpret how behavioural System Dynamics Models can be used to explore policy pathways and transition dynamics in farming systems.

Unit overview

- Unit 1: Behavioural-oriented System Dynamics Models

Introduces System Dynamics Models as tools for representing influence, feedback, and change over time, with particular attention to the role of behaviour in sustainability transitions.

- Unit 2: Representing behavioural mechanisms in System Dynamics Models
  Explains how behavioural concepts such as motivation, risk perception, and learning can be translated into quantitative model components through auxiliary variables and causal relationships.
- Unit 3: Integrating behavioural evidence and exploring policy pathways
  Shows how behavioural evidence from Discrete Choice Experiments can be embedded in behavioural SDMs and used to simulate transition pathways under different policy configurations.

Module 5: Designing policies that work

This module explores how public policies can better support sustainability transitions in complex agri-food systems. It starts from the observation that current agricultural policies, especially the Common Agricultural Policy (CAP), often struggle to overcome systemic lock-ins and may unintentionally reinforce unsustainable dynamics. Building on the systems perspective developed in earlier modules, the module shows why effective policy design requires more than adding new measures to existing frameworks.

Participants are introduced to the concept of policy mixes and learn how to analyse their core components: objectives, instruments, and calibrations. The module explains how the quality of a policy mix can be assessed through three key criteria — coherence, consistency, and congruence — and shows how these can be strengthened through stakeholder-informed design and iterative evaluation. The module also examines the political and institutional conditions under which policy reform becomes feasible. Drawing on ENFASYS results, it introduces the concept of policy design spaces, with particular attention to governmental willingness and capacity as key determinants of whether transformative policy proposals can be adopted and implemented. Finally, the module shows how empirical lessons from case studies and co-design processes can be translated into transferable design principles for more effective and feasible policy interventions.

By combining policy design theory with ENFASYS case material, this module helps participants understand how policies can either reproduce existing lock-ins or become leverage points for systemic change in European farming systems.

Guiding question: How can agricultural policies and policy mixes be designed to support sustainability transitions rather than reproduce existing lock-ins?

Learning outcomes

By the end of this module, participants will be able to:

- Analyse how existing agricultural policies may reinforce or fail to overcome systemic lock-ins in complex agri-food systems

- Deconstruct a policy mix into its core components: objectives, instruments, and calibrations and explain how these interact.
- Assess the internal quality of a policy mix using the criteria of coherence, consistency, and congruence.
- Examine the feasibility of policy reform by applying the concept of policy design spaces, including indicators of governmental willingness and capacity.
- Synthesise lessons from empirical cases into transferable design principles and use them to critically compare policy approaches aimed at sustainability transitions.

Unit Overview

- **Unit 1:** Understanding policy design in agri-food systems
  Examines why current agricultural policies often struggle to address systemic lock-ins, with particular attention to the CAP and CAP Strategic Plans
- **Unit 2:** Designing coherent and consistent policy mixes
  Introduces policy mixes as combinations of objectives, instruments, and calibrations, and explores how coherence, consistency, and congruence can be strengthened through co-design.
- **Unit 3:** Making policy design feasible and transformative
  Explores willingness and capacity as dimensions of the policy design space and shows how design principles can support context-sensitive but transferable policy learning.

Module 6: Systems co-design for transformations across scales

This module connects insights and methods from all previous modules to explore how participatory systems mapping processes can support strategies for systems change. Participants learn how to link problem understanding, behavioural insights, and policy design to (collectively) develop intervention logics. Using examples from ENFASYS and other relevant case studies, the module encourages participants to think critically about leverage points for transformation and how system-based approaches can support transition pathways in agri-food systems. Beyond technical mapping, the module explicitly focuses on the human and process dimensions of systems (change) mapping: how shared understandings are built, how power and representation influence outcomes, and how divergence and convergence are navigated. Overall, the module highlights how system-based approaches can enable coordinated action, experimentation, and learning across actors and scales, while remaining attentive to normative, and ethical dimensions of transformation.

Guiding questions: How can systems co-design processes help build shared understandings and shared visions of transformation across scales? How can researchers and facilitators meaningfully engage with actors who are geographically, socially, or institutionally distant from them? How can participatory systems mapping contribute to translating shared understanding into strategies for systems change?

Learning outcomes

By the end of this module, participants will be able to:

- Explain the principles and dynamics of participatory, integrated systems mapping and why the process matters as much as the map.
- Apply approaches to co-designing system maps with diverse stakeholders, including methods and epistemological reflections needed to handle divergence, convergence, and power asymmetries.
- Identify leverage points and collaborative strategies that can support social-ecological system transformation across scales and actors.
- Translate shared system understandings into actionable experiments or interventions that support systemic change.

Unit overview

- **Unit 1:** why participatory systems co-design matters
  Sets out conceptual foundation to explain why participatory processes matters, and how groups build shared understanding of wicked problems
- **Unit 2:** how participatory systems co-design unfolds in practice
  Shows through practical examples how mapping with and for societal actors can trigger change
- **Unit 3:** what participatory systems co-design enables
  focuses on how co-designed maps can become actionable and support real-world coordination across actors and scales, moving from shared understanding to coordinated experiments or interventions

6. Instructor Team

Nr.	Module	Lead, *Contributors*
0	Introducing ENFASYS	**Elsa Dinkhun**, *Louis Tesser*
1	Systems thinking	**Philippe Baret,** *Louis Tessier*
2	Systems mapping tools	**Fleur Marchand,** *Giovanna Ottaviani Aalmo, Divina Gracia Rodriguez, Clémentine Antier*
3	Behavioural insights & interventions	**Erwin Wauters,** *Matteo Massotti, Niall Hammond*
4	Systems dynamic modelling	**Filippo Pini,** *Arianna Dell'Olio*
5	Designing policies that work	**Elisabeth Stumvoll**
6	Systems co-design and change	**Elsa Dingkuhn,** *Domenico Dentoni*
	Course conclusion and closure	**Elsa Dingkuhn**

Arianna Dell'Olio is a PhD researcher in agricultural economics at the University of Bologna. Her research focuses on the identification and design of effective and feasible policy strategies for sustainability transitions, with particular attention to integrating systemic and behavioural approaches. She uses ex-ante assessment approaches including systems modelling, behavioural experiment design, and systems mapping.

Clémentine Antier (MSc in agricultural sciences) is a co-founder of research institute Sytra at UCLouvain. Her research focuses on agro-ecological transition pathways through systems analysis, lock-in assessment and foresight studies.

Divina Gracia P. Rodriguez is an agricultural economist and researcher at NIBIO specializing in sustainable food systems and circular bioeconomy. Her work applies a systems approach to analyse consumer behaviour, production systems, agricultural mitigation measures, and policy design in agri-food transitions. She coordinates and contributes to national and international projects on nutrient recycling and novel inputs to production, linking environmental performance with socio-economic outcomes and stakeholder engagement.

Domenico Dentoni is the chairholder of the Chair Communication and Organising for Sustainable Transformation (COAST) at Montpellier School of Business (MBS). He is a Professor in business, resilience, and transformation in social-ecological systems. His work focuses on systems mapping and co-design, multi-stakeholder processes, and sustainability transitions in agri-food and related sectors.

Elisabeth Stumvoll is a PhD researcher at Humboldt-Universität zu Berlin specialising in EU agricultural policy and the design of policy instruments and policy mixes. In ENFASYS, she is responsible for Work Package 6 on co-designing transformative policy strategies and pathways to overcome lock-ins in farming systems, and serves as case study lead for the Brandenburg case. She also teaches an introductory module on agricultural sciences as inter- and transdisciplinary systems science.

Elsa Dingkuhn is a researcher at Montpellier School of Business (MBS), working on sustainability transitions within the Horizon Europe ENFASYS project. Her research focuses on governance, strategy, and stakeholder dynamics in complex socio-ecological systems, including agri-food contexts. She combines interdisciplinary research with teaching and applied projects to support transformative change. Her PhD, *From Soil to Society*, identified transferable governance principles and strategies across diverse international contexts.

Erwin Wauters is Senior Researcher at ILVO (Flanders Research Institute for Agriculture, Fisheries and Food) and coordinator of the Horizon Europe ENFASYS project. An agricultural economist, his work focuses on the economic, institutional, and social dimensions of farming and food systems, including sustainability transitions and animal health. He is also professor of Economics at Ghent University and formerly guest professor at the University of Antwerp.

Filippo Pini is an early career researcher in agricultural and food economics at the University of Bologna. His work combines behavioural economics, agricultural sciences, and systems mapping to analyse sustainability transitions in farming systems. He studies how farmers' behaviour interacts with structural contexts and develops system-based models integrating behavioural and system dynamics approaches to support more effective and grounded policy design.

Fleur Marchand is Scientific Director at ILVO, the institute for research in agricultural fisheries and food in Flanders and professor at University of Antwerp. Her work focuses on complex challenges in agricultural and food systems, with a strong emphasis on understanding system dynamics and transitions.

Giovanna Ottaviani Aalmo is a Research Scientist at the Norwegian Institute of Bioeconomy Research. Her work focuses on bioeconomy, food systems, and policy, applying systems thinking to address complex sustainability challenges such as governance, policy coherence, and socio-economic dynamics. She has extensive experience leading multi-actor processes (including Living Labs) and currently coordinates European R&I projects to develop evidence-based, system-oriented solutions aligning environmental, economic, and social objectives.

Louis Tessier is a bio-science engineer by training and researcher at the ILVO Social Science Unit. After concluding his Ph. D research on (political) agroecology in 2021, he brings a critical systems thinking and political economy perspective to the ENFASYS project, where he supports the project coordination and development of the systems-based theories of change, as well as implementing case study activities in Flanders.

Matteo Masotti is PhD in Agri-food Economics and Statistics, he is currently Junior Assistant Professor of Agricultural and Food Economics at the Department of Agricultural and Food Sciences of the University of Bologna. His current research focuses on the analysis food system sustainability issues, both from consumers and producers perspective, with a strong focus on behavioural economics approaches.

Philippe Baret is professor at the Université de Louvain. He lectures agroecology, system analysis and genetics. He leads the Sytra research team working on the transition of agricultural and food systems with a specific attention to the meso level and applications to pesticide reduction, protein transition and crop diversification.

7. Support and contact

Please contact for technical support and questions on the course: enfasys.mooc@gmail.com

8. Course coordination and acknowledgements

The ENFASYS MOOC was developed collaboratively by partners across the ENFASYS consortium.

MOOC co-leads

- **Louis Tessier (ILVO):** academic coordination and scientific coherence
- **Elsa Dingkuhn (MBS):** pedagogical design and delivery coordination

They gratefully acknowledge the contributions of all module leaders, contributors, and support teams involved in the development of the course. In particular to **Marija Roglic** for the initial preparation, planning and design of the MOOC, **Garima Kishor** for Pedagogical engineering and instructional support; **Sara Matkovic** (ABE) for Communication, visual identity, and technical production

9. About the ENFASYS project

ENFASYS (ENcouraging FArmers towards sustainable farming SYstems through policy and business Strategies) is a Horizon Europe research project that brings together researchers from multiple disciplines to better understand how agri-food systems can transition towards greater sustainability. The project develops and integrates systems thinking, behavioural insights, and participatory policy design approaches to support more coherent, effective, and socially grounded pathways for transformation.