PhD Course

Systems Thinking in Practice (STiP) in PhD Research

How to contribute to addressing challenges faced by farming systems

28th June to 4th July 2024 (including 5 days of IFSA conference)

in Trapani (Sicily), Italy

Objectives

Research has a key role to play in appreciating and identifying ways to address how contemporary farming systems deal with the impacts of climate change and resource challenges. Farming Systems Research uses systems thinking to focus on a particular system of interest, to make relevant connections, to work with multiple stakeholders, and to contextualize research activities without becoming overwhelmed by complexity and uncertainty. Within PhD research it can be challenging to identify ways to address the complex and multifaceted issues of social justice, environmental sustainability, and economic empowerment in relation to the production, distribution and consumption of food and fibre. However, enhancing rural livelihoods and understanding the influence of producer-consumer linkages are central to the experience of the IFSA community. The purpose of this course is to help you, the PhD student, develop your Systems Thinking in Practice (STiP) skills by contextualizing your research, by making connections among issues using systems thinking, and by improving your ability to work both strategically and purposefully towards transformations.

Through joining this course you will:

- strengthen your research through developing your understanding of systems theories and methodologies as well as your capabilities for systems thinking in practice (STiP)
- have the opportunity to reflect on strengths and weaknesses of different systems approaches and methodologies in relation to your own PhD research
- gain an overview of the intellectual traditions of Farming Systems Research and make links to the history of IFSA
- get added value from your participation in the IFSA conference in Trapani by becoming part of a parallel critical learning systems community
- critically review potential contributions of your research to help meet farming systems challenges, including climate change and resource challenges
- develop an appreciation of multiple perspectives on contemporary issues across multiple disciplines
- build and strengthen your personal networks within the research community.

Process and course design

The course will be integrated with the 15th European IFSA Conference and draw on the gathering of specialists and researchers within this field (https://ifsa2024.crea.gov.it/). The researchers who will attend the conference with you are resources you are welcome to tap, e.g. by engaging in conversations with them to learn more about their experiences with using systems theories and methods in their research.

The course design draws on tried and tested ways of experiential learning. The course will be grounded in examples, including your own and other students' PhD work. An on-line platform (learn.boku.ac.at) will be used for uploading your assignments and for discussions between participants before, during, and after the conference.

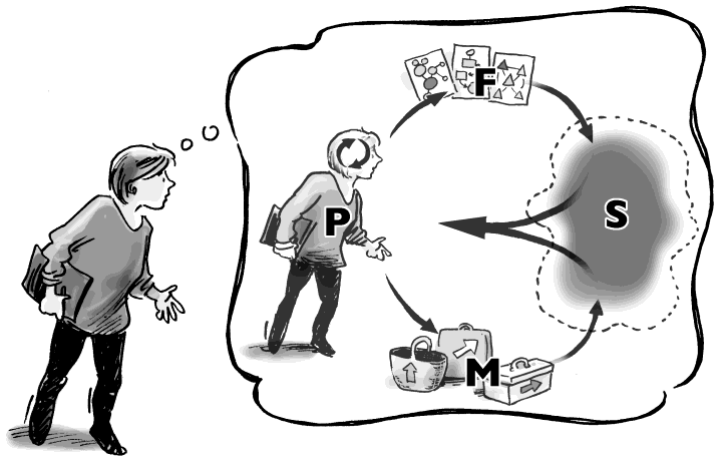
1. *Before coming to Trapani*, you have to:
    a. Engage with a range of relevant background resources on systems thinking, including academic papers. These are selected to give you an overview of systems thinking in the context of farming and will be available from the on-line platform. They will help you reflect on your own approach to systems thinking (which will be useful for tasks b and c) as well as ensure that all participants are familiar with 'the basics' thus ensuring constructive discussions in Trapani.
    b. Explore your personal history of relevance to your research and draw a trajectory diagram. You will use this diagram to communicate with other participants in the course about your perspective.
    c. Write one or two paragraphs reflecting on your use of system theories and practices (and/or cybernetic or complexity theories). Write about the rationale you have followed, or would follow, in making a choice to include (or not) systems theories in your PhD research.
    d. There will be opportunity on the first day for you to present your PhD research in a very short and informal way to other participants. You can be as spontaneous as you want, so any preparation is optional.
2. *In Trapani, before the start of the IFSA conference,* the course will be offered in a workshop format consisting of a mixture of lecture inputs, group work, and student presentations (see schedule below).
3. *During the IFSA conference* you will attend sessions of your own choosing. As part of the course, you will also have two evening sessions that will provide an opportunity for joint reflection and feedback as the conference progresses. You will work as part of a group with other students to provide feedback to the conference participants at the IFSA2024 closing plenary.
4. *Right after the closing plenary*, you will work to recapitulate, and to reflect on possible improvements of your own PhD study design, or your future research trajectory, linking it to systems thinking in practice.

Outline of the planned course schedule

	Morning	Afternoon
Fri. 28th	Sharing trajectory diagrams Working as a critical social learning system	PFMS-Research practice and systems lineages Informal exchange about your PhD research
Sat. 29th	Farm visit: Identifying emerging issues	Presenting the insights from the farm visit Contextualizing yourself and your research using systems diagrams
Sun. 30th	Invited researchers reflect on how they have used systems thinking and what they have learned from their experiences	Groups to decide what they want to focus on and how they will proceed
Mon. 1th		Groups meet for reflection session
Tue. 2nd	*Conference field trips – no activities for the PhD course*	
Wed. 3rd		Groups meet for reflection session
Thur. 4th		Groups present at closing plenary Final debriefing

When planning your travel and accommodation, take into consideration that to successfully complete the PhD course, you need to:

- arrive on Thur. 27th June (or earlier) in Trapani, as the course will start at 9:00 hrs on 28th June.
- leave on 5th July (or later), as we will work until 17:00 hrs on 4th July.



In the PhD course, will be building on the PFMS framework:

During the course you, as a research practitioner (**P**) will learn to use various conceptual frameworks (**F**) and methods (**M**) to assess your system of interest (**S**). While doing so, you will reflect on your own practice.

Course requirements

The course covers 4 ECTS. To receive the course certificate you need to complete all four essential components:

- Preparatory reading, and pre-course assignments (incl. uploads by 1 May): 24 hours
- Pre-conference intensive course (Fri. 28 June – Sun. 30 June): 20 hours
- Attendance at the symposium and integrated systemic inquiry (1-4 July): 32 hours
- Closing plenary and post-symposium session (4 July): 4 hours

Registration for the course

If you want to participate in the course, please send an email to Ika Darnhofer in which you briefly (100-150 words) describe your background and what you expect from the course, i.e. how might it contribute to your research. Max. 25 PhD students can attend the course, based on a first-come first-served basis while considering diversity, esp. gender and geography.

Contact: Ika Darnhofer

There will be a fee for this course (approx. 200 Euros), in addition to the conference registration fee and your accommodation fee. All fees will be charged when you register for the IFSA conference.

Core team designing the course

Chris Blackmore, Visiting Fellow, Applied Systems Thinking in Practice Group, Open University, UK

Ika Darnhofer, Associate Professor, Univ. of Natural Resources and Life Sciences (BOKU), Austria

Ray Ison, Professor, Applied Systems Thinking in Practice Group, Open University, UK

Nadarajah Sriskandarajah, Professor Emeritus, Swedish University of Agricultural Sciences, Sweden

Contact

For all course-related matters, please contact: Ika Darnhofer (ika.darnhofer@boku.ac.at)