



PhD Course

Systems Thinking in Practice (STiP) in PhD Research

How to contribute to addressing challenges faced by farming systems



20th March to 26th March 2020 (including 5 days of IFSA conference)
in Évora, Portugal

Objectives

Research has a key role to play in appreciating and identifying ways to address the many challenges farming systems face as a result of climate change and resource scarcity. Farming Systems Research uses systems thinking to focus on particular a 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 a 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 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:

- gain an overview of the intellectual traditions of Farming Systems Research and make links to the history of IFSA
- strengthen your research through developing your understanding of systems theories and methodologies
- have the opportunity to reflect on strengths and weaknesses of different systems approaches and methodologies in relation to your own PhD research
- get added value from your participation in the conference at the Institute of Mediterranean Agricultural and Environmental Sciences in Évora 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

The course will be integrated with the 14th European IFSA Conference and draw on the gathering of specialists and researchers within this field. Its 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.

In your time in Évora you will participate in an inquiry with three main parts: before, during, and after the conference.

1. *Before coming to Évora*, you will be asked to complete an assignment in which you describe and reflect on either (i) your understanding and use of system theories in your research; or (ii) the rationale you have followed, or would follow, in making a choice to include (or not) systems theories in your PhD research.
2. *In Évora, before the conference*, the course will be offered in a workshop format consisting of a mixture of lecture inputs, group work, and student presentations. This part will start on Friday 20th March at 09:00 hrs and finish on Sunday 22nd March at 15:00 hrs.
3. *During the IFSA conference* you will attend workshops 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 with other students to provide feedback to the conference at the IFSA2020 closing session on Thursday 26th March.
4. *After the conference*, you and the other students will work in groups to recapitulate, and to reflect on possible improvements of your own PhD study design, or future research trajectory, linking it to systems thinking in practice. The course will end by 19:00 hrs on Thursday 26th March.

When planning your travel and accommodation, take into consideration that to successfully complete the PhD course, you need to be in Évora from early on 20th March until late on 26th March 2020.

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.

Ties to the IFSA Conference

This PhD course will benefit strongly from the fact that many outstanding researchers within farming system approaches will be gathered at the Conference of the International Farming Systems Association (<http://www.ifs2020.uevora.pt/>). Experienced researchers who have been a part of the IFSA community for many years will contribute to the PhD course.

They will include lectures and/or workshops that:

- discuss experiences with using systems theories and methods, focusing on how they were used to purposefully make a contribution to farming, food, rural areas, and environment
- explore how systems tools and methods were used to handle complexity and uncertainty
- critically discuss the role of researchers
- critically review the role of action, learning, and reflexivity
- consider how system approaches can be applied in your own research situation



Literature for the course

Blackmore, Chris (Ed.) (2010). [Social learning systems and communities of practice](#). Springer: London.

Darnhofer, Ika, David Gibbon and Benoit Dedieu (2012). [The farming systems approach into the 21st century: The new dynamic](#). Springer: Dordrecht.

Ison, Ray (2017). [Systems practice: How to act in situations of uncertainty and complexity in a climate-change world](#). Springer: London.

Ramage, Manus and Karen Shipp (2009). [Systems thinkers](#). Springer: London.

Reynolds, Martin and Sue Holwell (2010). [Systems approaches to managing change: A practical guide](#). Springer: London.

Sriskandarajah, N., N. Giva, and H.P. Hansen (2016). bridging divides through spaces of change: action research for cultivating the commons in human-inhabited protected areas in Nicaragua and Mozambique. In: H.P. Hansen, B.S. Nielsen, N. Sriskandarajah, E. Gunnarsson (eds). [Commons, sustainability, democratization: Action research and the basic renewal of society](#), Routledge.

Key reading material will be provided on the on-line platform (learn.boku.ac.at).

Course assessment

Upon completion a certificate for 4 ECTS will be issued by Aarhus University. To obtain the course certificate you will be required to:

- complete the assignments before the course and after the conference
- participate in the lectures and group discussions
- participate in one or more of the workshops of the IFSA conference
- work in a group and present a feedback at the closing session of the IFSA conference
- after the conference, discuss improvements to your own PhD study, or future research trajectory design linking it to systems thinking and practice.

Registration for the course

If you want to participate in the course, please send an email to Ika Darnhofer, briefly (5-6 sentences) describing your background and what you expect from the course, i.e. how might it contribute to your research.

Contact: Ika Darnhofer (ika.darnhofer@boku.ac.at)

There will be a fee of 120 Euros for this course, in addition to the conference registration fee and your accommodation fee. All fees will be charged when you register for the IFSA conference: [IFSA 2020 - Registration website](#)

Core team designing the course and/or presenting in Évora

[Chris Blackmore](#), Senior Lecturer at the Open University Applied Systems Thinking in Practice Group, UK

[Ika Darnhofer](#), Associate Professor at the Univ. of Natural Resources and Life Sciences (BOKU), Austria

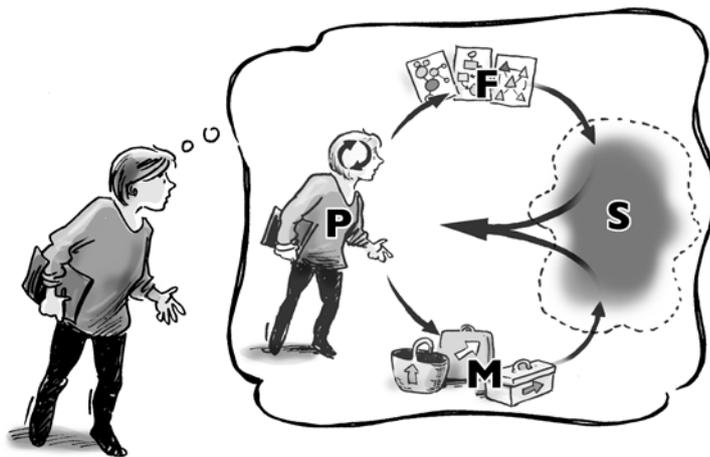
[M^a Helena Guimarães](#), Researcher at the University of Évora, Portugal

[Ray Ison](#), Professor at the Open University Applied Systems Thinking in Practice Group, UK

[Chris Kjeldsen](#), Senior Researcher at Aarhus University, Denmark

[Teresa Pinto Correia](#), Professor at the University of Évora, Portugal

[Nadarajah Sriskandarajah](#), Professor at the Swedish University of Agricultural Sciences, Sweden



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.