

Transdisciplinarity in Practice: Experiences in the 'FaRMPaTH' Project

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Introduction

FaRMPaTH is a European Union (FP7) funded project, which commenced in March 2011. The project is led by the James Hutton Institute (Scotland) and includes consortium members from eight other universities and research institute across Europe:

- University of Natural Resources and Life Sciences (Austria)
- University of National and World Economy (Bulgaria)
- Agricultural University of Athens (Greece)
- Institute for Rural Development Research (Germany)
- Czech University of Life Sciences Prague
- University of Plymouth (England)
- University of Évora (Portugal)
- Agrocampus Ouest (France)

The overall goal of the project is “to identify and assess future transition pathways towards regional sustainability of agriculture in Europe, and the social and technological innovation needs required to initiate and progress along these pathways”.

A transdisciplinary research approach is being adopted to help ensure that the results of this study are relevant in the context of demands for sustainability being placed on agriculture in regions across Europe. Transdisciplinary approaches are increasingly being applied in the context to real-world research problems in the context of sustainability science.

In this poster, we reflect on the first few months of FaRMPaTH and look ahead to future challenges

Research approach

Three key elements characterise transdisciplinary research approach adopted in FaRMPaTH:

- ▶ **Integration of disciplinary paradigms** ▶ **Use of participatory methods** ▶ **Application to real-life problems**
- ▶ The research consortium comprises researchers from a range of academic backgrounds – including agricultural sciences, geography, economics, policy, sociology, and engineering – incorporating qualitative and quantitative methods.
- ▶ The research teams will work with National Stakeholder Partnership Groups (NSPG) – comprised of individuals with a personal or professional interest in the research topic – to collaboratively develop and undertake the research process. Later in the study, stakeholder groups in case study regions will contribute in analysis and formulation of study outputs.
- ▶ In the context of wider calls for sustainability in the agricultural sector, a key output of FaRMPaTH will be to produce a handbook for assessing and identifying actions which can be taken by policy-makers to facilitate transition towards regionally sustainable agriculture.

Transcending the 'science-society' divide

Figure 1 illustrates a key aim of the transdisciplinary approach taken in FaRMPaTH, in terms of joint working between researchers and stakeholders towards a combination of scientific outputs and societal effects.

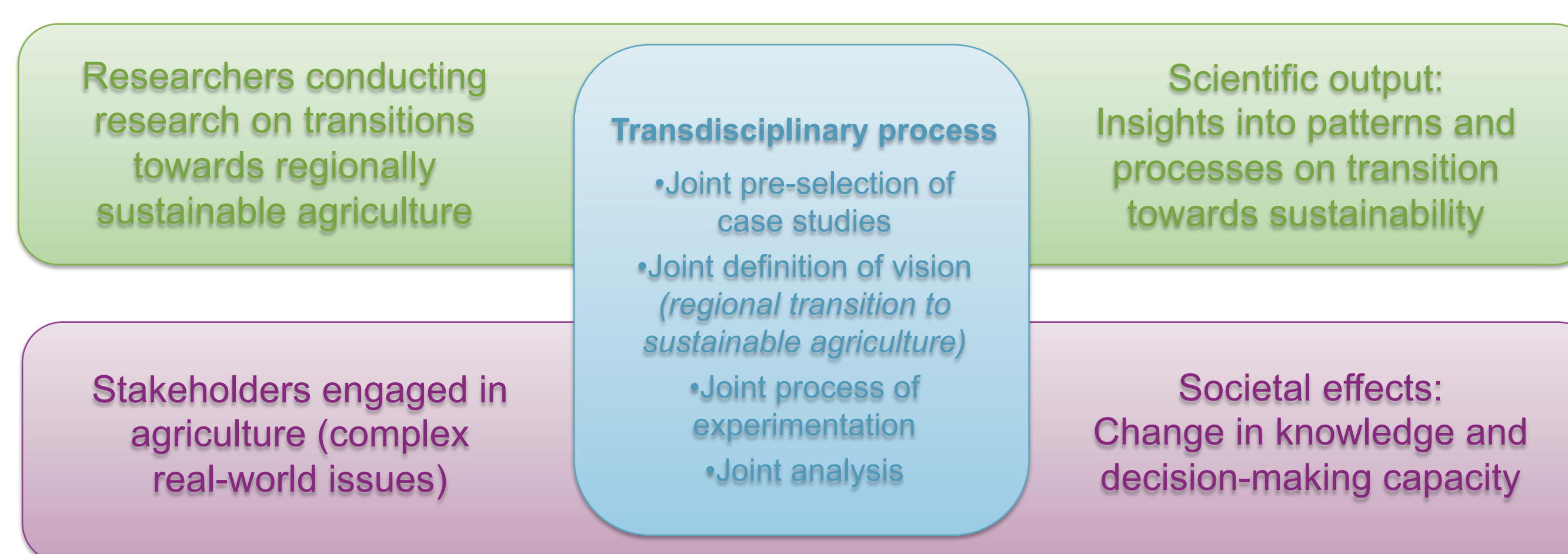


Figure 1. Transcending the science-society divide in FaRMPaTH (adapted from Walter et al. 2007 – Evaluation and Program Planning, 30, 4, 326.)

Key challenges

As well as being time-intensive and demanding in terms new skills requirements for researchers, many of the key outcomes of transdisciplinary research are not easily measurable (e.g. embodied knowledge) and academic recognition remains limited. Some of the procedures to be used to address three key challenges are identified below:

Balance of power and obligations

- ▶ **Between researchers**
 - Skills development (training)
 - Option to use independent facilitators
 - Flexible protocols (e.g. for stakeholder interaction)
- ▶ **Between researchers and stakeholders**
 - Structural increase in participation over course of project
 - Flexible contributions
 - Enabling questions of interest to be addressed

Integrating lay, professional and academic knowledge(s)

- ▶ **NSPG meeting 1:** Participatory process – independent facilitation – observation and recording by ‘transdisciplinarity researcher’ to improve procedures across project – confidential participant feedback (researchers and stakeholders).
- ▶ **Outcomes:** Wealth of regional knowledge elicited from stakeholders – stakeholder interest in topic and commitment shown to project – potential imbalance in participation (researchers/stakeholders).
- ▶ **Key question:** How can potential tensions between knowledge co-construction and knowledge elicitation be resolved?

Documenting, assessing and publishing transdisciplinary research

- ▶ **Research diaries** – keeping track of progress and questions raised – ‘learning by doing’.
- ▶ **Literature review/conference attendance** – identify mechanisms for assessing ‘quality’ in transdisciplinary research.

Conclusions

- Transdisciplinary research aims to transcend disciplinary limitations as well as transcending the science-society divide. In the early stages of FaRMPaTH, it is anticipated that integration of stakeholder and scientific knowledge(s) will generate useable knowledge that may be applied to the challenge of regional sustainability of agriculture across Europe.
- Predominately positive feedback received from initial stakeholder engagement (in Scotland) – interest, enjoyment, fruitful discussion.
- A flexible approach is being taken in order to learn from the research process, and mechanisms have been put in place to analyse the role and benefits of transdisciplinarity in the context of the wider FaRMPaTH project.

Acknowledgements

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