### Chapter 13

## **Conceptual Insights Derived from Case Studies** on 'Emerging Transitions' in Farming

### I. Darnhofer<sup>1</sup>, L-A. Sutherland<sup>2</sup>, T. Pinto-Correia<sup>3</sup>

<sup>1</sup> University of Natural Resources and Life Sciences, Vienna, (ika.darnhofer@boku.ac.at); <sup>2</sup> James Hutton Institute, Aberdeen; <sup>3</sup>University of Évora

#### Introduction

The multi-level perspective (MLP) has been applied to agri-food studies in the past, however, they have tended to focus either on large-scale (national) and often historical transitions (e.g. Grin, 2010), or on very specific system innovations initiated by technical innovations (e.g. Elzen *et al.*, 2012). The former focus on long-term processes and, thus, allow an assessment of whether or not a broader transition has occurred, or at least is well under way. The latter focus on processes that started recently, and whose future development is still uncertain so that it may be too early to speak of a 'transition in the making'. The ambition of the case studies presented in this book was to provide novel insights on the 'middle-ground': niches that have matured and that have started engaging with the regime to initiate the start-off phase of a transition. The coverage of very diverse cases, from different regions of Europe and relating to different combinations of regimes, was designed to acquire a broad understanding of emerging transitions occurring in relation to farming and rural areas in Europe.

In this chapter, we will briefly review the specificity of farming and associated implications for understanding transitions. We will then review the lessons learned, especially regarding the definitions of niche and regime in the context of transitions, and in relation to niche-regime interactions. We will also briefly reflect on the role of research – as part of the regime – in emerging transitions. We conclude by assessing the challenges of studying transitions in farming, and the challenges posed by the need to take into account the diversity within farming.

#### The specific features of farming

There are several features that distinguish the agricultural sector from the industrial or service sectors which need to be taken into account when studying transitions. We will briefly review a few of these features, which include diversity in farming, its spatial nature, its multifunctionality, and its public good character, all of which contribute to the high level of policy involvement in the sector.

#### 190 Conceptual insights

Farming is fundamentally a land-based activity, and is, therefore, heavily shaped by the local agri-ecosystem, topography and climate, as well as by traditions, economic structures and social norms that have co-evolved in this natural environment. As natural conditions and cultural traditions vary, both within a region and between regions, *farming* structures, practices and values are *very diverse* (see Slee and Pinto-Correia, this volume). Indeed, on the farm various activities can be integrated in different ways to suit local conditions and farmer preferences. As a result, within a given region farms vary in size, activity and market-orientation. Some farmers will focus on reducing production costs to increase their competitiveness on international commodity markets, whilst others diversify their crops or engage in processing to provide a broad and attractive range of products for sale at farmers' markets. Yet others may opt for 're-grounding' by diversifying the economic activities based on the farm. Between regions, diversity is also pronounced; ranging from small, 0.5 ha semi-subsistence farms in Bulgaria, to 250 ha mixed crop-livestock farms in southern Portugal, to 10,000 ha estates in the UK. Diversity in farming is not limited to production methods, farm structures, or the influence of terrain and climate; it is also influenced by the types of markets that farmers serve, be they long or short food chains, energy markets, or the services that they offer (e.g. tourism and recreation). Given this diversity, a transition is not likely to lead to a uniform set of practices but rather to a different mix with different emphases, and differences in the linkages between elements of the farm system. This might make it challenging to pinpoint a clear transition from a set of practices, 'A', to a new - and radically different - set of practices, 'B'.

Marsden (2013) has also pointed out the inherently *spatial nature* of farming systems. As such, the bio-physical conditions are decisive as is the location of a region (especially whether it is peripheral or close to a large urban area), both of which can play an important role in the types of transitions that are more likely to 'take-off.' For example, the case studies on 'countryside consumption' (Pinto-Correia et al.a, this volume) show that a transition from agricultural land being used primarily for food production towards agricultural land being used primarily as a living space and for recreation, is more likely to occur in regions with an attractive physical landscape close to an urban centre, not least as the latter will offer jobs and, thus, income opportunities. Similarly, urban centres play an important role in the cases linked to alternative agri-food networks (Darrot et al., this volume): the proximity to large cities and the demand by urban consumers has enabled farmers to co-construct direct marketing initiatives with them. In some cases, the spatial nature of agriculture might seem less relevant; for example in the production of renewable energy, as the electricity generated can be fed into the grid and, thus, transported over large distances (Sutherland et al.b, this volume). However, even in that case the low quality of grid connections in remote areas tend to privilege more centrally located farms, whilst periurban developments are more likely to be subject to public protest.

Another feature is linked to the *function of farming*. Indeed, farming is often perceived as having primarily one societal function: food production, and, therefore, as being one clearly defined sector. Within the MLP, this sector can be understood as a sociotechnical regime, with its constituting sub-regimes (see Geels, 2011), for example; agricultural policy, agricultural research, the agri-food industry, food production and processing technology, market and consumer preferences. However, this sectoral (or food-chain) understanding of agriculture has been the object of discourse in Europe since the 1990s, when ideas surrounding the multifunctionality of farming came to the fore (Marsden and Sonnino, 2008; Renting *et al.*, 2008). Although the specific aspects of multi-



# Transition Pathways Towards Sustainability in Agriculture

Case Studies from Europe

Edited by Lee-Ann Sutherland, Ika Darnhofer, Geoff A. Wilson and Lukas Zagata

n)





## Transition Pathways towards Sustainability in Agriculture: Case Studies from Europe

Lee-Ann Sutherland. James Hutton Institute, Aberdeen

Ika Darnhofer. University of Natural Resources and Life Sciences, Vienna

Geoff A. Wilson. Plymouth University, Plymouth

Lukas Zagata. Czech University of Life Sciences, Prague



## Contents

ntroduction	1
Lee-Ann Sutherland, Geoff Wilson, Lukas Zagata	
2 Socio-technical transitions in farming: key concepts	17
Ika Darnhofer	
3 Understanding the diversity of European rural areas	33
Bill Slee, Teresa Pinto-Correia	
4 Utilising the multi-level perspective in empirical field research:	
methodological considerations	51
Pavlos Karanikolas, George Vlahos, Lee-Ann Sutherland	
5 Lifestyle farming: countryside consumption and transition	
towards new farming models	67
Teresa Pinto-Correia, Carla Gonzalez, Lee-Ann Sutherland,	
Mariya Peneva	
6 More than just a factor in transition processes? The role of	
collaboration in agriculture	83
Simone Schiller, Carla Gonzalez, Sharon Flanigan	
7 High nature value farming: environmental practices for rural	
sustainability	97
Mariya Peneva, Mariana Draganaova, Carla Gonzalez, Marion Diaz,	
Plamen Mishev	
8 Transition processes and natural resource management	113
George Vlahos, Simone Schiller	
9 On-farm renewable energy: a 'classic case' of technological transition	127
Lee-Ann Sutherland, Sarah Peter, Lukas Zagata	

10 'The missing actor': alternative agri-food networks and the	
resistance of key regime actors	143
Catherine Darrot, Marion Diaz, Emi Tsakalou, Lukas Zagata	
11 Local quality and certification schemes as new forms of	
governance in sustainability transitions	157
Michal Lostak, Pavlos Karanikolas, Mariana Draganova,	
Lukas Zagata	
12 Transdisciplinarity in deriving sustainability pathways for agriculture	171
Teresa Pinto-Correia, Annie McKee, Helena Guimarães	
13 Conceptual insights derived from case studies on 'emerging transitions'	
in farming	189
Ika Darnhofer, Lee-Ann Sutherland, Teresa Pinto-Correia	
14 Conclusions	205
Lee-Ann Sutherland, Lukas Zagata, Geoff Wilson	