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Moving beyond competition in crop diversification niches

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Abstract

To transform the dominant agro-food regime, which is locked in a specialisation logic, innovation niches supporting crop diversification can play a major role in experimenting, developing and learning about new technical and organisational practices that could be adopted or adapted into regimes, involving mainstream actors. One example is the DiverIMPACTS (DI) project, comprising no less than 25 so-called case studies in 11 European countries. Within this project, we seek to draw on the ideas and experiences of pioneering innovators to further analyse the agricultural, processing, retail, research and other practices implied in crop diversification, and to explore the structural embedment they need. In a second step, by feeding our understanding back into the case studies and turning them into recommendations for public policy actors, as well as other regime actors, we aim to help these pioneers to establish and scale up their ideas further and to facilitate adoption of diversification by the mainstream sector.

However, in doing so, in a variety of case studies as to the level and scope of transparency in sharing knowledge about their practices, pioneer actors are suspicious of competition with other niche actors or big players of the dominant regime. This situation raises a dilemma between sharing as part of a strategy to develop the innovation through network formation versus the risk that mainstream actors appropriate the innovation. The latter may imply various risks, from “dilution” of the innovation if it gets appropriated too early or too incompletely by mainstream actors to unfairness: while a niche has worked hard to develop an innovation, benefits are lost in favour of a mainstream player. Furthermore, local knowledge gained through developing the innovations could potentially get lost under such circumstances.

This dilemma may be overcome, in principle, by developing strategies that make limited adoption less likely or less attractive, in some way or another. To reflect on this, we will combine several insights from transition studies literature, amongst others in regards to transition pathways (Schot & Geels, 2008), translation dynamics (Smith, 2007) and niche protection (Smith & Raven, 2012; Ulmanen et al., 2012; Ulmanen, 2013) to understand the dilemmas as they express themselves in case studies from the DI project. We will follow a theory-generating case study design, drawing on data collected through participant observation and interviews. We will explore strategies to overcome the previously introduced dilemmas, using notions of transparency, sharing, (em)powering and the role of reframing the problem to raise new perspectives and reflect on variances across cultural contexts. In doing so, we aim to provide more insight into the risks and possible pathways for overcoming those, for pioneers within the transition towards a diversified food system.

1 Introduction

To transform the dominant agro-food regime, which is locked in a specialisation logic, innovation niches supporting crop diversification can play a major role in experimenting, developing and learning. One example is the DiverIMPACTS (DI) project, comprising no less than 25 so-called case-studies in 11 European countries. Within this project, we seek to draw on the ideas and experiences of pioneering innovators to further analyse the agricultural, processing, retail, research and other practices implied in crop diversification, and to support their wider adoption. However, in a variety of case studies, pioneer actors are facing a dilemma between cooperating with other similar actors as part of a strategy to develop the innovation through network formation versus the risk that concurrent actors appropriate the innovation. Our objective is to better analyse the types of competition that could be at stake in such innovation dynamics and explore possibilities for overcoming that dilemma.

2 Materials and Methods

This work is based on interviews carried out with actors of the 25 DI case-studies and will illustrate our results with concrete elements coming from 3 contrasted case-studies we focused on: one in Sicily about hemp production, one in the United Kingdom about local pulses and minor crops; one in Sweden about organic legume crop production and consumption. The data from these case studies consists of a combination of interviews and participant observation. The analysis of a collective workshop organised on this issue in June 2019 with actors of other DI case-studies will also be integrated in the analysis. To analyse the data, we will use concepts from the coopetition literature which examines situations where competitors simultaneously cooperate and compete with each other (Keith & Custance, 2010). We will also integrate insights from transition studies, amongst others in regards to transition pathways (Schot & Geels, 2008), translation dynamics (Smith, 2007), and niche protection (Smith & Raven, 2012; Ulmanen et al., 2012; Ulmanen, 2013).

3 Results

Across the DI case-studies we distinguished different types of competition. In some cases, competitiveness exists around access and ownership of *material resources*, such as food processing facilities (e.g hemp mills in Sicily).

In other cases, competitiveness revolves around *information flows* and *transparency*, in sharing knowledge about growing or processing techniques. For example, actors from the British case faced suspicion when contacting farmers in Brittany (France) who had developed small-scale dehulling of buckwheat. These farmers feared that their knowledge would be appropriated by mainstream actors. From pioneer actors' perspective, sharing information with mainstream actors implies indeed various risks, from "dilution" of the innovation if it gets appropriated too early or too incompletely by mainstream actors to unfairness: while a niche has worked hard to develop an innovation, benefits are lost in favour of a mainstream player. Furthermore, local knowledge gained through developing the innovations could potentially get lost under such circumstances.

Competitiveness can also be of of an *economic* nature, for example when a small-scale local food business promoting new legume crops in Sweden fears losing its market position to a big food company. It can also be *reputational*, when a pioneer is afraid of losing his or her image of being the leader, or detaining the most advanced know-how for making a specific product.

In practice, different types of competition are often combined and can influence each other, for example guarding certain information out of fear for losing a market position. Concrete examples will be provided and analysed for each type of competition.

4 Discussion and Conclusions

A detailed analysis of competition factors and related risks in innovation dynamics is a first step to better support sustainability transitions. The competition-cooperation dilemma may be overcome by developing strategies that make limited adoption less likely or less attractive, in some way or another, and bring mutual benefits to all actors in a win-win logic. However, according to the type of competition at stake, possible solutions differ and will be discussed. This also implies different transition pathways, in which depend on the adoption of niche innovations by regime actors and the manner in which niches relate to wider structures and developments (see Smith & Raven, 2012). For each competition type, we will discuss the potential benefits, limits and suitable scale of transparency, sharing, (em)powering, defining clearly the "rules of the game" in negotiations and the role of reframing the problem to raise new perspectives. This furthers our understanding of translation dynamics between niches and regimes.

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