Knowledge Systems in the Agrifood Supply Chains:
A Cross-Country Study

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ABSTRACT

Knowledge production and exchange can enhance the performance of agrifood supply chains (ASCs). However, the mechanisms that facilitate or impede knowledge co-creation within ASCs have not yet been elucidated. In this work, using a systems approach, the authors compare the knowledge systems in two countries with similar characteristics but also major differences in their agrifood sectors: Italy and Greece. In Italy, the analysis indicates a divided but pluralistic system, which facilitates the production and enables the exchange of various types of knowledge. In Greece, the lack of central coordination leads the involved stakeholders to create, test, and share new forms of knowledge. These findings, on the one hand, reveal the ability of interrelated actors to mutually produce context-specific knowledge while, on the other hand, emphasise the importance of creating knowledge spaces within ASCs.

KEYWORDS

Agrifood Networks, Agrifood Supply Chain, Composite Knowledge, Greece, Italy, Knowledge Co-Production, Knowledge Dynamics, Knowledge Systems

INTRODUCTION

Instead of other types of supply schemes, agrifood supply chains (ASCs) are characterised by a higher interdependency among actors (Fritz and Schiefer, 2008), a higher degree of business risk (Sporleder and Wu, 2006), and by oligopsony market structures (Perekhozhuk et al., 2015) which create an imbalance of power between actors (Isakson, 2014). Moreover, their complexity, emerging from the extremely large number of involved actors (Clapp, 2014) and the reliance of agricultural production on various external conditions – such as the climate change (Conceição and Mendoza, 2009), the volatile energy prices (Clapp and Helleiner, 2012), and the quality and quantity of natural resources (Thrupp, 2000) – raises concerns over the future sustainability of food systems.

To cope with this complicated and challenging environment, all the involved actors have to constantly enhance their knowledge potential and develop competencies to face the rapid, and often extreme, changes in the food sector. National and international bodies emphasise the need to support the ability of ASCs to produce new, valid and reliable forms of knowledge. The acknowledgment of the need to conceptualise and unfold the ways knowledge is produced, distributed, refined and used within the complex web of the agrifood sector has led to a very active research stream during the last years. Scholars in the field strive to understand the ways knowledge develops within a system of interlinked actors (Ingram, 2018), the shifts that can facilitate knowledge access within this system (Mtega and Ngoepe, 2018), the strategies that can increase the quality and quantity of knowledge exchange (Chagwiza et al., 2017), and the effectiveness of different interventions aimed at amplifying the potential of knowledge creation (Klerkx and Jansen, 2010). The present work contributes to this study area by dealing with knowledge systems with the purpose of comparing two European Mediterranean countries: Greece and Italy. The very fragmented structure of ASCs in these countries raises concerns about fluid knowledge evolution and circulation, and, consequently, innovation adoption.

The importance of this research agenda is clearly stressed in recent documents of European rural policies:

- In the point 7 of the Cork Declaration 2.0 (European Commission, 2016) it is posited that "Rural businesses, including farmers and foresters, of all types and sizes must have access to appropriate technology. […] Stronger policy focus on social innovation, learning, education, advice, and vocational training is essential for developing the skills needed. This should be accompanied by the strengthening of peer-to-peer exchange, networking, and cooperation amongst farmers and rural entrepreneurs. The needs and contributions of rural areas should be clearly reflected in the research agenda in the European Union";
- The document "The Future of Food and Farming" (European Commission, 2017) denounces that "sound, relevant and new knowledge is really patchy around the Union" (p.13).

Previous documents address new complexities in the knowledge circulation which have not been intercepted by the traditional approaches to knowledge management. By removing traditional, top-down and linear approaches, where knowledge is conceptualised as a product, the aim of the paper is to put forward an alternative view of knowledge production as the output of the relationships among actors mutually producing context-specific knowledge.

The article is articulated as follows. The following section summarises the paradigm shift from linear knowledge "transfer" to the mutually produced knowledge within a system of interconnected actors. The next paragraph briefly describes the methodology of analysis, while the consecutive sections are devoted to the presentation of the two case-studies (Greek and Italian). Some final considerations end the paper.

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