

# Chapter 10

## Governance Structures in the EU Milk Supply Chain

**Nico Polman**

*LEI, Wageningen UR, The Netherlands*

**Noortje Krol**

*Wageningen University, The Netherlands*

**Jack Peerlings**

*Wageningen University, The Netherlands*

**Pierre Dupraz**

*INRA, France*

**Dimitre Nikolov**

*Institute of Agricultural Economics (IAE), Bulgaria*

### ABSTRACT

*Governance of the EU's dairy sector changes will change as a result of the 2008 CAP reform. This chapter focuses on governance structures between dairy farms and milk processors and the role of the exchange of information. Information costs are an important category of transaction costs. To get insight in regional differences within the EU, literature research and interviews are conducted in three case study areas, namely: the Netherlands, Bulgaria, and France. Results show that in these countries both farmers and processors have incentives to form hybrid governance structures with a higher level of control compared to the current structures. Asymmetric information and the exchange of information play an important role in this contractual relation. Most dairy cooperatives have no additional advantage in managing milk quality and milk supply compared to investor owned firms. Chain integration could go a step further in Bulgaria compared to the Netherlands and France given the institutional environment that is not expected to guarantee milk quality and the focus on the export of milk.*

### INTRODUCTION

Dairy farming and milk processing require large asset specific investments (Henriksen, 1999).

Given that milk is a highly perishable product it is processed in production areas. Only processed milk is traded over long distances e.g. in the form of cheese, butter and milk powder. Prices in the

DOI: 10.4018/978-1-60960-621-3.ch010

different markets for dairy products might vary significantly. Hence, it is rather difficult and costly for an individual farmer to obtain correct market information (Hobbs, 2004: 200). Farmers therefore at best can negotiate on the terms of milk supply with processors where asset specificity weakens their bargaining position. The specific characteristics of the dairy sector have influenced the governance of the dairy sector and in some cases (e.g. in Denmark) positively contributed to the development of dairy cooperatives (Henriksen, 1999).

Another factor influencing the governance structure is the Common Agricultural Policy (CAP) of the EU. The CAP has by means of price support and supply quotas a large influence on production, structure and profitability of the dairy sector. However, as a consequence of the Health Check in 2008 dairy policies are reformed. With the gradual increase in milk quota, the reduction of intervention levels for dairy products, the phasing out of export subsidies and in the abolishment of the milk quotas in 2014, the EU dairy sector is approaching a new market situation in which it will need to address new challenges. Milk prices are expected to fluctuate more with an average milk price lower than in the past decade (Bouamra Mechemache et al., 2008). Because of the lower price level and with increased opportunities for farmers to expand and reorganize production, there is within the EU a restructuring of dairy farming expected.

Milk processors could also experience a very different supply situation, as deliveries to certain factories or even complete companies might change significantly in a relatively short period of time. Also, the institutional environment in which they are functioning will change because production can increase as supply quota will not be legally binding. Tacken et al. (2009) indicate that the restructuring of dairy farming might put more pressure on the competitiveness of the EU milk processing sector, which currently is slightly below world average. Van Bekkum and Nilsen

(2002) argue that it might be rational for the EU dairy cooperatives, to respond differently to identical changes in their institutional environment. In addition, Rafat (2009: 61) argues that differences between cooperatives and investor owned firms have implications for their flexibility to cope with the challenges ahead and to accommodate the effects of the policy changes in the EU.

Given the change in the CAP the question is how farmers and processors change the governance in the dairy sector. The objective of this chapter is therefore an analysis of the governance structure between farmers and milk processors as a result of the change in the CAP. It is hypothesised that the reaction of the dairy sector may vary between regions in the EU. We analyse the role of information asymmetries as a result of the changes in governance. To answer the research objective a literature research and interviews are conducted in three case study areas, namely: the Netherlands, Bulgaria and France. Using transaction costs economics we will characterize expected governance structures.

Section 2 discusses the conceptual framework. The empirical methodology and data are discussed in section 3 while section 4 presents the main results. Section 5 concludes.

## **CONCEPTUAL FRAMEWORK**

Several studies have discussed the governance of agrifood chains, paying attention to the specific characteristics of these chains (e.g. Cook et al., 2008, Raynaud et al., 2009). Food and agricultural commodities have unique characteristics. Production of agricultural commodities is dependent on seasonality, weather conditions and potential hazards such as the occurrence of diseases. This brings high levels of uncertainty and physical, site and temporal asset specificity (Cook et al., 2008). The asymmetric information about the condition of agricultural products, combined with the fact that the products are perishable and the fragmented

12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/governance-structures-milk-supply-chain/54408](http://www.igi-global.com/chapter/governance-structures-milk-supply-chain/54408)

## Related Content

---

### Foreign Direct Investment and ICT: Catalysts for a Low Carbon Economy in Africa?

Paul Adjei Kwakwa (2025). *Nexus of Environmental Quality and Technology Innovation* (pp. 211-230).  
[www.irma-international.org/chapter/foreign-direct-investment-and-ict/381035](http://www.irma-international.org/chapter/foreign-direct-investment-and-ict/381035)

### BIM and Asset Management (AM) Interoperability Towards the Adoption of Digital Twins: Current Status and Research Directions

Karim Farghaly and Ahmed Nasr Hagra (2022). *International Journal of Digital Innovation in the Built Environment* (pp. 1-28).  
[www.irma-international.org/article/bim-and-asset-management-am-interoperability-towards-the-adoption-of-digital-twins/294445](http://www.irma-international.org/article/bim-and-asset-management-am-interoperability-towards-the-adoption-of-digital-twins/294445)

### Towards a Greener Future: Integrated Strategies for E-Waste Management

B. Yamini, Anish T. P., B. Maheswari, J. Praveenkumar and Siva Subramanian R. (2025). *Integrated Approaches for Sustainable E-Waste Management* (pp. 133-150).  
[www.irma-international.org/chapter/towards-a-greener-future/380246](http://www.irma-international.org/chapter/towards-a-greener-future/380246)

### Potential Nitrogen Load from Crop-Livestock Systems: A Spatial Database for a Multi-Scale Assessment and Mapping

Marco Vizzari, Sara Antognelli, Mariano Pauselli, Paolo Benincasa, Michela Farneselli, Luciano Morbidini, Piero Borghi, Giacomo Bodo and Alessandra Santucci (2016). *International Journal of Agricultural and Environmental Information Systems* (pp. 21-40).  
[www.irma-international.org/article/potential-nitrogen-load-from-crop-livestock-systems/163317](http://www.irma-international.org/article/potential-nitrogen-load-from-crop-livestock-systems/163317)

### Harmonized Development of International Trade in Logistics Services and Ecological Environment

Peng Zhang and Aili Ma (2025). *International Journal of Agricultural and Environmental Information Systems* (pp. 1-20).  
[www.irma-international.org/article/harmonized-development-of-international-trade-in-logistics-services-and-ecological-environment/389145](http://www.irma-international.org/article/harmonized-development-of-international-trade-in-logistics-services-and-ecological-environment/389145)