## **Editorial**

In this issue, we feature a selection of papers from the First Joint SIDEA-SIEA Conference, held in Bisceglie and Trani on September 13-16, 2017, and titled "Cooperative strategies and value creation in sustainable food supply chains". Seven papers were selected for this Special Issue and further reviewed and revised to be published in Economia agro-alimentare/Food Economy. The papers focused on several aspects of national and international agricultural and food systems.

International and national markets of agricultural raw materials are closely connected, and cooperation between operators plays an important role to reduce price risk exposition, influencing economic performance of the agricultural and food systems. Therefore, agricultural policies and their tools are aimed at sustaining and promoting cooperation in the supply chains. Different examples of Italian supply chains and the relationships between operators, contracts and other tools and actions improving efficiency and effectiveness, as well as the behaviour of companies and consumers are analysed in this collection of papers.

Italy is among the world's main producer of grape (table and wine), and the third producer of table grape in the world, after China and USA. Italy is also the third exporter country of table grape after USA and Chile. However, a loss of competitiveness was observed for Italian table grape in the last decade, and some actions are requested to avoid a worsening of position. In Italy, Apulia is the most important producer region of table grape in term of surface areas. The study conducted by De Boni, Cardone, Jouini, and Roma, titled "Innovations in table grape supply chain: economic and environmental sustainability and local policy instruments" highlights the role of coordination between operators in the Apulian grape supply chain. They surveyed stakeholders (farmers, technicians, regional officials, policymakers), to collect and analyse data and applied different methods, such as SWOT analysis, Cost-Benefit analysis, LCA assessment, policy evaluation in the

Apulian Rural Development Program (RDP). The main findings of the study lead to consider strategic the organic production of table grape but must strengthen the cooperation and overcome the inefficiency. The Authors suggest that it is also advantageous to support the traditional seeded grape varieties as well as to promote the innovative seedless varieties. The financial means can be found in the Apulian RDP and in the Operational National Program of the Ministry of Education, University and Research.

The pork industry plays a strategic role in many EU Member States and particularly in Italy, due to the high value of Italian dry-cured ham Protected Designations of Origin (PDO), such as "Prosciutto di Parma" and "Prosciutto San Daniele". Due to the fragmentation of the farming stage and the international competition in the supply of livestock, vertical coordination mechanisms within the Italian pig supply chains is not effective, and the power between different operators is unbalanced. The study developed by Camanzi, Bartoli, Biondi and Malorgio titled "A Structural-Functional Theory approach to vertical coordination in agri-food supply chains: insights from the "Gran Suino Italiano" Inter-branch Organisation has the aim to assess operators' perceptions of the current vertical coordination and bargaining power conditions in the pig sector. They surveyed farmers using an original approach based on both the sociological (Structural-Function Theory) and the economic literature (Transaction Costs Theory and Contract Theory). They selected a sample of farms (n=35) of the "Gran Suino Italiano" Inter-branch Organisation (IO) in Italy and verified the satisfaction of the contractual models currently used. The focus of the survey was on farmers' perceptions of critical issues of contractual relationships between breeders and processors. The results show that farmers only partially use written contracts and there is a lack of legal clauses protecting the weak contractor in the transaction. The determination of the price of sales of animals is also a critical point in the contracts. A solution to improve vertical coordination among farmers and processors could be to design a new contract scheme implemented within the Inter-branch Organization. In this way, the new contract binds the parties to the signing of an agreement on cases of noncompliance and defining what can be sanctioned.

Cooperation is an important tool for business innovation. Horizon 2020 and the new Common Agricultural Policy (CAP) 2014-2020 both emphasize the role of innovation. The new Rural Development Policy introduced new important instruments such as the European Innovation Partnership (EIP), the Operational Groups (OGs) and different technological clusters to encourage and transfer the innovation over the coming decade. In this framework, in the paper Lessons of Innovation in the Agrifood Sector: Drivers of Innovativeness Performances" Finco, Bentivoglio and Bucci aim to describe the role of a Regional Cluster in spreading innovation in the associated firms.

They seek to identify determinants of innovation by analysing a sample of agri-food SMEs associated in Cluster Agrifood Marche. They highlight that cooperation is a useful tool to allow small agri-food firms to make investments in innovation otherwise not possible individually due to different constraints (e.g. financial capabilities). Clusters are considered a successful way to develop innovation strategies and to increase competitiveness. Furthermore, the results suggest that innovation is not a random process but depends both on firm characteristics and on several exogenous and endogenous variables.

Cooperation is an important tool for risk management too. Trestini and Penone, in their paper "Transmission of futures prices to the Italian spot market: are there opportunities to hedge corn price risk?", aim to broaden the knowledge on the relation between soybeans Italian markets and the CBOT (Chicago Board of Trade) futures market. This study, in fact, analyzes how CBOT soybean futures prices influence national soybean spot prices of AGER (Associazione Granaria Emiliana Romagnola) market in Bologna. Through econometric models, the paper allows evaluating the feasibility of price risk management instruments for Italian farmers in the arable crop sector. They forecast domestic prices on CBOT futures markets and identify opportunities to hedge price risk and to organize the supply chain better.

Aquaculture represents an important tool to avoid fish resources depletion and, in the recent period, reached a primary role in the economic sustainability of the sector, as well as becomes one of the important priority in the Common fishery policy. In the article "Assessing the efficiency of aquaculture cooperatives. A country case study", Forleo, Romagnoli, Palmieri, and Di Nocera start from the lack of studies on efficiency and integration of aquaculture's chain in the scientific literature. They present a "state of the art" description of the sector's statistical framework, aiming to evaluate the firm's cooperation capability and their efficiency, according to size and location. They based their analysis on the study of the aquaculture cooperatives budget. They evaluated cooperatives' efficiency with the Data Envelopment Analysis (DEA) non-parametric approach, analysing differences in efficiency according to the size and location of the cooperatives. Size seemed to represent an import key for efficiency improvement, needing a strong regulation supporting firm size increase, coupled with the implementation of an appropriate information system that allows identifying the causes of inefficiency.

Fake and substandard foodstuff and beverage commodities pose a specific threat to food supply chains because consumers who purchase the products believe they are genuine. Unlike other counterfeit products, it is doubtful that consumers would deliberately procure food or beverage that they believed to be dubious in origin. Despite the close cooperation between

producers, governments, and consumers organizations, the majority of illegally manufactured food and drink penetrate the legal supply chain and if we consider both fake Italian food products and the so-called "Italian Sounding" products, the amplitude of this phenomenon is estimated in 60 billion of Euros in the world. This data highlights that counterfeiting can be one of the main threats to value creation in the Italian agro-food chain. The authors Cagnina, Cosmina, Gallenti, Marangon, Nassivera and Troiano, propose a study titled "The role of information in consumers' behaviour: A survey on the counterfeit food products". They identify and classify the relationships between the purchase of counterfeit food and the consumers' characteristics in order to provide public and private decision makers with a support in deciding strategies to counteract this problem. To this aim, they followed an econometric approach. In particular, a survey with a sample of 405 consumers was carried out in Italy during the period 2014-2016. The findings pointed out the presence of different groups of consumers showing heterogeneous behaviours toward counterfeit food. One interesting result is that the purchase of counterfeit food seems to be linked to a lower income and a lack of information. Therefore, to prevent dishonest trading and counterfeit food productions, the authors suggest encouraging cooperative approaches providing consumers with sufficient information to improve their awareness.

Information plays an important role in the sustainability of the entire food chain especially in relation to the consumer's attitude and behaviour. In their paper "The effects of Expo Milano 2015 on consumer food choices", Ricci and Banterle studied the effect, on consumer's food habits and consumptions, of information about environmental sustainability coming from EXPO Milano 2015 experience. Results highlight the relevance of such event that, coupled with information and communication campaigns, may improve the sensitivity of consumers in the adoption of environmentally friendly behaviours.

This issue of Economia agro-alimentare also include two Notes that provide useful insight into specific aspects of the food system.

Wine is a key sector of the economy of Moldova, where the vineyards cover a large proportion of agricultural land and wine contributes to 3.2% of GDP and 7% of exports. The case of Moldova is interesting because recently it signed the Association Agreement with the European Union (EU), which included the deep and comprehensive free trade agreement (DCFTA) that should lead to a free trade area between Moldova and the EU. The article "Moldavian wine industry, between legal reforms and economic challenges" by Luciano Sangiovanni and Aurel Băieşu describe the Association Agreement and the DCFTA, analyze the main features of the wine legislation and the initial effects on export.

The final contribution is the Note proposed by Scocco, Rivaroli, Mercati, Tardella, Malfatti, De Felice, and Catorci titled "Anatomy for economy: Starting from the rumen keratinization degree to enhance the farm income" that deals with an issue linked to global climate change and its impact on sheep fed on semi-natural pasture of Central Italy Apennine. The authors present an analysis of the economic sustainability of food supplementation as an essential way to contrast the rapid rumen keratinization in sheep fed only on the pasture affected by increasingly dry weather during the summer. The supplementation may generate quantitative differences in milk production. The analysis of accumulated losses and profit during the period of trial supplementation can reduce the rumen keratinization degree while preserving the economic sustainability of sheep milk production.

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