Literature review WP 2

WP 2

Italy

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Review report

IDENTIFICATION OF THE MOST RELEVANT RESULTS

Arfini, F. (1999)

I problemi della filiera del Parmigiano Reggiano alle soglie del nuovo millennio.

Trade Marketing, n. 26.

The large majority of the cheese dairies of Parmigiano-Reggiano cheese has a limited bargaining power, as most of the cheese is sold after only 10-12 months ripening. They are essentially price takers. Cheese dairies loose contact with their product as it is valorised by specialised wholesalers-ripening firms. These firms are in their turn subjected to the power of the multiple retailers, as the wholesalers-ripeners often are not able to impose their own firm trademark. At supermarket shelves the consumer is not able to distinguish between the different types of PR cheese, because they are offered at different prices without precise indications about the age of the cheese or its provenance. In this way the link between consumption and provenance is interrupted .

In order to increase the market power of the cheese dairies the Consortium favoured the introduction of ISO9002 quality control systems. This certainly is a tool to reduce percentage of discarded cheese, but as the cheese dairies have only a limited direct access to the retailers the quality certification of the cheese dairy cannot be used as a marketing tool.

Within the PR supply chain contrasting interests between retailers, ripening firms and cheese dairies impedes an efficient and effective marketing strategy. Although the high quality of the product guarantees a high value added anyhow which goes to the benefit to all actors of the supply chain, a more efficient collective marketing strategy would bring about a more equilibrated distribution of the total value added generated by the chain favouring in particular the profitability of the cheese dairies.

Arfini, F.; Mancini M. C. (2001).

Parmigiano Reggiano cheese and market revolution: dream o reality?

In : E Commerce and Electronic Markets in Agribusiness and Supply Chains, Edit by Schiefer G., Helbig R., Rickert U., Bonn University ILB, Bonn.

The problem of the lack of market power of the PR cheese dairies can be tackled through initiatives aiming at either the concentration of supply by means of a sales agency or by an expansion of the market through the institution of an electronic auction through Internet. As the first option is concerned in order to have any positive effect on the wholesalers price at least 60% should be traded through a single broker. A negative aspect of the concentration of supply of the cheese dairies is the reduction of the role of the reference price of the Chambers of Commerce as it would refer to a residual market. Secondly, the quality grading policy of the Consortium may come into conflict with the market strategy of the sales agency as necessarily this agency will have to carry out its own quality grading activity.

The second option would instead enhance the role of the Consortium, because an auction through Internet can function only efficiently when a clear and strong quality grading system is put forward by the Consortium. The Chamber of Commerce may acquire an important coordination role of such an auction. A downward auction through Internet enlarges the market (purchases at large distance), will increase market transparency, will enhance the role of product quality in setting the price and finally will bring about a re-atomisation of demand, which will go to benefit of the cheese dairies.

Bertani, L.; Endrighi E. (1998).

Il sistema qualità di formaggio tipico: presupposti e modalità applicative.

Agribusiness, Paesaggio & Ambiente, n. 2-3, pp. 211-221

Origin Labelled Products are the result of traditional processing techniques, where the final quality of the product is the result of the synergy between the actors in the supply chain. The mutual interdepedent activity and synergy between the actors is of utmost importance for the final quality of the product, but the mere compliance with the official product specification and regulations is not a sufficient guarantee for the success of the product. The application of Quality Assurance Schemes as foreseen by the ISO standards are even more important for OLP products than for industrial food products, as it favours the formalisation of artisanal production techniques, which otherwise would not emerge. The main objective of the introduction of ISO quality control systems is the reduction of the costs of non-quality At the same time their introduction has to be highly flexible to take account of "strong personality" of the single production units. The strong traditional nature of the production process of PR cheese does not justify the absence of formal and adequate documentation of the production process.

De Roest, K.; Dufour M. (2000).

The interrelationships between the PDO product specification, ilts link to the terroir and its technological development.

67. EAAE Seminar, Le Mans, 1999/10/28-30, EAAE, European Association of Agricultural Economists, La Haye, In : Sylvander, B. (éd.); Barjolle, D. (éd.); Arfini, F. (éd.), The socio-economics of origin labelled products in agri-food supply chains : spatial, institutional and coordination aspects, 408 p, Actes et Communications, N° 17-2, Paris, INRA-Editions, 2000/11, 2. vol., pp 295-308.

In all PDO supply chains attempts are made to reduce production costs, as in most cases the observance of the production rules laid down in the product specification raises the costs of production. The introduction of a series of cost reducing technologies may compromise the link of the product with the *terroir* as the maintenance of a certain degree of artisanality is crucial for the *typicity* of the PDO product. In other words the product, although produced at lower costs, runs the risk to loose one of its main distinguishing characteristics: a product quality related to and embedded in its *terroir.* A PDO label in itself, without distinct and specific organoleptic characteristics of the product with respect to its main substitutes, is not sufficient to strengthen its market position. This is why the introduction of new production techniques and technologies is the result of often long periods of debate among the actors of the chain. The questions always are to which extent the new technology does effectively reduce the production costs and how much does the new technology alter the final product quality?

The lack of cohesion among the actors of the chain, especially in large differentiated areas, leads to a weak product specification and to the entrance in the chain of large industrial multi-product companies, eager to exploit the product name for their own economic interests and to enlarge their portfolio on the market. A predictable reaction to a lack of cohesion among the actors is the emergence of local sub-chains, composed of actors in smaller areas within the boundaries of the PDO area, which agree upon a stricter product specification in order to differentiate their product within the supply chain.

De Roest, K. (2000*).*

The production of Parmigiano-Reggiano cheese: the force of an artisanal system in an industrialised world.

Van Gorcum, Assen p.279

The theory on economic districts contains a considerable interpretative power when it comes to understanding the reasons for the economic validity and persistence of the Parmigiano-Reggiano system. The integration of positive externalities generated within the district into the firm balance alleviates the higher costs generated by limited economies of scale in milk production, processing and in the cheese maturing firms. The fact that the cheese-maker must exercise control over key operations within the production process is a regarded as a prerequisite for the quality of the cheese and puts a brake on any development towards large-scale processing units. Mutual trust and loyalty to the cheese dairy on the part of its members reduces the transaction costs significantly and are the basic forces that hold this social organisation together. Many cheese dairies have market relations with only one or two cheese maturing firms and these too do not change much over time. The stability of sales to a few purchasers guarantees a high reliability and this in turn reduces transaction costs.

The specific market position (large PDO operating on a market of mass consumption) puts the PR system anyhow under continuous pressure to standardise its production and processing technology which may compromise its link with the specific conditions of the production area. Certain strategies of farms and cheese dairies move production techniques at the edge of the product specification aiming at a significant reduction of production and processing costs, which may become incompatible with the minimum quality requirements of PR cheese. Other strategies are put forward to differentiate PR cheese at the upper side of the quality range (rediscovering of local cow breeds, organic PR cheese etc.). The system is evolving versus a pronounced internal quality differentiation.

De Roest, K.; Corradini, E.; Fornaciari; G.; Gazzola, L. (1998).

Performance analysis of Fontina cheese.

Research Report of EU project : PDO and PGI products: markets, supply chains and institutions FAIR-CT95-0306.

The collective economic performance of the Fontina cheese supply chain is highly positive, but depends heavily on public support. Production and processing costs of milk in the Aosta Valley are very high and only part of the cost difference with non-PDO milk is covered by the higher milk price, whereas the majority is integrated by direct income support. A positive aspect within the system is the severe quality grading system, where second choice cheese is substantially downgraded and marketed at a significantly lower price. One single sales and cheese maturing Cooperative is marketing more than 80% of the total production enabling a substantial contractual power of the small and tiny cheese producing cooperatives towards the multiple retailers. A weakness in the production system is the overlap of competencies of institutions and a too high invdvement of public authorities in technology and market development. The whole system is drugged by a huge amount of public finance. Without any public intervention the future of the Fontina supply chain will be seriously compromised and if in future this support will decrease more will be required from a stronger institutional coordination to maintain the collective benefits. Too much public support created confusion and overlaps of the roles of the several public institutions involved in the system.

De Stefano, F. (1995).
Problemi economici del mercato della mozzarella di bufala.
Rivista di Politica Agraria, n. 2
Mozzarella is the most consumed fresh cheese in Italy and its market is increasing continuously. The mozzarella made out of buffalo milk has to compete directly with mozzarella of cow milk. The supply chain of buffalo mozzarella is composed of small specialised buffalo breeders and small artisanal processing firms, concentrated primarily in the north of Campania and the south of Lazio. The value added of about 222 mln Euro is shared for 40% by the farmers and for 60% by the processing firms. In the supply chain of cow milk mozzarella large multinational firms are leader producers promoting strong firm brands strongly related to multiple retailers. The marketing policy of these firms creates an increasing demand for mozzarella in general of which the buffalo mozzarella is taking benefit, but at the same it is conditioned by this policy. The PDO recognition may have the effect of a more pronounced product differentiation with respect to cow milk mozzarella. Within the production area cow milk has been mixed with buffalo milk to overcome problems related to the seasonality of buffalo milk production, as buffalo milk is concentrated in winter and spring, whereas demand tends to be high in the summer months. With the PDO regulations this practice will have to stop, creating the possibility of a higher quality differentiation, also made possible through a more even distribution of buffalo milk production throughout the year. The opportunities for a market expansion are high (there are no milk quotas for buffalo milk), mainly by the exploitation of niche markets supplied by specialised retail shops. Larger processing firms in the production area may try to produce for multiple retailers, but will have to comply with a demand for a constant and homogeneous quality. This may create the premise for a more autonomous market strategy, less dependent on the success of the multinationals of cow milk mozzarella, as this dependence has created a too high market vulnerability.

Galizzi, G. (1997).
I formaggi DOC/DOP nel nuovo contesto competitivo,.
Working Paper, Istituto di Economia Agro-alimentare, Università Cattolica, Piacenza.
The PDO creates a barrier to entry and constitutes for the actors of the supply chain a kind of monopoly and a new asset, of which all the actors may benefit. Imitations may be contended more easily. In sectors with low levels of concentration the PDO label and the private firm label are non incompatible: they are complementary, as the PDO may act as an important protection umbrella to penetrate in a market of product of private firm label. The PDO label does not impede competition between the firms of the PDO product, at the contrary it creates a more loyal and transparent competition. Technological innovation has to take place among the PDO producers, but is limited by the necessiyy to preserve the link between the quality of the product and the territory characteristics. They should follow a specific technology trajectory and this aspect of particular importance because otherwise the product may loose its PDO recognition, due to the opposition of Northern European producers, which have never stopped their fierce battle against the whole PDO legislation. As large scale food industry has abandoned mass production and is increasingly involved in the launching of new food products, which are often imitations of PDO and PGI products, the Consortiums will have to increase their activities in promotion and advertising.

Gonano, S.
The agro-industrial district if the «Castelmagno» cheese: social and economic implications for the rural environment of a small Piedemontese valley.
Although being a very high priced cheese (up to 25 Euros/kg at retail level), the very small production of Castelmagno cheese (20 tons) does not create an adequate economic size to create significant socio-economic benefits for the economy of the alpine valley where the cheese is produced. Population decreased in this valley at the same rate as in other adjacent valleys. This outcome is also the result of the lack of cooperation between the actors of the supply chain and the weakness of the local Consortium. To this respect the supply chains does not present the connotations of a Marshallian Agroindustrial District.

Magni, C. (1996).
La comunicazione per la valorizzazione della qualità nel sistema agroalimentare.
In: I Prodotti agroalimentari di qualità: organizzazione del sistema delle imprese a cura di Berni P. & Begalli D. Il Mulino, Bologna
The competitive advantage of firms with a collective label of origin with respect to those firms who operate outside the label of origin are: easy identification of a product which meets a increasingly differentiated demand, reduction of information asymmetry, possibility of development of common marketing activities for otherwise too small quantities. Conflicts may however arise when a rigid control system has to be implemented in order to guarantee compliance with the product specification. In that case an increase of the bureaucratic control costs may not be compensated by the saving in the costs of using the market, i.e. the transaction costs. In case the production of the OLP is highly homogeneous conflicts between firms at medium and long term may arise as firms will be incited to conquer market shares and in particular through price cuts.

Rosa F.; Mancini, M. C. (1998).

Socio-economic effects of quality system implementation in typical productions: the case of Parmigiano agroindustrial system (PAIS).

52. EAAE Seminar, Parma, 1997/06/19-21, EAAE, European Association of Agricultural Economists, La Haye, In : Arfini, F. (ed), Mora, C. (ed.), Typical and traditional products : rural effect and agro-industrial problems, pp 503-527.

The reduction of second choice PR cheese confirms the effectiveness of the introduction of ISO quality assurance schemes in the dairies, but maturing firms are not ready to pay higher prices for cheese coming form ISO certified dairies. The introduction of the quality assurance schemes has been costly, but alleviated by contributions of the Consortium. The identification and prevention of non conformities are undoubtedly the benefits of the system.

Tosi, L. (1998).

La produzione e la commercializzazione del pecorino toscano tra tutela della tipicità e orientamento al mercato.

INEA, Osservatorio di Economia Agraria per la Toscana, Studi Specific 3, 1998

The research, dedicated to the supply chain of Pecorino Toscano, a typical PDO ewe milk cheese of Tuscany, investigates its development and expansion among 19 cheese dairies. Recognised in Italy in 1986 as DOC cheese and in 1996 by the EU has been promoted primarily by the larger cheese dairies of the region. The smaller and very local processing units did not adhere to the initiative as they are already supplying in a profitable way their very small and local market niches. The adherence to a PDO Consortium of these tiny cheese dairies would generate more costs than benefits.

Objective of the PDO initiative has been the creation of more value added by means of the aggregation of a critical mass of cheese to be marketed at larger scale. The creation of extra value added is necessary in order to maintain competitiveness with the lower priced Pecorino Romano, the largest ewe milk cheese of Italy, produced mainly in Sardinia. The costs of the milk collection in Tuscany is quite high, which raises the total production costs significantly. Another weakness of the supply chain is the marked seasonality of ewe milk production, as sheep farmers tend to concentrate lamb deliveries in spring in order to take advantage of the high lamb prices around Easter. Milk production tends to be low from July till December and most cheese dairies in this period will produce mixed cheeses composed of ewe milk with cow milk. The product specification foresees the use of pure ewe milk, hence production of Pecorino Toscano declines significantly in these months. Another strategy has been to offer higher milk prices in these months, but the income generated by the lamb sales is too high to renounce of easily. Obviously the seasonality of production weakens the market position of the production, as retailers require a constant year around supply.

Pecorino Toscano was launched at the beginning of the eighties by a group of seven cheese dairies within a myriad of already well established local ewe milk cheeses in Tuscany. Although Pecorino Toscano increased its market share, all cheese dairies, who adhere to the Consortium, continue to produce their own highly remunerative cheeses anyhow next to the production of Pecorino Toscano. These cheeses are often locally very well known and produced at lower costs (no costs of certification). At the same the notoriety of these local traditional ewe milk cheeses is often higher than of Pecorino Toscano, therefore the dairies are able to bid higher prices for these cheeses. This is the main reason of the actual difficulties of market expansion of Pecorino Toscano. The cheese dairies are more jealous of their name and reputation and tend to sell the cheese stressing the name of the dairy before the name Pecorino Toscano. Each dairy has its only label promoting the name of the dairy with only minor reference to the name of the cheese. The different labels (colours, size, characters) create confusion among the consumers and reduces the visibility and recognisability of Pecorino Toscano. The dairies try to find a compromise between adhering to the Consortium and in this way enlarging and differentiating the supply of cheeses and at the other side to maintain their name and reputation. But this strategy is hampering the expansion of Pecorino Toscano on the market. A large opportunity to sign an important contract for the delivery of Pecorino Toscno with an international multiple retailer vanished because of the heterogeneity of supply of the different cheese dairies.

Finally, the significant cuts of export subsidies for Pecorino Romano following the GATT agreement of the Uruguay round has created a stronger competition for ewe milk cheese on the Italian market. The formerly substantial exports of Pecorino Romano from Sardinia to the United States declined and provoked an increase of domestic supply of this cheese on the Italian market putting under pressure ewe milk cheese prices.

Discussion report

To a certain extent there is a discrepancy between the significant role of OLP's in Italian agricultural policy and the quantity of economic research dedicated specifically to these products. According to the Nomisma report PDO and PGI products account for 7% of Gross Agricultural Production and in agricultural policy emphasis is put on their role in enhancing rural development, in particular in the less favoured areas, which account for three quarters of the country.

One of the reasons of the lack of economic research to the subject is the predominance of the Anglo-Saxon tradition among many Italian agro-economists. The atomistic approach to economic behaviour hardly is able to come to grips with the collective rationale pursued by the actors of PDO/PGI supply chains. An interesting contribution to the theory of the institution of a PDO using neo-classical concepts comes from Caiati (1996), but remains rather isolated.

More promising analyses in Italy come from industrial economists and from agro-economists which have taken over concepts and methodologies developed primarily by industrial economists applied to the analysis of local development processes. The theory on the evolution of industrial economic districts based on the rediscovering of this Marshallian concept and proposed in the eighties by Beccattini et.al. has been an important stimulus for the development of a neo-institutional approach in the agricultural economics research tradition. Only an analysis which moves on the edge between economics and sociology has the potential to explain the pursuing and the outcome of collective objectives of economic actors. To this respect network analysis is particularly useful, as it uses concepts and methodologies particularly adapt to the explanation of the formation of producer groups involved in the institution of new market channels of OLP's. This type of analysis has been applied in several research projects. In Italy technological research focused on the link between the intrinsic quality of the product and the natural characteristics (soil types, climate etc.) of the production area is producing interesting results and in particular on cheese, but remains often separated from socio-economic research on the subject. Interdisciplinary research (economics, sociology and product technology) has to be carried out when the formation of a new product specification of an OLP has to be analysed.

Success factors of PDO/PGI products emerged from the FAIR research project "PDO and PGI products: supply chains, markets and institutions" (1996-1999). An important result of this project is that in order to have success particular emphasis has to be laid on the degree of specificity of a OLP product with respect to its immediate substitutes which move on its relevant market. The PDO label in itself is not sufficient to differentiate a product. This factor explains why fresh non processed products, like fruits with a PGI label, often have more difficulties on the market, as the human artisanality component of quality differentiation is less important for these products. Much more is requested of the natural specificity and the reputation of the production area in conferring a special quality to the PGI fruit in order to distinguish them of lower priced substitutes.

In many research on OLP's the role of cooperatives have been underlined as an important element of success. The small scale cooperative combines the principle of solidarity pursuing collective objectives together with the necessity of economic efficiency and in this sense potentially is a better equipped economic organisation for an OLP product than the large private multiproduct company. The latter organisation undoubtedly is endowed with more market power than the former, but contains the risk of an uneven distribution of the value added among the actors of the OLP supply chain. When analysing the 30 PDO cheeses in Italy, which account for almost 50% of Italian milk production, one notices effectively the role of the small cooperative in explaining the success and failure of many of the PDO cheeses. According to the Nomisma research 1,740 cheese dairies are involved in the production of 413 thousand tons of PDO cheese and almost 500 of these are producing Parmigiano-Reggiano cheese. Many of these cheeses are based on the processing of raw milk and are strongly related to traditional locally rooted production techniques, others developed towards an industry scale production loosing to a great extent their link with the production area. The drive towards the reduction of production costs of these latter products implied the introduction of technologies incompatible with the OLP product specification.

NEED FOR NEW RESEARCH

Interdisciplinary research

For many OLP products interdisciplinary research can contribute to an improvement of the quality definition. Still a large knowledge gap exists on the link between the natural characteristics of the production area and the technical and intrinsic quality of the product. Such research is important to collect arguments in defence of the specific quality of OLP's with respect to generic standard food products, arguments which are of particular importance in the WTO negotiations. If technological research may monitor the quality variability and analyse the factors which have the major impact on quality variability, market research may analyse the perception of consumers of the quality variability. This type of interdisciplinary research is highly relevant and useful for the debate among actors on the product specification of the OLP. The research may take the form of *social action research* as this research methodology is particularly adapt to assist economic actors in their struggle to define a product specification based on their different production techniques, which are often the result of centuries old traditions.

A second field of research, insufficiently investigated up till now, regards the economic coordination