

Editorial *

The modern age has witnessed a rapid change in agriculture, which was at one time the primary production sector. In the past, the cultivation and the transformation of crops were strictly tied to the farming area, and the farmer's task was mainly confined to sowing, harvesting and simple agricultural produce. One or more operators - brokers or traders - managed the market as well as part of the service sector. The consumer would buy a product that had only undergone a minor manufacturing.

Subsequently, the value added increased because of the industrialization of the product which had become a manufactured good/foodstuff. This trend highlighted that the bulk of the value added, instead of being acquired by the primary sector, was in fact appropriated by the downstream sectors (industry, trade, general services). Thus, cooperative structures or consortia were created, often with many difficulties, to re-allocate at least part of this value added to the agricultural sector. This development ensured product quality, but by standardizing production, it created a constraint on the quality of the product. The more advanced producers were not sufficiently recognized for their innovational efforts. On the other hand with the improvement in living standards, the consumer was able to appreciate this increase in quality and was willing to pay a higher price for a product with higher value.

This evolution in agriculture can also be applied to the development of wine and winemaking, and the partners, wine experts, distribution chains, together with the enlargement of market opportunities deriving from globalization, etc. This sector has followed changes resulting from economic and social development of markets, at a varying pace depending on the regions and products.

However, it is not enough simply detecting and advertising quality improvement. Instead, it must be guaranteed by the careful and continuous monitoring of the whole process from the farm to the table through an extensive use of information and communications technologies. In the past production and consumption were related to the farming area and in many cases this is still true, but the actual transformation of grapes can be located somewhere else, as can, even more, its consumption.

Physical factors still characterize the different types of quality wine, incorporating a greater proportion of information and knowledge coming from the past and from the markets. Their production requires a network of relations among

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the agricultural sector and the manufacturing and services sectors. This shift is reflected in the innovations that are possible in both the conception of a new wine and in the choice of the production process, as well as in the choice of grapes and in the cost-benefit analysis that determines the optimum time for aging the wine. These innovations allow the firm to increase the value of the wine, but the opportunity must be seized by studying the behavior of competitors in world markets as well, and sometimes by knowing how to choose, for each stage of the production process, whether *make or buy*, especially within the services that accompany and add value to the wine

Having discussed the development of the wine sector, it is now necessary to define the analytical schema of the relations between enterprises. Within the wine industry, there are collaboration networks involving different firms in functional and organizational areas, (such as production, sales and customer relations) and with different geographical location, which should be increased further. In these cases, it is strategically important to manage information and knowledge in order to identify which services in the supply chain have a higher value creation.

Over the past twenty years, the study of business networks has fostered a considerable amount of theoretical and empirical literature. The distinctive character of the networks lies in its ability to coordinate the production activities of the various stakeholders and to manage technological and functional interdependencies. This differs from other organizational forms of production and exchange such as the market institution or the integration of upstream and downstream process. To exploit the opportunities, of network enterprises, policy authorities must avoid sacrificing competition, which is crucial in fostering efficient production and in increasing consumer satisfaction. At the same time, they must create an environment that promotes entrepreneurial innovation and the growth of individual enterprises. The final aim is to strengthen relations between enterprises and between them and consumers.

In order to be able to determine, therefore, the performance and development of relations, it is important to characterize the resource - and knowledge-based enterprises, i.e. based on the resources involved and on the coordination and sharing of knowledge. It is also essential to deepen the role of communication and the transfer of skills in organizations involved in the use of networks in order to bring them closer to competitors, suppliers and customers.

Cooperation usually considers cost irrelevant and draws the attention on the assessment of the benefits related to the specific skills involved in tailoring goods and/or services to the needs of partners within the production chain. The link between sharing information and negotiating relations would be made even stronger if there were a preponderance of informal communication channels since confidence

and appropriate conduct are a better substitute for contractual agreements and furthermore a quality signal of the relations within the firms involved.

The sharing of information is a key element to cooperation because this form of transactional governance allows for a greater exchange of information than in the market, although theory suggests that information sharing determines the efficiency of the latter.

The diffusion of Internet makes it less important to establish cooperative ties within close geographical areas. But geographical proximity is not completely irrelevant. Proximity between firms allows for face-to-face meetings and the formation of informal communication channels.

It is thus essential to determine if firms have at their disposal network technologies. Without the support of ICT and without the proper dissemination of this technology in businesses, relations may exist, but with the timeframes and cost transactions characterized by conservative industries

A pilot survey (*FIRB 2005 ARTDECO*) on a limited number of winemakers was set up in order to determine the diffusion of these modern types of organizations and to identify the motivations and characteristics of the relations, the criteria for partner selection, governance relations and territoriality. This is not a sample but a selection of enterprises of different sizes, propensity for innovation, development of ICT and propensity for collaboration. The resulting picture is obviously fragmented, but the goal was to explore different realities.

The pilot survey was done on wine-wineries with the exception of a winery and a services company. The individual firms in the survey included family owned, local and regional companies, production cooperatives and a trading cooperative.

The sizes of the companies were deliberately different, ranging from 30 hectares to one of 1800 hectares. The labor force varied from 8 to 72 employees, and in some cases seasonal workers should be added.

The majority of the target markets were both national and export, while only in few cases were they local. The provision of ICT was underdeveloped, usually aimed at the administrative and financial management. In rare cases, technology was used for relations with suppliers, transporters and customers.

It is interesting to note that virtually all the firms have made innovations in the product wine, with one exception where the innovation was in the process area. The control of processes was limited to the production phase, and only in one case was there the monitoring of transportation and storage.

Despite this propensity for innovation, research collaborations and exchange of information and knowledge are almost absent, except for two companies that reported relations with research centers and with a chemical industry to improve the quality of grapes and wine. In other cases, there is only membership in orga-

nizations for the protection of the product quality or marketing.

A case apart was a services cooperative that has a total of 3500 hectares, but it consists of small companies that take advantage of this cooperative, especially in selling the product. Its staff and ICT are appropriate to the role, and certainly not related to the number of members of the cooperative.

In conclusion, the survey suggested a positive correlation between the diffusion of ICT and the relationships with other companies, while the size of the company was not relevant. ICT was mainly used for administrative and financial tasks while it was hardly used in the control of production process and of transportation.

In the other cases, the insufficient ICT resources and the absence of an innovational strategy through the development of services was divided between the lack of interest by the owners and/or management, the scarce endowment of ICT services in the territory, and the difficulty in convincing members of the cooperative to invest in ICT.

The survey showed that there is a lot of space for improvement in both quality and especially in creation of value added through the appropriation of the value created by the services. It is important to note that size does not determine whether companies are innovative or not, or whether they utilize the network to improve the profitability of the business. It is the owners, but rarely the management, that hold back these changes.

Perhaps it would be interesting to study in more depth resource- and knowledge-based companies in the wine sector using a larger sample, different geographical area and of enterprise, to understand in more depth the relationships within and outside the wine sector.

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