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Multifunctional diversification for the Italian wine producers: the state of the art in the adoption of deepening strategies

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Abstract:

•Purpose (mandatory):

The paper aims at underlining how the application of deepening, broadening and regrounding strategies (as defined by the Van der Ploeg "Triangle") might help Italian wineries to maintain themselves competitive as they face new challenges on the internal market.

oDesign/methodology/approach (mandatory)

Starting from an overview of the use of deepening, broadening and regrounding strategies in the Italian primary sector, the paper analyses the state of the art of the implementation of the main forms of deepening strategies by the wine producers using Census data and a specific direct survey.

•Findings (mandatory)

The paper highlights how the level of implementation of certain deepening strategies is still very far from its potential extent. The findings help to understand that the difficulties in filling this gap are basically due to both the hesitancy with which a very tradition-driven production sector approaches innovation and the structural problems of the sector.

Key words: multifunctional diversification, deepening strategies, direct sales, e-commerce, wine market (maximum 5)

1. INTRODUCTION

The wine sector is going through a particularly delicate period, in which consumer preferences and policy scenarios force towards a dynamic and continuous redefinition of skills and priorities for keeping and gaining competitiveness in a globalized market. In this complex framework, wineries often need to reshape their strategies focusing on a wider range of activities not only linked to wine production but also to other products and services and to distribution and commercialization aspects. Within this context, the definition of multifunctionality and the relevance of multifunctional diversification become more and more important for the understanding and the exploitation of all the strategic opportunities available for agriculture as a whole and specifically for wineries.

The paper presents a reflection on the applications of the multifunctional approach, focusing on the *deepening*, *broadening* and *regrounding* strategies (as defined by the Van der Ploeg "Triangle") implemented by Italian farmers, followed by a specific analysis of the deepening strategies developed by the wine producers using Census data and a direct survey. The hypothesis is that such strategies are not fully implemented to their maximum potential by the farmers, mostly because of structural problems and a lack of awareness by the managers. In order to shed light on the accuracy of such hypothesis, the analysis will try to answer the following questions:

- What is the state of the application of deepening, broadening and regrounding strategies in the Italian wine sector?
- Among the deepening strategies, what is the role currently played by direct selling and e-commerce? And what are the possible future developments of such instruments?

In the conclusions, the answer to these questions will help in underlining how the application of these strategies might help the wineries to maintain themselves competitive in the market and, at the same time, create new values and positive externalities for the society.

2. LITERATURE AND ANALYTICAL MODEL

Traditional agricultural activities often seem inadequate to meet the economic needs of the farmers and a growing consumer demand that is increasingly focused on quality and food safety issues. In recent years, farmers have been working in a constantly changing socio-economic context that created confusion in the agricultural sector, especially for the definition of entrepreneurial choices. Farmers have to coexist in a new international scenario where the main drivers, including the new reformed CAP (Common Agricultural Policy), give a central role to the concept of agriculture multifunctionality. Agriculture must be considered as a whole, taking into particular consideration the implications that it has on society, the environment, food security and rural development. One of the most important definitions of multifunctionality is the one suggested by OCSE: "beside food and fiber supply farming can also change the landscape, provide a sustainable management of the environment through land conservation, a sustainable management of natural resources, biodiversity preservation and the preservation of socio- economic life in rural areas" (OCSE, 2001). From this definition, we can infer that agricultural activities give rise to combined products and helps to achieve, at the same time, social objectives. Within this concept, the European Union recognizes the fundamental connections between agriculture and sustainability, food security, territorial balance and food supply. Moreover, the European Commission, in its documents, acknowledges that the multifunctional role of agriculture can be ensured only with government support, which is warranted by the so-called "European agricultural model" that is characterized by an agriculture with peculiar elements, such as small scale farms, family run farming system and territorial integrations (Council Decision 20/2/2006 about UE strategic guidelines for Rural Development 2007-2013).

In 1998 the European Union funded a study (UE IMPACT Study) aiming at underlying the extent of diversification in EU farms. From that moment, numerous studies have been carried out on this topic (Marinelli and Menghini, 1996). Among these, a particular relevance is given to the design of the so-called "Value Triangle in Modern Agriculture" by Van Der Ploeg (Van der Ploeg et al. 2002,

Menghini and Marinelli 2011, Casini et al. 2012). At the base of the model there is the thought that conventional agriculture is not capable any more to face the new agricultural system, therefore a change in the farming activities is needed. Keeping traditional agriculture as the core of the agricultural model, Van der Ploeg triangle system shows the development of agriculture along three different feasible routes for the farms. These routes, that are outlined in Figure 1, are defined as follows:

• *Deepening*: it mainly refers to non-conventional new activities to be integrated in the conventional agriculture system, a reorganization of the production with more complexes and integrated practice, the innovation of the product and the care of the qualitative aspects.

• *Broadening*: it mainly refers to the development of no-food production activities that reflect new market requirements and could create a new income source. An example is using the farming structures as "farm holidays".

• *Regrounding*: it mainly refers to all non-agricultural activities, which are however integrated and complementary to the main agricultural one. The purpose is to provide alternative chances of employment.

Fig. 1: Van der Ploeg's "Value Triangle in Modern Agriculture"





Beside the strategic use that some Countries have done of this approach in the international arena (Burrel 2002, Anderson 2000), what is relevant is the acceptance of a new agricultural "status" and the shift towards a new paradigm in which agricultural policies take into account the resizing of the sector in the economy and the fact that agriculture represents the main provider of leisure services, environmental goods, rural traditions and many others secondary products that are all associated to multifunctionality (Blanford et al., 2002).

In particular, certain activities that fall within the range of deepening strategies – such as direct selling or e-commerce – play a significant role because of the value added redistribution mechanism that they create within the value chain. Their relevance is even more evident in chains that are usually characterized by intermediaries and distributors that often act as price makers and concentrate higher mark ups towards the end part of the value chain creating long term survival issues for local production systems. Moreover, such activities can be seen as pivotal in the strategic rethinking of the wine production system as they require an attitude towards innovation that invests the available human resources and their set of skills, particularly involving the newer generations.

3. THE ITALIAN SITUATION

Multifunctional diversification holds a relevant position in the primary sector in Italy and this has also been recognized by policy makers. As a matter of fact, the 6thAgricultural Census of 2010 was improved with a series of new questions in order to gain information on the importance of multifunctionality and diversification at farm level, including data on the level of computerization, the use of internet, the creation of a web-site and/or of a web page and the creation of an on-line shop. This updating allows for a specific analysis of the diversification strategies at farm level, with a particular focus on the deepening, broadening and regrounding strategies.

In terms of multifunctional diversification, it is interesting to analyse what activities have been carried out at farm level to increase their opportunities of remaining competitive (Table 1).

The data show that 4,7% of the farms adopts at least one strategy for the diversification of their agricultural activity. The most relevant strategies are the organization of farm holidays (broadening), vertical integration of the production process (deepening) and subcontracting (regrounding). Regrounding strategies are the most widespread as they concern more extensive forms of integration between the farms and the local rural environment. It must be pointed out that the direct selling to the consumer (at farm level, out of the farm and through e-commerce), that is part of the deepening strategies, will be taken into account in the following section of the paper.

Total n. of farms	1.620.884					
Total n. of farms	76.148					
% of farms with	4,70%					
	Farm holidays	19.304				
	Recreational and social activities	2.253				
Broadening	Educational farm	2.382				
strategies	Handicraft	660				
	Total n. of farms for broadening strategies	24.599				
	First processing of agricultural products	8.344				
Deepening	Processing of vegetal products	7.983				
strategies	Processing of animal products	9.653				
	Total n. of farms for deepening strategies	25.980				
	Production of renewable energy	3.485				
	Wood processing (cutting, etc.)	2.832				
	Acquaculture	348				
	Maintenance of parks and gardens	4.505				
Regrounding	Silviculture	6.020				
strategies	Production of animal feed	1.016				
	Subcontracting for agricultural activites	19.824				
	Subcontracting for non- agricultural activites	3.073				
	Total n. of farms for regrounding strategies	41.103				
Other activities	Other activities 7.157					
Source: our elaboration on 6 th Agricultural Census 2010						

Table 1: N. of farms that adopted multifunctional diversification strategies

our elaboration on 6^m Agricultural Census, 2010

Table 2 shows that Italy counts 1.6 million of farms which covers more than 12 millions of hectares, highlighting the strongly fragmented situation of the primary sector, characterized also by an old average age of the owner (ISTAT, 2010). This condition negatively affects the penetration of innovation, as farm size, information and risk propensity (strictly linked with age) are the three key variables that play a major role in the adoption of new technologies by the farmers(Menghini S., 2007). Considering that the use of computers (including the use of accounting softwares and other services) and the web are mostly linked with farm owners belonging to Generation X and Y and that the average farm size is quite small, it is easy to understand why only 3,76% of the total number of farms is computerized, only 1,79% have a web-site or a web page and only 0,67% have an on-line shop.

It must be pointed out, however, that if the data is analysed in terms of Utilized Agricultural Area (UAA) the percentage significantly increase: 18,29% of the UAA is owned by computerized farms, 8,49% by farms that have a web page/site and 2,68% by farms that have e-commerce platforms,

confirming the fact that larger farms in terms of size are more likely to implement new technologies.

Table 2: N. of farms and Utilized Agricultural Area and their relation to computerization, internet and e-commerce in Italy

	Non- computerized farm	Computerized farm	Ownership of a web-site/web page	E-commerce / on-line shop	Total
N. of farms	1.559.939	60.945	29.043	10.865	1.620.884
UAA in hectares	10.504.719,96	2.351.327,86	1.092.034,38	344.465,59	12.856.047,82
% of Farms on Total	96,24%	3,76%	1,79%	0,67%	100%
% UAA on total UAA	81,71%	18,29%	8,49%	2,68%	100%

Source: our elaboration on 6th Agricultural Census, 2010

4. A FOCUS ON DEEPENING STRATEGIES: THE ROLE OF E-COMMERCE IN THE ITALIAN WINE PRODUCTION

The Italian wine sector, as seen before for the entire primary sector, is characterised by a very large number of really small sized farms: the farms with less than 3 hectares do represents the 55% of the total number of farms, covering a little bit more than 17% of the total vine area. The farms with more than 30 hectares represent the 4% of the total number of farms, covering over 24% of the vine area, thus revealing how important they are in the wine sector, in terms of production and thus in the role played in the wine market (Table 3).

		Total N. of wine farms	Total vine hectares
	0,01 - 0,99 ha	90.829	26.062,44
	1-1,99 ha	75.313	44.607,46
	2-2,99 ha	47.673	44.294,61
Classes of	3-4,99 ha	55.728	76.753,31
Utilized	5-9,99 ha	57.686	128.299,02
Agricultural	10-19,99 ha	34.474	124.464,01
hectares)	20-29,99 ha	11.444	59.282,91
	30-49,99 ha	8.444	56.294,14
	50-99,99 ha	4.926	48.912,31
	100 ha and more	2.364	55.325,97
	Total	388.881	664.296,18

Table 3: Number of wine farms and vine hectares in Italy

Source: our elaboration on 6th Agricultural Census, 2010

Analysing the data regarding the selling of the farm products, it is possible to have an idea of the role played by the deepening strategies both in the whole agricultural sector and in wine production. Table 4 shows the figures.

Table 4: N. of farms that sells their products to intermediaries or directly to the consumers

	Vegetal products	Animal products	Wine and grape must	Other processed products	Forest products	Total
Total n. of farms	-	-	-	-	-	1.620.884
Total n. of farms that sell their product*	839.008	142.419	31.875	161.488	11.304	1.037.211
- to intermediaries	762.252	118.131	10.936	52.952	6.004	883.434
- directly to consumers	123.828	35.722	26.519	120.765	6.245	270.579

- directly to consumers in the farms	92.111	29.319	23.367	95.551	4.415	210.625
- directly to consumers outside the						
farms	43.810	8.842	6.939	35.754	2.254	89.668
- with e-commerce	6.667	2.390	2.217	2.778	430	10.175

*all distribution channels: direct selling and intermediaries

Source: our elaboration on 6th Agricultural Census, 2010

Table 5: N. of farms with direct selling and e-commerce on total farms with selling activities (%)

	Vegetal products	Animal products	Wine and grape must	Other processed products	Forest products	Total
% of direct selling on total selling	14,76%	25,08%	83,20%	74,78%	55,25%	26,09%
% of e-commerce on total selling	0,79%	1,68%	6,96%	1,72%	3,80%	0,98%
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Source: our elaboration on 6th Agricultural Census, 2010

Among the farms that sell their products (that are in total more than 1 million), 26% of them is selling it directly to the consumers (Table 5), thus representing an important way for the farmers to the vertical integration of the productive process. Among the different products sold directly to the consumers, it is possible to notice how this is relevant for wine and grape must, being the 83.2% of the farms adopting this strategy.

In terms of e-commerce, which it is still a non common method for selling any of the agricultural products, Table 5 shows that again the farms that produce wine and grape must are the ones that mainly adopt this tool, compared to the farms that produce the other commodities.

Going deeper in the analysis for wine production activities, Table 6 shows the number of farms divided into classes of UAA, so classified in terms of their size, that adopt direct selling and e-commerce.

		N. of wine farms with direct selling of wine	% of wine farms with direct selling of wine	N. of wine farms with on-line shop	% of wine farms with on-line shop
	0,01 - 0,99 ha	3.519	3,87%	37	0,04%
	1-1,99 ha	4.021	5,34%	84	0,11%
	2-2,99 ha	2.920	6,13%	102	0,21%
	3-4,99 ha	3.932	7,06%	222	0,40%
Classes of Utilized	5-9,99 ha	5.068	8,79%	491	0,85%
Agricultural Area	10-19,99 ha	3.617	10,49%	513	1,49%
(in hectares)	20-29,99 ha	1.294	11,31%	236	2,06%
	30-49,99 ha	1.105	13,09%	227	2,69%
	50-99,99 ha	660	13,40%	175	3,55%
	100 ha and	380	16 07%	130	
	more	380	10,07%	150	5,50%
	Total	26.516	6,82%	2.217	0,57%

Table 6: N. of wine farms that do direct selling and e-commerce in terms of Classes of UAA

Source: our elaboration on 6th Agricultural Census, 2010

The data, confirming what already stated for the agricultural sector in general in terms of innovation, highlight the stronger incidence of direct selling for the medium-large farms (larger than 10 hectares) with regards to the smaller ones (less than 3 hectares). The data is even more significant if we consider the adoption of the on-line shop: the smaller wine farms almost have not yet adopted this deepening strategy, but as the size increases the frequency of this selling strategy increases in a very progressive way. It must be said that, however, a wine farm that decides to adopt this direct distribution channel has to put in place a series of steps, including a re-structuring of the web page, if it exists, the creation of a payment system and it must organize the logistics linked

with the shipping, all things that require time and effort, especially for wineries where the owner often has a multi-tasking role.

A recent direct survey conducted by UniCeSV at the end of 2013 supplies more specific information about the relation between wineries and the use of internet for commercial purposes. The on-line survey on a sample of more than 2,000 Italian wine farms returned 258 valid questionnaires. 97% of the respondents declare they have a homepage and use it to promote their business and 21% have an on-line shop. It has to be noticed that this percentages are substantially higher than national available data because of the intrinsic nature of the survey to study those farms which make a larger use of the web (hence the use of an on-line questionnaire).

The characteristics of the wineries with an on-line shop are summed up in Table 7. *Table 7: Characteristics of the wineries with an on-line shop*

	N/A	5%
Age of the	Under 35	20%
owner	35 - 60	60%
	Over 60	15%
On-line shop	Before 2010	51%
opening	After 2010	49%
0/ of on line	Under 1%	47%
% of on-line sales on total	1% - 10%	38%
	Over 10%	15%

The data also show a mild generational gap in the use of the web as an instrument for the commercialization of their product; farms that are run by under 35 years old people show a higher predisposition for the use of on-line tools. It is also evident that the opening of on-line services have witnessed a strong growth in the last 3-4 years: since the year of ISTAT Census data (2010), the number of on-line shops for the wineries in the sample has almost doubled. Most of the wineries supply all of their products via e-commerce, with only a small percentage declaring that less than 70% of their product portfolio is available on-line. Nevertheless, on-line sales represent less the 10% of the total business for 85% of the wineries, with 62% of them declaring that e-commerce returns have not varied significantly in recent years.

5. CONCLUSIONS

In the last decade, farmers had to deal with a number of changes (i.e. climate, markets, technologies, etc.) greater than ever before. Even though Italy has a strong tradition in the wine industry, being one of the most important wine producers and wine exporters in the world, its production sector is facing a very hard time since competition is getting increasingly tougher in terms of both supply quantity and prices. In addition, the contraction of the internal demand and the increase of imports have determined issues of unsold production and consequent reduction of prices and profitability. As this situation proves to be not feasible in the long run, the identification of alternative strategies to re-launch the sector is, now more than ever, absolutely necessary. The deepening strategies analysed in this study, and in particular the ones related to the vertical integration of the production process (direct selling and e-commerce), can prove to be remarkably efficient as, by eliminating the intermediaries, they allow to act directly in the creation of value within the value chain and partially rebalance the equilibria towards the production side of the sector. However, for the Italian producers, the data show a situation that only begins to move the first steps in the direction of using the new technologies for commercial purposes. As a matter of fact, direct selling is a traditional and largely spread activity within the Italian wine market, but it is still linked to its historical form related to low cost, bulk wine selling and its potential is far from being completely exploited, especially in association with other farm activities such as tastings and guided tours. On the other hand, setting up an on-line shop is still a difficult step for most of the agricultural producers, even though wine makers seem to be relatively better positioned within the

primary sector. Nevertheless, there are still big issues preventing a wider adoption of such tools. The generational problem seems to be among the most important aspects, together with an attitude towards these kinds of innovations that is also naturally linked with the size of the farms. So, basically, the elements that keep the Italian system from evolving more in this direction seem to be mainly structural and aggravated by a wine tradition in entrepreneurship that opens up at a slow pace towards new tools. Wine producers must bear in mind that a new segment of consumers has appeared in the market: the Millennials, the "internet generation", who communicate, buy and learn using the web. In this sense, the creation of web pages/web sites by wine farms and the introduction of on-line shops represent their keeping pace of the times and being able to reach these "new" consumers in the way they like and use the most.

In conclusion, the study confirmed that the image of an Italian wine production sector composed mainly of "very good producers but not good enough sellers" is not completely wrong (Menghini, 2007). Anyway, the first steps have been clearly taken in one of the "new" market directions, and it is a matter of time needed to deal with a few cultural and traditional entrepreneurial attitudes that might prevent the sector from being up-to-date and ready to face the current and evolving challenges.

REFERENCES

- Anderson, K. (2000). "Agriculture's 'multifunctionality' and the WTO". Australian Journal of Agricultural and Resource Economics.
- Blanford D., Boiisvert R.N., Fulponi L., (2002). "Nontrade Concerns: Reconciling Domestic Policy Objectives with Free Trade in Agricultural Products". American Journal of Agricultural Economics, 668-673.
- Boham M., Cooper J., Mullarkey D., Normile M.A., Skully D., Vogel S., (1999). "The Use and Abuse of Multifunctionality". Briefing paper, USDA\Economic Research Service, Washington, DC. Available at http:\\www.ers.usda.gov\Briefing\WTO\pdf\multifunc1119.pdf
- Burrel A., (2001). "Synthesis of the Evidence of the possible impact of Commodity Price Decrease on Land use and Commodity Production, and the Incidence of the Provision of non-Commodity Outputs", OECD, Paris. Online. Available at http://www.oeced.org/agr/mf/doc/burrel.pdf
- Casini L., Contini C., Romano C. (2012). "Paths to developing multifunctional agriculture: insights for rural development policies". International Journal of Agricultural Resources, Governance and Ecology, Vol. 9, Nos. 3/4.
- ISTAT, (2010), "6th Agricultural Census", ISTAT, Rome.
- Marinelli A., Menghini S. (eds.) (1997). Dallo sviluppo agricolo allo sviluppo rurale: proposte per l'agricoltura del 2000. Centro Stampa 2P, Florence.
- Menghini S. (ed.) (2007). "Il mercato del vino. Le leve per il futuro". UniCeSV Conference Proceedings. FrancoAngeli, Milan.
- Menghini S. (ed.), (2007). Il ruolo del settore vitivinicolo nei processi di sviluppo sostenibile. FrancoAngeli, Milan.
- Menghini S., Marinelli N. (2011). Sostenibilità e mercati nelle teorie del benessere e del comportamento dei consumatori. Italian Journal of Agronomy, Vol. 6(s2):e10.
- OECD (2001). "Multifunctionality: towards an analytical framework". OECD Publications, Paris.
- Randall, A. (2002). "Valuing the Outputs of Multifunctional Agriculture." European Review of Agricultural Economics , pgg 289-307.
- Salhofer K., (2001). "Elasticities of Substitution and Factor Supply Elasticities in European Agriculture: A Review of Past Studies." In Organization for Economic Cooperation and

Development (ed.), *Market Effects of Crop Support Measures*, ppg. 89-119. Paris: OECD. Online. Available at htp://www.oecd.org/publications/e-book/5101141E.pdf.

Van der Ploeg, J.D., Long, A., Banks, J, (2002), "Living countryside. Rural Development Process in Europe: The state of Art", Elsevier, EBI.