The Hazelnut Sector of the Monti Cimini

Agro-Industrial District: Economic Analysis and Development Perspectives

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Abstract

An analysis of the Italian hazelnut sector, focusing on the Monti Cimini area and its own quality product, with the final aim to purpose some initiatives to improve the visibility of the Monti Cimini hazelnut and to strengthen growers’ revenues.

Keywords: Hazelnut sector, Monti Cimini, agro-industrial district, valorisation and marketing strategies

1. Introduction

Italian hazelnuts, especially in their best varieties, represent a quality production worthy to be qualified, adequately protected and presented to consumers. During the twentieth century the Italian hazelnut production has undergone a major transformation, not only because it has increased but also because it has been implanted in the best areas. The specialization of the sector is due to the most accurate cultivation practices, the choice of varieties and the specialized mechanization along with the growth of satellite activities. Hazelnut growing in Italy is very ancient, although the involved areas have always been circumscribed in delimited territories. During the twentieth century,
the hazelnut cultivation went through a major evolutionary process, as evidenced by official data of ISTAT. In the survey taken in 1936, about the 90% of the total core area (about 29,200 hectares) was located in the South, mainly in Sicily (18,300 hectares) and Campania (7,800 hectares). According to the ISTAT collection of data regarding agricultural statistics in 2002, the overall area with hazelnut cultivation was of approximately 69,300 hectares [1]. The main hazelnut areas are Piedmont, Lazio, Campania and Sicily, with Viterbo as first province for quantity collected. Regarding the Italian foreign hazelnut commerce, it has presented an oscillatory trend during the ‘90s, especially regarding the unshelled fruit. Analysing the trend of exports from 1991 to 2001, there was a significant reduction in the commercialized quantities, with a shelled fruit reduction of 47.7% (from 52,000 to 27,000 tons) and an unshelled fruit reduction of 63.7% (from 301 to 109 thousand tons). Correspondingly, there has been an overall increase in importations: the unshelled hazelnuts from abroad increased from 128,000 to 290,000 tons (+ 126.1%), while those in shell fell from 27,000 to 14,000 tons (-47.6%). During the ‘90s Italy has passed from being an exporter to being an importer of shelled hazelnuts and this is due to an increased use of hazelnuts from the confectionery industry and to an internal and external trade policy, which favoured the import, especially the Turkish one. World production of hazelnuts is growing and, according to FAO data of 2002, amounts to about 800,000 tons [1].

However, the trend of the first two hazelnut producers in the world, Turkey and Italy, is different, as the Turkish production has almost quintupled over the last fifty years, while the Italian one is little more than doubled. All the other producing countries have been increased their productions, and this fact progressively reduced the role of Italy, from a production share of 25% during the ‘70s to the current 15% [2].

The Italian hazelnut production is localized in a few areas that are highly specialized: this fact is due to both environmental and climatic reasons, to the presence of a particular socio-economic context in which they have developed technical knowledge and to the commercial structures and particular human relations.

The most important area at the national level is Viterbo, with more than a quarter of the area planted with hazelnut and almost a third of total production.
The following tables show the harvested hazelnut production in Italy and central Italy from 2006 to 2013, according to the data provided by the Chamber of Commerce of Viterbo. The graph gives an overall idea of harvested production trend during the target years [2, 3].

<table>
<thead>
<tr>
<th>Year</th>
<th>Harvested production in quintal – Italy</th>
<th>Harvested production in quintal – Central</th>
<th>Quintal price¹</th>
<th>Italian production value</th>
<th>Central Italy production value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>1.421.086</td>
<td>539.879</td>
<td>€ 236,04</td>
<td>€ 335.433.139,44</td>
<td>€ 127.433.039,16</td>
</tr>
<tr>
<td>2008</td>
<td>1.118.410</td>
<td>365.007</td>
<td>€ 180,60</td>
<td>€ 201.984.846,00</td>
<td>€ 65.920.264,20</td>
</tr>
<tr>
<td>2009</td>
<td>1.051.123</td>
<td>339.769</td>
<td>€ 161,28</td>
<td>€ 169.525.117,44</td>
<td>€ 54.797.944,32</td>
</tr>
<tr>
<td>2010</td>
<td>936.444</td>
<td>286.644</td>
<td>€ 183,54</td>
<td>€ 171.874.931,76</td>
<td>€ 52.610.639,76</td>
</tr>
<tr>
<td>2011</td>
<td>1.289.467</td>
<td>496.517</td>
<td>€ 207,06</td>
<td>€ 266.997.037,02</td>
<td>€ 102.808.810,02</td>
</tr>
<tr>
<td>2012</td>
<td>852.320</td>
<td>301.773</td>
<td>€ 200,76</td>
<td>€ 171.111.763,20</td>
<td>€ 60.583.947,48</td>
</tr>
<tr>
<td>2013</td>
<td>1.029.846</td>
<td>507.267</td>
<td>€ 185,64</td>
<td>€ 191.180.611,44</td>
<td>€ 94.169.045,88</td>
</tr>
</tbody>
</table>

*Table 1- Harvested production value, Italy / Central Italy– Own elaboration based on Viterbo CCIAA data.*

*Graph 1 – Harvested production value trend – Italy / Central Italy*

¹ Price of hazelnut variety “Nocciola secca in guscio tonda gentile romana”
The following table makes similar considerations with particular reference to the province of Viterbo: the harvested production decreases from 2006 to 2010, increases in 2011, decreases sharply in 2012 and increases again in 2013 [2, 3, 4].

<table>
<thead>
<tr>
<th>Year</th>
<th>Harvested production in quintal</th>
<th>Price per quintal</th>
<th>Production Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>524,207</td>
<td>€ 236,04</td>
<td>€ 123,733,820,28</td>
</tr>
<tr>
<td>2007</td>
<td>465,693</td>
<td>€ 192,78</td>
<td>€ 89,776,296,54</td>
</tr>
<tr>
<td>2008</td>
<td>350,977</td>
<td>€ 180,60</td>
<td>€ 63,386,446,20</td>
</tr>
<tr>
<td>2009</td>
<td>327,173</td>
<td>€ 161,28</td>
<td>€ 52,766,461,44</td>
</tr>
<tr>
<td>2010</td>
<td>272,376</td>
<td>€ 183,54</td>
<td>€ 49,991,891,04</td>
</tr>
<tr>
<td>2011</td>
<td>482,120</td>
<td>€ 207,06</td>
<td>€ 99,827,767,20</td>
</tr>
<tr>
<td>2012</td>
<td>292,800</td>
<td>€ 200,76</td>
<td>€ 58,782,528,00</td>
</tr>
<tr>
<td>2013</td>
<td>497,000</td>
<td>€ 185,64</td>
<td>€ 92,263,080,00</td>
</tr>
</tbody>
</table>

Table 2 - Harvested production value, province of Viterbo – Own elaboration based on Viterbo CCIAA data

The concentration of hazelnut production in a circumscribed area is the result of the combination of two elements:

1) The presence of a naturally suited territory (climatic conditions, altitude, soil characteristics);

2Price of hazelnut variety “Nocciola secca in guscio tonda gentile romana”
2) Existence of a socio-economic environment in which integrate technical, commercial and social relationships.

The area around Viterbo is, as already said, the most relevant at a national level, with more than a quarter of the cultivated land used for hazelnut production and about one-third of the total production [4, 5].

To better understand the dynamics that led this area to success it is essential to recall the concept of agro-industrial district.

The concept of the district dates back to the nineteenth century, when Alfred Marshall identified a particular socio-economic entity: the industrial district. Marshall noticed a unique mix of cooperation and competition present in this form of aggregation that improved productive and organizational performance of the companies in terms of flexibility, innovative capacity, reduction of transaction costs and social mobility [6].

This is why it is possible to speak about a district when, within a specific area in which the production plays a dominant role in the local economy, a very tight link between production companies, services and people is created. When the element unifying the local economic system is represented by a primary production, the district assume an agro-industrial connotation. The agro-industrial districts are formed by farms, which provide companies and agro-industries with raw material.

In this case, an important aspect to consider is the extension of agro-industrial district, which is determined by the kind of presence of hazelnut producers: it is possible to distinguish areas where the production of hazelnuts is predominant from peripheral areas where cultivation is dramatically reduced until it disappears. This distinction affects the characteristics of the socio-economic structure and the effectiveness of development policies that can be implemented at the district level, since the presence of hazelnut cultivation affects the farmers’ choices and influence their ability to innovate [6].

2 Material and methods

2.1 Case study: the hazelnut from the Monti Cimini area

The elements characterizing the Monti Cimini area compared to the regional context are:
a) Amount of the area used for agriculture;

b) Low level of land fragmentation;

c) Strong specialization in the primary sector of the orchards, particularly in the hazelnut and chestnut productions;

d) Good level of development of food processing activities;

e) Lack of accommodation facilities against a significant flow of tourists.

This list focuses on both territorial elements and purely sectorial aspects, as well as more general aspects of local development. The Monti Cimini area presents all the features of the district, since the agricultural production shows strong territorial specificities, high concentration of production, widespread technical producer capacity, social roots, sectorial integration with industries (both upstream and downstream), and services, mainly for technical support and marketing.

The Monti Cimini hazelnut production participates significantly in the volume placed on the market (35% of Italian total and 5% of the world total) and it is characterized by a high geographical concentration and specialization. The hazelnut market is characterized by high instability, where the change in the price is mainly determined by the conditions of the Turkish offer, very difficult to forecast since it is linked to several factors. Another important factor to consider is the increasing variability of climate, which affects crop yields, prices and income levels of the farms.

The district of Viterbo appears to be characterized by a high dimension and specialization of production units, elements which, along with the size of the economic and geographical segment, characterize the area as an agro-industrial district. The Monti Cimini hazelnut area, located in the southeast zone of the province of Viterbo, is characterized by the presence of 10,000 companies with a hazelnut area totalling more than 18,000 ha, corresponding to about 8.5% of the provincial
Hazelnut sector of the Monti Cimini agro-industrial district

UAS\textsuperscript{3}. The average annual production is about 40,000 tons, equal to about 5% of the world production, for a total value of 400-500 million €.

The territorial concentration has facilitated the development of markets for inputs and technical and commercial services for companies in the sector. In addition, the growth of the local hazelnut production supported the creation and development of enterprises producing machines to collect and transform nuts, which have become very important at a national and international level.

2.2 Price variability

The high level of mechanization achieved in the cultivation, together with the stable factor of production price dynamics, means that the variability of hazelnut growers’ revenues depends almost exclusively from the revenue entity. The price volatility affects heavily the hazelnut production system, alternating moments of prosperity with periods of crisis.

The factors of variability in the hazelnut price, although difficult to predict or oppose, are related to some aspects:

1) Turkish offer entity: being the first market, it inevitably influences the conditions of the entire hazelnut market. It is determined by elements hardly predictable in advance.

2) National production situation, both in aggregate and with reference to the different areas of production: it is linked to climate trends, especially in recent years, characterized by high variability.

3) Lack of internal hazelnut production protection in the European markets, compared to non-EU country offer.

Recently the EU policy has offered to the hazelnut industry new opportunities, as hazelnut grower may benefit from interventions related to quality improvement, environmental impact reduction of agricultural practices and the landscape conservation.

\textsuperscript{3}Useful Agricultural Surface
3. Results: Monti Cimini hazelnut valorisation and marketing strategies

The Monti Cimini hazelnut is included among the products of the brand “Tuscia Viterbese”, a collective brand created by the Chamber of Commerce of Viterbo in order to promote and protect those products that reflect the history, culture and values of the territory of Viterbo. This brand has been accepted and shared by the University of Tuscia, the Province of Viterbo, as well as all the associations and professional orders and it has become the symbol of the Tuscia territory. The support and enhancement of this brand will both indirectly and directly give value the Monti Cimini hazelnut.

Some possible actions for the direct promotion of Monti Cimini hazelnut may consist in gastronomic events, tastings and promotional campaigns, in order to show the product and its nutritional and organoleptic features. These initiatives allow to achieve specific goals, such as:

- Showing the distinctive characteristics of the product to the consumer;

- The activation of initiatives that affect directly the attitude of opinion makers, also affecting the supply choices;

- The implementation of activities in new markets where the Monti Cimini hazelnut is not known.

The communication activity should increase the consumer’s opinion towards the product and its goal is the creation of new commercial supply relationships and to reinforce of the existing ones. In order to promote the product and make it more recognizable on the market, particularly at a European level, it would be ideal to obtain the Protected Geographical Indication (PGI), mark of origin that is given by European Union to agricultural and food products whose quality, reputation or other characteristic depends on their geographical origin.
In a world of consumers increasingly more attentive to the logic of environmental and productive sustainability, obtaining this brand could have positive externalities for the entire sector. A last consideration, but certainly not least, regards the Expo 2015 in Milan, which has as its slogan "Feeding the Planet, Energy for Life".

During this event, which will start on the 1st May to end on the 31st of October, several issues related to food and sustainability will be faced: lots of products will represent the different countries, with a flywheel of visibility out of the ordinary. It could therefore be an important opportunity to give Monti Cimini hazelnut the visibility it deserves.

4. Conclusions

This paper has dealt with the Italian hazelnut sector, focusing on the Monti Cimini area, near Viterbo. Starting from considerations regarding the Italian production, also in comparison with the market leader, Turkey, the Monti Cimini area has been analysed from different points of view.

In the end, some considerations about the possibility to better exploit the current resources and to find new ways to make the Monti Cimini hazelnut renowned on the marketplace.

References


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