The Place of Wine Chain in Romanian Economy

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Key words: wine chain, Common Market Organisation, competitiveness, SWOT analyse

Abstract  
Market mechanisms implementation, Common Market Organisation respectively, implies restructuring each agro-food sector’s participants to the final output, in order to face internal and international competition. Among these sectors, wine chain is one of the best organised, because of production characteristics which means that vine is a long-term plantation and from its exploitation results wine that could be market for at least two decades.

The objective of this paper is the assessment of the wine chain’s efficiency in Romania. In pursuing this, it is analysed the wine chain from viticulture to trade, concluding the results in a SWOT analyse. The findings of the research show that wine chain in Romania has strengths: grapes producers integrate numerous activities, the production is specialised, Romania has large areas cultivated with grapes, there are many professional and inter professional organisms, governmental and nongovernmental organisms on the whole chain; weaknesses: traditional technologies, vineyards areas are divided into small fragments, wine making technology is very old, self-consumption of wine in small farms, lack of orientation to quality and hygiene, lack of marketing orientation; opportunities for developing wine sector in Romania: tradition and experience in wine making, favourable environment conditions, good results of negotiations with European Union, increasing of demand for good quality wines; threats: restrictive environmental factors, perishability of grape, low level of power of purchasing, lack of information regarding industry structure, its yields, prices etc., lack of opportunities regarding labour market in rural area, demand’s increasing for beer in some periods of the year, large penetration of imported wines on internal market.

INTRODUCTION

Short time after accession to the European Union, Romania faces big structural problems, having a lack of medium-sized farms’ sector and a chain of cooperatives upstream and downstream to agriculture. The accession to the European Union represents a big economic and social opportunity, and a reason for fundamental changes in micro and macro management of the food system, as well as in reconsidering the agriculture and rural areas in the process of sustainable development.

Wine chain is one of the most efficient agro-food chains in Romania, well organized, with specific regulations for and relationships between actors, and with professional and inter-professional organizations on the chain, that coordinate different activities. Wide assortments of grapes and large varieties of wine, high quality and specific compositions of wine, place our country among first ten world producers and exporters of wine.

MATERIAL AND METHODE

The wine chain is analysed in each stage: viticulture, wine industry, wine market, domestic and external trade with wine.

Viticulture
Viticulture accounts for 1.8% of the agricultural areas and 2.8% of the arable area. The area harvested, the yield and the total production of grapes are presented in the following table.

**Area harvested, yields and production of grapes, 2000-2006**

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Area harvested</td>
<td>1000 ha</td>
<td>247.5</td>
<td>244.4</td>
<td>242.9</td>
<td>238.3</td>
<td>191.8</td>
<td>190.2</td>
</tr>
<tr>
<td>Yield</td>
<td>Kg/ha</td>
<td>5,234</td>
<td>4,590</td>
<td>4,433</td>
<td>4,626</td>
<td>5,529</td>
<td>5,115</td>
</tr>
<tr>
<td>Total production of grapes</td>
<td>1000 tons</td>
<td>1295.3</td>
<td>1121.7</td>
<td>1076.7</td>
<td>1102.4</td>
<td>1060.5</td>
<td>978.8</td>
</tr>
</tbody>
</table>

Source: Ministry of Agriculture and Rural Development, Romania, 2007

The structure of vineyards raises problems to chain performance. Thus, of total area of 190,000 hectares, just 50% represent the grafted and native vineyards (Table no.2). Beginning with 1990, the areas cultivated with hybrids have increased with 46%. This structure represents an obstacle in European acquis implementation in wine sector, as one’s can notice in the paragraph Public policy for wine sector.

**Structure of areas cultivated with vineyards**

<table>
<thead>
<tr>
<th>Year</th>
<th>Vineyards area (1000 ha)</th>
<th>Total</th>
<th>Of which:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Grafted and native</td>
</tr>
<tr>
<td>1990</td>
<td>224</td>
<td>161</td>
<td>63</td>
</tr>
<tr>
<td>1995</td>
<td>249</td>
<td>146</td>
<td>103</td>
</tr>
<tr>
<td>2000</td>
<td>247</td>
<td>128</td>
<td>119</td>
</tr>
<tr>
<td>2006</td>
<td>190</td>
<td>98</td>
<td>92</td>
</tr>
</tbody>
</table>

Source: Ministry of Agriculture and Rural Development, Romania, 2007

Modern management concepts state that every production and distribution process is derived from the demand and needs of the consumers. It seems that consumer’ requirements for quality, quantity and availability dictate the design of the chain. But today consumers demand a new type of quality. They are concern and asking for quality throughout the whole chain, starting from the farm suppliers and ending to their own plate (Hanf and Kuhl, 2002). Therefore, the approaches of food system regard the products’ quality, in general, and the approaches for wine chain, the remove of the hybrid vineyards, in particular.

**Public policy for wine sector**

Wine chain implies particular approaches, because there are no governmental politics based on instruments and mechanisms like there are for other products. Still, this market benefited of some general measures of agriculture policy, like financial and credit policies, tariffs and subsidies for wine storage and distillation.
Romania, as a candidate country, was supposed to accomplish the acquis in wine sector by implementing the European Union measures regarding removal of hybrid vineyards in a period of 8 years beginning with 2007, and organizing the vineyards inventory and Vine Register until 2007.

Romania has requested a transition period of 4 years until December 31, 2010, for organizing the vineyards inventory and a register (Reg. 2392/86 and Reg. 649/87). The commissioners have considered this period too long, the Register could have been solved until 2007 (Mayhew, 2000). The second request was a transition period of 8 years until December 31, 2014, for the removal of hybrid vineyards (Reg. 1493/99) (Romanian Position Document, 2001). The results of the negotiations between European Union and Romania, in May 2004, show that the Commission has accepted an area of 30,000 hectares of hybrid vineyards to be replanted with grafted and native vineyards, in a transition period of 8 years.

Briefly, the mechanisms of wine market organization refer to the products quality and to the removal of the hybrid vineyards. The quality level makes the difference between products on the common market, being regulated by measures such as authorized laboratories for analyzes execution, quality certification and transactions with viticulture material, controlled origin denomination and geographical protected indication and so on (Boboc, 2005).

For the removal of hybrid vineyards, the farmers receive primes and licenses for vineyards plantation and re-plantation. In the Law no.244 there is stipulated that the hybrids areas from vineyards regions and out-side the villages should be removed until 2014, through programs initiated by the Ministry of Agriculture and Rural Development (Law 244/2002).

The farmers will receive yearly re-plantation rights, consisting in financial intern support, maximum 30% in 2007, and 35% in 2008, the financial support increasing with 10% yearly, to 75% in 2014. The re-plantation rights are received for those 30,000 hectares negotiated with the European Union.

Also, as it is mentioned in the law, Romanian farmers will benefit of supplementary plantation rights for recommended varieties on an area of 2830 hectares (1.5% of the total area of 188,000 cultivated with vine). These supplementary rights consist in financial support from the European Union, until 2014, which means 353.75 hectares yearly.

Wine industry

Grapes production is processed in the same unit, if there is a large company, or is delivered to processing industry. In Romania, there are over 1200 units in alcoholic beverages business, most of them small and medium enterprises with less than 50 employees. Alcoholic beverages industry has accounted for 13.6% of the agro-food system, in terms of supply (Association of Wine Producers and Exporters, 2003).

There are presented bellow some indicators of performance (National Institute of Statistic, Romania, 2005):
- turn over 1,989,888,888 USD
- exports 23,185,185 USD
- gross added value 459,074,074 USD
- investments 147,777,777 USD
- turn over per employee 59,229 USD/person

The wine production is appreciatively 5-6 million hectolitres per year, depending on weather conditions.

Wine market

In this stage of the chain, we analyse the demand, supply, and price for wine.

The level of wine consumption in Romania is 22 litres/person/year, lower than the level of consumption in the European Union, which is 33 litres/person/year, but much
higher than the level of consumption in the United States of America, which is 7.33 litres/person/year (FAOSTAT, 2004 – last year for food consumption’s statistics).

**Wine and wine products’ consumption, 1990-2004 (litres/capita)**

*Table 3*

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Level of consumption</td>
<td>18.5</td>
<td>25.3</td>
<td>23.2</td>
<td>25.5</td>
<td>27</td>
<td>23.1</td>
<td>22</td>
</tr>
</tbody>
</table>


The wine consumption has increased from 1990 to 1997. After 1997, until present, the level of consumption has stabilized around 20 litres/person/year.

In Romania, wine supply on the market is varied in terms of assortment. There are over 400 types of wine, depending on qualitative characteristics, composition, and technology used, classified as follows: 11 types of table wines, 42 types of superior quality wines, 118 types of superior quality wines with origin denomination, 231 types of superior quality wines with origin denomination and stages of quality (Association of Wine Producers and Exporters, 2003).

**Structure of wine production in Romania, 2004 (thousand hectolitres)**

*Table 4*

<table>
<thead>
<tr>
<th>Specification</th>
<th>Total</th>
<th>Of which:</th>
<th>Noble wine</th>
<th>Hybrid wine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>noble</td>
<td>hybrid</td>
<td>White</td>
</tr>
<tr>
<td>Wine production</td>
<td>6166</td>
<td>3561</td>
<td>2605</td>
<td>2384</td>
</tr>
</tbody>
</table>

The structure of wine varieties is much diversified. Production of noble wines is larger than that of hybrids (Table no.4). In the noble wines category, white wines account for more than 50%, but in the hybrid category, red wines account for more than a half.

Wine production is supplemented with imports in order to achieve the total supply necessary to satisfy the internal consumption. But the quantities imported are too low in the whole supply, and they will be mentioned in the paragraph *External trade*.

The *prices for wine* vary depending on assortments, type, season, geographical area of provenience, type of store, brand, and so on. There is a wide range of assortments of Romanian wines, from domestic ones to foreign ones. The average shelf prices for wine vary between 3-10 dollars/bottle.

**Wine trade. Domestic and external trade**

There have been identified seven distinguish types of channels representing opportunities for producers to put their products on the market as well (Manole and Ion, 2006).

Circuits no. 1 and 2 – large companies of wine and grapes producers → consumers / export – it is characteristic for large companies that integrate the functions of wine making and distribution. The production has two possible destinations: domestic market (circuit no. 1) and external market (circuit no. 2).

Circuit no. 3 – large companies of wine and grapes producers → engross wine selling → consumers / export – it is used when the grapes producers integrate just the
function of wine making and sell the wine to engross resellers, the wine having two possible destinations: internal market and external market.

Circuit no. 4 — small grapes producers → centers of grapes’ collecting → wine making companies → engross wine selling → consumers — it is used when small grapes producers do not process the grapes production themselves, this one being sold to centres of grapes’ collecting.

These centres are equipped with necessary logistics, having the role of grapes’ collecting, transport and storage from numerous and small grapes producers, characterized by low economic power. The centres deliver forward the grapes production to the wine making companies who will process it and sell the wine forward to resellers. Previous studies show that the integrator in this case is the wine making company (Manole and others 2005).

Circuit no. 5 – small grapes producers → wine making cooperatives → engross wine selling → consumers — it is hardly met in economical practice. This circuit should be revealed in Romanian agricultural structures’ context, in which the dimensions of farms are very low and the farmers have reduced economical power.

Circuit no. 6 – small grapes producers → wine making cooperatives → consumers – it is similar to circuit no. 5, having in particular wine selling direct to final consumer.

Circuits no. 7 and 8 – small grapes producers → consumers / self-consumption – consist in ultra-short channels. In this case, the grapes producers integrate numerous functions: grapes’ and wine’s transportation, storage, processing and selling. They are the integrator of the chain. Artisanal wine making takes place in households, the wine production having two possible destinations: local market (circuit no. 7) and self-consumption (circuit no. 8).

The circuit producer — consumer is specific for all agro-food chains in Romania. In this type of circuit, the physical functions of distribution (storage, packaging, transport, and selling) are done in unsuitable condition of hygiene and quality. This type of commerce is forbidden in the European Union countries and it will disappear when Romania will join the community. Taking into account the experience gained by the countries where the agro-food system is competitive, it is necessary to promote those channels and circuits that favour and creates associative and integrative structures between different partners of the chain and that assure the highest advantages (Hueth, B., Marcoul, Ph., 2003).

**External trade.** Romania’s balance trade for wine is positive (Table no.5). Romania exports over 7.5% of the whole production of wine. The main export destinations are Republic of Moldova, Great Britain, Germany, Japan, and United States of America.

### External trade with wine, 2000-2005

<table>
<thead>
<tr>
<th>Specification</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports (million USD)</td>
<td>17</td>
<td>19</td>
<td>23</td>
<td>24</td>
<td>26</td>
<td>22.3</td>
</tr>
<tr>
<td>Imports (million USD)</td>
<td>1.23</td>
<td>1.33</td>
<td>1.75</td>
<td>2.26</td>
<td>4.19</td>
<td>9.1</td>
</tr>
<tr>
<td>Difference (million USD), export-import</td>
<td>15.77</td>
<td>17.67</td>
<td>21.25</td>
<td>21.74</td>
<td>21.81</td>
<td>13.2</td>
</tr>
</tbody>
</table>


The imports coming from France, Italy, Spain and California are usually designated to satisfy the needs of consumers with high levels of income. Those coming from new world countries Australia, New Zealand, Chile and South Africa as well, make strong competition to internal supply of wines for the same assortments. Still, Romania has domestic varieties very much appreciated by the consumers. Those varieties (Francusa, Feteasca, Babeasca, Tamaioasa) have no external competitions and are exported successfully on the world market.
RESULTS

SWOT analysis

Analyzing the data above, there are some strengths that should be underline: grapes producers integrate numerous functions: grapes production, wine making, storage, transport and trade (wine sector is characterized by high level of specialization and division into specific regions); in agricultural farms specialized on grapes production there are cultivated large areas of vineyards and there are developed modern technology; the grapes meant wine making are cultivated on large areas, especially in associative organizations, companies and in some families’ farms from different areas of grapes production; in agricultural stage, inputs’ costs are low, especially labour costs; there are numerous professional and inter professional organisms, governmental and nongovernmental organisms on the whole chain.

On the wine chain there are some weaknesses worth to be remembered: the technologies used in the small farms are traditional, based on labour work and animal energy; vineyards areas are divided into small fragments, which determine difficulties in supplying the wine centres with grapes; the structure of the areas cultivated with vineyards suffered deterioration in the last few years, in those that concern the share of native and grafted vineyards; grapes’ production implies high level of expenses, especially those with phyto-sanitary actions, resulting a high level of expenses by hectare; wine making technology is very old (there are demanded measures for technologies’ rebuilding to improve the wine’s quality); the wine produced in small families’ farms is used for self-consumption, as a priority, thus the quantities delivered for processing are very low; lack of orientation to quality and hygiene; lack of marketing orientation, in the agricultural stage of the chain, argued by the age of the owners and by the high level of self-consumption; lack of information regarding market’s situation and evolution; and distribution system fragmentation.

The opportunities for wine sector development are very large in Romania. There may be mentioned: tradition and experience in wine making; environment conditions (climate and soil) are very favourable for grapes production coming from native and grafted varieties; vine culture reclaims areas unsuitable for other cultured plants; wine chain is characterized by high level of vertical integration, for both large and small units; for wine sector, Romania negotiated with European Union an area of 30,000 hectares to be replanted with grafted and native vineyards in a period of 8 years (for replanting and abandoning, there will be received primes); investments that could be made in vineyards that produce high quality wines; increasing of demand for good quality wines as a result of consumers’ education regarding wine consumption.

Threats for wine chain consist in excessive humidity, frosts, floods and droughts and other restrictive environmental factors that determine quantitative and qualitative losses of production; perishability of grape, which implies taking actions regarding transportation, storage and processing; low level of power purchasing; lack of information regarding industry structure, its yields, prices etc.; lack of opportunities regarding labour market in rural area brakes; demand’s increasing for beer in some periods of the year determines wine selling reduction; large penetration of imported wines on internal market. If the wine quality and its productivity are maintained on a low level, new „actors” of the world wine market: Australia, New Zeeland, South Africa, Chile, penetrate Romanian wine market, which implies a strong competition (Manole, V., Ion, Raluca, 2006).

CONCLUSIONS AND RECOMMENDATIONS

Wine chain in Romania has numerous strengths: grapes producers integrate numerous activities, the production is specialised, Romania has large areas cultivated with grapes, there are many professional and inter professional organisms, governmental and
nongovernmental organisms on the whole chain. However, besides these strengths, it has numerous weaknesses: traditional technologies, vineyards areas are divided into small fragments, wine making technology is very old, self-consumption of wine in small farms, lack of orientation to quality and hygiene, and lack of marketing orientation.

There have been identified some opportunities for developing wine sector in Romania: tradition and experience in wine making, favourable environment conditions, good results of negotiations with European Union, increasing of demand for good quality wines. However, there are some threats in developing the wine chain: restrictive environmental factors, perishability of grape, low level of power of purchasing, lack of information regarding industry structure, its yields, prices etc., lack of opportunities regarding labour market in rural area, demand’s increasing for beer in some periods of the year, large penetration of imported wines on internal market.

The Common Market Organization for agricultural products in Romania could be implemented by a marketing strategy focused on quality. This objective could be achieved by providing financial support for the farmers, by setting up cooperatives that will provide appropriated services for producers, especially those services regarding logistic system and promotional activities. A public organization that will facilitate access to export market is needed. Competitive structures, high quality and a good image of national products will lead Romanian agro-food products to success.

BIBLIOGRAFY


17. (2003), *Association of Wine Producers and Exporters of Romania, Present situation and tendencies in Romanian wine sector, In vino veritas – Informative brochure, no.2*.

