

## **Sales Growth Following the Quality Improvement of the Wine and Wine Products**

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**Abstract.** The increasing competition in any area of activity makes the level of quality as one of the effective tools that determine the worldwide competitiveness of products. Motivation of the activity of any enterprise, the quality of products is necessary to build and maintain a good reputation, becoming an important factor in gaining of new markets. The wine industry of Moldova Republic is at a crossroads. The interdiction of Moldavian wines import in Russia since 2013 was balanced by opening the European Union market for Moldavian wines, plus the steps taken by Moldova to join the EU. To withstand the challenges, the wine industry of Moldova has to pursue long-term recovery and development. For that, all area producers have to change their thinking and action manner, developing and implementing plans that rely on their own forces. Complex analysis underlying such plans has to consider bot the cultivation of the vine and the wine production. Thus, they have to pursue the use of all agricultural lands that are suitable for the cultivation of vines to produce wines with denomination of origin and wines with designation of origin (PSR wines – wines produced in specified regions), increasing the share of these wines in total wine production. Also, the existing techniques of grape processing and winemaking, the efficient use of equipment and the insurance of proper hygiene of equipment have to be analysed to improve the quality of wine. It is imperative to implement appropriate quality systems in wine making enterprises. The application of these measures will ensure the enhancement of wine and other wine products quality, the improvement of inland wine production image and the export promotions.

**Key words:** quality, competitiveness, Quality Management System, wine production, viticulture, winemaking industry, implementation, sales, export, standard, promoting, certification, development.

### **1. Introduction**

The wine industry is a main branch of the Republic of Moldova economy, with approximately 20-25 % of industrial production and a share of about 30 % in total exports of the country. However, the Moldavian wine industry faces more problems, one of which is the outdated material and technical basis of production, especially in winemaking. To revive the vine and wine industry huge investments are required in the coming years. Two major obstacles stand in front of the commercial success of Moldavian wines, namely the quality and the style.

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Moldavian winemakers' strategy should be "high and stable quality at a reasonable price". These reasons and the reality that only 8-10 % of the own wine production is usually sold in the country enhance the importance of the research related to the increase of wine sales following the improvement of the quality of wine.

## **2. Competitiveness of the Republic of Moldova Wine Products**

The wine industry is traditionally considered as a basic and strategic branch of the Moldavian economy. Despite of multiple shocks suffered in recent years, it remains one of the most important sectors of the Moldavian economy due to either its share in the structure of industry and of economy, generally speaking, its repercussions on other sectors, or its numerous social implications, primarily related to the large number of employees involved in the process (Tornea, 2010).

According to the official webpage of vine and wine ([www.vinmoldova.md](http://www.vinmoldova.md)), the Republic of Moldova is situated on the eighth rank among the non-UE countries on the UE market of wines in the period 2010-2012. Moldova follows, for instance New Zealand, Argentina, and Macedonia, leaving behind Serbia, Morocco and Chile. Sales increased from 19 million US \$ in 2010 to 21 million US \$ in 2012, as global statistics of wine market show.

According to the Ministry of Economy ([www.mec.gov.md](http://www.mec.gov.md)), the Republic of Moldova exported to EU, without custom duties, around 162,070 hectolitres of wine in 2012, which is 90.04 % of the annual rate of 180,000 hl offered by the European Union. The most important export destinations of Moldavian winemakers were the Czech Republic, Germany, Romania, Lithuania, Poland and Slovakia. Based on Autonomous Trade Preferences granted by the EU for Republic of Moldova, 196,700 hectolitres of wine were exported in 2013. The Annual Report of the Ministry of Economy shows that this meant 82 % of the granted value. Starting from the 1<sup>st</sup> of January 2014, EU has liberalised total imports of Moldavian wines.

The production of wine products in the Republic of Moldova is dominated by natural wines from grapes, situation that has remained almost constant since 2005 year (Table 1). Production of fortified wines ranks 2 as share, although it significantly reduced compared to the last year before the decline of the sector by closure of their main markets, Russia, in March 2006 - November 2007. Conversely, the share of distilled from wines and sparkling wines slightly increased in total wine production.

**Table 1. Volume and structure of wine production in the period of 2005-2012**

Year	2005	2006	2007	2008	2009	2010	2011	2012
Wine products	Thousands dal.							
Distilled from wine	478.0	224.0	202.0	282.0	178.0	177.0	240.0	309.0
Sparkling wines	1,051.0	402.0	541.0	572.0	500.0	556.0	686.0	654.0
Natural wines from grapes	36,300.0	19,300.0	12,300.0	15,400.0	12,500.0	12,700.0	12,500.0	14,800.0
Fortified wines (Porto, Madeira, Sherry, Tokay etc.)	3,237.9	1,336.9	752.6	921.8	692.5	1,051.1	1,111.6	528.2
Total	41,066.9	21,262.9	13,795.6	17,175.8	16,570.5	14,484.1	14,537.6	16,291.2

Source: National Bureau of Statistics of the Republic of Moldova ([www.statistica.md](http://www.statistica.md))

According to the researches of the Institute for Development and Social Initiatives (IDSI) „The Future” (Tornea, 2010), about 95 % of all wine production in Republic of Moldova are exported. Demi-sweet wines and dessert wines (about 75 %) prevail in the wine structure, while the remaining 25 % is the dry wines, matured and of collection. This structure is determined by consumer preferences from the main selling markets: Russia and Community of Independent States (CIS). Accordingly, majority of Moldovan wines are positioned on export markets on the lower and middle price segment, being perceived as cheap wines, for masses consumption.

However, only 8-10 % of autochthonous wine production is sold in the country. For this reason, research and investigations to determine the directions of increasing sales of wine products as a result of their quality improvement is particularly significant. Investigations in this field demonstrate that local wine production for export is not at a high quality as could and should be.

### **3. Determinant Factors of Quality Improvement of the Moldavian Wine Products**

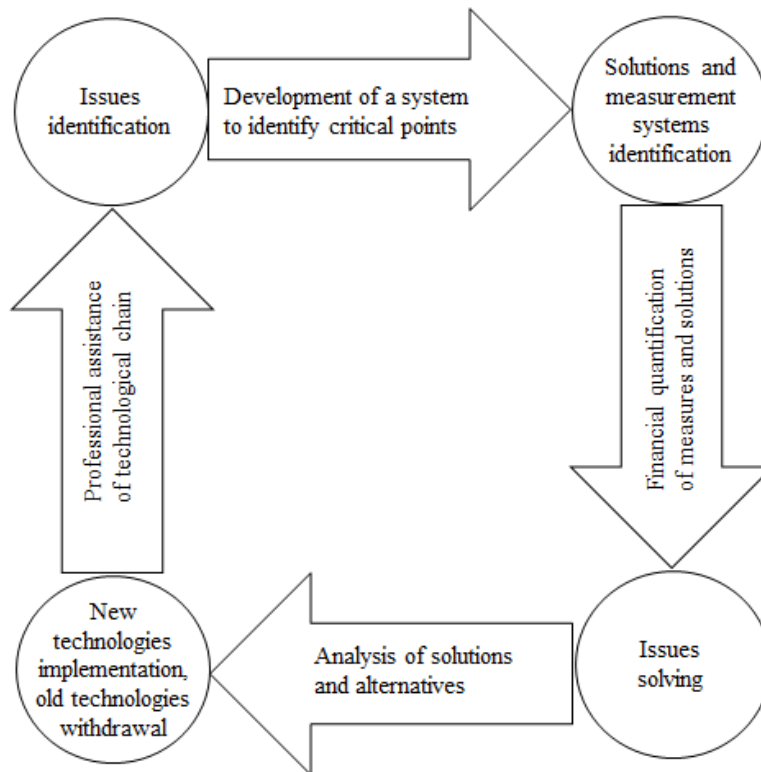
Globalization and trade liberalization have led to a new type of competition during the last 15 years. While consumption of wine production increased, the export of European countries such as France and Italy declined. On the contrary, exports from Australia, Chile, Argentina and the United States have greatly increased and consolidated. This “new redivision” contributed to change planning and achievement strategy of production on wine market, accompanied by differences in pricing, in branch structure, as well as in manufacturing technologies (Stiroi, 2010).

Competitiveness of wine products depends on their quality. According to a study of improvement the quality of the agro-food products (Istudor et al., 2006), the measures to be taken to increase the quality of food products are:

- legislative improvements;
- strengthening the quality control and marketing of agricultural and food products on the market;
- systematic provision of information and training programs for farmers and food industry specialists;
- introduction of quality standards for food and beverages (designations of origin, geographical indications and certificates of specific characteristics);
- introduction of quality standards for spirits beverages;
- protection of agro-food products having geographic indication.

The competitiveness through quality began to be used as a dimension of competitiveness after considerable diversification of production along with accelerating of technical and scientific progress, which generated a considerable increase of innovations and of the complexity and technicality of the products. In order to compete in this way, the quality must be regarded firstly as an opportunity to attract consumers and not as a way to avoid the problems or to reduce the costs. Quality should be considered as a significant and competitive instrument (Belostecinic, 2006).

The researches of Leonid Babii (2006) consider the assessment of the quality of wine products as a determinant element of the competitiveness in wine industry of the Republic of Moldova. The quality of wine products depends on productive infrastructure (PI), technical assistance and technological industry, whose absence would lead to the considerable reduction of the product quality and sales. The quality of wine products requires programming, which is a potential source to maximize the profit in businesses of the wine sector. (Babii, 2006).



**Figure 1. Logical diagram for detecting and solving problems concerning the quality of wine**

*Source: (Babii, 2006)*

By developing this diagram of detecting and solving problems related to the quality of wine product, Babii (2006) shows how fight with competition can be gained either through lower prices or by increasing the quality. The competitive advantage obtained through the quality of the wine becomes significant if the export is done in developed countries where the consumer has a certain culture of alcohol consumption. The development of communications, the increase of healthcare culture of the society determine the rapid evolution of tastes, preferences, and the “fashion” of consumption. The prestige of consumption is worth to be added to all these statements. Consumers become more exigent to the quality of wine products and they require correct and complete information in order to choose the right products based on their own criteria. According to Babii’s opinion (2006), the quality is a vector whose components are the various characteristics and customer needs. The quality of wine product is determined by the quality of a number of components. In any field, the quality of finished product should be more important than to obtain at once profit. The quality of wine products must be directed to the consumer and not to the manufacturer. However, to obtain quality wine products,

economical, technical, legal (legal responsibility toward the product), psychological, ergonomic, and professional efforts are required.

The most efficient instrument that can handle the competitiveness of local wine production is the correlation price/quality, and as an efficient mechanism to optimize this report, the *Quality Management System* (QMS) can be used.

According to this system, Frau (2013) considers the company as an object of analysis that has planned and implemented the processes of monitoring, measurement, analysis and improvements which are necessary to confirm the product compliance, ensure conformity of the quality management system and the continuous increase of effectiveness of this system.

At the moment, in the Republic of Moldova core focus is on certification of QMC in secondary winemaking enterprises according to ISO 9001:2000 standard. This activity neglects the need to certify primary winemaking companies, agricultural companies which cultivate vineyard and commercial companies which distribute the wine production. ISO 9001:2000 standard focuses on an organisation process management approach and a more logical structure, customer orientation and evaluation of its satisfaction, as well as commitment of management for continuous quality improvement. The eight principles of quality management are:

- a) customer focus organisation;
- b) leadership;
- c) involvement of people;
- d) process approach;
- e) system approach to management;
- f) continual improvement;
- g) factual approach to decision making;
- h) mutual beneficial suppliers relationships.

These eight principles of quality management form the basis of quality management standards in the ISO 9000 family. A QMS system can provide a framework for the continuous improvement of quality to enhance the probability of increasing the satisfaction of client and other interested parties. This system gives customers confidence that the organization is able to provide products that consistently meet requirements.

Examining the design principles of the QMS based on ISO 9001:2000 standard, Turcan (2006) determined the importance and necessity of implementing all of the principles. The author believes that the practical value of each principle is undoubtedly important, and constitutes the mainstay of the implementation of QMS. Neglecting of at least one of the principles of QMS will not allow the implementation and operation in the company of a quality control system efficient and sustainable. One of the main principles of the Quality Management System to which is given increasing attention at the present is the continual improvement.

Certification of the production is a necessary tool for promotion of export. Being conceived as a modality of attesting the product conformity, the quality system of the company with a predetermined level, certification is an attestation accomplished by a neutral organization which is independent of the manufacturer and the beneficiary called certification organization. (Turcan, 2006).

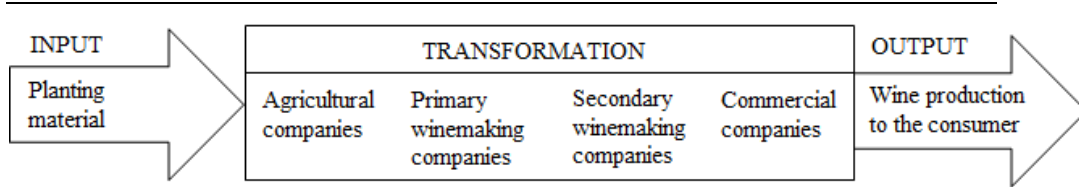
Smolevscaia (2008) states that in the Republic of Moldova several accredited organizations with the right to certify businesses exist such as Certification body of management system which belongs to the National Institute of Standardisation and Metrology and Centre for Standardisation and Metrology of Balti. Some international organisations such German company TUV, Belgian company SGS, Loyd, Veritas are also active in Moldova.

However, according with Oprunenco's opinion (2009) in one of his works (The wine sector: survived another crisis?) current certification procedure suffers from the following deficiencies:

- it does not provide a quality certification accepted on other markets either CIS or EU;
- it is not transparent and at the same time, it provides more space for lobbyism and corruption;
- the state has a monopoly on it, which is contrary to the principles of free and fair competition;
- it is procedurally difficult;
- the destination of collecting payments from companies is not clear.

It is recommended to ensure transparency and competition in this area, by removing barriers to the emergence of private organisations.

Simultaneously, the QMS developed and implemented in companies according to ISO 9001:2000 standard are based on management implementation through processes (Turcan, 2006). Any measure that requires input - transformation - output serves as process in QMS. Integrated QMS is the basis of quality assurance in the vine and wine sector. However, the quality of raw material is still the mainstay of quality assurance, even if QMS implemented in the wine companies contributes directly to the growth and continuous improvement of the production quality. Hence the necessity to trace the specific process of wine production from cultivation of vines to marketing stage of products is obvious. The whole production chain can be approached as an integrated process with its own inputs and outputs (Figure 2).



**Figure 2. General scheme of the integrated process for the production of wines**

*Source: (Turcan, 2006)*

According to the diagram presented in Figure 2, the inputs of the process of wine production is the planting material (vines grafted or vines on their own roots), which are planted and cultivated, providing the grape harvest, and the outputs of the integrated process is the production of wine to the final consumer.

Because vine is a culture that remains in operation for decades, the selection of vineyard assortment structure must be the result of an anticipative study which considers the entire set of socio-economic factors at worldwide level, in parallel with the overall strategy of the promotion of quality wines, accepted relatively uniform by all the major wine producers in the world. Therefore, the International Organization of Vine and Wine was founded ([www.oiv.int](http://www.oiv.int)). This organisation promotes uniform product policies that are able to create the premises for maintenance and, eventually, the enlargement of segment represented by wine consumers.

The achievement of wine production and export has to consider, as well, the classical varieties of white and red vine accepted by the consumer as share in culture, and the preservation of those autochthonous varieties with a real quality potential, which are connected to worldwide consumer trends.

Specialised studies have demonstrated the existence in red wines of some high value compounds with reducing character. These compounds act against cholesterol accumulation, therefore are natural drugs, excellent in preventing cardiovascular disease. These studies are supported by the fact that the incidence of cardiovascular diseases is very low among French people which are good consumers of red wine. The publication of these studies has created a strong focus to the production and consumption of red wines in America, in the early '90s. As a consequence, the studies concerning colour and tannin extraction technology from red grapes were extended and combined with modern technologies of red wine maturation and aging in small oak barrels. The economic aspect is considered through faster maturation and "rounding" of fresh, acidic, tannic and astringent red wines in oak barrels of 227 L using two to three cycles of aging of approx. 6-8 months. Therefore, compared to a classical maturation of two to three years in large oak vessels, maturation of red wine in small barrels leads to a reduction of the time until sale of up to eight months. The knowledge of these consumption trends requires the revision of red grape varieties recommended to be cultivated in



Moldavia Republic and which are able to produce red wines with good quality in a shorter period of time. Thus, cultivation of several varieties such as *Cabernet Sauvignon*, *Merlot*, *Pinot noir*, *Malbec*, *Gamay Freau* is expanding.

Regarding the white grape varieties, and considering the global trend of the quality white vine structure required for consumption, varieties that should be considered are: *Chardonnay*, *Sauvignon blanc*, *Traminer*, *Muscat* group, *Rhine Riesling* and *Aligoté*. White varieties should be consumed starting with the first year, from one harvest to another, because they are appreciated by fruitiness, freshness and flavour of each variety. White wines quality is not improved by aging so that producers have to sell their production within the first year of its occurrence (Istudor et al., 2006).

According to some research on the problems of the wine sector (Bulmaga, 2008), 185 companies operates in the wine industry sector of the Republic of Moldova, of which several wineries have high production and are equipped with modern equipment for grapes processing, must fermentation, wine clarification and wine pumping into stainless steel tanks or oak barrels for maturation. Over 25 wineries have retooled processing equipment with new performant lines of the latest achievements of the European Union. Over 50 modern bottling lines of still and sparkling wines, and spirits (distilled from wine, brandy, vodka, etc.) run alongside the country, creating businesses with integrated production cycle from vines planting to the export of finished products of high quality and competitiveness.

A Wine Sector Restructuring Programme was also designed in the Republic of Moldova ([www.businessportal.md](http://www.businessportal.md)) by the Moldavian Government and the European Investment Bank in order to solve structural vulnerabilities of wine industry of the Republic of Moldova. The objectives of this program are:

- restructuring of wine sector and related industries and promoting the production of PSR wines with protected designation of origin (PDO) and protected geographical indications (PGI);
- improving the quality of the wine produced in the Republic of Moldova from the quality of vineyards to the final packaging and product delivery.
- diversification of markets by ensuring the authenticity of wines produced.

According to INFOTAG agency ([www.infotag.md](http://www.infotag.md)), Victor Bostan, the president of the Moldavian Wine Guild, considers that Moldavian winemakers could provide to EU quality wines. He also stated that the market is 80% full with cheap wine (2-3 Euro per bottle) in all countries. At present, the Republic of Moldova is situated in the niche of cheap table wines on Poland Czech Republic, Slovakia, Germany (in the section of "Russian" stores) and Baltic countries markets. For instance in Poland, Moldavian wines are alongside with those from France, Italy, USA and other countries, although the logistics and distribution are much more costly for

Moldavian producers than for those from European companies; however there Moldavian wines are more competitive.

#### 4. Conclusions

In order to develop long-term autochthonous wine industry and to increase the volume of exports by conquering new market segments it is necessary to produce good wine categories, with high quality, considering the experience of winemakers from different countries. Producers have to invest in technology, in noble vine, in irrigation methods and treatment of noble vine. They have also make efforts to visit foreign vineyards, wine cellars or integrated companies to learn from their experience and understand their work. Moldavian wine sector has all the conditions for effective operation, however it requires implementation of systems and models to ensure a high quality for wine and wine products, consumer orientation of all activities of the wine sector, increase the volume traded to obtain maximum income, contributing to sustainable economic development of the republic as a whole.

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