

Secteur du vin

Pays : Arménie

SOURCE : VERTUMNE INTERNATIONAL & ASSOCIÉS

La reproduction totale ou partielle des informations contenues dans le présent document est autorisée, sous réserve des mentions suivantes :“Source: *“Analysis of the Armenian Wine Industry – Strength and Weaknesses – Rehabilitation strategy – Opportunities for further developments” – VERTUMNE International & Associés – February 2001*”.

Total or partial reproduction of this document is authorized under the express condition to indicate : *“Source: Analysis of the Armenian Wine Industry – Strength and Weaknesses – Rehabilitation strategy – Opportunities for further developments” – VERTUMNE International & Associés – February 2001.*

***ANALYSIS OF THE ARMENIAN WINE INDUSTRY
STRENGTH AND WEAKNESSES
—
REHABILITATION STRATEGY
OPPORTUNITIES FOR FURTHER DEVELOPMENTS

FEBRUARY 2001***

The present document is a brief summary of the analysis

I – CURRENT SITUATION OF THE VINE AND WINE SECTOR IN ARMENIA

1. Major Viticulture and Wine Zones

1.1. Area under vine in Armenia

The Republic of Armenia is divided into 11 administrative districts, called Marz.

The vineyard for table and industrial grapes is located in several Marzs that can be regrouped into three main zones (*Cf Map in annex I*):

Ararat Zone (includes Ararat, Armavir and Aragatzotn Marzs)

Daralaghias Zone (includes Vayots Dzor and Syunik Marzs)

Northeast Zone (includes Lori and Tavush Marzs)

Additional production in other zones is of minor importance.

In 1998, the total area under vine (comprising both table and wine grape production) was 15,800 ha. In 1999, according to the Ministry of Statistics, the surface under vine in Armenia has been stable to 15,800 ha. For 2000, this area is estimated to be nearly 14,000 ha.

In 1981, the Armenian vineyard represented 35,473 ha. This means that the surface area dedicated to wine grape production decreased by 55.5% over a 17-year period. Most of the decrease took place after 1990, followed by an increase after the events of 1997.

This decline in surface area planted with wine grapes has affected all the Marzs, but was of a higher magnitude in the major ones: Armavir, Ararat and Argatzor:

This has resulted in an increase in the relative importance of the Ararat Zone in the national surface area dedicated to grape production: with 11,879 ha in 1998, this zone represented more than 81% of the country's total vineyard. In 1981, this zone represented 70.5% of the total Armenian vineyard with 24,285 ha under vine.

The second largest grape growing zone is the northeast part of the country with 1,971 ha under vine in 1998, compared with 4,075 ha in 1981 (representing a 48.4% drop).

The third largest zone is Daralaghias with 727 ha under vine in 1998, compared with 1,410 ha in 1981.

1.2. Vineyard in production

In 2000, based on official figures, discussions with private industries and field visits to vineyards, we estimate that : between 300 and 400 ha of vines are newly planted and do not yet produce any grapes, 25 to 30% of the existing area under vine is abandoned.

Some additional vines were destroyed and pulled out by farmers between 1999 and 2000.

The result is an estimated total vineyard surface area in production of between 9,000 and 11,000 ha for 2000.

Before 1990, the total surface area in production was around 29,000 ha. After 1990, this surface area went down to around 24,000 ha, then to 25,100 ha in 1994. After 1997, the surface area in production experienced a further decline. For 2000, the surface area in production

accounts for less than 36% the surface area of 1990.

All the marzes have experienced a similar decline. Today, the Ararat Zone represents 80% of the total vineyard in production in the country.

1.3. Production of grapes

In 1998, Armenia produced 105,960 tons of grapes. This number should be compared with 361,013 tons produced in 1981: during a 17-year period, grape production decreased by more than 70%.¹

In 1991, grape production was already down to 196,172 tons, which means that most of the decline took place immediately after the independence of Armenia from Russia.

In 1999, due to better climatic conditions, the quantity of grapes officially registered by the Ministry of Statistic was 114,800 tons, representing an increase of 8.34% from 1998.

For the year 2000, official data are not yet available, but it can be anticipated that due to the severe drought that affected the Caucasus area during summer, quantity produced decreased. An estimation of 100,000 tons seems reasonable.

Ararat is the major grape producing Marz, representing 26% of the national surface under vine in production and producing 41% of the national grape production in 1998. Armavir accounts for 37.5% of the national grape production and Aragatzotn around 9%. The other marzes contribute a small portion to the national grape production. Since the beginning of the 80's, the marzes of Kotayk and Tavush

have seen their grape production activity all but disappear.

1.4. Yield of grape production

Between 1981 and 1999, the yield of grape production fluctuated heavily from a minimum of 6.1 tons/ha in 1997, to a maximum of 12.51 tons/ha in 1981.

This heavy fluctuation of grape yield production is directly related to: the difficult economic situation faced by Armenia during the last ten years: resulting from the events of 1990 in addition to the blockade enforced in 1997; the difficult climatic conditions prevailing in Armenia with low levels of rainfall in addition to winter temperatures as low as -20°C and summer temperatures as high as +40°C.

A sharp decrease in yield for the year 2000 can be anticipated due to the effect of a severe drought. A yield of 7 ton per ha is estimated in accordance with 100,000 tons produced on 14,000 ha.

1.5. Grapes processed

In 1999, 114,900 tons of grapes were produced and the official figure for quantity delivered to and processed by wine or brandy factories is 50,300 tons (representing 43.77%). This percentage was even lower in 1995, where only 12.3% of the grapes were processed. In 2000, an estimated 100,000 tons of grapes were produced, and the official data fluctuate between 50,700 and 52,000 tons processed.

2. Vine varieties planted in Armenia

Armenia has numerous grape varieties planted. Most of them are *Vitis vinifera*, but some hybrids, produced by combining a *Vitis vinifera* variety with that of another *Vitis* species (mostly *Vitis amurensis*) are also widespread.

¹ These quantities include table grapes as well as grapes produced by individuals, and processed grapes used for brandy and sparkling wine..

Vertumne

Etude de marché

Due to a lack of reliable records, it is not possible to know which clone is planted for each variety.

During Soviet time, the Rkatsiteli variety was dominant, representing almost 30% of the total vineyard (worldwide, an estimated 267,000 ha were planted with this variety in 1998, with about 248,000 ha planted in former Soviet countries). In 1995, the surface area planted with this variety was estimated at around 27%. Today, due to the collapse of the Russian market and the poor quality wine produced with this variety, a lot of Rkatsiteli has been ripped out, and is now estimated to represent only 7 to 8% of the total vineyard in Armenia.

Currently, the dominant wine grape variety is considered to be Mashali, a white grape variety mostly used for the production of brandy.

The other dominant varieties are: Voskeat and Garan Dmak for white wines, and Areni and Kahet for reds.

** Vine management*

It can be estimated that around 80% of Armenian wine grape vines are between 15 and 30 years old. Approximately 13% are older than 30 years, and 7% are younger than 15 years.

It should be emphasized that due to extreme weather conditions (winter temperatures as low as -22°C and summer temperatures as high as $+42^{\circ}\text{C}$), plus poor canopy management, the life expectancy of vines in Armenia is around 40 years. This means that in 10 years, around 80% of the Armenian vineyard will have to be replanted if grape production is to remain at today's level.

Density of vine plantation is similar in Armenia as most of the CIS countries :

2,666 vines per ha, with 2.5 m between rows and 1.5 m between vines. Vine training is based on Double Guyot, with 3 to 4 wires and cement poles every ten meters. (Cf Annexes Photos)

** Cost of plantation*

Cost of plantation of 1 ha, plus maintenance from year 2 to 4 (without irrigation) and harvesting during the years 2, 3 and 4 is around 3,600,000 drams, or 8,000 US\$.

Cost of planting and irrigating 1 hectare is around 5,000 – 6,000 US\$.

Vineyards are usually irrigated 6-7 times per year (using 600 cubic meters per ha each time) and cost 40 dollars per hectare per year. This is based on a water cost of 6 drams per cubic meter, and total quantity of water used per ha per year of 3,600 to 4,200 cubic meters.

In Armenia, due to high temperatures during summer and very low rainfall from April to October, irrigation is necessary in almost all grape-producing areas. Before 1990, the irrigation scheme was well maintained and provided adequate quantities of water to all main vineyard areas. Today, almost 60% of the irrigation systems have been destroyed or abandoned. Maintenance on those in operation is very low, as many farmers cannot afford to pay for water services. It can be estimated that vineyards are irrigated two times less than needed.

Fungicides and insecticides (mostly Baylethon, Bulldog, Euparen, Antracole, Arrivo, Cinèb, Cinbush, Cuprozan, Chlorophos, Decis, Isophen, Phozolon, Pléctan, Karaté, Karatan, Sulfate) are used against powdery mildew, downy mildew, anthracnose, spiders, botrytis. However, due to the price of the reliable chemicals and the large market of poor quality counterfeited pesticides, these diseases are widespread. (Cf Annex Photos). Ammonia nitrogen (selitra) is the main fertilizer used.

Vertumne

Etude de marché

** Nursery sector*

Vine rootlings used to be produced on three State farms (Vanand, Echniadzin, Norabats) and at the Scientific Research Center of Viticulture, Fruit-growing and Wine making (in Armavir Station and Idjevan Station).

The total surface area for vine collection and propagation by State farms was around 22 ha. This surface area is around 6 ha for the Research Institute. The collection is composed of 60 to 80 grape varieties.

Today, none of these nurseries have significant business activity, even if they continue to produce rootlings (for example, in 1999, the Research Institute Station in Armavir produced 20,000 rootlings, but was not able to find a market for this production). Furthermore, by reason of the cost of pesticides and the inadequate market for rootlings, state nurseries are badly maintained and vine diseases can often be observed. (Cf Annex Photos)

Market prices for rootlings vary from 200 drams up to 400 drams, depending on the variety and the sanitary condition. Today, owing to low demand and fierce competition from "home-made" cuttings and rootlings, prices can go as low as 100 drams.

** Wine and brandy production - Statistics*

The wine sector experienced a sharp decrease in size in less than 10 years: in 1980, wine represented 48% of the total Armenian alcohol production; in 1990 it represented only 13.7%. During the same time, production of Brandy and Vodka increased their relative share, even if the volume produced of these two products also sharply decreased.

In 1998, 14,300 hl of wine were produced, in addition to 59,710 hl of Vodka, 25,290 hl of brandy and 9,860 hl of sparkling wine. In 1999, as brandy and sparkling wine decreased respectively to 12,100 hl and 7,500 hl due to the difficulties encountered on the Russian market, wine production went up to 48,800 hl. Figures for the year 2000 seems to show a return to a more normal situation with a production of wine reaching 25,930 hl, brandy production up to 28,500 hl and sparkling wine production estimated at around 7,950 hl.

The number of companies involved in wine production can be estimated at around 25-30. However, in 2000, no more than 10-15 were active. All the companies were privatized (most in 1997).

The major players are Yerevan Brandy Corporation (brandy Production), Great Valley Corporation (Brandy and wine), VeDi Alco (Gueta, Vodka and Wine), MAP Ojsc (Wine and small production of Coganc), Idjevan wine factory (Wine), and Ararat wine factory (Coganc and Wine), Dalar wine factory (Wine).

For the last two years, some smaller companies have started being active in wine production. Mostly located in Vayots Dzor marz, these companies (Genitas Ltd, Areni Winery, Kimley Ltd, Van 777) have been mostly involved in producing wines from the most promising varieties in Armenia, the Areni or Hakhtanak grapes.

** Wine and Brandy Trade Characteristics*

The domestic alcohol market (which includes both domestic consumption and storage) used to be very small in Armenia, representing, in 1988, 13% of the wine production, 21.5% of the brandy

Vertumne

Etude de marché

production, and 74% of the sparkling wine production. In 2000, due to the collapse of exports - *wine exports decreased from 411,900hl in 1988 to 2,720hl in 2000; brandy exports decreased from 96,400hl in 1988 to 24,120hl in 2000; sparkling wine exports decreased from 13,000hl in 1988 to almost 0 in 2000*) - the domestic market represented 90% of the wine production, 15.7% of the brandy production and 100% of the sparkling wine production.

We anticipate that the Armenian domestic wine consumption will not go up in the near future. This is because of a continuous decrease in the Armenian population (3.8 million inhabitants according to the World Bank in 1998, and less than 2.5 according to government sources for 2000), a low level of the GNP per capita that is less than 480 US\$, and tougher competition from home-made alcoholic beverages. It would be correct to assume that the per capita consumption of wine should remain at the same level it was in 1994: around 2 liters/year/inhabitant. The main cause of this low wine consumption is the alternative purchasing of vodka, which has a consumption rate more than three times higher than wine.

It should be pointed out that exports have sharply dropped due to the loss of the traditional markets resulting from the break-up of the former Soviet Union in 1990, the blockade enforced since 1997, the financial crisis of 1997/1998 and the declining quality of the wines, brandy and sparkling wines produced.

Exports of table grapes to Russia have been decreasing since 1997. According to official data, exports of table grapes by individuals remained at a reasonable level in 1998 and 1997. These figures should be questioned, as it has been impossible to obtain a clear description of their content.

Today, Russia is still the largest buyer of Armenian wines representing more than 90% of the volume exported. Some wines have been exported sporadically to western countries, but it has proven to be very difficult to transform these "one shot" exports into a steady flow.

The situation is very similar with brandy: Russia accounts for more than 80% of the exports.

Exports of wine and sparkling wine fluctuate heavily in value, but the general trend in volume is a sharp decrease from 424,900 hl exported in 1988 to 8,720 hl in 1998. Estimation of wine exports for 1999 and 2000 are a further decrease to respectively 1,320 hl and 2,720 hl

Exports of brandy fluctuated not only in value but also in volume during a four-year period (1996 – 2000): between 17,170 hl and 41,450 hl worth between 10 and 18 million US\$. Estimated numbers for exports in 1999 and 2000 are respectively : 17,700 hl and 24,120 hl

The quantity of alcoholic beverages imported by Armenia has been regularly declining from 1991 to reach a level of almost 0hl in 2000.

This trade analysis shows that it took more than three years for the industry to adjust to the collapse of the traditional markets after the break-up of the former Soviet Union: in 1996, wine and sparkling wine production accounted for 87,900 hl, while consumption and exports were only 21,410 hl. The available figures demonstrate that the adjustment took place in 1998: 23,830 hl were produced compared with 26,240 hl consumed and exported. This situation, in addition to observations made while visiting wine factories, leads to the assumption that a minimum of 3 to 4 years of wine stock still exists in the cellars of most factories.

Vertumne

Etude de marché

From 1990 to 1996, huge quantities of wine and brandy stock were generated. After 1996, producers realized that the best way to diminish these stocks and solve their cash flow problems was to transform wine into spirits. After 1996, Vodka made from distilled grape wine become common.

** Viticulture Scientific Research Activities and Education*

The only wine and vine research and training institution in Armenia is the Scientific Research Center of Viticulture, Fruit-growing and Wine-making. This Center is part of the Ministry of Agriculture and is located in the suburb of Yerevan. The Director is Mr Samuel GASPARIAN. This Institute employs around 10 scientists with Doctorate degrees. Main departments include Winemaking, Grape-growing, Agro-technic, Economy and Marketing and Scientific Research

The activities of the Center focus on 14 major themes involving wine-making, fruit-growing and grape-growing. Most of their activities are geared toward developing new vine varieties resistant to frost and disease. Over the last few years, more than 30 different cold-resistant varieties have been created by the Center. The main varieties are Karmrahyouth, Nerkarat, Bourmunk, and Tavros, but these varieties are not very well disseminated, and tend to produce high yields. The Center also used to be also involved in conducting some micro-vinifications. Due to the fact that equipment has not been maintained since 1991 and no funding was provided by the State for Research analysis, the micro-vinification unit of the Research Center is no longer in use.

The Scientific Research Center of Viticulture, Fruit-growing and Wine

making also manages nursery stations in Armavir and Idjevan. The total land managed by the Center is around 575 ha, but only 60 ha are actually used for the nursery and scientific activities.

The Research Institute is in charge of maintaining mother vines of the National Collection of Armenian grapes varieties. The collection is composed of 60 to 80 grape varieties.

The major institution for student training in wine and vine sciences is the Agricultural Academy that offers special courses on viticultural sciences and wine-making techniques. In 2000, 16 students enrolled for this training. Mr Samuel Gasparian, Director of the Research Institute, is a member of the staff. At the end of their training, only a couple of the students will find work within the wine industry due to the low demand for qualified workers by the industry.

** Sector regulation and legislation*

The Ministry of State Standards has issued regulations on Wine, sparkling wine and brandy practices. Except for the brandy regulation that was updated in 1999, the wine and sparkling wine rules of practices are based on the regulations adopted before 1990, during Soviet time.

** Foreign Investment*

Until today, foreign investment in the wine and brandy business in Armenia has been very limited. The most significant example is the privatization of the Yerevan Brandy Corporation, acquired by the French wine and spirits group Pernod Ricard in 1997.

** Marketing and sales promotion*

Vertumne

Etude de marché

Most of the Armenian wines are bottled in recycled bottles. When new bottles are used, they are usually manufactured in Italy or in Bulgaria. Labels are also quite often manufactured abroad. The total cost for dry goods used for bottling can vary from 100 drams to 210 drams:

Bottle price : 25-30 drams if
recycled - 100 drams when new

Cork price : 80-100 drams

Capsule price : 3 drams for
wine - 10 drams for sparkling wine

If the price of grapes is included (at an average cost of 100 dram/kg and a juice ratio of 70%), in addition to the cost of processing the grapes (28 dram/kg has been estimated by the Scientific Research Center), the total cost to produce one bottle (0.75 liters) is approximately between 325 and 450 drams.

If taxation is computed (excise and VAT), the final cost of the bottle fluctuates between 580 and 814 drams per bottle 75 cl (us\$1.10 to 1.50)

On the domestic market, the price of a 75cl bottle of wine usually varies from 600 drams to 9,800 drams for the top quality (with the average price being around 3,000 drams per bottle). Wines made from Areni grapes are able to fetch these high prices.

Promotional activities for the wine industry are implemented by the Agribusiness Development Center that regularly invites companies to attend national or international exhibitions.

For more information, please use the order form hereafter.

Vertumne

Etude de marché

VERTUMNE INTERNATIONAL & Associés

Conseil, Etudes & Formation pour les entreprises du Vin et des Spiritueux
Consulting, Engineering & Training for the Wine and Spirits Industry
29 rue St Maur
33 000 BORDEAUX
Tel : 05.57 87 72 00 – Fax : 05.57 87 72 01

ORDER FORM

Your references: (to fill in capital letters)

| | |
|---|--|
| M./Mrs/Ms (family name – first name) | |
| Job Title | |
| Company name | |
| Nature of business | |
| Address | |
| Post Code - Town | |
| Telephone number | |
| Fax number | |
| E-mail | |
| Web Site | |

Your order :

| Document title | Unit Price HT | N° of copies | Total Price |
|--|----------------------|---------------------|--------------------|
| Analysis of the ARMENIAN Wine Industry - Strength and Weaknesses - Rehabilitation strategy, Opportunities for further developments | 80,00€ht | | |
| Total before VAT | | | |
| VAT 19,6 % | | | |
| Total with VAT | | | |

Your payment :

- SWIFT Transfer to VERTUMNE INTERNATIONAL & Associés
Bank Code : 10907 - Agency Code : 00 001 - B.P.S.O Bordeaux Jean Jaurès
Account N° : 024 217 025 11 key 57

Date :

Signature and / or company stamp :

N. B : Analysis will be sent after reception of payment