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A SWOT Evaluation of Organic Winemaking Regulatory Implications in the Support for Organic Products in Romania

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INTRODUCTION – Organic Wine Industry

The roots of modern organic wine industry are in Western Europe and USA, in the 1970s.

- Deeper roots could be documented in France, where some producers are at the 3rd generation of organic wine producers.

The field was not as successful as in the case of other organic foods, for several reasons:

✓ the perception regarding intrinsic quality

✓ the association of the idea of alcohol with unhealthy foods.

Popularity gradually increased, especially among intellectual and environmentally oriented people, but even now, after 50 years, the world organic wine market is still small.

INTRODUCTION

Organic surfaces dedicated for grapes in the world

At present, organic vineyards cover less than 5% of the world's vine surface…

….but not all the grapes produced as such are turned into wine, or organic wine.

In the USA, one of the most important market in the world for organic wines, **consumption reached in 2018 only 1% of the total wine sold.**

Worldwide, the organic grape vineyards covered in 2017 a surface of **233 thousands ha**, of which 218 thousands ha (93.5%) in Europe.

Organic surfaces dedicated for grapes in the world

Country/Region	2013 Organic vineyards (ha)	**2017 Organic vineyards (ha)**
EU	222815	217824
Europe	222815	**217826**
- France	64012	-
- Germany	-	7300
- Spain	83802	106528
- Italy	66578	103207
- Romania	**1976**	**-**
Latin America	3571	5876
Oceania	3970	6615
Africa	55	1695
North America	292	936 (in 2015)
Asia	397	617
World	231101	**232629**

(*data from FiBL survey, 2017*)

While other sources report larger figures for 2015, with total surface of organic grapes in the world of 333 thousand ha and 293 thousand ha in Europe (FiBL-IFOAM-SOEL 2006-2017), it is clear that the organic grape area is basically located in Europe.

Organic surfaces dedicated for grapes in the world

These figures also include surfaces with grapes for fresh consumption, not only those with wine grapes.

However, the organic concept is not necessarily about wine, but about producing better grapes.

The vine growers turn toward organic and even biodynamic practices to obtain better grapes, but also to preserve the soil and the vineyards, especially when also facing climate changes.

INTRODUCTION

Organic grapes and wine FINANCIAL SUPPORT

Financial support is provided in EU to implement organic farming practices and methods or to promote the products. ***"Organic farming" is an eligible measure funded in rural development programmes.***

In Romania, for the period 2014-2020, **2467 million Euro are allocated from EU** and **437 million Euro from the national budget** for measures regarding the environment and climate.

Out of these **for Organic Agriculture (measure M11):**
200 million Euro are from EU and 35.7 from national budget.

Investments for organic farming are included in measure 4.1, "Investments for agriculture exploitations".

Organic grapes and wine FINANCIAL SUPPORT

In total, depending on the agricultural practices applied by the farmers, the cumulative support in 2018 was from:

-119 to 449 euro/ha/year **during conversion** and

-153 to 483 euro/ha/year **during organic farming exploitation**.

INTRODUCTION

Organic grapes and wine FINANCIAL SUPPORT

Starting 2019, the allocations in PNDR 2014-2020 for vineyard (Measure 11 Organic Agriculture and Measure 10 environment and climate) are as follows:

- **530 €/ha/year for the conversion period plus**
- **support for environment and climate*:**
  - 143 €/ha/year (M10 package 6.1) – manual work or
  - 39 €/ha/year (M10, package 6.2) – for light machine work

- **479 €/ha/year for as long as organic agriculture practices are maintained plus**
- **support for environment and climate*:**
  - 129 €/ha/year (M10 package 6.1) – manual work or
  - 73 €/ha/year (M10, package 6.2) – for light machine work

*provided both types of practices are maintained.

Paid by APIA

INTRODUCTION

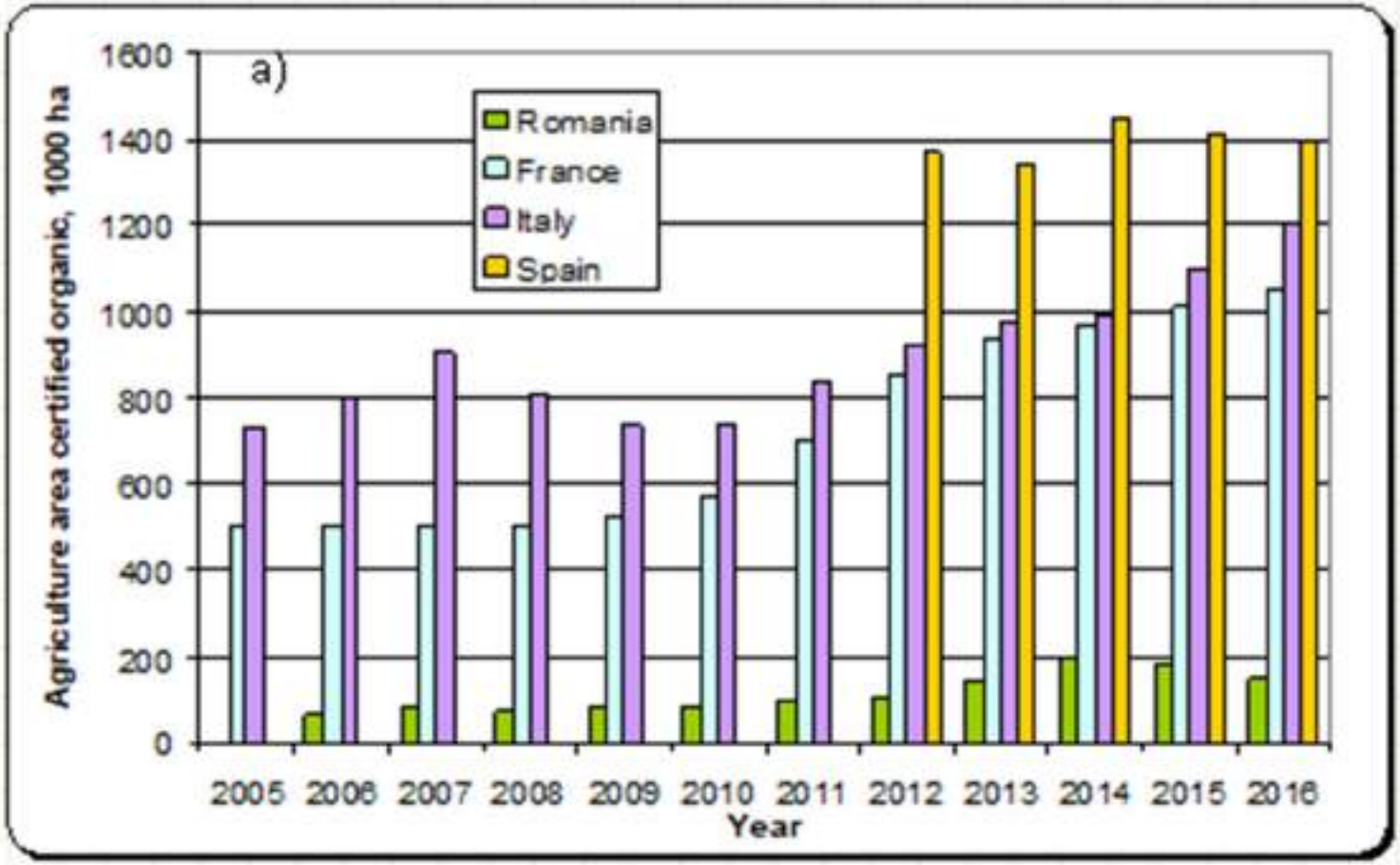
Evolution of surfaces of organic agriculture

	Surfaces of organic agriculture, 1000 ha*					
Year	World	**Romania**	**France**	**Italy**	**Spain**	**Germany**
2005	31512.45	**92.8**	550.5	1067	622.8	807.4
2006	32303.02	**108.3**	552.8	1148	736.9	825.5
2007	33419.78	**131.9**	557.1	1150	804.9	865.3
2008	36461.17	**139.6**	583.3	1002	1129.8	907.8
2009	38719.03	**167.9**	676.4	1106	1330.8	947.1
2010	37196.76	**183.0**	845.4	1114	1434	990.7
2011	38463.65	**230.0**	971.8	1097	1625	1015.6
2012	39535.44	**288.3**	1029.5	1167.4	1756.6	1034
2013	37967.9	**301.1**	1061	1317	1610.1	1045
2014	47234.56	**289.3**	1119	1388	1663.2	1048
2015	52898.59	**245.9**	1323	1493	1968.5	1088.8
2016	65251.44	**226.3**	1537	1796	2018.8	1135.5
		1x	**7x**	**8x**	**9x**	**5x**

selection from FAOSTAT, 2018

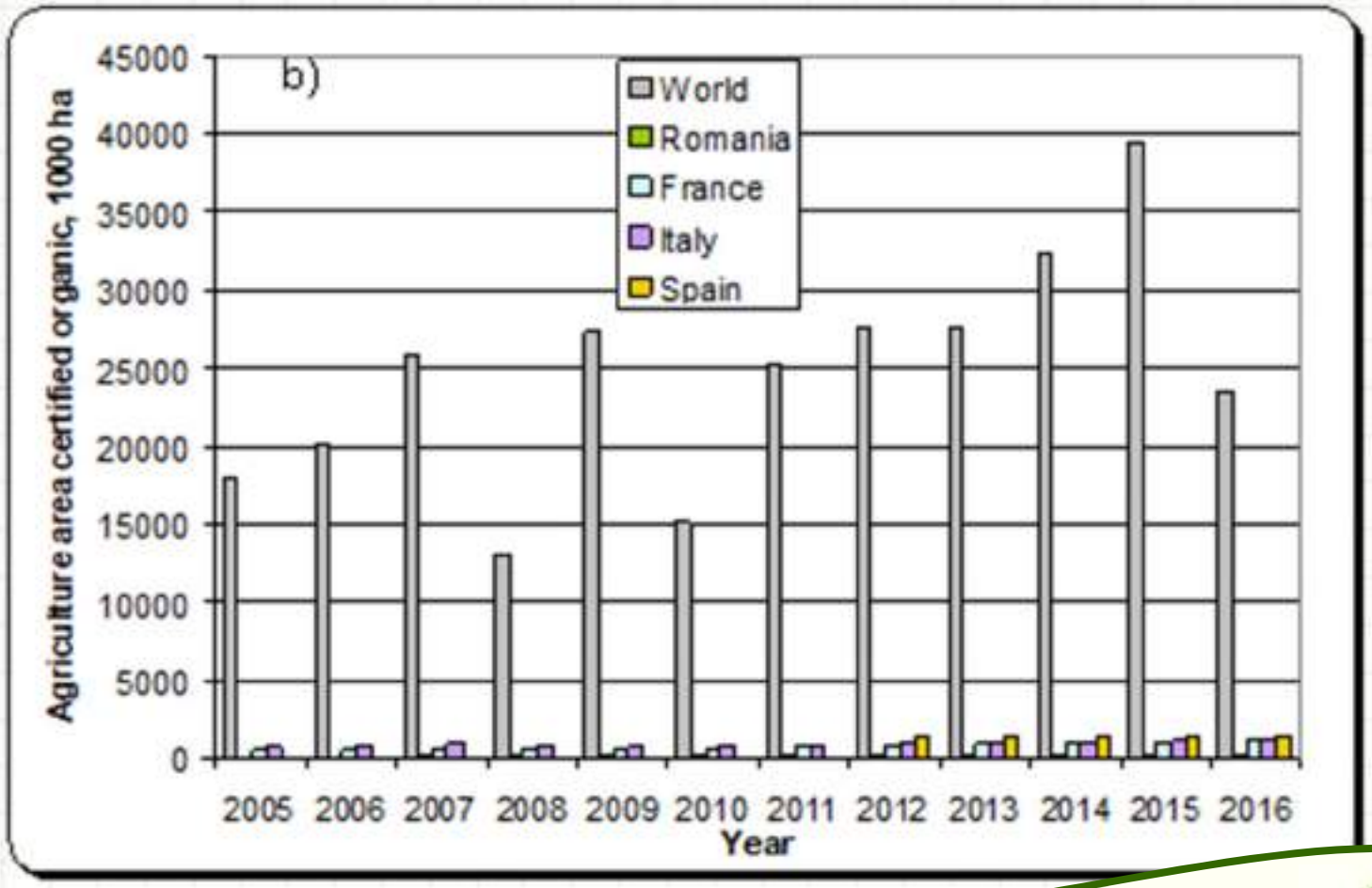
INTRODUCTION

Evolution of surfaces of organic agriculture



INTRODUCTION

Evolution of surfaces of organic agriculture



INTRODUCTION

Evolution of surfaces of organic grapes

Year	Surfaces with Organic grapes, 1000 ha	
	World*	**Romania****
2005	101.26	-
2006	113.97	-
2007	122.42	-
2008	150.75	-
2009	190.45	-
2010	217.95	**0.89**
2011	264.71	**0.84**
2012	284.23	**1.65**
2013	312.58	**1.98**
2014	311.87	**2.09**
2015	332.91	**2.16**
2016	379.55	**2.02**

**FIBL-IFOAM-SOEL 2018*

*** Ministry of Agriculture and Rural Development, 2018*

INTRODUCTION

Evolution of surfaces of organic grapes

ROMANIAN VINEYARDS

Some certified producers:

Budureasca Organic, Vitis Metamorfosis, Domeniile Franco-Române,

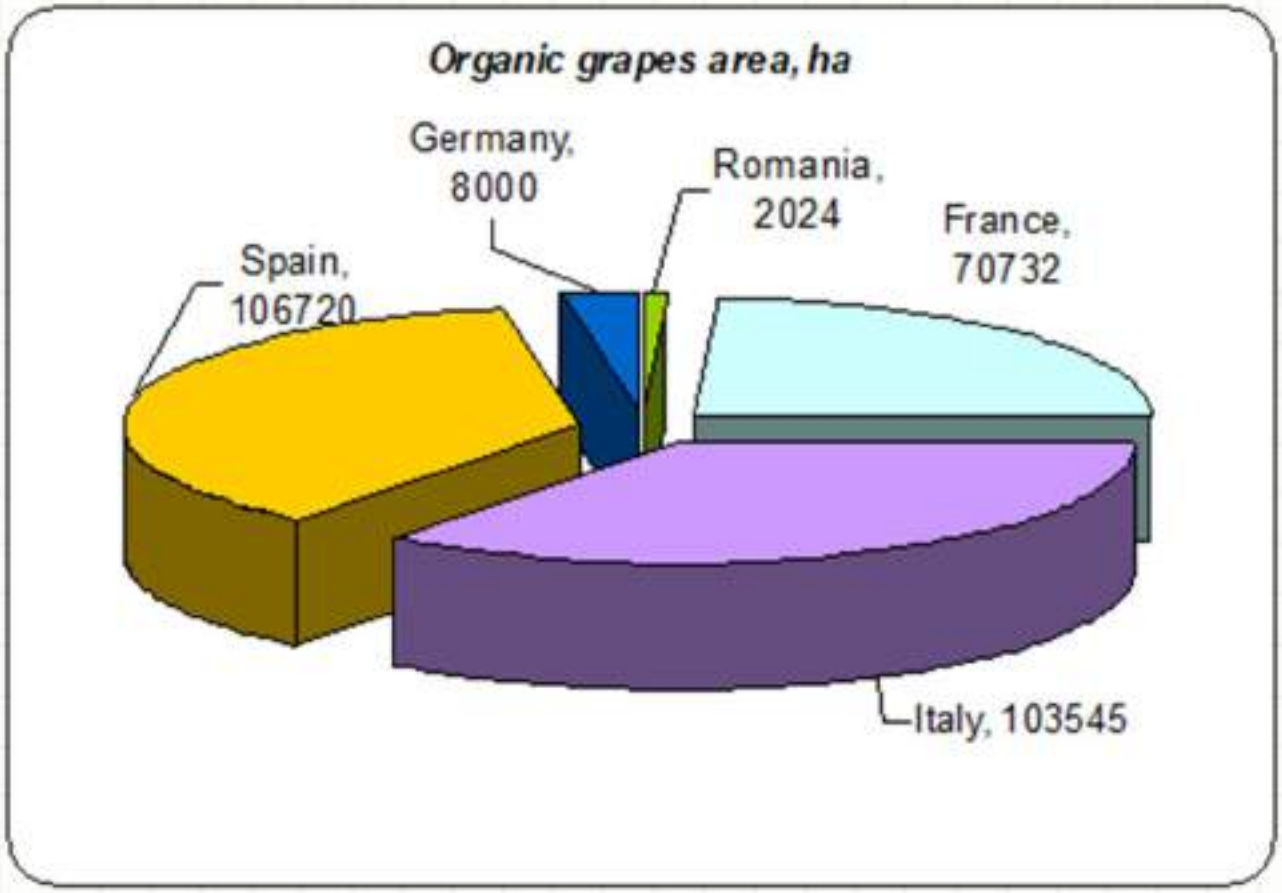
Domeniile Adamclisi, Domeniul Bogdan, Senator Wine, La Sapata,

Lechburg,

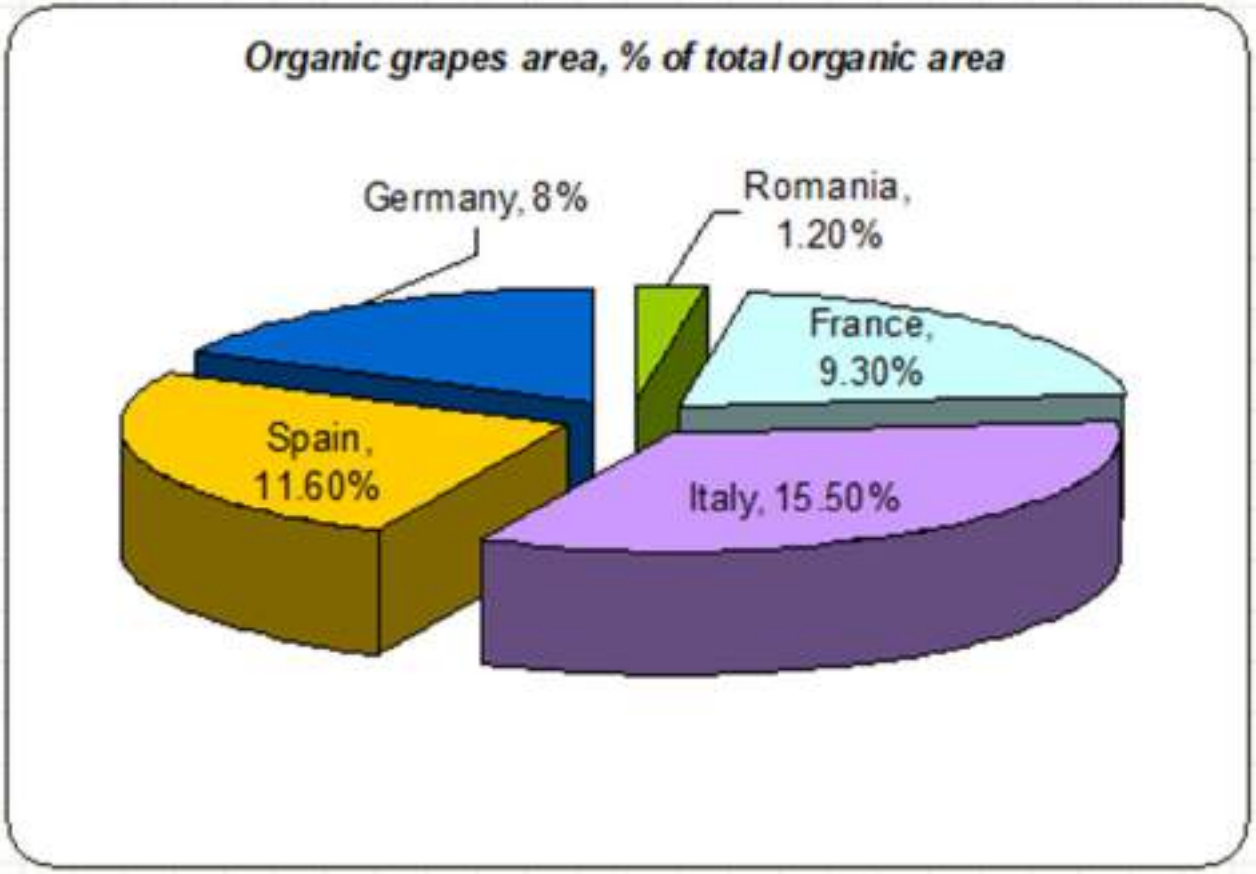
Terra Natura

INTRODUCTION

Surfaces of organic grapes in 2016



Evolution of surfaces of organic grapes



SWOT analysis

Although the SWOT analysis was first used for developing management strategies for companies, it has also been used to develop:

- political strategies,
- financial strategies,
- environmental strategies

and so on, thus being possible to be extended **to evaluate the competitive position of an entire field**, as it is the case of organic wine.

SWOT analysis

SWOT analysis is actually a tool developed to help decision makers to formulate strategies by taking into account

- **the interactions between internal factors (strengths, weaknesses) and**
- **external factors (opportunities, threats).**

However, SWOT analysis can provide guidance only in a specific, limited context, as ***whether something is a strength or a weakness depends highly on the background.***

MATERIALS AND METHODS

Several reports and scientific papers were used to evaluate the past and present situation in the organic grapes and wine field, taking into account a multitude of influencing factors.

The SWOT analysis has taken into account the main issues related to organic vine and wine production, **pointing out some new or changed relevant aspects**, listed and explained hereafter.

1. Strengths

Strengths

- Legislation supports and enforces the **avoidance of anorganic fertilizers and plant protection synthetic substances.**

Before 1940s, when pesticides started to spread, the crops and wines were produced in the way we consider it today as being organic.

After a so called "golden period of pesticides", when their use was very appreciated, the movement towards more sustainable approaches has started.

As a result, around 1970s some organic wines were already produced in Europe and USA..

In RO, before 1989 the used of pesticides was very limited, on financial reasons.

1. Strengths

Strengths

❖ The **regulations** on organic production (EC 889/2008; EC 834/2007) are now **very clear on type of products to be used or prohibited.**

- Dosage of certain products are closely supervised and reduced wherever possible.
- Thus, *the dosage of copper*, a controversial fungicide widespread in organic farming, especially because it accumulates in soils, will be further reduced, as in the end of 2018 the European Commission revised its usage and decided that the authorised doses in viticulture should be lowered from 6 to 4 kg/ha/year (average of 7 years).

EFSA's copper evaluation guideline is under revision too.

1. Strengths

Strengths

❖ **Preservation of soil quality is one of the major objectives** of organic farming.

Döring et al. reviewed in 2015 the results of several previous researches, **concluding that for various types of crops the soil organically farmed**

- is of higher quality,
- preserves a higher content of organic matter,
- has more biological activity,
- is less eroded and
- has lower bulk density.

Even though it does not directly apply to grape growing, it is worth mentioning that in the legislation the hydroponic culture is not considered organic, as it is done without soil.

1. Strengths

Strengths

- Organic faming, including viticulture, supports the preservation of animal life,
- while **no GMO is allowed**.

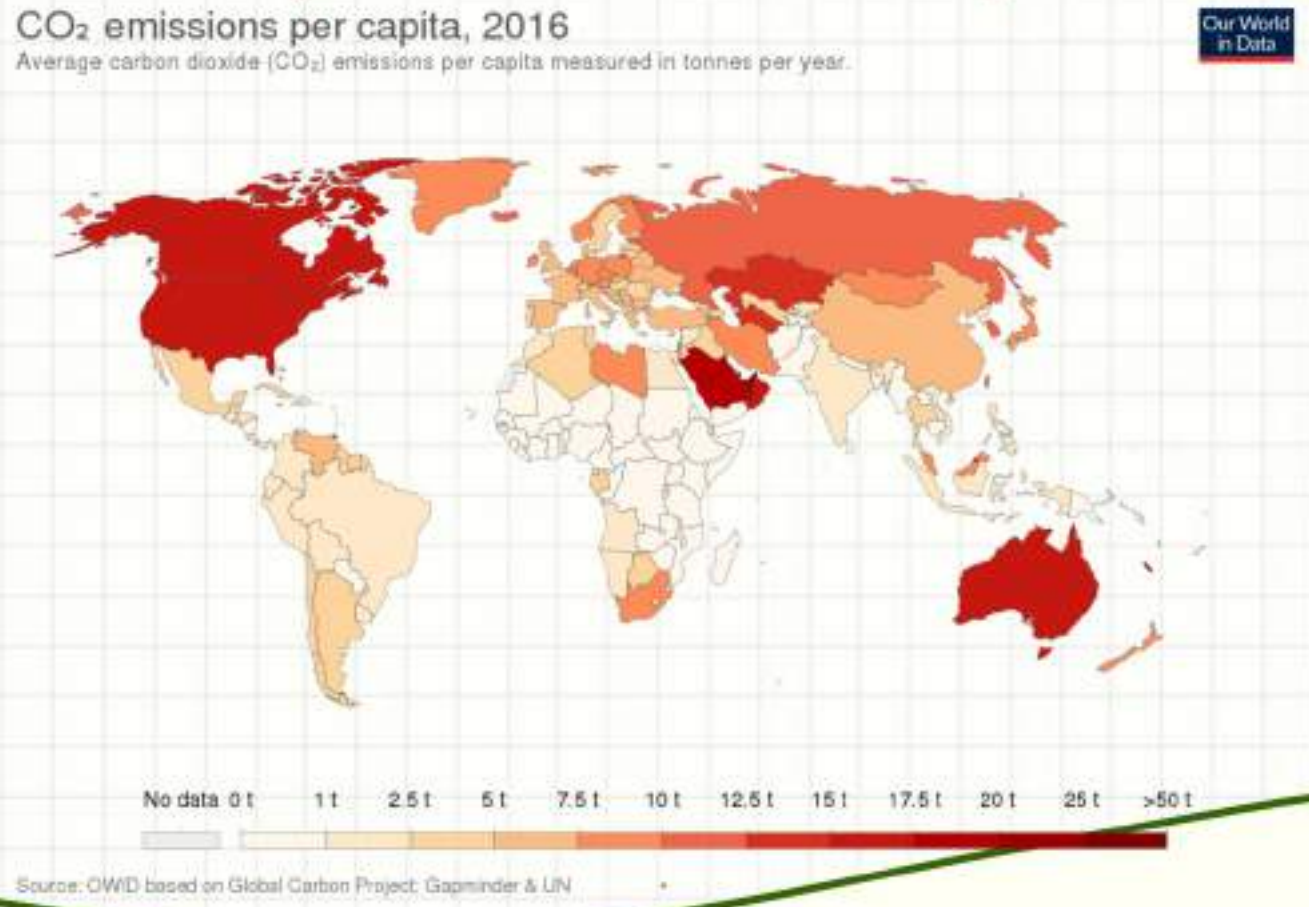
Genetically modified grape vines have been made in Chile, France, Germany, South Africa and the US. They are not approved for commercial use.

A GM yeast strains - ML01 - has been approved for use in the US as well as Canada, Moldova and South Africa. Since wine labelling does not require listing of GMOs, they may be present in conventionally-made wines of those countries or in wines “made with organic grapes” in US can potentially contain GMOs.

1. Strengths

Strengths

- It is able to reduce the CO_2 footprint, by reduction of external inputs.



1. Strengths

Strengths

- The new legislation introduces clear lists of **substances and practices forbidden in organic winemaking**.

It is more easily understandable that several treatments are not allowed such as:

- addition of sorbic acid or sorbate,
- addition of ammonium sulphate,
- ammonium bisulphite;
- acidification with malic acid;
- use of carboxymethylcellulose,
- use of polyvinyl-poly-pyrrolidone,
- co-polymer PVI/PVP,
- potassium ferrocyanide,
- calcium phytate,
- heat treatment and so on.

These treatments are permitted in conventional winemaking, for certain desired effects in the wine, mostly for chemical and microbiological stabilization.

Strengths

1. Strengths

- The new legislation introduces clear lists of **substances and practices forbidden in organic winemaking**.

- Not everything used in conventional winemaking is forbidden in organic winemaking - the organic legislation allows now many important treatments applied also in conventional winemaking.

In 2018 more beneficial inputs, have been sent for approval for application in organic wine.
(Document C(2018)6828, thus amending the present regulations on organic products, Regulation EC 889/2008).

These new inputs include:
- **inactivated dry yeasts,**
- **potato protein,**
- **yeast protein extracts,**
- **chitosan from *Aspergillus niger* and**
- **yeast mannoproteins**

Strengths

1. Strengths

- With the approval in EU of the usage of SO_2 as an antioxidant and antimicrobial, the organic wines will have **longer shelf lives**, with more stable aroma and less oxidation.

A long debate around SO_2, has driven some consumers away from wine, even though **it is used in many other products in even higher quantities** and despite the fact that **the practice has very old roots** (fumigation by burning sulphur rods being documented from antiquity. Its consistent use began for fruit conservation in 1950s).

The low/reasonable SO_2 concentrations may be also beneficial effects:

- for extracting in wines more bioactive compounds good for human health (resveratrol, caffeic acid and quercetine);
- for preserving aroma. The presence of SO_2 creates in the wines the aromatic profile the consumer is already used to, as it is demonstrated that in the absence of SO_2 the flavours evolve differently.

1. Strengths

Strengths

- The new policies are more and more recognising and supporting environmentally friendly farming practices,

for products with a specific identity, perceived as more closer to nature and healthier for both environment and people.

- ***Financial incentives*** **for producers increased in recent years.**

For example, the new Common Agricultural Policy (CAP) (2014-2020) recognises the overall significant contribution of organic farms to environmental protection and therefore includes in the first pillar a green direct payment, without asking these farms to fulfil any further obligations.

Weaknesses

2. Weaknesses

- Unclear terminology exists in different countries.

Terms like ***organic, biological, ecological*** are used for products obtained through same or similar practices in accordance to the specific country.

Other terms, such ***biodynamic*** (from 1920s), ***sustainable, natural, wine without sulphites*** etc. further complicate things.

Moreover, in order for a wine to be legally certified as biodynamic (respecting the holistic approach proposed by Rudolf Steiner and certified by Demeter) **it should be first certified as organic.**

Weaknesses

2. Weaknesses

- Unclear terminology

The term ***"organic"*** (used mostly in English-speaking countries) is confusing itself, as its main meaning is "relating to or derived from living matter" or "containing the chemical element carbon".

The term "***biologic***" (used mostly in French-speaking countries) is even more confusing, when having in mind the main meaning of the word.

The term "***natural***" is debatable too, as it induces the idea that other wines may not be natural, even though they are obtained from the fermentation of a natural fruit.

Legally, to label a wine as "***sulphite free***" it should contain no more than 10 mg/l total sulphites,
while a "***no added sulphite***" wine should be produced with no sulphites added.

Weaknesses

2. Weaknesses

- Unclear terminology

For "*natural wine*" no legal definition is yet available, the expectations being that they are made with minimal interventions.

In the EU there is a proposal to legally define the "*nature*" wines.

For the regulation of these wines organic certification may be required, while some more practices acceptable in organic wines are discussed to be banned, among which filtration, fining, usage of selected yeasts or even cold fermentation or gas protection.

All these lead to *unclear communication of different practices that makes a product to be called organic.*

Weaknesses

2. Weaknesses

- **Legislation is evolving too slowly** and still includes inconsistent aspects in several countries.

For organic wines, the most controversial practice is by far the addition of sulphites, thus, much debate was always around this topic.

In USA, within the framework of past and present legislation, there is a **clear distinction from organic wines** and **wines produced from organic grapes,** as the first cannot have any added SO_2, while the latter can.

In European countries, for many years there was no specific legislation for organic wines, thus wines produced from organic grapes was the only option, under the general regulation for organic production (EC 834/2007, now repealed and replaced by EU 848/2018).

2. Weaknesses

Weaknesses

- Legislation is evolving too slowly

- In 2009 European Commission proposed to introduce organic wine regulation, but an agreement regarding the content of sulphites could not be reached.

- ***Only in 2012 a specific implementing regulation of organic wine was passed*** (EU 203/2012), laying down detailed rules for the implementation of the organic products Council Regulation EC 834/2007.

2. Weaknesses

Weaknesses

❖ National legislation is complex too and slowly evolving

- Mostly replaced by Reg EU 834/2007
- Rules laid mostly for official bodies

OUG 34/2000 for organic agro-food products

HG 131/2013 measures and sanctions for observing Reg. EU 834/2007

- Ex.: sanctions for illegal using the term organic (fines: 10.000 - 35.000 RON)

- Operators should register annually at MADR through mandated bodies (EM)
- EM : (i) DJ; (ii) professional assoc.; (iii) OC

Ord.1253/2013 registration of organic agriculture operators

Ord. 895/2016 inspection and certification system

- inspection and certification is done by OC (certif. body), under control of MADR
- OC can be based in RO or in another MS of EU

- National mark „AE”

Ord. 417/2002 labelling rules

❖ Legislation expected evolution

In force from 1st of January 2021

Reg.UE 848/2018
(main changes)

- New objectives
  - Shorter distribution chains /more local products
- New principles
  - Exclusion of foods containing nanomaterials
- Certification as a group of operators
  - Products of max. 25.000 EUR, max. 5 ha
- Specific norms for hygiene
  - List of authorized products for cleaning & desinfection
- Inspection system based on risk
  - Inspection at 24 months (not 12 as it is now)

2. Weaknesses

Weaknesses

❖ Confusing levels of SO_2:

The present European legislation allows the use of sulphites, but the levels permitted should be in accordance to the type of wine and level of sugar present in the wine.

- Thus, *for organic certification*, wines can have the SO_2 content of a maximum 100 mg/l in red wines and maximum 150 mg/l in white and rosé wines, **when residual sugar is under 2 g/l.**

- For the rest of the wines (with sugar levels above 2 g/l) the SO_2 content should be **increased by 30 mg/l as compared to the levels permitted organic wines under 2 g/l sugar**. *These levels of SO_2 represent the total sulphites, added and naturally produced in wines*.

Weaknesses

2. Weaknesses

For trade purpose, in accordance to the equivalence arrangement between EU and USA (2012), *organic wine exports must respect the winemaking and labelling rules of the destination market*. At the time there was no organic Winemaking regulation in force.

The regulations in the USA are much stricter as regards the SO_2, thus:

- *EU organic wines, containing sulphites can only be traded in USA as "made with organic grapes",*
- while wines produced in USA from organic grapes, as they do not contain added sulphites, can be traded in EU as "organic wines".

There is no need for other certification, but that obtained by the organic winemaker in its own country.

Several other countries (Argentina, Australia, Canada, Chile, Costa Rica, India, Israel, Japan, Tunisia, Republic of Korea, New Zealand and Switzerland) **are referred to as 'equivalent' countries** (European Commission, Trade in organics, Importing organic produce, accessed in 2019).

2. Weaknesses

Weaknesses

Country	Maximal limit of SO_2 in organic wines (mg/l)	Maximal limit of SO_2 in biodynamic wines (mg/l)	Maximal limit of SO_2 in conventional wines (mg/l)
EU Member States	**100 mg/l red wine with less than 2 g/l sugar** **150 mg/l white and rosé wines with less than 2 g/l sugar** 130 mg/l red wine with more than 2 g/l sugar 180 mg/l white and rosé wines with more than 2 g/l sugar	110 mg/l red wine with less than 5 g/l sugar 140 mg/l white, rosé and sparkling wines with less than 5 g/l sugar 140 mg/l red wine with more than 5 g/l sugar 180 mg/l white, rosé and sparkling wines with more than 5 g/l sugar 360 mg/l sweet wines with Botrytis, 250 sweet wines without Botrytis	**150 mg/l red wine** **200 mg/l white and rosé** 200 mg/l red wine with more than 5 g/l sugar 250 mg/l white and rosé wines with more than 5 g/l sugar 300 mg/l for some exceptions listed in EU regulation 606/20[illegible]

2. Weaknesses

Weaknesses

Country	Maximal limit of SO_2 in organic wines (mg/l)	Maximal limit of SO_2 in biodynamic wines (mg/l)	Maximal limit of SO_2 in conventional wines (mg/l)
USA	No addition of SO_2 allowed, up to 10 mg/l naturally occurring sulfites	100 mg/l measured at bottling	350 mg/l measured at bottling

Small variations are also found for Australia, New Zealand, South Africa, Chile, Argentina

2. Weaknesses

Weaknesses

❖ Labelling

Organic or not, any wine containing more than 10 mg/l sulphur dioxide must be labelled as ***"contains sulphites"*** or ***"contains sulphur dioxide".*** This requirement become mandatory in EU from 2005.

In 2007 the European Commission introduced Directive 2007/68 which added further ***allergenic ingredients*** to the labelling requirements. As a result, after the adoption of wine labelling regulations (EC) No: 607/2009, in June 2012, in spite of vocal objections from the industry, it also became compulsory to declare the presence of milk and\or egg residues in wine, if they exceeded the prescribed level, which is at present 0.25 mg/l (Regulation (EU) No: 579/2012).

2. Weaknesses

Weaknesses

- **Certification is sometimes even more confusing**

It was intended to assure the consumers that the products were really obtained thorough certain practices, but the different logos, types of certifications and claims added more to the confusion.

Weaknesses

2. Weaknesses

- Various logos for organic or sustainable products

EUROPE unified logo

France

Germany

Romania local logo

Italy

Spain

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Weaknesses

2. Weaknesses

- Various logos for organic or sustainable products

USA

CANADA

AUSTRALIA

NEW ZEELAND

ARGENTINA

CHILE

2. Weaknesses

Weaknesses

- Various logos for organic or sustainable products

SOUTH AFRICA

JAPAN (Japanese Agricultural standard – not for wine)

CHINA

SOUTH KOREA

MALAYSIA

2. Weaknesses

Weaknesses

- Various logos for organic or sustainable products

Bio-dynamic

2. Weaknesses

Weaknesses

❖ **Conforming to all the restrictions is challenging for the producers.**

As compared to other more simple organic foods (fruits, vegetables, honey, tea), organic wine has to comply to both organic production of the raw materials (grapes, yeast, enzymes etc.) and organic processing.

Any intervention not approved by organic regulations leads to losing the right to label as organic.

These many restrictions can cause some disadvantage to the producers. Compared to their competitors in conventional wine business, the restrictions can be perceived as unfair.

This is especially true for the restrictions regarding herbicides in the vineyards and limitations of SO_2 *in the wine.*

These restrictions are however those that lead in the trust of consumer.

2. Weaknesses

Weaknesses

❖ **Some producers self-impose more restrictions than legally required.**

- *The expression of "terroir" is viewed by many organic wine producers as non-interventional,* thus letting the fermentation to progress as nature intended it.

Research in ISVV proved that there are no specific yeasts of bacteria for terroir region or estate.

The aroma developed in the final wine by the microorganisms present in the specific environment is indeed part of the specific "terroir", but it is not always appreciated by the consumers.

Weaknesses

2. Weaknesses

❖ Organic wine has a low market share.

Of the total wine, only 3-5% is marketed as organic.
With the new generations more aware of the environmental movement, there is however hope that the market will grow fast.

Country/Region	% of organic vine of the total vine*
Europe	8.5%
(in Romania 1.3% of the total vineyards; 2.5% of the noble vine vineyards)	
New Zealand	7%
USA	4.1%
Chile	3%
South Africa	2%
Argentina	2%

However, to increase the organic wine production, first an increase in conversion from conventional to organic vineyard should be realized.

Everywhere in the world, the surfaces covered with organic vineyards are only a few percentages from the total surface covered with vine.

2. Weaknesses

Weaknesses

❖ **Consumer expectations for organic product vary.**

Most consumers understand the term “organic” as basically referring to protection of human health, by producing grapes and wines without any use of synthetic herbicides, pesticides and fertilisers,

while the more subtle implications for the plant or the environment are mostly ignored.

With more information available the perception changes, becoming more divers.

3. Opportunities

Opportunities

- **Organic winemaking enjoys the largest recognition so far.**

It has spread worldwide from the EU to USA, Chile, South Africa, Australia, all these countries having in place established standards for organic winemaking.

The new legislation on organic wines *clarifies the issue of "wine from organic grapes"*. Before, this term did not cover the processes involved in winemaking, thus, the wine itself could have been produced by obeying the rules for either type of winemaking - organic or conventional.
Now, a "wine from organic grapes" would be a wine conventionally vinified, otherwise it could have been labelled as "organic wine". **Since 2012 this is not used anymore in EU**.

3. Opportunities

Opportunities

- **Winemaking practices have gained in precision and the processes are easier to keep under control.**

Increase in hygiene in winemaking allows for reduction of SO_2 by at least 50 mg/l compared to the maximum values permitted for conventional wines.

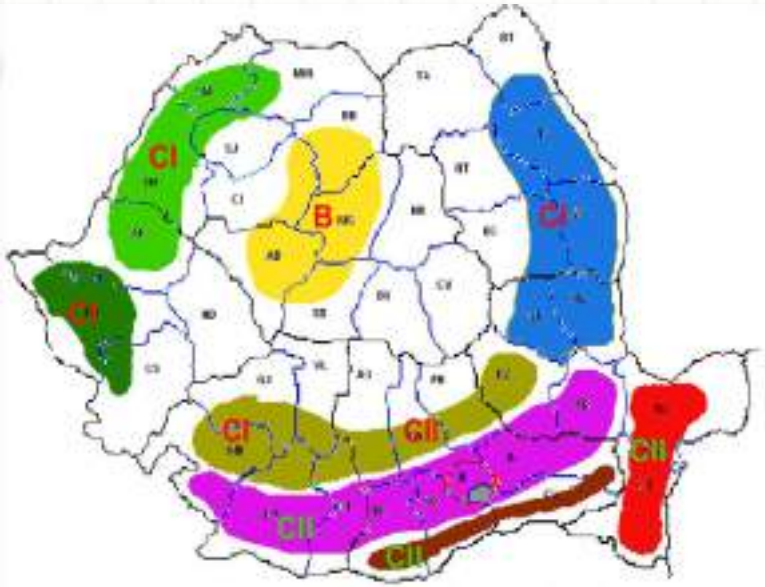
With modern equipment and carefully monitored processes, even conventional wines do not need to go this far to reach the maximum level of accepted SO_2.

Water management has also evolved very much.

Opportunities

3. Opportunities

- **There are regions more favourable for organic growing than others.**



Science and tradition can show where the chances are higher to obtain constant quality products.

In some regions, including in some parts of Romania the pressure for diseases is lower, thus it is more easier to grow vine organically.

In dry climates the number of treatments for plant protection is lower even than those applied conventionally, which makes it easier to go for organic there.

3. Opportunities

Opportunities

- **Organic products are more accessible and popular.**

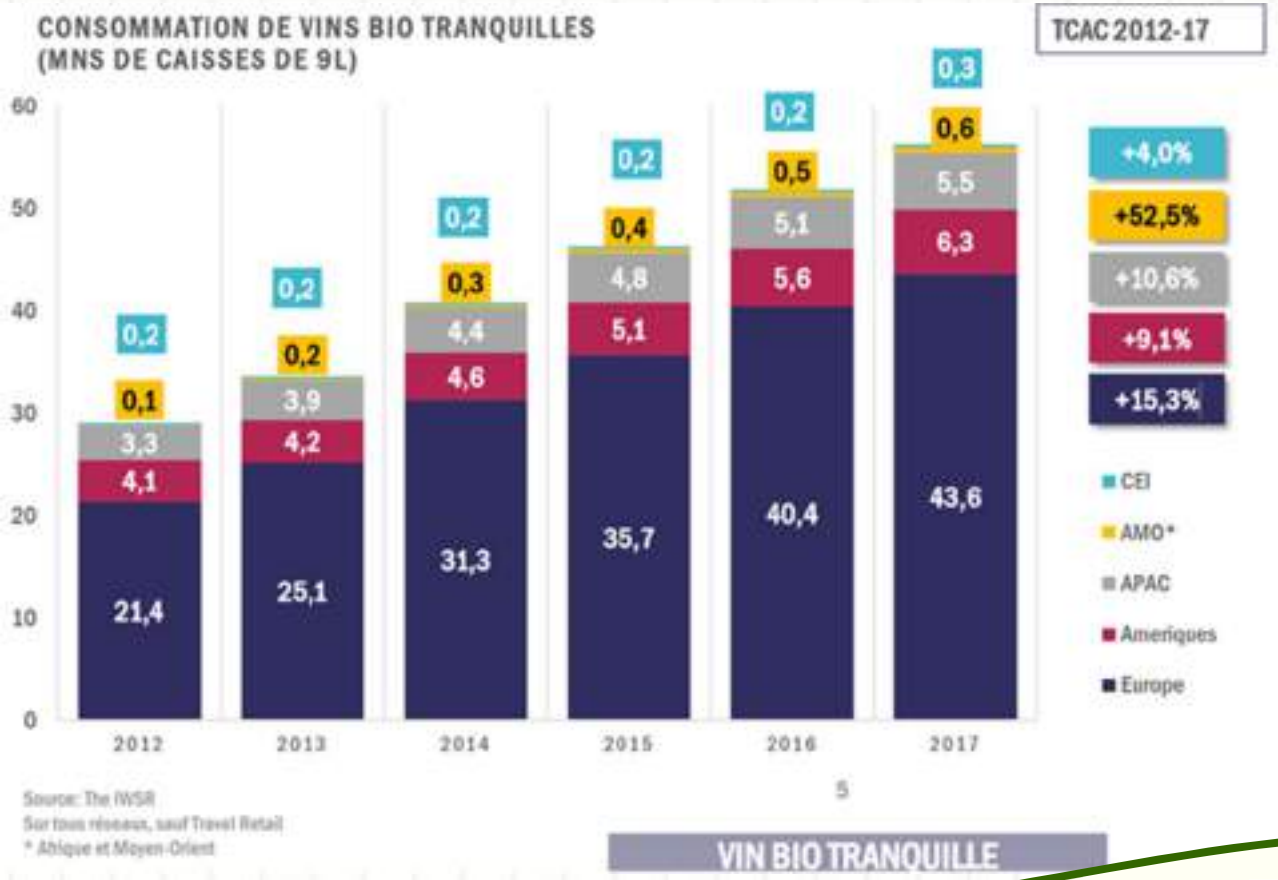
In accordance to an AC Nelson study in the **USA consumers spend more on organic products than before,** thus an increase of 9.5% was recorded in 2018 as compared to 2017.

The trend was valid for consumers of all ages, with certain trends for age groups.
Millennials spent over 14% more on organic products, followed by Generation X with 9.5% increase, while boomers spent only 7.2% more.
Thus, in spite of some set-backs, *the production and demand are growing*.

3. Opportunities

Opportunities

- Organic products are more accessible and popular.



3. Opportunities

Opportunities

- **Quality of the organic wines improved and could be demonstrated in blind tastings.**

More and more organic wines participate in international wine contests and they are awarded medals in competition with any other types of wines.

3. Opportunities

Opportunities

	CMB 2019 entries	CMB 2018 entries/medals	BWT 2017 entries	BWT 2018 entries	BWT 2019 entries
Italy	182	184/57	85	91	109
Spain	151	110/40	100	91	
France	121	138/35	15	23	36
China	53	101/27			
Germany	2	3/0	52	41	72
Greece	9	37/10	25	46	25
Moldova	6	24/8			
Portugal	22	11/4	2	3	
Romania	3	8/2			
Other countries	63	44/20	17	6	29
No. of countries	24	24	12	10	17
Total organic wines	636	660	**296**	**301**	**369**
Total organic wine medals	To be judged	199	**93 (72 gold; 21 silver)**	**82 (65 gold; 17 silver)**	**90 (79 gold; 11 silver)**
Total samples in the contest			**6067**	**6381**	**7253**

3. Opportunities

Opportunities

- Quality of the organic wines improved and could be demonstrated in blind tastings.

As expected, **the majority of organic entries come from countries where organic viticulture is most developed: Italy, Spain, France and Germany.**

Recognizing this market development, CMB introduced **a new category dedicated to organic and biodynamic wines, the "Organic Wine Trophy",** which was awarded for the first time in 2017. Believing in the significance of the organic and biodynamic wines the management of CMB expect this trend to continue, receiving numerous entries in this category.

3. Opportunities

Opportunities

❖ Quality of the organic wines

Scientific studies were also performed.

A 2016 UCLA study showed that eco-certified wine (wine made with grapes from organic and biodynamic farms) obtained higher scores in professional blind tasting evaluations than regular wines.

On a standardized 100-point scale, eco-certified wines scored an **average of 4.1 points higher**.

Aside of the fact that generally the eco-certified wines seem to taste better, as they are also often cheaper, the choice for these types of wines is bound to increase. The study is however incomplete, as it only included wines made with organic/biodynamic grapes.

3. Opportunities

Opportunities

- **Consumers themselves are more open for wines with different aroma** than the mainstream conventional wines.

3. Opportunities

Opportunities

- **Increased communication regarding environmental issues can lead to development of the market for organic wines.**

*It was found that **consumers with high awareness and strong pro-environmental attitudes** have the highest expenditure share for organic wine, as well as for other sustainable products.*

3. Opportunities

Opportunities

- **The new generations are more interested in *"green" life*,** with some countries more interested than others.

- **There is a global increase in the movement towards *sustainability*.**

  Famous wine companies, such as Domaine Romanee-Conti from Burgundy, France, one of the highly-regarded for its wine quality, converted recently all its vineyards to biodynamic cultivation. Other famous Bordeaux domains, such as Château Falfas, are applying biodynamic principles for years.

Opportunities

3. Opportunities

- **Consumer perception is changing:**
- A study on French, Italian and Spanish consumers shows that there is generally a **positive perception about the health effects of wine**.

As far as organic wines are concerned, the same study showed that **eco-labelled wines are indeed perceived as being healthier than conventional ones, but only by French and Spanish consumers with high environmental awareness.**

- Thus, wines with an environmental label might have an economic advantage.

3. Opportunities

Opportunities

On the other hand, consumers who are more involved into wine do not think that an eco-labelled wine is better for health than a wine without any certification.

An USA survey showed that consumers who attributed the most health benefits to wine were the ones most likely to drink more and pay more for wine, if the wines were health enhanced.

3. Opportunities

Opportunities

- **Logos too are conveying more than before the immediate information regarding the belonging to the organic product category.**

There are as well famous trustworthy logos outside of EU, such as JAS Japan, Canada, USDA organic.

3. Opportunities

Opportunities

Reminder of the specific elements of European Logo

siglă ecologică privată sau națională

AB-CDE-999
(codul organismului de certificare)

AB – codul ISO specificat în articolul 58(1)(a) corespunzător țării în care au loc controalele

CDE – termenul format din trei litere care stabilește o legătură cu metoda de producție ecologică, după cum se specifică în articolul 58(1)(b), cum ar fi „oko", „org", „eko", „bio" etc.

999 – numărul de referință, alcătuit din cel mult trei cifre, care trebuie atribuit după cum se specifică în articolul 58(1)(c)

4. Threats

Threats

- - Climate issues may prevent the development of an efficient organic grape production in some regions, wet microclimates being less favourable for controlling fungal diseases.

- Global climate change may also play a significant role.

4. Threats

Threats

- **The costs are roughly 15-30% higher than in case of conventional cultivation.**

The costs with substances for plant protection are less than using conventional pesticides, but the costs of **labour is higher,** as more persons are needed for working with vines and the soil.

Also, **lower densities in the organic/biodynamic vineyards** contribute also to increasing the costs.

4. Threats

Threats

❖ **The higher price is a major limiting factor** with multiple implications.

Even though the consumers recognise the value for the environment of the organic foods, **they are not willing to pay the extra cost needed to produce these**.

As wine price is also a marker of quality, bonus prices of organic wines are perceived differently by consumers in accordance to the market segment.

In a German study (2018) it was found that

- **in the low-price category,** organic wines were valued highest, **prices for organic wine being perceived as extremely high.**
- **in the high-price (premium) segment, price was perceived as a quality signal** for both organic and conventional wine as well.

4. Threats

Threats

- **Low willingness to pay bonus prices for environment protection.**

Consumers are interested in sustainability and environment protection, but **attach even more importance on hedonic characteristics of products.**

Thus, in spite of the interest observed in several studies, **when it comes to buying intention of organic wines, the behaviour does not show commitment to pay a bonus price for environment protection or for sustaining financially the producers of organic wines.**

For low income consumers especially the price of organic wine is still a barrier, in spite of the positive attitudes towards environment.

4. Threats

Threats

❖ **- Organic wines are rarely recognized as having higher sensory quality.**

When organic winemaking emerged the results were not very much appreciated by the consumers, as the prices were high, yet the products were far from being perceived as premium wines. This negative reputation of organic wines proved difficult to overcome and still persists on some markets, in spite of the obvious progress.

Organic wines obtain awards in wine contests, but most in special categories dedicated to organic wines.

4. Threats

Threats

- ❖ - Organic wines are rarely recognized as having higher sensory quality.

To date, the limited market for organic wines has settled around **prices of 5-10 Euro/bottle**, most of the wines being sold very young.

Still, there are organic wines that can be allowed to age even for 20-30 years, provided they hold a good acidity and the quality of grapes at harvest was high.
This is especially valid for wines produced from grapes harvested at over-ripening and ice-wines.

4. Threats

Threats

- **Organic wines are not perceived as belonging in the premium wine category or related to terroir.**

They are considered mainstream commodities.

Thus, when selecting a wine, **knowledgeable wine consumers go to the shelves with wines from a certain region**, not to the organic wines category.

4. Threats

Threats

- Organic wines are not perceived as belonging in the premium wine category or related to terroir.

Sometimes, **advertising an eco-label can be perceived as a sign of lower quality.** A study published in 2017 showed that only when the price is lower consumers tend to prefer eco-labelled wines over otherwise identical conventional ones, mostly because of the belief that the wine is produced in lower quality wine regions.

Wine consumers prefer conventional, more expensive wines, if they are coming from famous high-quality regions.

Based on this behaviour, the authors concluded that an eco-label may work to the disadvantage of wines, as consumers tend to interpret this eco-labelling as a sign of lower quality.

4. Threats

Threats

- **Scientific evidence is scarce regarding the benefits of consuming organic wines.**
- Research could not consistently demonstrate that organic wines have higher nutritional value. No studies have reliably proven they are healthier.

On the contrary, the main results point to **nutritional qualities not different than in conventional products**, even though the different inputs lead to differences in metabolic pathways and accumulation of matter in the fruits.

As consumers tend to interpret “organic” as producing a benefit for their private health rather than being beneficial for the environment, many studies tried to pin-point the advantageous changes in the chemical composition of the products. However, the results are inconsistent, as each grape variety can behave differently in a different microclimate.

4. Threats

Threats

For example, our results obtained in Murfatlar region, Romania, showed that aside of the fact that **large variations were induced by the year of production**, higher concentration of beneficial polyphenols and aroma were obtained in Feteasca neagra grown conventionally rather than organically (Antoce and Cojocaru, 2018), while Cabernet Sauvignon is of better quality if produced organically (Artem and Antoce, 2018).

A study performed in Italy (Micelli et al., 2003) on 15 different red wine varieties of various levels of quality (table wine, Controlled Denomination of Origin wines) found that organic wines had significantly higher concentrations of polyphenols. As compared to the average of 2148 mg/l total polyphenols in DOC wines, an organic wine reached a concentration of 2540 mg/l.

4. Threats

Threats

Resveratrol concentrations were higher in organic wines, averaging 1.69 mg/l, while DOC and table wines averaged 1.16 and 1.18 mg/l, respectively.

In yet another study of 2015 Garaguso and Nardini showed **that total polyphenols and flavonoids concentrations were not influenced by organic winemaking**, the content being similar in conventional and organic red wines produced without sulfites addition. **The antioxidant activity too was similar in organic and conventional red wines.**

4. Threats

Threats

- **Not many consumers are interested in lower levels of sulphur dioxide in wines**, especially when this is associated with lower quality

A survey on 223 consumers recruited in a liquor store investigated perceptions on wines with sulfites and willingness to pay for non-sulfited wines. The study results from a model of purchase intentions showed that quality and price are most important, while differentiating **labels such as "no sulfite added", "organic", played only a marginal role.**

Consumers seemed **not interested to give up quality for low sulfite content**. Only the sub-group of consumers who also reported getting headaches after drinking wine are receptive to low-sulfite wine marketing, as they tend to attribute the headaches to sulphites.

4. Threats

Threats

- **Certification requirements are highly bureaucratic and costly.**

Many organic-minded producers chose to apply organic farming principles for the sake of the land and vine protection, without any certification*.

Others gave up certification (not the organic practices) after a while, after they noticed **there was no significant difference in sales.**

Furthermore, those who produce organic grapes for their intrinsic quality, are not always turning them into organic wines, as the winemaking process imposes a supplementary certification.

4. Threats

Threats

- **Big companies are not particularly interested in organic wine production,** thus, coming mostly from small producers, the organic wines have **limited and regional availability.**

For example Ernest & Julio Gallo, the biggest wine producing company in the world, with almost 3% of the world's wines, is at present certified "sustainable" for some of its vineyards and wineries (by California Sustainable Winegrowing Alliance), but "sustainable" is not as strict as "organic", having no restriction for addition of sulfites.

CONCLUSION

✓ **The SWOT analysis shows that new legislation and policies confer good prospects for the expansion of organic wine production and sales.**

✓ In this international trend, Romania too can benefit, provided proper measures are taken swiftly in order to catch up with more advanced countries.

THANK YOU
FOR YOUR ATTENTION

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ANY QUESTION?

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