Analyses of sector of viticulture and wine production in Republic of North Macedonia

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History and Tradition

- The wine is one the Macedonian symbols
- ...more than 4000 years
- Great number of artifacts
- Dionysus – god of wine
History and Tradition

**Krater**

A bronze vessel used for alleviating wine by adding water.

Height: 81.5 cm / Width: 44.5 cm

Archaeological site: Trebenishte-Ohrid, R. Macedonia

VI-V Century BC
History and Tradition

- Macedonia was one of the most important regions for growing grapes in the Roman Empire
- Via Egnatia – old Roman road
- Amphorae - to the harbours
- At the time of the rise of Christianity, wine was part of almost all Orthodox Church ceremonies.
History and Tradition

• Ottoman empire – stagnation, table grape
• The first winery of modern ages was opened in 1885
• Phylloxera – 1908-1914
• Second World War – stagnation
• As a part of Yugoslavia, Macedonia was a major producer of wine, accounting for 2/3 of the Yugoslav production.
History and Tradition

- In the 60s and the 70s – 14,000 ha
- Stanushina, Prokupec, Vranec, Kratoshija, Smederevka, Zilavka
- Quantity vs. Quality
- 1981 – 39,000 ha
THE REPUBLIC OF MACEDONIA
Structure of cultivated land %

- Arable land and gardens: 80%
- Meadows: 12%
- Vineyards: 5%
- Orchards: 3%
Today

- Vineyards Area - 22.612 ha
  - 84% wine varieties
  - 16% table grape varieties
  - 50% red and 50% white varieties

Grape production: 300.000 t
Wine production: 120 mil L
<table>
<thead>
<tr>
<th>Variety</th>
<th>Usage</th>
<th>Surface ha</th>
<th>% of total surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vranec</td>
<td>Wine</td>
<td>7335</td>
<td>32</td>
</tr>
<tr>
<td>Smederevka</td>
<td>Wine</td>
<td>5096</td>
<td>23</td>
</tr>
<tr>
<td>Merlot</td>
<td>Wine</td>
<td>837</td>
<td>3.7</td>
</tr>
<tr>
<td>Afus ali</td>
<td>Table grape</td>
<td>828</td>
<td>3.6</td>
</tr>
<tr>
<td>Cabernet sauvignon</td>
<td>Wine</td>
<td>768</td>
<td>3.4</td>
</tr>
<tr>
<td>Kratoshija</td>
<td>Wine</td>
<td>708</td>
<td>3.1</td>
</tr>
<tr>
<td>Rain riesling</td>
<td>Wine</td>
<td>670</td>
<td>2.9</td>
</tr>
<tr>
<td>Kardinal</td>
<td>Table grape</td>
<td>616</td>
<td>2.7</td>
</tr>
<tr>
<td>Chardonnay</td>
<td>Wine</td>
<td>553</td>
<td>2.4</td>
</tr>
<tr>
<td>Victoria</td>
<td>Table grape</td>
<td>410</td>
<td>1.8</td>
</tr>
</tbody>
</table>
Facts and Figures

- **Economic Impact:** 17-20% of Agriculture GDP
- **Second largest Sub-Sector After Tobacco**
- **Number of Registered Wineries:** 74 (2003-28)
- **Total capacity:** 2,100,000 hl
- **Diversified Structure:**
  - 35 wineries to 500 hl (41.6%)
  - 6 wineries from 500 to 1,000 hl (7.1%)
  - 18 wineries from 1000 to 10,000 hl (21.4%)
  - 25 wineries with a capacity of more than 10,000 hl (29.8%)
- **Domestic Consumption:** 9 liters per annum
### Bottled Wine

<table>
<thead>
<tr>
<th>Country</th>
<th>Volume in L</th>
<th>Value in EUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serbia</td>
<td>5,449,400</td>
<td>6,550,457</td>
</tr>
<tr>
<td>Germany</td>
<td>3,434,000</td>
<td>1,846,009</td>
</tr>
<tr>
<td>Croatia</td>
<td>1,881,800</td>
<td>2,143,463</td>
</tr>
<tr>
<td>Slovenia</td>
<td>1,718,500</td>
<td>1,049,588</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>1,053,500</td>
<td>1,383,591</td>
</tr>
<tr>
<td>Montenegro</td>
<td>529,300</td>
<td>575,514</td>
</tr>
<tr>
<td>Russia</td>
<td>494,800</td>
<td>508,280</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>493,800</td>
<td>429,491</td>
</tr>
<tr>
<td>China</td>
<td>432,300</td>
<td>766,926</td>
</tr>
<tr>
<td>Canada</td>
<td>360,500</td>
<td>239,765</td>
</tr>
</tbody>
</table>

### Bulk Wine

<table>
<thead>
<tr>
<th>Country</th>
<th>Volume in L</th>
<th>Value in EUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>34,336,800</td>
<td>14,083,069</td>
</tr>
<tr>
<td>Serbia</td>
<td>15,604,700</td>
<td>6,783,044</td>
</tr>
<tr>
<td>Croatia</td>
<td>6,447,600</td>
<td>4,420,682</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>3,443,800</td>
<td>1,955,693</td>
</tr>
<tr>
<td>Slovakia</td>
<td>3,262,900</td>
<td>1,388,418</td>
</tr>
<tr>
<td>Romania</td>
<td>1,837,100</td>
<td>801,196</td>
</tr>
<tr>
<td>Slovenia</td>
<td>1,702,800</td>
<td>961,671</td>
</tr>
<tr>
<td>Russia</td>
<td>1,394,400</td>
<td>563,562</td>
</tr>
<tr>
<td>China</td>
<td>679,000</td>
<td>325,061</td>
</tr>
<tr>
<td>Japan</td>
<td>522,600</td>
<td>277,108</td>
</tr>
</tbody>
</table>
Terroir

- Land of **TIMELESS SUN**
  - 270 sunny days
- Climate
  - Mediterranean to Continental
- Soil
  - Deluvial, rich with minerals and carbonat
- Vegetation temperature – 17.0°C -18.8°C
- Annual Precipitation
  - 500-1700 mm
  - Driest Region in Balkans
- Density of plantation
  - 2.3 – 3.0 m x 0.9 – 2.5
- Training system
  - Guyot
Trends in the Developments

- Status symbol
- Family values, leisure, life philosophy
- Medical researches – antioxidant, red wines
- Macedonian red wines – polyphenols
- Customers – to know more about the wine
- Fruity, fresh and light wines
Trends in the Developments

- Companies – total quality system
- International standards
- Products with higher prices
- Link between grape growers and wineries
- Transparent and contractual relationship
- Involving in grape growing process
• The wine is consumed less in amounts, anyway the consumption of the quality wines is increased
• The autochthonous and local wines, i.e., regional varieties gain great importance
• The recognizability of the Macedonian wines comes from the growing of these varieties
• The ecological viticulture – organic wine
The GI system on wine is partially harmonized with the EU PDO/PGI system.

The whole territory of the Republic of North Macedonia is the geographical area, in other words, region for production of regional wine.

The geographical area of origin of the quality wine is called wine district.

16 wine district
Wine districts
Tikves Wine district

- **Climate**: mediterranean and continental, hot summers and mild winter, lowest amount of rainfall
- **Altitude**: from 110 to 650 m
- **Terrain**: mildly slopes, low hills
- **Varieties**: Vranec, Kratoshija, Cabernet sauvignon, Cabernet franc, Merlot, Syrah, Chardonnay, Smederevka, Grenache blanc, Sauvignon, Temjanika, Zilavka, Rkaciteli
- **Micro location**: Vilarov, Vrsnik, Smolnik, Bela voda, Barovo, Popova Kula
Wine regions

• Three Wine Regions
  1. Pcinya – Osogovo (Eastern)
  2. Vardar River Valley (Central)
  3. Pelagoniya – Polog (Western)

• Sixteen Wine Districts
Quality categories of wines

- High-quality wines with geographical origin (wine with controlled and guaranteed origin)
- Quality wines with geographical origin (wine with controlled origin)
- Table wines (regional) with geographic origin
- Table wines without geographic origin
- Special selection wines
Opportunities for the viticulture and wine sector - Strategy

• Strategy or Action plan do not exist since most of the approximation process with EU acquits in wine sector has been done

• 2010-2015

• New amendments in the Law on wine (April 2019)
Disadvantages:

- Fragmentation of vineyards
- Low purchasing on the domestic market
- Little focus on strategic objectivities
- Imperfect wine low (legislation)
- Low investments in researches
Advantages:

• Increase the surface of autochthonous and local grape varieties; clonal selection, certified plant material
• Production of wines from local and unique autochthonous commercially significant varieties;
• Focusing on the production of quality wines with Protected Geographical Name and Protected Designation of Origin;
• Consolidation of vineyards, innovative solutions in grape production, good practices for wine grapes;
Opportunities for the viticulture and wine sector - Strategy

- Implementation of technologies that lead to higher efficiency and productivity of vineyards and are environmentally friendly;
- Increasing the level of association and cooperation in the sector;
- Expansion of the application of the Global GAP and ISO standards;
- Macedonian wines should be introduced on various fairs and events worldwide;
- Development of marketing strategies, expanding the share on traditional markets and entering new attractive commercial destinations.
Stanushina

- **Synonyms**
  Stanushina crna, Gradesh (MK)
- **Origin**
  - Tikvesh
  Black Sea Group (Convarietas Pontica)
  Balkan Subgroup (Subconvarietas Balcanica)
- **Surface**: 250 ha
- **Ampelographic Characteristics:**
  - Grape: medium, cylindrical,
  - Berry: medium, round
  - Skin: dark blue, rusty spots
  - Anthocyanin: 300 mg/l (Vranec >500mg/l)

- **Technological Characteristic**
  - Sugar Content: 170 - 190 g/l
  - Acid Content: 6-7 g/l

- **Maturity**: beginning of October
- **Wine**: fresh, pleasant, with ruby red colour, simple smell and fruit aroma
- **Clonal selection**
Thanks for attention!