Past, Present and Future of the Wine Industry in Peru

Submitted by: Peru
PAST, PRESENT AND FUTURE OF WINE IN PERU
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Ing. Alfredo San Martín Novelli
President of Technical Standardization Committee on Grapevine Alcoholic Beverages

CONTENT

- The history of the wine industry in Peru
- Figures of APEC economies compared to Peru
- Wine regulations and standards
- Conclusions
THE HISTORY OF THE WINE INDUSTRY IN PERU

First vineyards

Francisco de Carabantes reported some plants from the Canary Islands (Spain) and planted them in Cusco.

Early production of chicha

Peru’s largest producer of wines and spirits (PISCO) of America

Competed with wines produced in Spain and other economies.

Behind Argentina, Chile, the United States and Brazil. The production was of $8 million tons.

Peru fifth producing wine country in Latin America.

The production was of 9,8 million liters.

Prohibitions of Spain

Filoxera

The winerys were deprived of vineyards

Agrarian Reform

They had many properties designated for wine production

Expulsion of the Jesuits

Mandate of kings Felipe II and Felipe III forbade Atlantic ships to transport wine to Europe. Peru and Guzmán.

Exotic of kings Felipe II and Felipe III to transport Atlantic ships to transport wine to Europe. Peru and Guzmán.

Source: Book “Desarrollo de la Vitivinicultura en el Perú” – Ministry of Agriculture, “La vid y el vino en América del Sur” – Pablo Lacoste, diverse information of Internet)
VINEYARDS
1570

35,000 HAS
II
(86,000 ACRES)

Source: "Cronología de la producción de vinos y pisco en el Perú 1548-2008" – Lorenzo Huertas Valdés

EVOLUTION OF TECHNIQUES

- **Obtaining of must**
- **Fermentation and preservation**
- **Distillation**
- **Bottling and labeling**

**Handmade**
- Pisa
- Botija
- (Falca) Sill

**Semiartesanal**
- Press
- Concrete
- Still
- Semi-automatic

**Industrial production**
- Stripping
- Stainless Steel
- Still with hot wine
- Automatic

PACIFIC
OCEAN
ECUADOR
COLOMBIA
BRAZIL
CHILE
BOLIVIA
INTERNATIONAL COMPETITIONS WHERE PERUVIAN WINE HAS BEEN AWARDED

Englpnd
The International Wine & Spirits Competition
Monde Selection

Germany
Mundus Vini

Canada
Selections Mondiales

Belgium
Concours Mondial de Bruxelles

Chile
Wine & Food Non Alcoholic Beverages Asia Pacific Testing Contest

Spain
Premios Zarcillo

France
Vinalies Internationales
Les Citadelles du Vin

Hungary
Concurso Mundial Budapest

Argentina
Vinandino

FIGURES OF APEC ECONOMIES COMPARED TO PERU
APEC: WINE PRODUCTION

The wine production has been tripled in the last 10 years.

Source: Expressed in million liters / Wine Institute (2009) / Comité de la Industria Vitivinícola de la Sociedad Nacional de Industrias

APEC: PER CAPITA CONSUMPTION

Through 2020, with an approximated population of 33 million, consumption of wine will be 130 million liters.

EVOLOUTION OF THE CONSUMPTION PER CAPITA OF WINE IN PERU

<table>
<thead>
<tr>
<th>Year</th>
<th>Nat. Wine</th>
<th>Int. Wine</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>0.50</td>
<td>0.23</td>
<td>0.74</td>
</tr>
<tr>
<td>2003</td>
<td>0.56</td>
<td>0.22</td>
<td>0.77</td>
</tr>
<tr>
<td>2004</td>
<td>0.58</td>
<td>0.20</td>
<td>0.78</td>
</tr>
<tr>
<td>2005</td>
<td>0.70</td>
<td>0.20</td>
<td>0.89</td>
</tr>
<tr>
<td>2006</td>
<td>0.70</td>
<td>0.24</td>
<td>0.94</td>
</tr>
<tr>
<td>2007</td>
<td>0.79</td>
<td>0.24</td>
<td>1.03</td>
</tr>
<tr>
<td>2008</td>
<td>0.97</td>
<td>0.28</td>
<td>1.23</td>
</tr>
<tr>
<td>2009</td>
<td>0.87</td>
<td>0.25</td>
<td>1.12</td>
</tr>
<tr>
<td>2010</td>
<td>1.09</td>
<td>0.28</td>
<td>1.38</td>
</tr>
</tbody>
</table>

Source: Comité de la Industria Vitivinícola – Sociedad Nacional de Industrias

WINE REGULATIONS AND STANDARDS
GENERAL REGULATIONS

CERTIFICATION

TRADE
Sanitary Registry, and Certificate of Origin

CONTROL OF QUALITY AND SAFETY

SENSORY ANALYSIS

SPECIFIC REGULATIONS / STANDARDS

CHEMICAL ANALYSIS

GOOD PRACTICES

LABELLING

CERTIFICATION

GENERAL GUIDES APPLICABLE FOR CONFORMITY ASSESSMENT

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP ISO/IEC 58:1993</td>
<td>Calibration and testing laboratory accreditation systems - General requirements for operation and recognition</td>
</tr>
<tr>
<td>GP ISO 27:2007</td>
<td>Guidelines for corrective action to be taken by certification body in the event of misuse of its mark of conformity</td>
</tr>
<tr>
<td>GP ISO/IEC 65:2008</td>
<td>General requirements for bodies operating product certification systems</td>
</tr>
</tbody>
</table>

Source: INDECOPI
**TRADE**

Sanitary Registry and Certificate of Origin

All industrialized product that is commercialized in Peru must be counted on **Sanitary Registry** granted by the Main directorate of Salud (DIGESA). In order to obtain it the supplier (exporter) it must present/display:

- **Request** to the Executive Director of Hygiene Alimentaria and Zoonosis, with character of Sworn Declaration. The information of the product is registered: name, presentation, size, package, etc.

- **Result of analyses microbiological physical-chemistries** and of the finished product, processed by the laboratory of quality control for the factory or a laboratory accredited in Peru.

- **Labeling of labeled products**. If it is an imported product, an additional label to brief all the minimum data in spanish language.

- **Certificate of Free Sale or Trade** if the product is imported, emitted by the competent authority of the economy. Ticket origin of payment.

Also, for the wine import **Certificate of Origin** will be required, in case the product is negotiated with the exporting economy, that is to say, that the product has comprised of the rounds of negotiations of the TLC with the exporting country and therefore it has a preferential tariff.

Source: Regulation on monitoring and sanitary control of foods and drinks

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**CONTROL OF QUALITY AND SAFETY**

HAZARD ANALYSIS CRITICAL CONTROL POINTS – HACCP SYSTEM

All food and drink factories must carry out the control of sanitary quality and safety of the products that elaborate. The procedure is the following:

- The manufacturer must prepare a HACCP plan for the product. After validated in plant by the manufacturer it will have to apply the plan to the process of manufacture of its products.

- One will give to the organization charge of the sanitary monitoring of manufacture of foods and drinks a copy of HACCP plan for technical validation and periodic inspection.

- The technical validation in plant allows verification of the suitability of the plan and its effective application in the manufacture process. In the act to the observations and term of inspection will be detailed.

- The manufacturer will have periodically to carry out all the verifications that are necessary to corroborate the correct application of the plan in the manufacture process.

- The pursuit of the application of the system in the factories will require inspection that will include a general evaluation of the potential risks associated to the activities or operations respect to the safety of the products that it elaborates.

Source: Regulation on monitoring and sanitary control of foods and drinks
### SENSORY ANALYSIS

**PERUVIAN TECHNICAL STANDARDS OF SENSORY ANALYSIS**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTP ISO 4120</td>
<td>Methodology. Triangle test</td>
</tr>
<tr>
<td>NTP ISO 4121</td>
<td>Guidelines for the use of quantitative response scales</td>
</tr>
<tr>
<td>NTP ISO 5492</td>
<td>Vocabulary</td>
</tr>
<tr>
<td>NTP ISO 5495</td>
<td>Methodology. Paired comparison test</td>
</tr>
<tr>
<td>NTP ISO 5496</td>
<td>Methodology. Flavor profile methods</td>
</tr>
<tr>
<td>NTP ISO 6458</td>
<td>Methodology. General guidance</td>
</tr>
<tr>
<td>NTP ISO 8587</td>
<td>Methodology. Ranking</td>
</tr>
<tr>
<td>NTP ISO 8589</td>
<td>General guidance for the design of test rooms</td>
</tr>
<tr>
<td>NTP ISO 10399</td>
<td>Methodology. Duo-trio test</td>
</tr>
<tr>
<td>NTP ISO 11035</td>
<td>Identification and selection of descriptors for establishing a sensory profile by a multidimensional approach.</td>
</tr>
<tr>
<td>NTP ISO 11036</td>
<td>Methodology. Texture profile</td>
</tr>
<tr>
<td>NTP ISO 13300-1 y 13300-2</td>
<td>General guidance for the staff of a sensory evaluation. Part 1: Staff responsibilities- Part 2: Recruitment and training of panel leaders</td>
</tr>
<tr>
<td>NTP ISO 13301</td>
<td>Methodology. General guidance for measuring odour, flavor and taste detection thresholds by a three-alternative forced-choice (3-AFC) procedure</td>
</tr>
<tr>
<td>NTP ISO 16820</td>
<td>Methodology. Sequential analysis</td>
</tr>
<tr>
<td>NTP ISO 3591</td>
<td>Apparatus. Wine tasting glass</td>
</tr>
</tbody>
</table>

**Source:** INDECOPI

### CHEMICAL ANALYSIS

**PERUVIAN TECHNICAL STANDARDS OF CHEMICAL ANALYSIS**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTP 212.006</td>
<td>Wines. Determination of sulfates¹</td>
</tr>
<tr>
<td>NTP 212.008</td>
<td>Wines. Determination of chlorides²</td>
</tr>
<tr>
<td>NTP 212.015</td>
<td>Wines. Determination of the sulphurous free and total anhydride¹</td>
</tr>
<tr>
<td>NTP 212.030</td>
<td>Wines. Determination of alcoholic grade¹</td>
</tr>
<tr>
<td>NTP 212.031</td>
<td>Wines. Determination of total volatile acidity¹</td>
</tr>
<tr>
<td>NTP 212.032</td>
<td>Wines. Determination of methanol¹</td>
</tr>
<tr>
<td>NTP 212.036</td>
<td>Wines. Determination of total dry matter³</td>
</tr>
<tr>
<td>NTP 212.037</td>
<td>Wines. Determination of citric acidity¹</td>
</tr>
<tr>
<td>NTP 212.038</td>
<td>Wines. Determination of the content of sweeten reducers²</td>
</tr>
<tr>
<td>NTP 212.039</td>
<td>Wines. Determination of malvidin diglucoside¹</td>
</tr>
<tr>
<td>NTP 212.041</td>
<td>Wines. Determination of saccharose³</td>
</tr>
<tr>
<td>NTP 212.047</td>
<td>Wines. Determination of total acidity¹</td>
</tr>
<tr>
<td>NTP CODEX CAC/RCP 63</td>
<td>Wines. Code of practice for the prevention and reduction of ochratoxin A contamination in wine</td>
</tr>
</tbody>
</table>

**Notes:** (1) OIV, (2) OIV/AOAC, (3) Regulation CEE 1295/2008 (based OIV) *Source:* INDECOPI
GOOD PRACTICES

ENOLOGICAL PRACTICES

ACIDIFICATION → CLARIFICATION → DECOLORIZER → DEACIDIFICATION

ENZYMES → ENRICHMENT → PRODUCTION → DEODORANT

FERMENTATION → PRESERVATIVE → SEQUESTRANT → STABILISATION

Source: Peruvian Technical Standard 212.014 Alcoholic Beverages. Wine

GOOD PRACTICES

PHYSICAL PROCESSES

ELIMINATION OF SULFUR DIOXIDE BY PHYSICAL PROCESS → CENTRIFUGING → MICRO / ULTRA FILTRATION

THERMAL TREATMENTS → EVAPORATION → REVERSE OSMOSIS

ELECTRODIALYSIS → ION EXCHANGE RESINS → PROCESSING SPINNING CONE COLUMN

Source: Peruvian Technical Standard 212.014 Alcoholic Beverages. Wine
LABELLING

WINE LABEL

Identification of the product* (mandatory)

Name, legal address of the manufacturer, packer, distributor (mandatory)

When the product is made by the person named on the label shall be accompanied by the phrase "Made by ...

Name of the variety of the grapevine (optional)

This phrase should be given in an area not less than 10% of the label (inc. back label) of the container and packaging (mandatory, law 28681)

If the wine has been elaborated with at least 75% of the grapes of this variety or if the totality of the wine comes from the mixture of 3 varieties and whenever the minority cepaje takes part in not less of 15%.

Year of harvest (optional)

Sanitary Registry y RUC (mandatory)

It will be possible to be indicated if the wine has been elaborated with grapes in non inferior proportion to 75% of the declared year.

Net capacity* (mandatory)

Lot (mandatory) or insert day, month and year of production directly or coded

The minimum altitude of numbers and letters for a content > to 200 mililiters and until 1L is 4mm

Alcoholic grade (mandatory)

Origin (mandatory)

Put the phrase "Product of Peru", "Made in Peru" or "Peruvian industry"

Source: Peruvian Technical Standard 213.0.014 Alcoholic Beverages. Wine

This information must appear on the main part of the presentation.

CONCLUSIONS
The quality of the Peruvian wine is being recognized and it continues to work to improve its competitiveness.

Peru continues in gastronomy and Peruvian wine is part of this.

The existing regulations have resulted in a substantial improvement of the quality of the wine which will further add to its competitiveness in the national and international markets and therefore to generate the development of the sector.

The informality and adulteration in alcoholic beverages have diminished from 53% in 2003 to 34% in 2009. Recently sign law 29632 to eradicate the production and trade of spirits that are informal, adulterated or not fit for human consumption will improve this number.

The wine industry in Peru will return to importance because of its conditions and/or potential. It has tripled in the last 10 years.

THANK YOU