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# STUDIES CONCERNING THE SITUATION OF WINE PRODUCERS IN SWITZERLAND

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***Abstract***

*In this paper we seek to analyze the level of wine production and rural tourism in Switzerland. The various factors in wine production and their functions represented the different segments, their links and the global values and identified the added value for each segment of the value chain. 443 respondents were selected using the multi-stage sampling technique and interviewed using structured questionnaires, informal interviews and observation techniques to obtain primary results. This resulted using the functionality and analysis. The work concluded that Switzerland, although having a small agricultural area, the surface cultivated with vines is relatively significant (over 15,000 hectares). Also, production of more than 1 million hectoliters per year is destined for self-consumption, the exports representing only about 1% of total production.*

***Key words***: *financial situation, resources, Switzerland, vineyards, wine producers*

## INTRODUCTION

Switzerland is an important grapes and wines producer even if it does not have a very large vineyard area comparing with other countries (about 15,000 hectares of vineyards, especially in the South and West of the Federation, mainly in the cantons of Geneva, Neuchâtel, Ticino, Wallis and Waadt) and the average area per producer is less than 4 hectares [9].
Switzerland produces about 1 million hectoliters of wine annually, of which about 479,000 hl of red wine and 522,000 hl of white wine. Almost all of their wine production being destined for domestic consumption. Less than 2% of wine production is exported, especially in the surrounding countries (Germany being on the first place in this ranking). Swiss wines enjoy an exceptional heritage, with over 60 local varieties (old varieties and modern crosses). Many known varieties - Chasselas, Savagnin - have their genetic origin on the current territory of Switzerland, and others more obscure (Armigne, Arvigne, Bondola, Cornalin) are found only in a canton or valley. In this sense, knowledge of varieties is important. At the same time, there are many known varieties that give very good results - Pinot Noir, Gamay and Merlot from tomatoes, and Chardonnay, Pinot Gris and Chenin Blanc from the white. Pinot Noir owns the largest planted area, followed by Chasselas, Gamay, Chardonnay and Merlot. Generally northwest is of white wines, and the center and Southern of red wines.
We also wanted to find out if the wine producers practice rural tourism and if so, to what level this activity influences the financial situation of the holding [1].
The climate is heavily influenced by the prevailing currents from westerly directions mainly deliver a mild, humid sea breeze to Switzerland. In summer, it has a cooling, in winter a warming effect, and most areas enjoy an adequate amount of precipitation throughout the year. The Alps are acting as a prominent climatic barrier between Northern and Southern Switzerland. In the Southern part of Switzerland, which is influenced mainly by the Mediterranean Sea, winters are considerably milder than in the Northern part. Aside from their dominant effect as a climatic

barrier between the North and South, the complex mountain range of the Alps additionally creates several different climatic regions [6],[7],[10].
The climate of Switzerland is characterised by a number of special features – ranging from snowfall during spring, a cold snap in June to fog and heat as summer in autumn [10].
Even though 40% of Switzerland's surface area is mountainous, there are six vineyards that group a variety of soils and microclimates: Valais - with over one third of total production, Vaud, German cantons, Geneva, Ticino, and the three-lakes region (Neuchatel).
The great lakes, the sunny valleys, the warm winds, the terraces with Southern exposure, all create favourable conditions for the optimal development of vineyards. On the shores of Lake Leman there is even a Mediterranean microclimate [1], [7].
Historically, on the current territory of Switzerland, there is continuous wine from the time of the Romans, who founded here the province of Raetia, and many modern localities are drawn directly from the ancient Roman settlements. Even since the early Middle Ages, there have been commemorations of vines, between monasteries.
There are several areas where there are documented over 1,000 years of uninterrupted cultivation - the Lavaux estates, for example, is UNESCO heritage. Even today, many manufacturers have been doing this for several generations, and there are wine growers' associations more than 100 years old [9].
In this context, the purpose of the paper aimed to analyze the level of wine production and rural tourism in Switzerland. The various factors in wine production and their functions represented the different segments, their links and the global values and identified the added value for each segment of the value chain.

## MATERIALS AND METHODS

A thousand questionnaire were sent to the Swiss wine producers to which 443 responded. For the following reasons: retirement, changing the field of activity or other reasons we did not get more answers.
The 443 vineyard locations analysed in this study totalize 1,650 ha (11%) from a total area of approximately 15,000 ha of Swiss vineyard. On the surface of 20 of the 26 cantons of Switzerland, the people surveyed carry out their production. In the six remaining cantons, the vine is less present or missing.

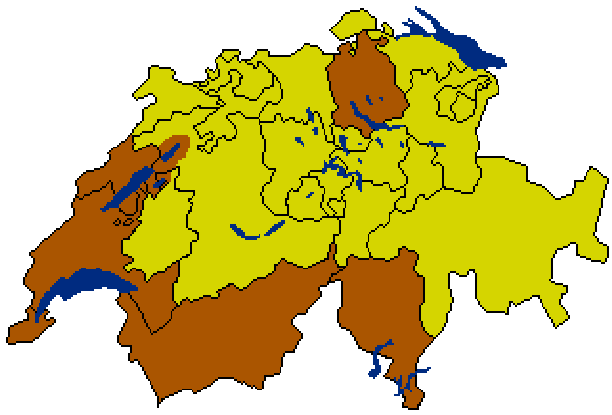

Fig. 1. The main wine regions of Switzerland (in brown color) [9]

To a certain number of people, it represents either the entire population or a sample drawn from this population [5].
The purpose of the survey of consumer attitudes toward organic products is that of making estimates, based on the results from the processing of obtained data and using the principles of the probability theory, the appropriate parameters of the total population, elements that are included in the name of the *statistic survey*.
The questionnaire has been chosen as tool for gathering the information necessary for the research, for the purpose of reaching the goals and performing the study, as well as for economic reasons.
Using the survey shows that the representativeness of a sample primarily depends on the proper choice of methods and selection types.
Among the most important methods used in this purpose are: opinion polls, SWOT surveys, surveys on the quality of products and services, surveys on product sales and information, etc. [10].

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## RESULTS AND DISCUSSIONS

The questionnaire highlighted aspects related to:
*(a)County* or *counties* where production takes place – Most part of the wine producers interviewed operate on the surface of a single county. The main counties as the number of respondents being Waadt and Wallis;
*(b)Year of birth* of the person interviewed – the average age of the Swiss winemakers is almost 54 years – average of born year being 1963.63;
*(c)Gender* - 89% of men and 11% of women;
*(d)Last graduated school* - the calculated average tells us that most of them have, at least, graduated the high school;
*(e)Full-time or part-time activity* - 58% of the respondents have the full wine production concern, for 42% of them is only a part-time activity;
*(f)Selling price of grapes* (if they sell grapes) - about 63% of producers sell grapes and the average price/1 kilo is about 3.52 CHF;
*(g)Wine price* is divided into 4 categories:

a. under 15 CHF / 0.75 l
b. between 15 and 20 CHF / 0.75 l
c. between 20 and 30 CHF / 0.75 l
d. over 30 CHF / 0.75 l

*(h)The mode of exploitation*: conventional, with ecological services required, biologic-organic or transition [3].
*(i)Agricultural surface*: arable land, grassland, vine, other perennial crops
*(j)Turnover* (%): *The financial situation of the agricultural holding*: very good, good, fair, poor, very poor
*(k)Wine marketing* (%): direct or through specialized distributors
*(l)Tourist facilities* (where applicable): pump room, restaurant, winery, accommodation, playground, events in which they participate, others to mention
*(m)The manufacturer's attitude* towards the following statements:

✓ productivity per unit area,
✓ the contribution of tourist activities to the direct sale of wine,
✓ the existing portfolio,
support from local authorities and from the state, the location of the farm in a scenic area [9].

For this last situation the scoring was performed from 1 to 7, as follows:

✓ Total disagreement - 1 point,
✓ Disagreement - 2 points,
✓ Rather disagree - 3 points.
✓ Undecided - 4 points,
✓ Rather agree - 5 points,
✓ Agree - 6 points,
✓ Totally agree - 7 points [4].

The most important answers to the applied questionnaire are related to:

1. **The price of wine**

The results obtained are represented in Table 1 and Figure 2 where you can see the following: more than 52% of the wine marketed by the producers is sold at a price of less than 15 CHF / 0.75 l and only 2.88% is sold over 30 CHF, but prices are significantly higher relative to other countries.

Table 1. The price of wine for 0.75 l in Switzerland

| | |
|---|---|
| under 15 CHF / 0.75 l | 52.64 % |
| between 15 and 20 CHF / 0.75 l | 31.59 % |
| between 20 and 30 CHF / 0.75 l | 12.89 % |
| over 30 CHF / 0.75 l | 2.88 % |

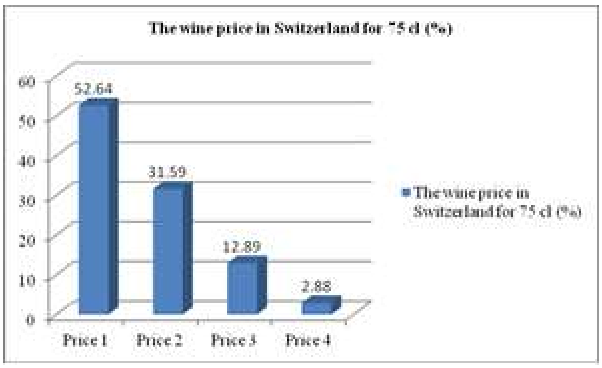


Fig.2. The price of wine in Switzerland for 0.75 l
Note:
Price 1= below 15 CHF; Price 2= between 15&20 CHF
Price 3=between 20&30 CHF; Price 4= over 30 CHF.
Source: Own calculations

**2. The agricultural area** - as it is distributed by the vine growers.

The obtained results with the area of land cultivated by wine producers are as follows (as shown in Fig. 3):
-Over 8 ha is the average of the arable land exploited by each producer;

-Approximately 4.8 ha is the average of the areas occupied by the grass;
-The vineyard culture with an average of 3.78 ha / producer;
-Almost 1 ha for each is the average for other perennial plants.

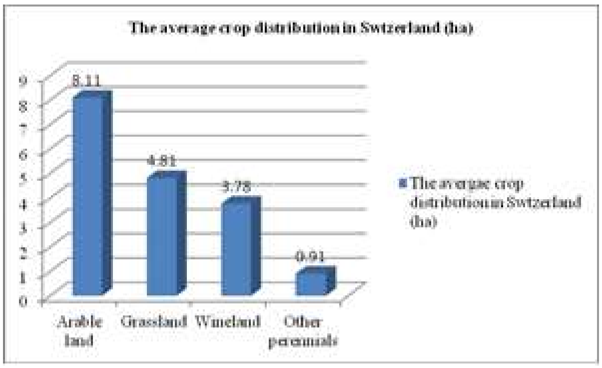


Fig.3.The average crop distribution in Switzerland (ha)

3. **The financial resources** of producers are highlighted in Figure 4. We find the following percentage situation:
-Nearly 64% of the average revenue comes from the sale of grapes or wine;
-26.8% come from agriculture, except for viticulture;
-1.38% of tourism;
-8% of revenues are financial sources from other activities outside the agricultural holding.

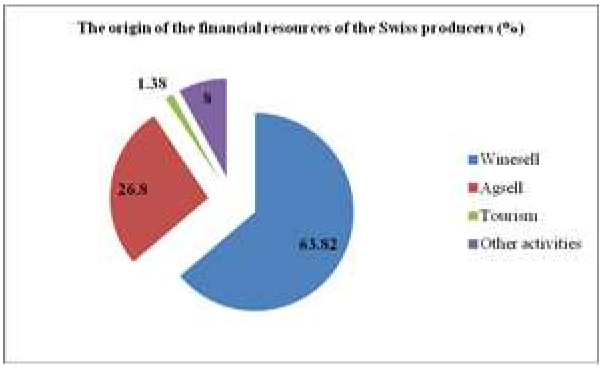


Fig.4.The origin of the financial resources of the Swiss producers(%)
Source: Own design.

4.**Tourist facilities** offered by wine producers (Fig. 5). Although, in terms of the overall income average, tourism activities in wine farms are not very high (less than 1.4%) but they are on the upward path, most of the producers wanting to combine these two branches.

Thus, in terms of facilities, we received the following answers:
-5 % have pump room;
-2.5% of respondents can provide food services;
-6.3% have wineries (they can also organize wine tastings at their own farm);
-3.2% can offer accommodation;
-Approximately 1.1% provide a playground for children;
-Over 28% participate in different events: fairs, exhibitions, tastings, etc.;
-8% also offer other services worth mentioning.

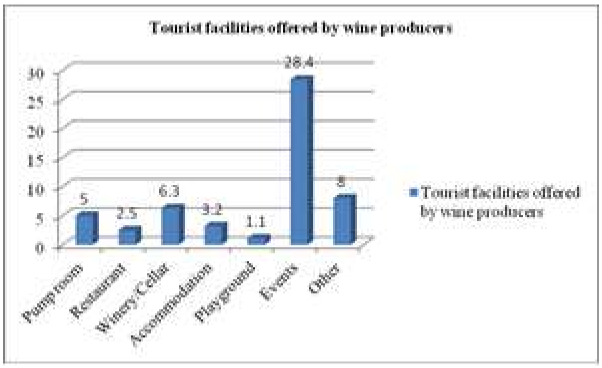


Fig.5.Tourist facilities offered by wine producers
Source: Own calculation and design.

**5.The attitude of Swiss wine producers** is presented in Fig.6.

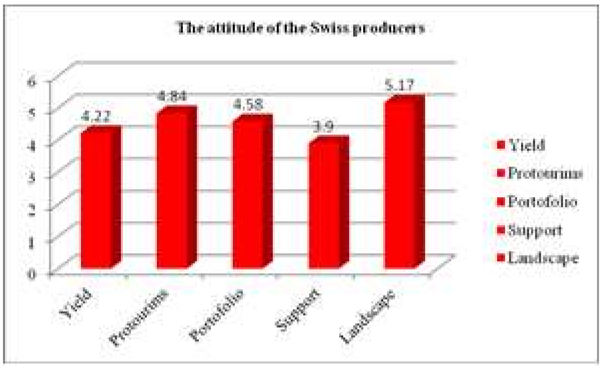


Fig.6.The attitude of the Swiss producers
Source: Own determination.

The Fig.6. shows the following aspects:
• Productivity per unit area – 4.22 points is the average out of 7 [5];
• The contribution of tourism activities to the direct sale of wine – 4.84;
• The existing portfolio (5 points) - broadly they have loyal customers – 4.58;

• Support from the local authorities and the state (3.9 points) - the state and / or the local authorities does not help too much;
• The location of the farm in the scenic area (5.17) - the attitude, from this point of view, is favorable, the producers being pleased with the landscape of their area.

## CONCLUSIONS

Vine culture and Swiss wine production are a great surprise to our study but a challenge at the same time. Tight data is the result of a busy but pleasant job.
In this small country as a surface, with a reduced agricultural area and with a smaller vine area, wine production is still high even if it covers more household use.
The tourist activities in the vineyards do not bring too much financial contribution but they are in continuous process of development from this point of view.

## ACKNOWLEDGEMENTS

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