

## RESEARCH REGARDING THE EVOLUTION OF WINE CERTIFICATION IN EUROPE

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### RESEARCH ARTICLE (REVIEW ARTICLE)

#### Abstract

*Wine is one of the oldest foodstuffs known in the world. It is one of the foodstuffs that is consumed not just for its benefits from nutritional point of view but also for its properties, linked with psychological impact. The local communities developed during centuries their own approaches related with wine and this way there are hundreds of different local assortments characterized by particular properties. This is the main aspect that allows us to conclude that wine is one of the most EMBEDDED food systems in Europe. Its production, presentation, certification and consumption are under national and European special regulations that provide food safety, intellectual properties rights, sustainable development and protection of local heritage even from an ethical point of view.*

**Keywords:** wine; DOP; PGI; certification; time evolution.

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#### INTRODUCTION

Most of the farmers that are players in the grape and wine production are looking for certification in order to protect their work, product and even local community.

This aspect was noticed by the European Union Commission very early and this way regulations have been laid down since 1970 (Regulation (EEC) No. 1698/70). The regulation was updated for several times and finally it was a very effective instrument that was providing safety, high qualitative level products and it was linked to geographical areas assets.

The most important regulations are related with P.D.O. (Protected Designation of Origin) and P.G.I. (Protected Geographical Indication).

Many producers and consumers are not used to use the brands that distinguish between P.D.O. (Protected Designation of Origin) and P.G.I. (Protected Geographical Indication) products yet. Both are considered quality labels issued by the European Union and are based on the proposal of the Minister of Agriculture of each European country, in conjunction with the availability of interested producers to undergo a constant control from a third party certification entity. Actually, a small fraction of the producers use the protection that derives from those instruments – 1719 certified products.

The most interesting aspect is the evolution of the certification during time in all European countries. Our research raised some questions, led to some conclusions but also

raised concerns on how the countries approach the certification procedure of wine.



Figure 1. P.D.O. (Protected Designation of Origin) and P.G.I. (Protected Geographical Indication) logos

([https://agriculture.ec.europa.eu/farming/geographical-indications-and-quality-schemes/geographical-indications-and-quality-schemes-explained\\_ro#reglement%C4%83ri-privind-sistemele-de-calitate](https://agriculture.ec.europa.eu/farming/geographical-indications-and-quality-schemes/geographical-indications-and-quality-schemes-explained_ro#reglement%C4%83ri-privind-sistemele-de-calitate))

#### MATERIAL AND METHOD

The research was conducted by database interrogation and therefore, eAmbrosia, the EU geographical indications register database, was used.

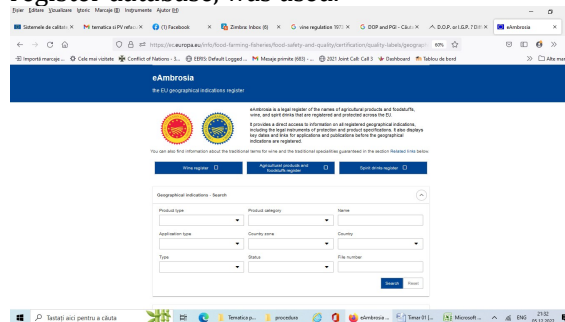


Figure 2. eAmbrosia database interface (<https://ec.europa.eu/info/food-farming-fisheries/food-safety-and->

The interrogation of the database was done on 03.12.2022 and the results are covering all the period from the beginning of the wine certification until present.

There were assessed the following parameters:

1. Number of certified products,
2. Kind of certification (P.D.O. and P.G.I.),
3. Type of certification (Applied, Canceled and Registered),
4. Date of certification.

The results were shown in graphical mode but also as percentage.

The main relevance of the research methodology is related to the evolution referring to the studied parameters and thus, the countries approach is emphasized.

## RESULTS AND DISCUSSIONS

The research showed very interesting aspects. The first results are related to the total number of the certified products. In Table 1 some important differences are presented. Despite the fact that there are countries with huge potential, the certified products are in a modest number or even extremely small number – the case of Cyprus.

Table 1

Total number of certified wine assortments in Europe

Country	Total number	Percentage, %
Austria	35	2.036067
Belgium	10	0.581734
Bulgaria	56	3.257708
Croatia	19	1.105294
Cyprus	13	0.756254
Czech Republic	13	0.756254
Denmark	7	0.407213
France	457	26.58522
Germany	50	2.908668
Greece	147	8.551483
Hungary	57	3.315881
Italy	538	31.29727
Luxembourg	1	0.058173
Malta	1	0.058173
Netherlands	25	1.454334
Portugal	49	2.850494
Romania	58	3.374055
Slovakia	10	0.581734
Slovenia	17	0.988947
Spain	157	9.133217
<b>Total</b>	<b>1719</b>	<b>100</b>

\*Standard deviation = 384.3224

The data in this table show that there is no correlation among the size of the countries, number of inhabitants and vineyards and number of certified wine assortments. Thus, Greece and Spain have comparable numbers but the size of the countries is significantly different. The areas of the countries provide similar conditions for grape cropping so there is no other interference.

In the same time, countries like Romania, Bulgaria and Hungary have higher numbers than Portugal which despite its small size, is located in

the most favourable position for grape cultivation.

Countries with relevant tradition in wine production have the highest rates.

Therefore, the highest share was recorded in the case of Italy with 31.29727 % while the lowest share was recorded for Luxembourg and Malta, despite the fact that Malta has excellent conditions for both grape cultivation and a good market for tourists.

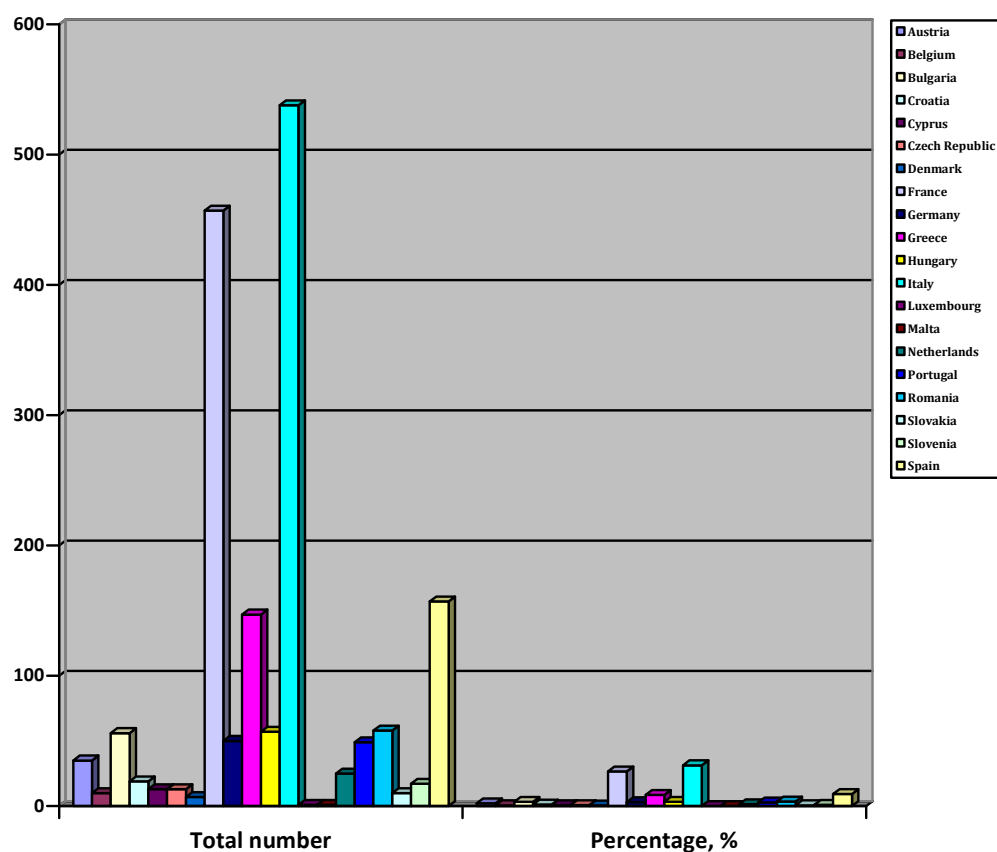


Figure 3. Total number of certified wine assortments in Europe

Table 2

Total number of certified wine assortments in Europe by status of certification

Country	Total	Applied	Registered	Cancelled	Percentage/Applied	Percentage/Registered	Percentage/Cancelled
Austria	35	3	28	4	8.571429	80	11.42857
Belgium	10		10		0	100	0
Bulgaria	54		54		0	100	0
Croatia	20	1	19		5	95	0
Cyprus	15	2	13		13.33333	86.66667	0
Czech Republic	13		13		0	100	0
Denmark	6		6		0	100	0
France	457	14	443		3.063457	96.93654	0
Germany	50	1	49		2	98	0
Greece	147		147		0	100	0
Hungary	57	15	40		26.31579	70.17544	0
Italy	538	7	528		1.301115	98.14126	0
Luxembourg	1		1		0	100	0
Malta	1		1		0	100	0
Netherlands	25	2	21		8	84	0
Portugal	49	9	40		18.36735	81.63265	0
Romania	58	4	54		6.896552	93.10345	0
Slovakia	10	1	9		10	90	0
Slovenia	17		17		0	100	0
Spain	157	5	152		3.184713	96.81529	0
<b>Total</b>	<b>1720</b>	<b>64</b>	<b>1645</b>	<b>4</b>	<b>3.72093</b>	<b>95.63953</b>	<b>11.42857</b>

\*Standard deviation 16.95015; 369.0666; 0

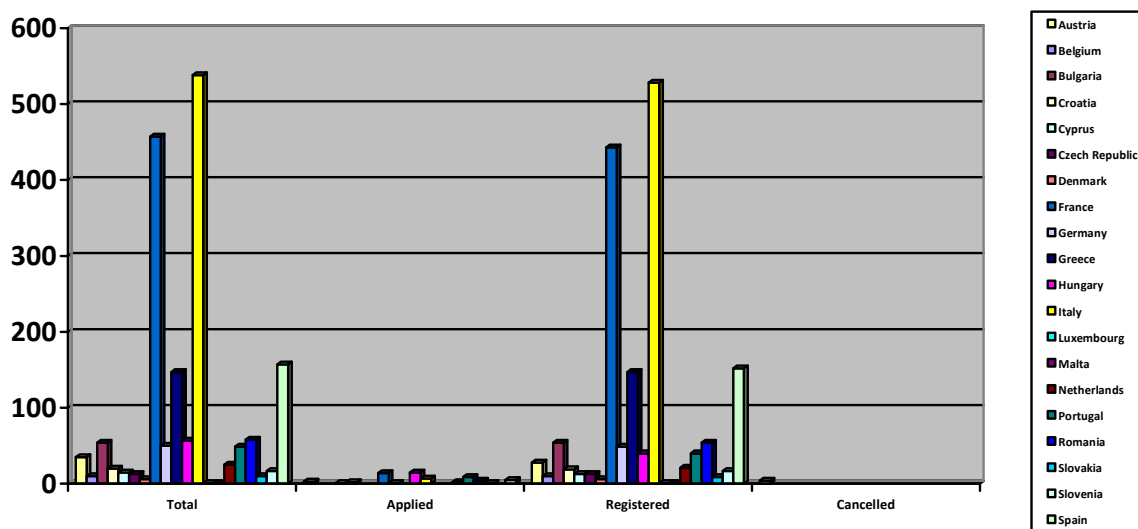


Figure 4. Total number of certified wine assortments in Europe by status of certification

The data in Table 4 show that there are some issues related to certification. Despite the fact that the final phase is taking place at a European level and it is expected as no procedural errors to exist, there are few certified products that are cancelled.

Due to the fact that the cancelled certified products are recorded only in Austria, it is possible that this is the exception that enforces the regulation, or there are errors related to the certification procedure at national level.

The small number of products sent to certification is a very concerning signal regarding the willingness of the producers, the support that they have from the national regulation bodies and also about the awareness on the benefits related to certification.

With a few exceptions, it seems that countries are not very interested in continuing the certification procedure, although most of the submitted applications have a 100% certification rate.

Table 3

Total number of certified wine assortments in Europe by type of certification					
Country	Total	DOP	PGI	Percentage DOP, %	Percentage PGI, %
Austria	35	32	3	91.42857143	8.571429
Belgium	10	8	2	80	20
Bulgaria	54	52	2	96.2962963	3.703704
Croatia	20	20	0	100	0
Cyprus	15	9	6	60	40
Czech Republic	13	11	2	84.61538462	15.38462
Denmark	6	2	4	33.33333333	66.66667
France	457	375	82	82.05689278	17.94311
Germany	50	23	27	46	54
Greece	147	33	114	22.44897959	77.55102
Hungary	57	51	6	89.47368421	10.52632
Italy	538	419	119	77.88104089	22.11896
Luxembourg	1	1	0	100	0
Malta	1	1	0	100	0
Netherlands	25	13	12	52	48
Portugal	49	33	16	67.34693878	32.65306
Romania	58	45	13	77.5862069	22.41379
Slovakia	10	9	1	90	10
Slovenia	17	14	3	82.35294118	17.64706
Spain	157	124	33	78.98089172	21.01911
<b>Total</b>	<b>1720</b>	<b>1275</b>	<b>445</b>	<b>74.12790698</b>	<b>25.87209</b>

\*Standard deviation 384.5157; 288.0732; 105.8318

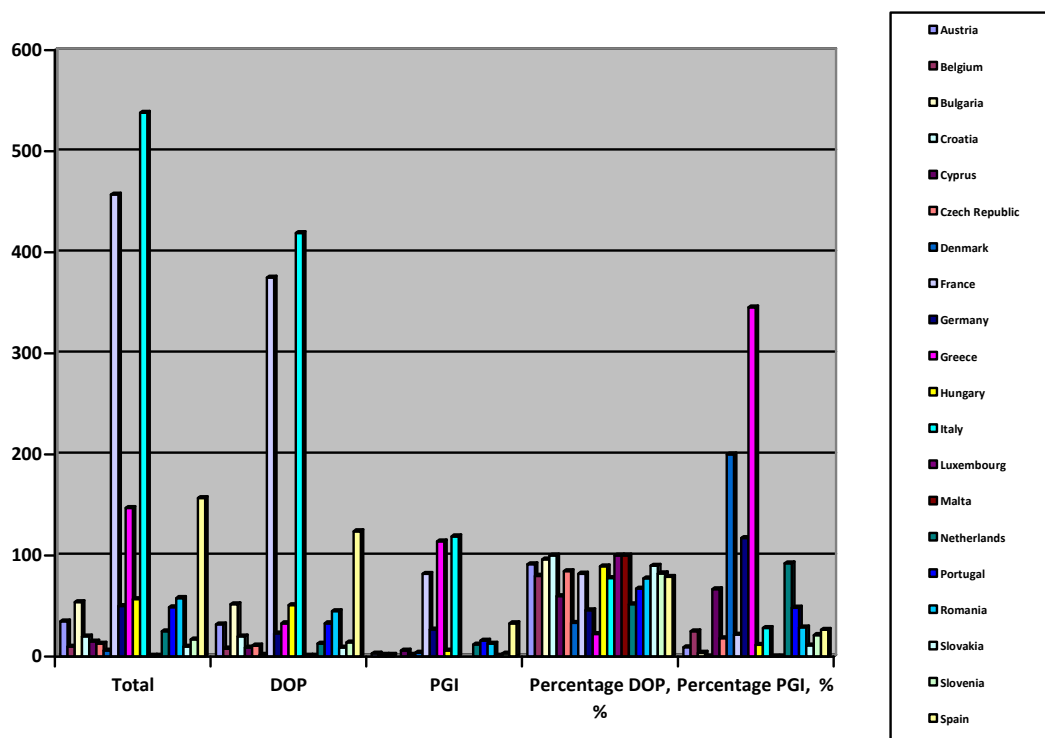


Figure 5. Total number of certified wine assortments in Europe by type of certification.

Table 3 shows one concerning aspect. The P.G.I. certified products are less in number even if they provide a better protection of the trade mark, sustainable development and strong local identity. This is partially explained by the fact that in the case of the P.G.I. products, the certification procedure started to be known just recently. More than this, the producers that already have D.O.P, or at least some of them, can obtain a higher P.G.I.

certification with all the benefits included. However, not too many of them, even if eligible, do not apply for the P.G.I. certification for unknown reasons.

The last observation is that there are no campaign in the countries to keep the producers aware and updated with the certification procedure and benefits of a higher certification.

Table 4

### Total number of certified wine assortments in Europe by year of certification

	BE	BG	CZ	DE	DK	EE	ES	FR	GR	HU	IE	IT	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	UK
Austria																								
Belgium																								
Bulgaria																								
Croatia																								
Cyprus																								
Czech Republic																								
Denmark																								
France	241	9	35			5		11																
Germany	11							11																
Greece				24		3																		
Hungary																								
Italy	105	24				13		21																
Luxembourg	1																							
Malta																								
Netherlands																								
Portugal																								
Romania																								
Slovakia																								
Slovenia																								
Spain																								
Sweden																								
Standard	358	33	35	37	29	22	28	4	20	7	13	8	35	8	2	1	20	6			1	13	2	2
Total	358	33	35	37	29	22	28	4	20	7	13	8	35	8	2	1	20	6	17	35	17	17	21	34
Standard deviation	798,053	671,002	1,017,790	679,210	679,960	968,180	1,103,632	1,168,634	1,037,807	1,246,000	650,890	690,630	421,720	912,200	626,808	638,626	1,313,967	893,004	1,010,908	760,302	639,630	896,165	607,004	607,000

Table 4 reveals the effectiveness of the first come – first served principle. Countries and producers from the first countries that formed the European Union are more advanced. There is also shown that the certification procedure is coming in waves, possibly due to countries' policies. There is also a strict timing that leads us to the conclusion

that certification procedure is done by a bureaucratic administrative system at national and European level that have nothing to do with reality, they are collecting candidatures and from time to time certificates are issued. The most concerning issue is that the certification significant slowing down after a few waves. Thus, compared to 1990s

the number of candidatures is around 10 times lower per year.

The results are better represented graphically in pictures 6 and 7.

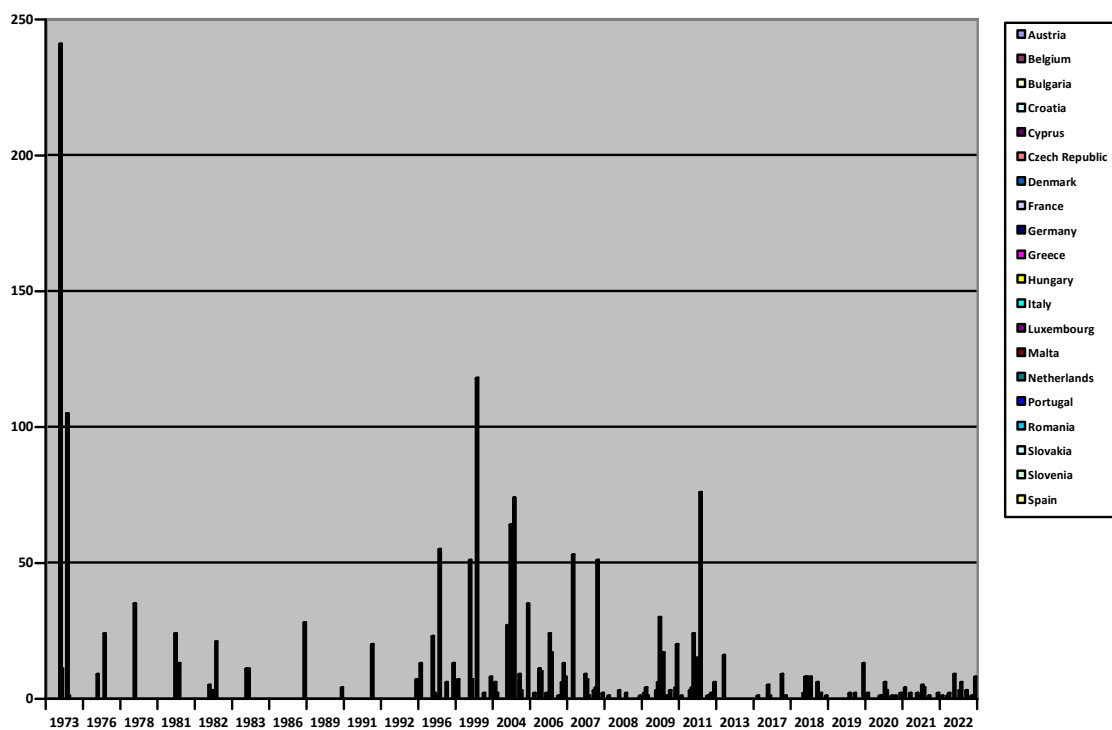


Figure 6. Total number of certified wine assortments in Europe by year of certification

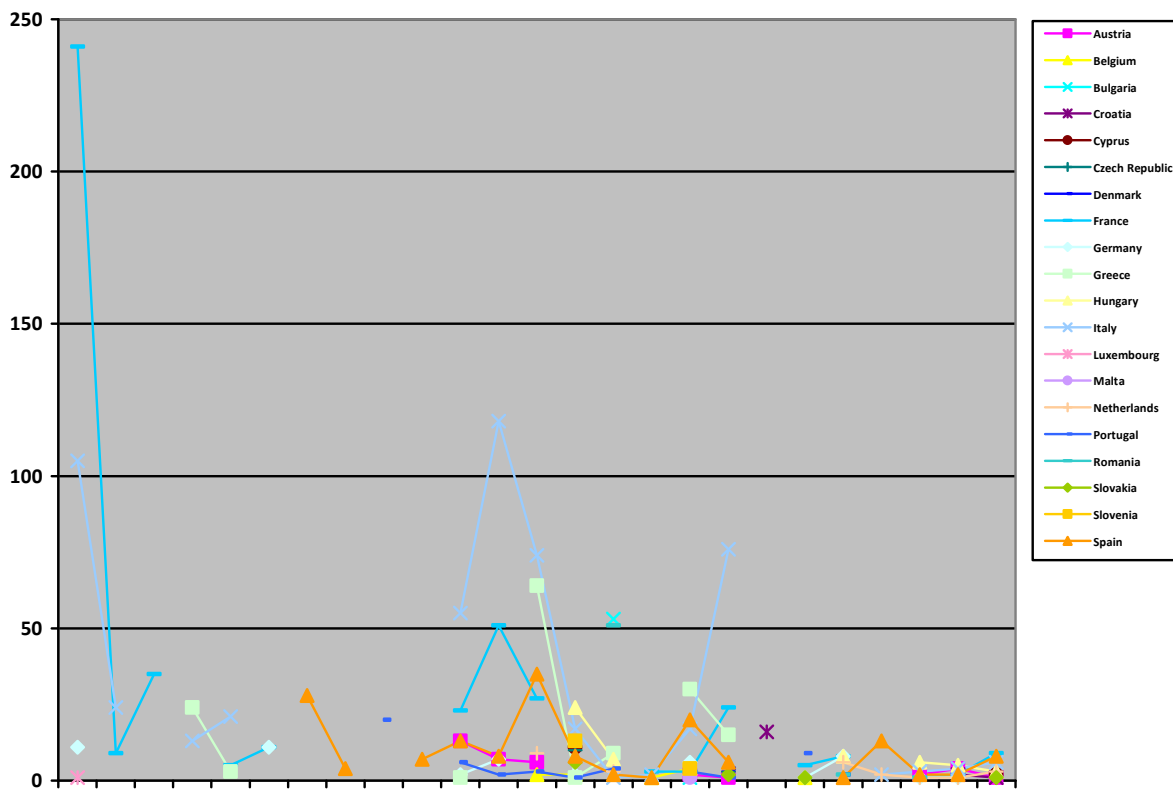


Figure 7. Total number of certified wine assortments in Europe by year of certification

## CONCLUSIONS

The conclusions related to our study show that the certification process is an important one. A lot of important brands from whole Europe become aware of the importance of the protection offered by certification.

There is recorded a significant slowing process of the certification procedure in whole Europe.

However, the 1990s were very intense as regards the certification procedure in most of the countries and at a later time, the number of candidatures was ten times lower.

Starting with 2022 the number of applications increased with 34 candidatures, in comparison with 17 in 2019 and 2020, and 21 in 2021.

Unfortunately the whole decade starting with 2012 has almost a similar number of candidatures as 2011 (157 compared to 132).

The producers that have already a D.O.P. certification are not interested to extend it to P.G.I.

The number of D.O.P. certified products is three time higher than P.G.I. certified products.

Errors of certification occur, but there are exceptions (present just in one country).

The promotion of the certification must become a national policy and should be done through campaigns in the media.

Certification procedure must be also subsidized by the member countries in order to increase the high quality products share on the market.

There are countries with 100% ratio related to the research topics, but there are a false results due to the very small number of products involved (1 or few) even if the countries have high potential and the life standard is very high.

The recommendations, that can be proposed after the present study, are related to the researches on the reasons behind the slowing process of the certification procedure, an intense campaign for increasing the awareness of the importance of certification by emphasizing the huge market that is available for promotion due to presence of the certified products in the European Union websites and databases and finally the increasing awareness of the producers and local communities about the importance of certification from

sustainability and cultural identity point of view.

## ACKNOWLEDGMENTS

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