

Model for evaluating the economic potential of operators (producers of agricultural or food products) in order to obtain a form of recognition through attestation/certification

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Abstract: A specific questionnaire was developed to assess the operators' ability to meet the requirements of the European recognition of the protected denomination or national attestation benchmarks (5 key factors). The questionnaire is followed by a model for quantifying the answers for each key factor (score from 1 to 20), total score of 100 points maximum. The score obtained was compared with a scale of recommendations regarding the possibilities of European recognition of the denomination or national attestation. The questionnaire was distributed to individual operators or associates in groups. At the time of the submission of the questionnaires, some of the respondents held national attestation or European protected denomination of the products (checking the evaluation method was taken into account). The results obtained for individual or associated operators, already national or European recognized for the denomination of the products, correspond to the proposed model.

Keywords: food products, model, attestation. recognition, questionnaire

1. Introduction

The identity of a nation is characterized by common elements, specific to a unique geographical area, the most important of which are language, history, religion, traditions and customs, culture, specific flora and fauna, achievements of personalities in the field of art, literature, science, technology and so on along with a set of associated values - national symbols - flag, anthem, currency, specific holidays.

A geographical area has communities with the same traditions and customs. Traditions and habits constitute an intangible heritage, transmitted through education within the community and implicitly within the family. This heritage includes common celebrations related to the main moments of life, where clothing, ceremonial, culinary preparations, crockery, etc. respect community specific rules. Culinary preparations, prepared with raw materials specific to the geographical area, according to traditional recipes, are part of the gastronomic heritage and constitute one of the factors of national identity.

Currently, the European Union encourages the consolidation of the gastronomic heritage of the member countries, by protecting the denomination of specific products, whose reputation has in many cases exceeded national borders [1].

The Romanian gastronomic heritage is made up of many products, obtained through specific methods by local producers, by using old, unique recipes for preparing and preserving food, using local raw materials and traditional preservation techniques (salting, seasoning, smoking etc.). The Romanian authorities have developed and implemented the necessary legislation for the attestation/recognition of agricultural or food products [2].

The purpose of the work is to make available to the interested factors (Authorities, individual operators or associates in groups) a model for rapid assessment of the capacity of producers to satisfy the requirements of European protection of denomination or national attestation. Based on the score obtained, interested parties can opt for a form of recognition.

2. Methods

Products proposed for national attestation or European recognition must meet the following conditions:

- the raw materials come directly from the farmers, usually in a fresh state, without the application of conservation technologies that can modify/alter the nutritional characteristics.
- the specific production methods are based on the traditional use of unique local resources (sources/wells of brine for salting products; caves with a unique microclimate for ripening cheeses; technologies for drying/long maturation of products using microbial cultures in natural environments, etc.)
- the products do not contain synthetic food additives (preservatives/antioxidants, taste improvers, colorants, etc.)
- the products do not contain substitutes for raw materials (proteins or vegetable oils as the basis of meat or milk preparations; gelling agents based on modified starch, invert sugar, etc.)
- when preparing these products, raw materials with low nutritional value or presenting risks for the health of the consumer are not used (collagen, mechanically deboned meat)
- brutal conservation technologies that can affect the molecular structure of the food (freezing, treatment with ionizing radiation) or that can constitute a potential health hazard (smoking with liquid smoke) are avoided.

These aspects are closely related to the orientation of consumers towards the purchase of products that offer confidence in satisfying nutritional needs, without neglecting the aspects of the local gastronomic culture; attestation or certification are factors that contribute to increasing confidence.

The study considered the following categories of products and producers:

a) Product categories:

- products with reputation, whose name can be protected at national and European level, produced in well-defined geographical areas or based on a recognized traditional method of producing (PDO - protected denomination of origin; IGP - Protected Geographical Indication; TGS - traditional specialty guaranteed) and for which the association of the operators is a condition (formation of the applicant groups). The requirements for obtaining European protection are described in Regulation (EU) no. 1151 of 2012.

- traditional products, obtained by local producers, through manufacturing food technology

b) economic operators:

- small operators (individual producers or family associations)

- SRL type economic operators - up to 20 employees

- SRL type economic operators - up to 100 employees

- economic operators of type SRL or SA - over 100 employees

Assessment questionnaire. When formulating the evaluation questionnaires, the following was taken into account: the profile of the operator (financial and human resources at his disposal) and potential benefits obtained as a result of the attestation/recognition (Table no. 1)

Table no. 1. Evaluation form of the operator and the potential results following the attestation/recognition

Section A – Operator data				
Crt. No.	Specification	Question	Yes	No
1	Operator category	Individual producer or family association		
		Operator (LTD unit) with a maximum of 20 employees		
		Operator (LTD unit) with 21 ... 100 employees		
		Operator (LTD unit) with more of 100 employees		
2	Duration and scope of the activity	Seasonal production up to 500 kg/season		
		Seasonal production up to 3,000 kg/season		
		Seasonal production up to 10,000 kg/season		
		Seasonal production greater than 10,000 kg/season		

		Continuous production up to 3,000 kg/year		
		Continuous production up to 6,000 kg/year		
		Continuous production up to 20,000 kg/year		
		Continuous production greater than 20,000 kg/year		
3	Personal resources	Personnel without specialized technical studies		
		1 - 2 employees with specialized technical studies		
		3 - 5 employees with specialized technical studies		
		More than 5 employees with specialized technical studies		
4	Raw materials	Purchases from conjuncture suppliers		
		Purchases from evaluated suppliers		
		Purchases from evaluated suppliers and own farm		
		Insured through own farm		
5	Financial resources	Profit of max €12,500		
		Profit between 12,500 ... 25,000 €		
		Profit between 25,000 ... 60,000 €		
		Profit greater than 60,000 €		

Section B - The effectiveness of recognition or attestation

Crt. No.	Question	Answer
6	What were the necessary expenses for the establishment of the applicant group (€)?	
7	How long did it take?	
8	What were the expenses for the elaboration of the Specifications (€)?	
9	How long did it take?	
10	Was the specification prepared by external personnel (experts)?	
11	What was the impact, on the market, of acquiring the protection? - increase in demand (%); - increase in export (%); - production capacity development (%)	
12	Following the acquisition of product name protection, were European or national funds accessed?	
13	What was the approximate value of these projects (€)?	

14	What were the annual expenses for obtaining/maintaining the certification (€)?	
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Sources: own contribution

3. Results

Assessment. An individual assessment model is proposed for each operator who wants attestation/certification, in order to guide them towards the most appropriate form of recognition (table no. 2).

Table no. 2. Assessment model

Crt. No.	Factor	Possibilities	Quantification	Justification
1	Operator size	Individual producer Family association Operator with up to 5 employees Operator with up to 20 employees Operator with up to 100 employees Operator with over 100 employees	1 1 3 5 10 20	Small operators have limited resources
2	Production - seasonality and quantity	Seasonal production, up to 500 kg/season Seasonal production, up to 3,000 kg/season Seasonal production, up to 10,000 kg/season Seasonal production greater than 10,000 kg/season Annual production up to 1,000 kg Annual production up to 6,000 kg Annual production up to 20,000 kg Annual production over 20,000 kg	1 3 10 20 1 3 10 20	The quantity of products sold ensures the resources available for development
3	Technical resources	Personnel without specialized technical studies. 1-2 employees with specialized technical studies 3 - 5 employees with specialized technical studies More than 5 employees with specialized technical studies	1 3 10 20	The staff with specialized technical studies can develop the technical documentation and contribute to the optimization of the activity.
4	Basic raw materials	Purchases from conjuncture producers Purchases from evaluated producers Purchases from producers and own farm Own farm	1 5 10 20	The provision of raw materials from evaluated producers contributes to the creation of products of constant quality
5	Financial resources	Profit of max €12,500 Profit between 12,500 ... 25,000 €	1 5	The size of the profit ensures the development of the operator.

		Profit between 25,000 ... 60,000 €	15	The calculation is for the tracked product
		Profit greater than 60,000 €	20	

Sources: own contribution

Each operator interested in obtaining an attestation/certification, evaluated based on the presented model, can obtain between 5 and 100 points. Based on the score obtained, the following recommendations can be made:

- 5 – 15 points; operator with limited resources - it can be recommended to obtain a certificate of producer of traditional products
- 16 – 35 points; operator with some (small) available resources for development; it is recommended to obtain a certificate of producer of traditional products; it can also be recommended to join a form of association for the promotion and development of the activity.
- 36 – 70 points; operator with resources that can ensure access to certification to protect at national or European level; the association is recommended to achieve the goal.
- score over 71 points: strong operator, with resources available for a superior form of recognition. It can start an application to recognize the protection of the name of the obtained product.

The questionnaires were sent to some operators who obtained the European protection of denomination of some products (group G1) and to some operators who want to apply for a kind of attestation or recognition of the manufacturing products (group G 2).

G 1 – Operators whose products have obtained European protection of denomination

Evaluation questionnaires were sent to three applicant groups:

- Sonimpex Topoloveni for "Magiun de prune Topoloveni PGI" - over 20 employees.
- Association for the Promotion of Traditional Products from Valea Gurghiului for the product "Telemea de Ibănești PGI" - approx. 100 employees (without raw material suppliers)
- Salam de Sibiu Producers' Association (APSS) for "Salam de Sibiu PGI" - over 1500 employees (7 large operators in the meat products market).

In the analysis carried out, the annual expenses related to achieving/maintaining the certification of product conformity were taken into account, to which the answers were given by the Certification Body (point 14 of the table); purpose – evaluation of the expense/benefit ratio

The answers of the G1 operators are presented in Table no.3

Table no. 3. Answers of G1 Operators

Questionnaire item	Topoloveni answer	Ibănești answer	APSS answer
Section A – Operator data			
1	Operator with up to 100 employees	Operator with more of 100 employees	Operator with more of 100 employees
2	Seasonal production greater than 10,000 kg/season	Continuous production greater than 20,000 kg/year	Continuous production greater than 20,000 kg/year
3	3 - 5 employees with specialized technical studies	More than 5 employees with specialized technical studies	More than 5 employees with specialized technical studies
4	Purchases from evaluated suppliers	Purchases from evaluated suppliers	Purchases from evaluated suppliers
5	Profit between 25,000 ... 60,000 €	Profit greater than €60,000	Profit greater than €60,000
Section B – The effectiveness of recognition or attestation			
6	About € 1,200	About € 400	About € 7,000
7	1 year	1 year	1 year
8	Carried out by own staff.	Carried out by own staff	Carried out by collaborators - 20,000 €
9	2 years	2 years	1 year
10	No	No	Yes
11	Change from collective packaging (large containers) to individual packaging, approx. 30% more for valorization	2016 - 77 t 2017 – 110 t 2018 - 240 t 2019 – 260 t	In the period 2017/2021, sales increase by 6% national and 30% export.
12	Yes	No	No
13	Promotion funds –300,000 € Total projects 3.5 million €, 20% co-participation	Indirectly, approx. 5.0 million € 50% co-participation	1.5 million € promotion grant with 30% co-participation.
14	About 600 € annually	About 1.000 € annually	About € 6,000 annually

Sources: own contribution

G 2 – Operators for whose products have been obtained/want to apply to certification (traditional products) or move to a higher form of recognition

The material that was analyzed - the National Register of Traditional Products (RNPT) of the Ministry of Agriculture and Rural Development, valid on 31.12.2021 [3].

The register contained a number of 712 registered operators, grouped into 7 categories of producers (Beverages - 29, Meat and Meat Products - 301, Milk and Milk Products - 127, Fruits and Vegetables - 109, Bread, Bakery and Pastry Products - 113, Over – 27, Other products - 6).

The operators are: approx. 55% individual producers or family associations, approx. 40% small economic agents (SRL up to 10 employees) and only 5% economic agents with a higher number of employees (11-25).

Production can be limited by seasonality (for the categories vegetables-fruits, fish). Also, from the analysis of the economic structure of the registered operators, the revenues obtained are usually fully used to maintain the continuity of the business. The resources for promotion/development are limited and, in most cases, too small for access to a higher form of recognition. A small part of the operators opted for online product marketing, most of them using local marketing or participating in producers' fairs.

Another aspect that must be considered is the qualification of the staff; only a small part, which does not exceed 10% of the operators registered in RNPT, have at least one member/employee with higher specialized education, most of them continue family activities related to obtaining traditional products. This factor has a negative contribution regarding access to financing or business development.

Three operators whose products have the potential for attestation/recognition (Dulceața de rubarba, Virșli, Pita de Pecica) were questioned. The answers are presented in Table no. 4.

Table no. 4. Answers of G2 Operators

Questionnaire item	Dulceața de rubarba Producer answer	Virșli Producer answer	Pita de Pecica Producer answer
Section A – Operator data			
1	Individual producer	Operator with 10 employees	Operator with 10 employees
2	Seasonal production, up to 500 kg/season	Annual production up to 20,000 kg	Annual production up to 20,000 kg

3	Personnel without specialized technical studies	1-2 employees with specialized technical studies	Personnel without specialized technical studies
4	Purchases from producers and own farm	Purchases from conjuncture producers	Purchases from evaluated producers
5	Profit of max 12,500 €	Profit between 12,500 ... 25,000 €	Profit between 12,500 ... 25,000 €

Sources: own contribution

4. Discussion

Based on the answers received, for the operators from groups G1 and G2, the evaluation model presented in Table no. 2 was applied.

- Results of the evaluation of G1 operators, section A (Table no.5)

Table no. 5. Evaluation of G1 operators

Questionnaire item	Topoloveni score	Ibănești score	APSS score
1	10	20	20
2	10	20	20
3	10	20	20
4	5	5	5
5	5	10	10
TOTAL	40	75	75

Sources: own contribution

- Sonimpex Topoloveni – score 40: operator with sufficient resources to access a higher form of recognition.
- Association for the Promotion of Traditional Products from Valea Gurghiului - score 75: strong operator, with large resources, available for a superior form of recognition.
- Sibiu Salami Producers Association (APSS) - score 75: strong operator, with large resources, available for a superior form of recognition.

Through the evaluation of the potential, it is confirmed that for the three operators (who accessed and obtained the recognition of the protection of the name) the proposed model corresponds to reality.

- Results of the evaluation of G2 operators, section A (Table no. 6)

Table no. 6. Evaluation of G2 operators

Questionnaire item	Dulceața de rubarba producer	Virșli producer	Pita de Pecica producer
1	1	5	5
2	1	10	10
3	1	3	3
4	10	5	5
5	1	5	5
TOTAL	14	28	28

Sources: own contribution

- Dulceața de rubarba (Rhubarb confiture) producer - score 14: operator with limited resources; under the current conditions, he cannot access a higher form of recognition. Association with other operators (establishing an applicant group) can lead to ensuring the necessary resources for a superior form of recognition. Currently, he can obtain national attestation.
- Virșli producer - score 28: operator with resources available for development (but small). For a higher form of recognition, it is necessary to establish an applicant group.
- Paine de Pecica (Pecica bread) producer – score 28: operator with resources available for development (but small). For a higher form of recognition, it is necessary to establish an applicant group.

- Results of the evaluation of G1 operators section B

From the evaluation of the answers of the three applicants (who obtained the European protection of denomination), presented in Table no. 3, section B, the following resulted:

- the process of setting up the applicant group and drafting the necessary documentation is relatively long (at least 2 years)
- the need for financial resources (which have technical staff) is small; the units that use external personnel have high costs.
- the costs of certification/periodical control are proportional to the complexity of the activities, but not excessive (e.g.: APSS has 7 large operators in its component) and do not exceed approx. 1,000 €/operator in a year.

- all operators obtained direct benefits after obtaining recognition through the superior valorization of the product and/or through the increase in production/export
- all operators had access to substantial financing (which far exceeded the expenses) by accessing some development/promotion projects.

5. Conclusions

1. Application of the proposed model to operators from group G1 (Section A)

The results after evaluating the operators from group G1 (by applying the proposed model) correspond to reality; operators have the necessary potential to obtain a higher form of recognition.

2. Application of the proposed model to operators from the G2 group (Section A)

The results after evaluating the operators from the G2 group (by applying the proposed model) correspond to reality; operators can know the potential needed to obtain a higher form of recognition and can orientate themselves for business development.

3. Report evaluation, allocated resources/benefits for G1 group operators.

Following the evaluation of the answers of the three applicants from group G1 (Section B) - who obtained the European protected denomination for their products - the following results were obtained:

- the process of setting up the applicant group is relatively long (at least one year)
- the resource requirement is small at the units that have technical staff and that do not call on external consultants.
- certification costs are proportional to the complexity of the activities, but not excessive (APSS has 7 large operators in its component). They do not exceed approx. 1,000 euros/operator in a year.
- all operators who benefit from a superior form of recognition have obtained direct benefits through the superior valorization of the product and/or through the increase in production/export.
- the operators who obtained a superior form of recognition and accessed development/promotion projects had access to substantial financing (which far exceeded the expenses)

- the implementation of promotion projects resulted in the constant increase of production and exports.

6. BIBLIOGRAPHY

[1] Regulation (EU) No 1151/2012 of the European Parliament and of the Council of 21 November 2012 on quality schemes for agricultural products and foodstuffs

[2] ORDER no. 1412 of October 8, 2018, for the approval of the Regulation on the recognition of bodies for inspection and certification of agricultural or food products and for the supervision of the activity of bodies for inspection and certification of agricultural or food products that will acquire the protection of protected geographical indications (PGI), of designations of origin protected (D.O.P.) and guaranteed traditional specialties (TSG.)

[3] National Register of Traditional Products (RNPT), according to Order no. 724 of 29 July 2013 of the Ministry of Agriculture and Rural Development, regarding the attestation of traditional products, valid on 31.12.2021