



CERTIFIED MOUNTAIN PRODUCT – QUALITY LABELING IN THE MOUNTAIN ECONOMY

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Abstract. The “mountain product” label is an important quality certification tool, with major potential in supporting the sustainable development of mountain areas in Romania and the European Union. This certification capitalizes on the geographical and cultural specificity of mountain regions, giving products a distinct, authentic and competitive identity. Mountain food products are made from local raw materials, cultivated or obtained in mountain areas located at altitudes of over 600 meters, using traditional and sustainable methods that comply with quality, food safety and environmental protection standards. By promoting these products, certification contributes not only to increasing added value, but also to strengthening the position of farmers on the market, in an economic context in which small producers face numerous difficulties: lack of information, excessive bureaucracy, limited access to financing and poorly developed infrastructure. The “mountain product” label offers a competitive advantage by guaranteeing consumers traceability, clear origin and ecological production methods, elements increasingly appreciated in a market where demand for healthy and authentic products is growing. Certified mountain products are not only quality foods, but also true expressions of local cultural identity. They support the economic and social development of mountain areas by generating income, creating jobs and attracting tourists through gastronomic tourism. Moreover, they contribute to the conservation of biodiversity and the promotion of sustainable agricultural practices, being aligned with the principles of the circular economy. Also, due to their high nutritional value and authentic taste, mountain products can become a healthy and responsible alternative for consumers interested in a balanced lifestyle. The certification of mountain products is a rigorous process, clearly regulated both at national and European level, and includes several key stages: submission of the application, verification of compliance with standards, on-site inspections, laboratory analyses and continuous monitoring. This approach is coordinated by the competent authorities and ensures that only products that meet all the required criteria can benefit from the “mountain product” label. There may also be additional certifications, such as Protected Designation of Origin (PDO), Protected Geographical Indication (PGI), organic certification or the ISO 22000 standard, which increase consumer confidence. The quality indicators of these products refer to precise geographical origin, the application of traditional production methods, the use of high-quality local ingredients, respect for the environment, compliance with rigorous food safety tests and a high nutritional con-



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tent. Mountain products are produced in limited quantities and are seasonal, which gives them an exclusive character and an authentic connection to local traditions. The National Register of Mountain Products, managed by the Ministry of Agriculture and Rural Development, has the role of centralizing and promoting these products. Although the number of registered products is increasing, the success of the scheme is still limited by administrative challenges and low awareness. To fully harness the potential of this label, it is necessary to simplify procedures, provide financial support and advice for producers, as well as promote a participatory governance model that involves public, private actors and local communities.

Keywords: mountain product, certification, labeling, rural development

INTRODUCTION

In recent years, the topic of sustainable development of mountain areas has gained increasing importance in agri-food economic research, due to the vulnerability of these territories and their essential contribution to the conservation of biodiversity, natural resources and cultural heritage (FAO,2021). Certified mountain food products are essential tools for capitalizing on local resources, supporting farmers economically and financially and ensuring competitiveness on the market. The literature frequently addresses the issue of mechanisms for transmitting information to consumers, as provided for in Regulation (EU) No. 1151/2012, and reducing market asymmetries (Regulation EU No 1151/2012; Grunert, 2005).

Some studies show that certified products are perceived by consumers as having high added value and contribute to creating brand loyalty (Belletti, Marescotti & Touzard, 2017; Aprile, Caputo & Nayga, 2012). However, other research claims that the level of knowledge of these products is low, which limits the impact of trust in the institutions responsible for certification. Regarding consumer motivations, the literature highlights both functional reasons such as food safety and nutritional quality, as well as symbolic motivations such as supporting the local community or ethical motivations related to tradition (Ceï, Defrancesco & Stefani,2018).

The different perspectives in the literature highlight the importance of in-depth studies that analyze the impact of the “mountain product” label on farmers, especially in terms of its economic and social implications. In this paper, we aim to analyze the role of the “mountain product” label as a quality certification tool in the economy of mountain areas, focusing on the direct effects on the activity of producers. The main hypothesis of the study is that the label has a positive impact on farmers, contributing to increasing the added value of products, strengthening their position on the market and supporting sustainable development in mountain communities. At the same time, the paper takes into account the relatively low level of information regarding the certification process, as well as the reluctance shown by some producers, generated by administrative barriers, perceived high costs or lack of confidence in the real benefits of the label.



1. DEFINITION OF THE MOUNTAIN PRODUCT AND THE CONCEPTUAL FRAMEWORK

1.1. The mountain product

Mountain products can be defined as products intended for human consumption, obtained from raw materials from the mountain area, which offer consumers the opportunity to consume healthy foods, originating from an area with low pollution, where extensive, sustainable agriculture is mainly practiced, in balance with the environment. Mountain food products are recognized for their superior quality, authentic taste and close connection with the natural resources of mountain regions. They respect local traditions and are distinguished by a series of specific characteristics. The ingredients used in the production process are of local origin, being cultivated and collected in a traditional way. They are natural, unprocessed and do not contain added additives or preservatives.

The production process of these products follows traditional methods, using recipes passed down from generation to generation, which gives the food a unique identity. Each geographical region in Romania has its own specific mountain food products. These include dairy products made from cow, goat or sheep's milk, such as Telemeaua de Ibănești, Cașul or Brânza de burduf. Homemade sausages, ham or bacon are also made from meat, all smoked and/or dried using traditional methods. Products made from mountain plants also have a special taste, such as blueberry, blackberry or raspberry jams and preserves, honey and natural syrups. The absence of additives and intensive processing contributes to preserving the authentic and intense flavor of meat and dairy products. At the same time, the lack of industrial processing favors the preservation of nutrients unaltered, making these products perceived as healthier compared to those processed and artificially preserved. Mountain food production is closely linked to the principles of sustainability, as the technologies used in preparation do not negatively affect the environment. In addition to traditional methods, producers can also adopt ecological practices in growing plants or raising animals, thus contributing to the protection of mountain ecosystems.

1.2. Peculiarities of mountain production

Raising animals on natural alpine and mountain pastures is a fundamental practice in mountain food production, as their food comes from unpolluted wild plants and herbs, rich in rare species and with medicinal properties. This type of feeding directly influences the quality of the products obtained, especially the taste and aroma.

As shown in the specialized literature, the organoleptic characteristics of animal products are directly influenced by the quality and floristic composition of the pastures. The aroma of milk is influenced by volatile substances from the plants that make up the flora of natural meadows, such as dandelion, yarrow, pennyroyal, wild carrot, plantain or mint. The pleasant taste of milk is given by its sugar content, and the texture is determined by the proportion of fats. In other words, the diversity and richness of the vegetation of the meadows is directly reflected in the quality of the milk. In contrast, milk obtained



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from animals grazing on grasslands composed exclusively of grasses (such as golomăț, ryegrass or fescue) has a weaker, less specific aroma. This characteristic is associated with the presence of hexane in these plants, which favors the oxidation processes of the milk. Furthermore, when the grasslands contain a high proportion of toxic species, the milk acquires an unpleasant, repulsive aroma, often described as “plastic”, “metallic” or “pharmaceutical” notes, due to odoriferous compounds specific to these plants (Dragomir, 2017).

Traditional pastoralism remains an essential practice in mountain areas, being carried out mainly by small farmers or shepherds who take their flocks to high-altitude pastures. This way of life involves an outdoor activity that supports a natural growth of the animals and actively contributes to the maintenance and conservation of the mountain landscape.

Mountain food products are obtained through traditional processing methods, passed down from generation to generation. Burduf cheese, mountain cheese, telemeau or urda are produced by hand, from fresh milk, often raw or minimally processed, and are naturally matured. These products have an intense and distinct taste, thanks to the mountain pastures and traditional production methods. Similarly, mountain meat and meat preparations, such as sausages or ham, are smoked or dried without the use of chemical additives or industrial preservatives, preserving an authentic and natural taste.

Another distinctive element of mountain food is the use of local natural resources. Mountain herbs used in animal feed, but also medicinal or aromatic plants used in the preparation of food or drinks, give the products a unique aromatic and gustatory profile, appreciated for its authenticity.

Seasonality also plays an important role in mountain production. Many products, such as cheeses or dried meat, are only produced during certain periods of the year, especially when the pastures are at their most nutrient-rich. Thus, agricultural and livestock activities in mountain areas are closely linked to the natural cycles of vegetation and the weather conditions specific to the altitude (Tregear, Arfini, Belletti & Marescotti, 2007).

Tourism contributes significantly to the development of mountain production, as in many regions there is an increased demand for traditional products from tourists interested in authentic tastes and local culture. As a result, mountain products are not only intended for local consumption, but also reach foreign markets, where they are appreciated for their naturalness and superior quality.

From an ecological point of view, production activities in mountain areas are generally more sustainable. Farmers in these regions use environmentally friendly working methods, avoiding the use of chemicals or industrial fertilizers. These practices contribute to the conservation of biodiversity and the maintenance of a balanced mountain ecosystem. At the same time, the relatively low production volume specific to these areas implies a lower consumption of industrial energy, which makes mountain products more “eco-friendly”.

Last but not least, mountain regions are distinguished by a special biodiversity, and food production is constantly adapting to local conditions. Medicinal plants or berries that grow only in certain areas give uniqueness to the products obtained here. This natu-



ral diversity, combined with traditional production methods, makes mountain foods offer not only a high level of quality, but also a valuable cultural and ecological experience, in harmony with the environment and local traditions.

1.3. The role of mountain products in the economy

Mountain food products play an important role in the economy of mountain areas. These products are characterized, as already mentioned, by a superior quality, due to the specific natural conditions in which they are produced, as well as the traditions and processing methods that are based on old, authentic techniques. Mountain food products are appreciated for their special taste that is due to the natural growing conditions of plants and animals: alpine meadows, clean air, unpolluted soils. These give the products quality and authenticity.

Many of the mountain food products benefit from certifications (mountain product or organic product certification), giving them an important advantage on domestic and international markets. These certifications guarantee that the products are obtained in a sustainable way, without the use of pesticides or chemical fertilizers, making them attractive to consumers concerned about health and the environment. They are produced according to old recipes and techniques, preserving the connection with the local culture, adding an added value due to their unique and rare character.

Mountain food products, by their specificity, have led to the development of gastronomic tourism, restaurants and guesthouses that serve traditional local menus. The organization of fairs with traditional gastronomic specificity attracts tourists who, in addition to the amounts spent on purchasing these products, spend additionally on accommodation, transport or other local products, not necessarily food.

In Romania, food festivals are a great way to celebrate local culinary traditions, promote authentic products and attract tourists from all over the world: the National Cheese Festival (Brădet, Argeş County), the “Tastes and Traditions” Festival (Braşov), the Sarmale Festival (Iaşi), the “Pensiunii si Gustului Montan” Festival (Moieciu de Sus, Braşov), the “Culture and Tastes” Festival (Sibiu), the “Deliciilor din Pădure” Festival (Vama, Suceava), the “Sărbătoarea Pensiunilor” Festival (Maramureş County). These food festivals in Romania are a great way to experience the country’s culinary diversity and support local producers, while also being an opportunity to get to know the traditions and customs of each region better. Mountain food products can be exported, in the context of the growing demand for authentic and organic products (Gruyère from Switzerland, Feta from Greece, Ibăneşti from Romania), attracting a wide audience due to the stories behind them, the traditional production methods and the superior quality, especially in Europe where the emphasis is on organic and traditional products.

Mountain agriculture is an important source of income for rural communities. Raising animals (for milk, meat or cheese), cultivating mountain plants (berries, medicinal plants), beekeeping are economic activities that support the livelihood of local people. Mountain food products resulting from these activities contribute directly to the diversification of the regional economy, providing jobs in the livestock and beekeeping sectors, but also in downstream sectors such as retail and tourism. Mountain agriculture is less



intensive than agriculture in plains, hills and hills, being more attentive to the conservation of biodiversity and the natural landscape. This sustainable approach contributes to protecting the environment. Mountain food production is linked to the management of natural resources, such as forests and mountain pastures, which contributes to maintaining a beneficial ecological balance for the entire region.

We can appreciate that mountain food products are a symbol of mountain regions and are essential for supporting local economies and for the development of rural and ecological tourism. Due to their added value, diversity and health benefits, these products represent an important source of income and can contribute significantly to sustainable economic growth in mountain areas.

3. QUALITY LABELLING: CONCEPT AND APPLICABILITY

3.1. Conditions for use of the quality term “mountain product”

The “mountain product” label can be applied to a wide range of food or non-food products originating from mountain areas and complying with strict criteria of origin, processing and quality. In the case of products of animal origin, this label is valid if the animals are raised and the products are processed in mountain areas. More specifically, the products may come from animals that have lived entirely in these regions or at least for the last two thirds of their lives, provided that the processing also takes place in the mountain area.

Products obtained from animals raised in transhumance can also be certified, if they have grazed on mountain pastures for at least a quarter of their lives. As regards animal feed, the label applies when the proportion of feed originating from outside mountain areas does not exceed 50% of the annual ration, expressed as a percentage of dry matter.

In the case of ruminants, this limit is even stricter, at 40%, and for pigs it must not exceed 75%. For beekeeping products, certification is only possible if the bees have collected pollen and nectar exclusively from mountain areas. In the case of products of plant origin, the essential condition is that the plants are entirely cultivated in these regions. Also, products containing ingredients originating from outside mountain areas can be certified as “mountain products” only if these ingredients do not exceed 50% of the total weight of the product. This exception applies, for example, to aromatic plants, spices or sugar used in processing.

There are also situations in which certain processing operations may take place outside the mountain area, provided that the distance does not exceed 30 kilometres. This concerns the slaughtering of animals, cutting and boning of carcasses, in the case of products obtained from animals raised for at least the last two thirds of their lives in mountain areas. The certification of mountain products aims to guarantee consumers that the products come from regions where the environment is less affected by pollution and where agricultural practices are in harmony with nature. These products comply with strict standards of quality, sustainability and tradition.



In the European Union, the certification system for mountain products recognises several important aspects, including organic certification, which certifies that production methods exclude the use of pesticides and harmful chemicals. Another defining element is the link with local traditions, the products being made using techniques passed down from generation to generation. Geographical origin also plays a key role, as these products are closely linked to the natural characteristics of the mountain region they come from. The “mountain product” label thus offers not only a guarantee of quality and authenticity, but also recognition of the cultural and ecological value of products from these areas.

3.2. Benefits and limitations of mountain product certification

Certification of mountain products brings a number of significant benefits, both for producers and for local communities, consumers and the environment. Through this process, the superior quality, authenticity and sustainability of products from mountain areas are recognized, contributing to a balanced and sustainable development of these regions. One of the main advantages of certification is the facilitated access to premium markets, both domestic and international.

Certified mountain products are perceived as being of high quality, which makes them attractive to consumers looking for natural, traditional and organic foods. This allows producers to better value their products, obtain higher prices and even expand into foreign markets, where the demand for authentic and sustainable products is growing.

Certification also contributes to the promotion and protection of local traditions. Production methods passed down from generation to generation are preserved and valorized, giving the products a strong cultural identity. In this way, the continuity of traditional crafts is ensured, which otherwise risk being lost to modern industrial processes.

Another major benefit is the stimulation of sustainable economic development in mountain areas. Through certification, small producers are supported in maintaining and diversifying their activities, contributing to the creation of new jobs and the economic revitalization of mountain communities. At the same time, certified products attract the interest of tourists, which supports the development of rural and mountain tourism.

Environmental protection is another essential aspect of certification. Certified mountain production involves nature-friendly methods, based on ecological and sustainable principles. Thus, biodiversity is protected, soil and water quality are maintained, and mountain ecosystems are preserved in the long term. These practices contribute to combating land degradation and reducing negative environmental impacts.

For consumers, certification offers clear guarantees of quality, safety and traceability. The “mountain product” label becomes an indicator of trust, signaling that the product comes from a clean environment, was obtained by traditional methods and has a reduced impact on the environment. This transparency increases the level of trust and loyalty towards mountain products.

In addition, certification can attract funds and institutional support for the development of mountain regions. By officially recognizing mountain products, authorities can



more effectively support support policies for these areas, contributing to reducing territorial disparities and protecting natural and cultural heritage.

Last but not least, certification helps to preserve local identity, promoting traditions, customs and lifestyles specific to mountain regions. This provides official recognition of the cultural value of these products, strengthening the sense of belonging and local pride. Overall, certification of mountain products becomes an essential tool for supporting a development model that values nature, people and mountain traditions.

3.3. Advantages of mountain food products

The advantages of mountain food products are multiple and are reflected both in the benefits for the health of consumers and in the positive impact on the environment and local communities. These products are often obtained from clean and ecological natural resources, which reduces the risk of the presence of chemicals or additives, thus contributing to the promotion of consumer health.

The certification of mountain food products stimulates local consumption, encouraging a diet based on regional, healthy and authentic products. At the same time, this helps to reduce the carbon footprint, due to the shortening of supply routes, which has a beneficial effect on the environment.

Another essential benefit is rigorous quality control, as certification involves periodic checks that guarantee compliance with strict food safety and quality standards throughout the production process. Thus, consumers can trust that certified mountain products comply with the criteria of authenticity and safety.

In addition, certification contributes to the sustainable use of mountain resources, helping to manage them responsibly and preventing excessive or irresponsible exploitation, which supports the long-term conservation of the natural environment.

Another important aspect is the increase in transparency and trust in the supply chain. Certified mountain food products are accompanied by a clear traceability system, allowing them to be followed from the production phase to processing and marketing.

Certification thus becomes a guarantor of transparency and compliance with the criteria imposed by the “certified mountain product” label. In addition, certified mountain food products are often promoted through educational campaigns aimed at raising consumer awareness of the importance of choosing healthy, organic and high-quality foods.

In the case of products of animal origin, certification can also include animal welfare standards, ensuring that they are raised in natural and humane conditions, without stress or abusive treatment, which gives added value to the products and an additional guarantee for consumers.

Thus, certified mountain food products represent a beneficial choice not only for consumer health and satisfaction, but also for environmental protection, support for local traditions and the sustainable development of mountain areas.

4. The mountain product certification process

The mountain food product certification procedure is a rigorous process, regulated both at national and European level. It aims to guarantee that the products come from authentic mountain areas and that they comply with the specific standards imposed for

this category. Among the mandatory requirements are the provenance of raw materials from mountain regions, the use of traditional processing technologies and the respect of clear limits on transport and processing.

Mountain products must reflect the special environmental, climatic and biodiversity conditions of the area. Certification ensures full traceability of the product, from producer to consumer. In addition, the “mountain product” label offers a competitive advantage in the market, increasing the confidence of buyers. This labeling contributes to the sustainable development of mountain areas and the support of small local farmers. The process involves periodic checks and controls carried out by the competent authorities. Ultimately, certification not only guarantees quality, but also protects the identity and regional specificity of mountain products.



Figure 1 – Mountain product logo

4.1. Stages of mountain product certification

The certification of mountain food products begins with the submission of a certification application. The producer submits to the competent authority or authorized body an application that includes, in addition to its identification data and the geographical area of origin, detailed information about the product, the production process and its methods of exploitation.

The next step consists of verifying the product's compliance with the regulations in force. The certification authority or body analyzes whether the product meets the criteria necessary to be considered a “mountain product”.

The third stage involves the preparation of a certification file that includes essential information such as the origin of the raw materials, the processing methods, the geographical characteristics of the production area, the quality standards respected, as well as documents attesting compliance with food safety requirements.

Subsequently, the inspection or on-site checks take place. Inspectors authorized by the certification body carry out checks on farms, processing units and other places where the product is obtained or processed, check the composition and quality of the product in the laboratory and evaluate its traceability, to ensure transparency and authenticity.

If the product meets all the criteria, the certification authority or body issues the “mountain product” certificate, which includes details about the product, the production method, the geographical area of origin and the quality standards respected. The product is labeled based on the certificate obtained and must contain the certification number, the specific logo and mentions of compliance with ecological standards, if applicable.



After obtaining the certificate, the process does not end, but continues with permanent monitoring and control to ensure continued compliance with the standards. In the event that non-conformities are identified, producers may be sanctioned depending on the severity of the deviations, and their certification may even be withdrawn. Upon expiration of the period for which the certificate was issued, it is necessary to renew it in order to maintain its validity. The renewal process involves going through the same procedure as in the case of the initial issuance, which implies fulfilling all the specific requirements and checks established by the issuing authority. Thus, the certificate retains its validity and compliance with the rules in force, ensuring the continuity of the rights or functionality it confers.

4.2. Regulations on the certification of mountain food products

Depending on the country of origin of the mountain food product, there are specific regulations that certify its authenticity and provenance. The certification process can involve both international or European standards and national regulations. In Romania, as well as in other European countries, there are various certifications and labels that guarantee the quality and mountain origin of food products.

An example of this is the Protected Designation of Origin (PDO) or Protected Geographical Indication (PGI) label, which confirms that a product comes from a specific region and that all stages of the production process take place exclusively in that area. Also, the ISO 22000 standard, which focuses on food safety management, is relevant for mountain products, especially those intended for export or international markets, guaranteeing that the products are safe for consumption.

Mountain food products obtained through organic methods can benefit from organic certification, either through national or European certifications, such as Biocert or the EU organic certification. These certifications attest to compliance with organic standards, which involve the avoidance of pesticides, chemical fertilizers and other practices harmful to the environment. In addition to these, there are also additional international certifications such as GlobalGAP, Fair Trade or UTZ, which are particularly relevant for mountain food products sold on foreign markets. Thus, certified mountain food products must comply with both external standards, such as PDO, IGP, Eco-Label or organic certifications, and internal regulations imposed by national and regional authorities. (Regulamentul CE nr.834/2007, Regulamentul CE nr. 889/2008).

These requirements ensure that the products are of high quality, safe for consumption and come from mountain areas that respect local traditions, environmental protection and sustainability principles. In order to obtain and maintain certification, farmers and producers must be transparent and comply with all legal regulations in force.

5. Quality indicators and monitoring tools

The quality indicators of certified mountain food products represent a complex set of characteristics that describe and ensure their high quality, authenticity and safety. These indicators are fundamental to guaranteeing that mountain products comply with the



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requirements imposed by the certification authorities and meet consumer expectations. They include both objective, measurable elements and subjective aspects related to sensory perception, reflecting the physical qualities of the product, but also the production methods.

An essential aspect is the clearly defined geographical origin, so that a certified mountain food product must come from a mountain area according to national or European regulations, where the landforms exceed 600 meters in altitude. Products can benefit from geographical certifications such as Protected Designation of Origin (PDO) or Protected Geographical Indication (PGI), which attest that the product was created, processed and prepared in that region, using traditional local techniques. Certified mountain products respect traditional production techniques, methods passed down from generation to generation, essential for preserving authenticity and local identity. In addition, they follow traditional recipes specific to the mountain area, which may involve the use of local ingredients and particular preparation methods.

The quality of the ingredients is another important indicator, as these products are made from raw materials from mountain regions, where climatic conditions and soil favor the cultivation of high-quality aromatic plants, vegetables, fruits or dairy products. Often, production is carried out using ecological or sustainable methods, such as organic farming or extensive animal husbandry, without the use of chemicals and artificial fertilizers, which gives the products a natural and healthy character.

In terms of food safety and quality, certified mountain products are subject to strict regulations, including rigorous laboratory tests that confirm the absence of contaminants or their presence within acceptable limits, such as heavy metals, pesticides or harmful microorganisms. The certification process involves regular audits and inspections, which verify compliance with quality standards and the implementation of traceability systems to track the product throughout its entire journey, from farm to consumer.

Respect for the natural environment is another essential aspect. Certified mountain products are closely linked to the protection of the mountain environment, and their production must comply with requirements aimed at preserving the landscape, biodiversity and ecological balance of the area. Thus, they are produced sustainably, with minimal impact on ecosystems and support local economic development in an environmentally responsible way.

The taste quality is another strong point of these products. They are recognized for their authentic taste, which reflects the specifics of the mountain region, and artisanal products, made in small quantities, offer a superior taste experience and characteristic aromas, due to both natural ingredients and traditional processing techniques.

Certified mountain products bring important health benefits, being generally less processed than industrial products and having a higher content of essential nutrients, such as vitamins and minerals. The natural conditions in which animals are raised and plants are cultivated contribute to this superior nutritional value.

Finally, authenticity and limited production are other defining characteristics of certified mountain food products. They are manufactured in limited quantities and, most often, only available during certain periods of the year, which gives them an exclusive

character and makes them highly appreciated by consumers looking for unique and high-quality products.

6. NATIONAL REGISTER OF MOUNTAIN PRODUCTS

The National Register of Mountain Products is a register of the Ministry of Agriculture and Rural Development (MADR) that includes specific, traditional and authentic products from the mountainous areas of Romania. The purpose of this register is to protect, promote and valorize products made in the mountain environment, ensuring compliance with clear criteria regarding their origin, production methods and authenticity.

This register provides producers with official recognition and support in promoting their products, and provides consumers with the certainty that they are purchasing authentic products, while supporting the local economy in mountainous areas. To be included in the register, products must meet strict standards related to provenance, quality and tradition, thus also benefiting from special protection against imitators or counterfeiters.

The frequency of updating the National Register of Mountain Products may vary depending on the regulations of the Ministry of Agriculture and Rural Development (MADR) and specific administrative procedures. In general, such registers are updated periodically, at least once a month, to reflect new entries, changes or deletions of the products and units included.

Thus, on August 31, 2025, 4,527 products were registered in the National Register of Mountain Products, of which 543 (12%) were in the milk and dairy products category

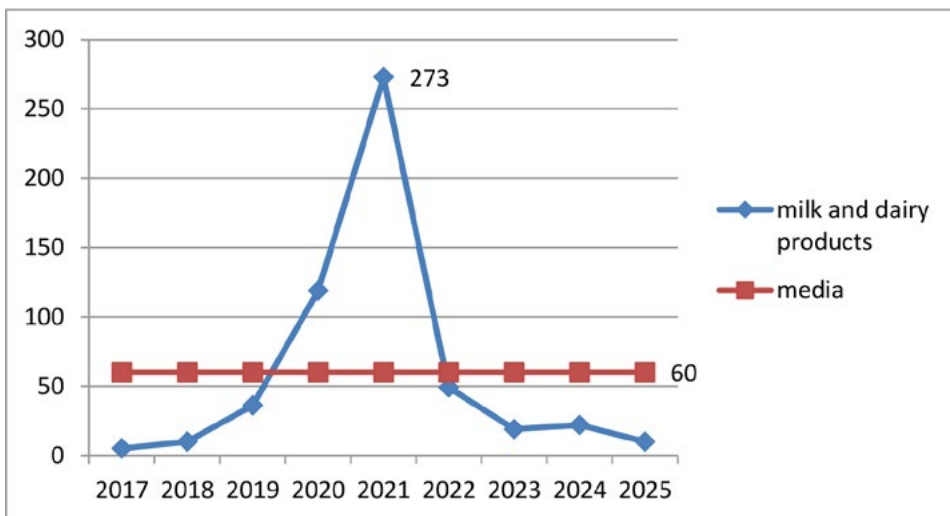


Figure 1 - Dynamics of registration of milk and dairy products in the National Register of Mountain Products

Source: own calculations according to NRMP, July 30, 2025

The image shows the evolution of the number of products in the milk and dairy products category registered in the National Register of Mountain Products between 2017 and 2025, compared to a constant reference average (60 units annually). During the analyzed period, their number recorded a fluctuating evolution. Between 2017 and 2021, a significant increase was noted, from 5 products in 2017 to a maximum of 273 products in 2021, a value considerably above the reference average of 60 units. After this peak, a sharp decrease occurred in 2022, falling to 49, followed by a decreasing trend in the following years.

Although the period 2019–2021 shows an increased interest in registering mountain dairy products, the decreasing trend in the following years highlights either a decrease in production capacity or problems in the certification and maintenance process in the register. Compared to the average, only 2 years (2020 and 2021) performed significantly, the rest falling well below expectations. This could signal the need for interventions to support, inform or simplify procedures for mountain producers (Figure 1).

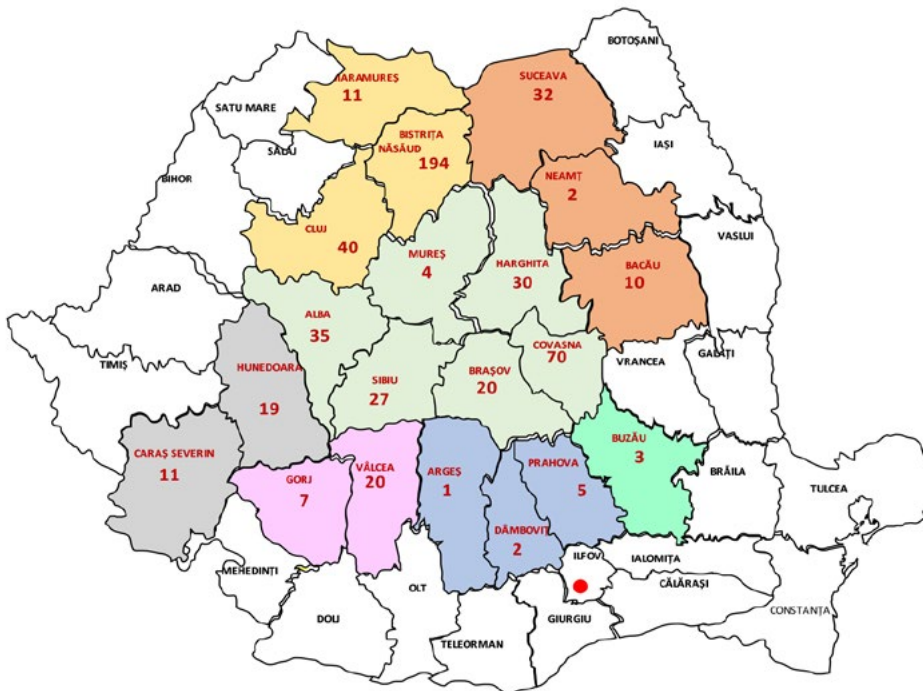


Figure 2 - Geographical representation of milk and dairy product producers
Source: own calculations according to NRMP, July 30, 2025

The analysis of the distribution of certified mountain products in the milk and dairy products category, reported to the counties and development regions of Romania, highlights significant differences in the degree of exploitation of the mountain potential.



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The highest concentration is found in the North-West Region, with a total of 245 certified products, of which 194 belong to Bistrița-Năsăud County, which is a detached leader at national level. Cluj contributes with 40 products, and Maramureș with 11. This region demonstrates sustained activity in the certification process of mountain dairy products, reflecting a good mobilization of local producers and, most likely, the existence of efficient administrative support.

In second place is the Center Region, with 186 certified products, in counties such as Covasna (70), Alba (35), Harghita (30), Sibiu (SB27) and Brașov (20). This performance is consistent with the mountainous agri-food tradition of the area and the local infrastructure that supports the promotion of traditional products. In contrast, in the North-East, South-West Oltenia and South-Muntenia regions, the number of certified dairy products is low, with 12, 7 and 8 products registered in the register, respectively.

Although these regions have counties with mountainous terrain and a tradition in animal husbandry, the low number of certifications indicates an undervaluation of local resources, possibly caused by a lack of information, bureaucracy or difficulties in accessing the certification process. For example, in the counties of Neamț, Gorj, Argeș or Dâmbovița, only a few certified mountain products are registered, although the production potential exists.

This uneven distribution of certified mountain products highlights the need for more balanced public policies, an awareness campaign at local level, as well as a simplification of certification procedures. More intensive promotion of this quality system could contribute to increasing the number of certified products and, implicitly, to the sustainable development of mountain areas.

CONCLUSIONS

In conclusion, although the certification of mountain products brings important benefits in terms of product valorization, environmental protection and promotion of local traditions, the limitations and challenges from the perspective of farmers remain real and significant. In order for more producers to be motivated to join this system, it is essential that the authorities simplify the procedures, provide concrete and accessible support and create clear conditions for the superior valorization of these products on the market.

Romania's efforts have resulted in a fairly high degree of adoption of the term in a short period of time, especially compared to other countries. However, the "mountain product" quality scheme has not yet demonstrated its full potential for most producers, although some perceive and report benefits associated with it, such as slight profit increases and greater customer loyalty.

The "mountain product" quality scheme could be a useful public policy instrument to increase the income of mountain product producers and protect mountain agriculture in Romania, as it can fill a gap in an otherwise binary market of "organic" or "non-organic" products.

Moving to the level of public strategies and policies offers several options for implementing the "mountain product" certification system and organizing the related market.



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Considerable benefits can be obtained by adopting a participatory governance model, based on cooperation between public and private actors. In support of this approach, some concrete examples are also provided regarding the application of these principles in the specific context of “mountain product” certification.

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