



NATIONAL POLICY



**NATIONAL POLICY ON**

**SUSTAINABLE FOOD SYSTEMS AND LIVELIHOODS IN RURAL AREAS OF MONTENEGRO**

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# Summary

*This study provides a comprehensive analysis of the challenges and development opportunities of the national policy for sustainable food systems and livelihoods in rural areas of Montenegro, with a special emphasis on the milk production and processing sector. In contemporary conditions, the food system of Montenegro faces numerous structural and functional constraints, which slow down its transformation towards sustainability, competitiveness and resilience. Key problems are reflected in the high level of import dependence, an underdeveloped domestic processing sector, a poorly organized market chain and limited institutional capacities to coordinate multisectoral policies and support mechanisms.*

*Despite efforts to strengthen institutional support and increase the coverage of rural development measures, especially those aimed at processing raw milk on family farms, the sector continues to suffer from fragmentation, marked by low farm-gate milk prices, rising production costs, underdeveloped market linkages, and weak producer organization. Milk producers most often face numerous obstacles: low purchase prices, high input costs, lack of market channels, as well as poorly developed forms of collective organization. Processing infrastructure is largely underdeveloped, while large retail chains, driven by profit interests and demands for standardization, often bypass domestic products in favor of imported alternatives.*

*To overcome these challenges, the study proposes a strategic shift towards establish- ing a functional value chain in the dairy sector, where all actors, from raw material producers, through small and medium processors, to distributors and consumers, are*

4 *connected through institutionally supported mechanisms of cooperation, fair trade and joint promotion. In particular, it highlights the need to establish and strengthen producer organizations, develop local brands and stimulate on-farm milk processing as a way to increase added value and retain economic benefits in rural areas.*

*The study also highlights the importance of the social dimension of development, including boosting employment in rural areas, enhancing gender-responsive value chain development and youth through targeted support programs, and combating depopulation in the north of the country. Linking the food and tourism sectors, es- pecially through the development of agritourism, can open up additional sales and promotion channels for domestic products, strengthening the visibility of Montenegrin agriculture and food culture on the domestic and international markets.*

*Finally, it is recommended to introduce modern technologies, digital solutions and ecological practices in all segments of the value chain, thus contributing to efficiency, traceability and compliance with European standards. A sustainable food system in Montenegro must be based on three pillars: economic sustainability, social inclusion and environmental responsibility. Only with stable public policy, coordinated man- agement and predictable financing is it possible to ensure the long-term development of the sector, improve the quality of life in rural areas and position Montenegro as a responsible producer of high-quality, authentic food.*

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# Introduction

This policy advice document was developed within the framework of the regional initiative Farm to Fork Academy for Green Western Balkans – Our Common European Future, which aims to contribute to the alignment of the Western Balkan countries with the strategic directions of the European Union in the field of sustainable food systems, in line with the European Green Deal and the reformed Common Agricultural Policy (CAP). The initiative promotes an evidence-based approach to policy-making, the participation of relevant stakeholders, as well as the integration of socio-economic and environmental aspects of agricultural development. In this context, this document represents a contribution to the na- tional process of shaping a sustainable policy for food systems in Montenegro, with a special focus on the milk production value chain. The selection of the dairy sector as a focal point is intentional, reflecting its strategic importance for rural livelihoods, food security, and ecological balance in Montenegro. Accord- ing to MONSTAT data, milk and dairy products account for more than a third of the total value of the purchase and sale of agricultural products, while domestic dairy farming also includes several thousand family farms that provide livelihoods, especially in mountainous and semi-mountainous areas. Despite the existence of direct support mechanisms, such as per-animal subsidies, subsidies for delivered milk, premiums for quality and processing of raw milk, the sector faces a number of structural weaknesses that limit its sustainability and competitiveness.

The main challenges identified were: a decline in the number of dairy cows and breeding herds, a de- crease in the total amount of milk produced, a poorly developed purchasing network in some regions, a lack of standardization and certification, a low purchase price for raw milk, and excessive dependence on imported dairy products. Import competition, especially from countries in the region and the EU, represents a serious obstacle for domestic producers, as imported products are often aggressively present

on the market, thanks to lower prices and a stronger logistics and marketing system. In addition, frag- 5

mented production, small farm sizes, and insufficient cooperation between farmers further complicate the market entry of domestic producers and slow down the processes of digitalization, innovation, and standardization. Given the pronounced seasonality of production and the presence of informal sales,

a large part of the milk never enters the official processing and distribution channels, thus losing the possibility of monitoring quality, controlling health safety, as well as creating additional value through processing and branding. At the same time, there are also positive trends that indicate development potential: the amount of milk processed on family farms is increasing, interest in traditional and organic dairy products is growing, and there has been a growth in exports – especially cheese – which still remains symbolically low, but shows room for progress with the support of state mechanisms.

For all the above reasons, this document uses the dairy sector as a representative example for the ap- plication of the FAO methodology for the development of sustainable food value chains, with an em- phasis on the first phase, Performance Measurement, which includes a three-dimensional assessment of economic, social and environmental sustainability. The document is based on data collected through desk research, official statistics, national strategic documents, the legislative framework, as well as an analysis of results from previous years related to purchase, processing, export and support through public policies. In this sense, the analysis of the dairy value chain does not only look at production, but also at the broader institutional, market and social contexts in which this sector develops. Special attention is paid to identifying points in the chain where value loss occurs, but also to recognizing the potential for improving the competitiveness, sustainability and resilience of the sector, in line with the objectives of the Strategy for the Development of Agriculture and Rural Areas 2023–2028, the IPARD III programme and the European integration process. Although the analysis focuses on one branch of production, the methodological framework and approach are fully transferable to other sectors of the Montenegrin food system.





# Methodology

The methodological approach used in this document is based on the concept promoted by the Food and Agriculture Organization of the United Nations (FAO) in its *Developing Sustainable Food Value Chains – Guiding Principles* (2014). This methodology enables the systematic assessment and improvement of food value chains, integrating the economic, social and environmental dimensions of sustainability, with a focus on participatory policy-making and a results orientation.

The document focuses specifically on the first phase of the FAO methodology – Measuring Performance, which involves assessing the sustainability of the milk value chain across three key dimensions:

* Economic viability: Analysis of profitability, market access, value added, employment and financial stability of producers.
* Social sustainability: Assessment of social inclusion, equitable distribution of values, working conditions, accessibility of infrastructure, participation of women and youth, and the role of social institutions.
* Ecological sustainability: Observing the impact of dairy production on land, water, biodiversity, and resilience to climate change.

In the context of Montenegro, the methodological framework was operationalized through desk research, relying on the latest data from MONSTAT, the Ministry of Agriculture, Forestry and Water Management (MAFWM), the Agency for Food Safety, Veterinary and Phytosanitary Affairs (AFSVPA), as well as reports from the IPARD III program and the Strategy for the Development of Agriculture and Rural Areas 2023–2028. Data from annual reports on direct payments, purchase, processing and export of milk and dairy products were also used, including relevant regulations and by-laws regulating the quality

6 and safety of milk.

In addition to quantitative analysis, expert interpretation of secondary data was used, including sectoral

weaknesses (SWOT) and institutional constraints analysis. Given the lack of systematic research direct- ly addressing the dairy value chain, the methodology also included qualitative insights from previous projects, institutional evaluations, and sector consultations.

The sustainability evaluation was carried out according to standardized criteria: each of the three dimen- sions was rated on a scale from 1 to 3, where:

* 1 indicates minimal sustainability (the element reduces sustainability),
* 2 indicates a medium level (the element is neutral),
* 3 indicates the maximum contribution to sustainability (the element clearly improves sustainability).

This assessment allowed for the identification of priority areas for intervention and the formulation of policy recommendations that are aligned with the objectives of the EU Common Agricultural Policy, sustainability principles and local development strategies.

In line with the document’s objective to provide a concrete, applicable and replicable model of analysis, the dairy value chain has been selected as a case study to demonstrate how national policy can be improved through measuring and understanding the sector’s performance. This provides a basis for designing strategic interventions that will strengthen the position of producers, increase the resilience of the sector, enable additional employment in rural areas and raise the level of food self-sufficiency in Montenegro.

This approach also allows for the future expansion of the analysis to other value chains, such as meat, fruits and vegetables, honey or wines, thus building a comprehensive framework for the development of national policies for sustainable food systems, based on evidence and adapted to local specificities.





# National Food Value Chain Analysis

The value chain of dairy production in Montenegro represents one of the key verticals of domestic ag- riculture and the food industry, not only because of its role in supplying the population with essential nutritional products, but also as a support for the preservation of the rural population, cultural heritage and agrobiodiversity. In the context of Montenegro’s increasing dependence on food imports, the analysis of this sector is not just a sectoral case study, but a foundation for redefining a strategic approach to the development of a self-sustainable and competitive food system.

## Structure and spatial distribution of production

Primary milk production in Montenegro is highly fragmented, geographically spread and largely based on family farms, with a small number of heads per household and a low degree of specialization. MON- STAT data for 2024 indicate that more than 90% of total milk production is achieved on individual farms, which reflects the deep roots of livestock farming in traditional practices, but also pronounced structural fragmentation. The largest number of heads is concentrated in the northern municipalities (Pljevlja, Bijelo Polje, Berane, Andrijevica), where agro-ecological conditions are suitable for grazing, but at the same time problems of physical isolation, poor road infrastructure and limited market access are pronounced.

The average yield per cow is 3,465 liters per year, which is far below the EU average (6,500–8,000 liters), and such an effect directly results from the low genetic potential of livestock, inadequate nutrition, poor veterinary coverage and limited access to modern knowledge and technologies. There is also a continuous erosion of the livestock fund: the number of dairy cows and breeding heifers is in a slight but persistent

decline, which additionally increases the risk of further weakening of the sector’s capacity to respond 7

to market needs.

According to the 2024 agricultural census, we have 26,711 agricultural farms. The number of agricul- tural holdings is 31.2% lower than in the 2010 Agricultural Census if we take the national criteria of the 2024 Agricultural Census into account compared to the same criteria from 2010.1) Primary agricultural production in 2024 demonstrates positive developments, however, the total utilized agricultural area continues to decline, decreasing by 5.8% and amounting to 248,234.2 hectares. Of this area, 92.3% consists of permanent meadows and pastures, 3.5% is arable land (representing an increase of 20.1% compared to the previous year), 3.8% is under permanent crops, while homesteads account for 0.4% of the total area. Compared to 2023, the total production of most fruit species increased, whereas peach production recorded a decline.2) Pastures and meadows are the most valuable resource possessed by the state of Montenegro, which provides a good basis for dairy cattle farming.

At the end of 2024, compared to 2023, a decrease was recorded in the total number of cattle, sheep, and goats. The total cattle population amounted to 67,496, representing a decline of 1.9% compared to the previous year. The downward trend in the number of dairy cows continued, with a decrease of 6.7%. The total number of sheep fell significantly, by 6.6% compared to 2023, while the number of goats decreased by 7.3%.3)

1. MONSTAT (2025): Agricultural Census, Podgorica, available at: https://monstat.org/uploads/files/popis%20 poljoprivrede%202024/Finalno%20Saop%C5%A1tenje%20PP\_cg%20final2.pdf [accessed 10 June 2025]
2. MONSTAT (2025): Crop production in 2024, Podgorica, available at: https://[www.monstat.org/uploads/files/](http://www.monstat.org/uploads/files/) Biljna/2024/Biljna%20proizvodnja%20u%202024.godini.pdf [accessed 10 June 2025]
3. MONSTAT (2025): Number of livestock and poultry in Montenegro in 2024, Podgorica, available at: https:// [www.monstat.org/uploads/files/poljoprivreda/stocna/2024/Brojno\_stanje\_stoke\_i\_zivine\_proizvodnja\_mli-](http://www.monstat.org/uploads/files/poljoprivreda/stocna/2024/Brojno_stanje_stoke_i_zivine_proizvodnja_mli-) jeka\_vune\_i\_%20jaja\_u\_CG\_u\_2024.\_FINAL.pdf [accessed 10 June 2025]





**Table 1.** *Number of livestock in Montenegro, 2020-2024*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Categories** | | **2020** | **2021** | **2022** | **2023** | **2024** | **Change in % 2024**  **2023** |
| **Cattle - total** |  | **77,889** | **71,166** | **70,765** | **68,826** | **67,496** | **-1.9** |
| Young cattle up to one year old | | 14,635 | 13,866 | 14,683 | 14,922 | 14,660 | -1.8 |
|  | Calves and bulls for slaughter | 5,565 | 5,346 | 5.127 | 5,633 | 5,712 | 1.4 |
|  | Other female | 7,052 | 6,882 | 7,777 | 7,449 | 7,144 | -4.1 |
|  | Other male | 2,018 | 1,638 | 1,780 | 1,840 | 1,804 | -2.0 |
| Cattle 1-2 years old | | 3,627 | 3,356 | 3,511 | 3,494 | 5.171 | 48.0 |
|  | Male voices | 1,097 | 519 | 738 | 724 | 700 | -3.3 |
|  | Heifers for breeding | 2,430 | 2,609 | 2,569 | 2,550 | 4.255 | 66.9 |
|  | Heifers for slaughter | 100 | 228 | 205 | 220 | 216 | -1.8 |
| Cattle older than 2 years | | 59,627 | 53,944 | 52,570 | 50,410 | 47,665 | -5.4 |
|  | Heifers for breeding | 1,939 | 1,933 | 2,022 | 2,053 | 2,035 | -0.9 |
|  | Heifers for slaughter | 90 | 89 | 65 | 83 | 80 | -3.6 |
|  | Cows - total | 55,499 | 50,097 | 48,974 | 46,444 | 43,845 | -5.6 |
|  | - Milking cows | 54,173 | 49,168 | 48,124 | 45,594 | 42,554 | -6.7 |
|  | - Others | 1326 | 929 | 849 | 850 | 1291 | 51.9 |
|  | Male animals (bulls and oxen) | 2,099 | 1,825 | 1,509 | 1,830 | 1,705 | -6.8 |
| **Sheep - total** |  | **176,580** | **165,918** | **161,376** | **155,096** | **144,916** | **-6.6** |
|  | Lambs and goats up to one year old | 23,440 | 23,564 | 23,811 | 22,998 | 22,700 | -1.3 |
|  | Sheep for breeding | 145,595 | 134,632 | 131,880 | 126,065 | 115,894 | -8.1 |
|  | from that milk | 91,647 | 91,970 | 91,354 | 89,196 |  |  |
|  | Rams and barren ewes | 7,545 | 7,722 | 5,685 | 6,033 | 6,322 | 4.8 |
| **Goats - total** |  | **27,823** | **29,032** | **29,136** | **28,950** | **26,833** | **-7.3** |
|  | Skins up to one year old | 5,025 | 5,506 | 5,227 | 5.102 | 5.151 | 1.0 |
|  | Goats - already kids | 19,336 | 20,263 | 20,047 | 20,057 | 17,961 | -10.5 |
|  | Goats - first time allowed | 1,536 | 1,585 | 1,834 | 1,812 | 1,800 | -0.7 |
|  | Goats and barren goats | 1,926 | 1,678 | 2,028 | 1,979 | 1,921 | -2.9 |

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**Source**: MONSTAT (2025): Number of livestock and poultry in Montenegro in 2024, Podgorica, available at: https://[www.monstat.org/uploads/files/poljoprivreda/stocna/2024/Brojno\_stanje\_stoke\_i\_zivine\_proizvodn-](http://www.monstat.org/uploads/files/poljoprivreda/stocna/2024/Brojno_stanje_stoke_i_zivine_proizvodn-) ja\_mlijeka\_vune\_i\_%20jaja\_u\_CG\_u\_2024.\_FINAL.pdf [accessed 10 June 2025]

The total milk production in Montenegro (cow’s, sheep’s, and goat’s milk) in 2024 amounted to 157,940 thousand liters, with cow’s milk accounting for the largest share (93.3%). The average milk yield per cow was 3,465 liters.4) The following shows the production of milk in Montenegro for the period from 2019 to 2024.

1. MONSTAT (2025): Number of livestock and poultry in Montenegro in 2024, Podgorica, available at: https:// [www.monstat.org/uploads/files/poljoprivreda/stocna/2024/Brojno\_stanje\_stoke\_i\_zivine\_proizvodnja\_mli-](http://www.monstat.org/uploads/files/poljoprivreda/stocna/2024/Brojno_stanje_stoke_i_zivine_proizvodnja_mli-) jeka\_vune\_i\_%20jaja\_u\_CG\_u\_2024.\_FINAL.pdf [accessed 10 June 2025]



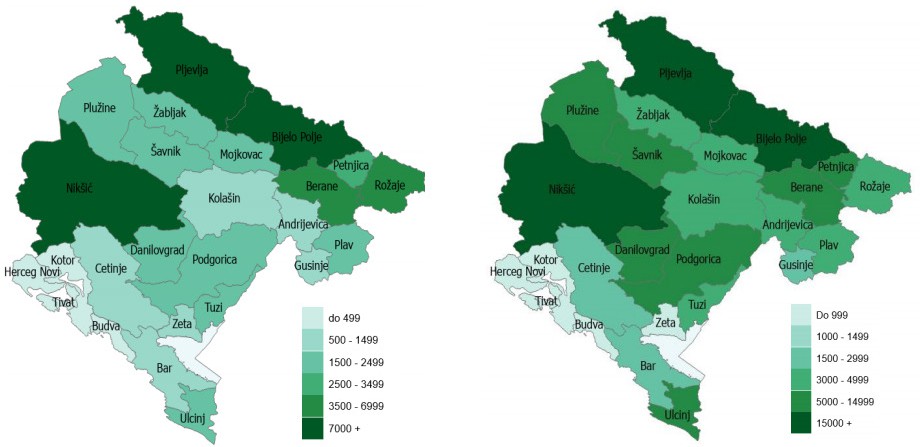


**Table 2.** *Milk production in Montenegro for the period 2019 to 2024.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Milk | | | | |
| total | cows | per milking cow | sheep and goats | per sheep |
|  | (000 liters) | (000 liters) | (literally) | (000 liters) | (literally) |
| 2020 | 180,459 | 165,576 | 3,035 | 14,883 | 110 |
| 2020 | 173,412 | 154,859 | 3.149 | 18,553 | 145 |
| 2022 | 172,049 | 153,376 | 3,187 | 18,146 | 134 |
| 2023 | 169,371 | 152,692 | 3,348 | 16,679 | 124 |
| 2024 | 157,940 | 147,437 | 3,465 | 10,503 | 122 |

Source: MONSTAT (2025): Number of livestock and poultry in Montenegro in 2024, Podgorica, available at: https://[www.](http://www/) monstat.org/uploads/files/poljoprivreda/stocna/2024/Brojno\_stanje\_stoke\_i\_zivine\_proizvodnja\_mlijeka\_vune\_i\_%20jaja\_u\_ CG\_u\_2024.\_FINAL.pdf [accessed 10 June 2025]

Figures 1 and 2 illustrate the number of cattle and sheep by municipality, providing an overview of the regional distribution of livestock. Differences in livestock concentration between northern, central and coastal municipalities are visible, which can be directly related to milk production.

**Graph 1.** Number of cattle, by municipality 2024. **Graph 2.** Number of sheep, by municipality, 2024.

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**Source:** MONSTAT

## Collection, processing and purchase network

One of the least developed segments of the milk value chain in Montenegro is the system of collection and purchase of raw milk. Although the number of registered dairies/cheesemakers is increasing, cur- rently at 27, the regional coverage of purchase points remains uneven. In many municipalities and rural areas, producers face the lack of organized purchase, which forces them to sell directly or process for their own needs and informal channels. This system results in reduced quality control, lack of traceability and origin of products, and loss of income for the producers themselves.

Despite the existing potential, the capacities of domestic dairies are mostly limited to micro and small production facilities, with a low level of automation and processing of the traditional range, fresh milk, yoghurt, sour cream and several types of cheese. In 2024, slightly more than 28 million liters of raw milk were purchased, which represents a growth of 3.9% compared to the previous year, but still remains





below the actual production potential, especially considering that a significant part of the production never reaches the official processing channels. Cheese production recorded a growth of 12.7%, which indicates an increase in demand, but it still takes place mainly in conditions of low standardization and without systematic promotion of authentic local brands.

The purchase, processing, and distribution of domestic agricultural products remain among the weakest links in the value chain. The purchase network does not operate evenly across the country, and small producers in particular often face limited market access and low bargaining power, resulting in a signif- icant portion of their production not entering organized purchase or processing channels. Additional challenges include issues related to product standardization, food safety, origin labeling, and logistics, which further complicate distribution on both domestic and export markets.

The total value of the purchase and sale of agricultural, forestry, and fishery products by business entities at the end of 2024 amounted to EUR 50.6 million. Of this amount, the value of sales from own produc- tion was EUR 20.56 million, while the value of purchases from individual agricultural producers reached EUR 30.03 million. Compared to 2023, the total value of purchase and sale of agricultural, forestry, and fishery products by business entities and agricultural cooperatives with two or more employees increased by 1%. This includes a 0.4% increase in the value of sales from own production of business entities, as well as a 1.9% increase in the value of purchases of agricultural products.5)

**Table 3.** *Value of purchased and sold agricultural and fishery products, 2021-2024*

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|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 2021 | 2022 | 2023 | 2024 |
| Purchase of agricultural products from individual producers | 20,906 | 23,799 | 29,480 | 30,034 |
| Sales from own production of business entities | 9,891 | 12,041 | 20,481 | 20,568 |
| **TOTAL** | 30,797 | 35,840 | 49,961 | 50,602 |

**Source:** MONSTAT (2025): Value of purchased and sold agricultural and fishery products, Podgorica, available at: https://[www.monstat.org/cg/page.php?id=1407&pageid=1407](http://www.monstat.org/cg/page.php?id=1407&pageid=1407) [accessed 10 June 2025]

An analysis of the value of purchased and sold agricultural and fishery products in Montenegro by quarter during 2024 indicates a pronounced seasonal dynamic within the sector. The total annual market sales volume of these products amounts to 50,602 million euros, with purchases from individual producers amounting to 30,034 million euros, while sales from business entities’ own production amounted to 20,568 million euros. It is particularly important to note that the volume of purchases fluctuated sig- nificantly throughout the year, reflecting the high degree of seasonality of production and supply on the market. Namely, the value of purchases by individual producers in the first quarter amounted to 5,513 million euros, to increase significantly in the second and third quarters, reaching 7,734 and 8,935 million euros, respectively, before a slight decline in the fourth quarter to 7,852 million euros. These oscillations indicate a strong influence of seasonal cycles of agricultural production, where the peak of purchases coincides with the periods when the harvest of the largest number of crops is carried out, especially in the summer and early autumn months. Such trends suggest that a large part of production is directed towards seasonal crops, while a decrease in purchase activity is recorded in the winter period, which may be a result of both a reduced volume of production and a limited number of available products.

On the other hand, sales from own production of business entities also show a similar seasonal pattern, although with somewhat smaller oscillations. From 3,700 million euros in the first quarter, the value of sales increased to 5,224 million in the second quarter and 7,035 million in the third quarter, while in the

1. MONSTAT (2025): Value of purchased and sold agricultural and fishery products, Podgorica, available at: https://[www.monstat.org/cg/page.php?id=1407&pageid=1407](http://www.monstat.org/cg/page.php?id=1407&pageid=1407) [accessed 10 June 2025]





fourth quarter a decrease was recorded again to 4,609 million euros. These data indicate that business entities also depend to a large extent on seasonal production, although they have a somewhat stable pro- duction and distribution structure compared to individual producers. Overall, the pronounced quarterly unevenness in the value of purchases and sales indicates the structural seasonality of the Montenegrin food sector, which has significant implications for purchasing planning, harmonious capacities, process- ing and market policy. Such seasonal concentration of production requires appropriate policy measures that could contribute to the extension of the production season (eg through greenhouse production irrigation and modern agrotechnical measures), the improvement of storage and processing capacities, and the development of market infrastructure that would enable the efficient valorisation of domestic production throughout the year.

The structure of the value of the purchase and sale of agricultural, forestry and fishery products at the end of 2024 reflects the basic characteristics of the production orientation and market dynamics of the Montenegrin agricultural sector. Based on the available data, the most significant individual item is the purchase and sale of fresh milk, which accounts for 33% of the total sector values, which indicates a pronounced orientation towards livestock production, primarily dairy cattle breeding. This production structure, although confirming the role of livestock farming as one of the most developed branches of domestic agriculture, also implies high concentrations of value in a limited number of products, which may have negative implications for the diversification of supply and the overall resilience of the food system.

Analysis of this structure clearly shows that the Montenegrin food sector is characterized by limited specialization, a high degree of dependence on a few basic products and a relatively low level of pro- cessing. 6)Such a production and market configuration indicates the need for a strategic orientation of the sector towards greater diversification, technological modernization and increased competitiveness, with a particular focus on the development of processing capacities and the improvement of sectors with a lower market share, but significant development potential. In this sense, a structured analysis of

the value chain within each of the above categories could provide key insights into opportunities for 11

increasing added value, generating income for local producers and improving the overall sustainability and resilience of the Montenegrin food system.

The total quantity of cow’s milk purchased by dairies in Montenegro at the end of 2024 amounted to 28,924,992 kg, an increase of 3.9% compared to 2023. The average milk fat content in 2024 increased by 2.7% compared to 2023, while the protein content was higher than 4%.7)

**Table 4.** *Dairy production in 2024 by quarter*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Product, kg | IQ | II Q | III Q | IV Q | TOTAL |
| Milk | 729,614 | 653,233 | 563,373 | 466,259 | 2,412,479 |
| Sour cream | 249,164 | 264,577 | 260,395 | 181,379 | 955,515 |
| Fermented dairy products | 2,141,220 | 2,479,149 | 2,831,323 | 1,915,457 | 9,367,149 |
| Cream | 54,053 | 54,821 | 57,173 | 51,839 | 217,886 |
| Other yellow-fat products | 413 | 454 | 257 | 476 | 1,600 |
| Cheese | 400,228 | 481,836 | 523,868 | 409,983 | 1,815,915 |

Source: MONSTAT (2025): Input of raw cow’s milk and obtained dairy products in dairies, available at: https:// [www.monstat.org/cg/page.php?id=1306&pageid=61](http://www.monstat.org/cg/page.php?id=1306&pageid=61) [accessed June 10, 2025]

1. MONSTAT (2025): Value of purchased and sold agricultural and fishery products, Podgorica, available at: https://[www.monstat.org/cg/page.php?id=1407&pageid=1407](http://www.monstat.org/cg/page.php?id=1407&pageid=1407) [accessed 10 June 2025]
2. MONSTAT (2025): Input of raw cow’s milk and obtained dairy products in dairies, available at: https://[www.](http://www/) monstat.org/cg/page.php?id=1306&pageid=61 [accessed June 10, 2025]



In 2024, compared to 2023, there was an increase in the production of cheese (12.7%), cream (21.1%), other yellow-fat products (31.6%), while a decrease was recorded in the production of sour cream (6.5%), fermented dairy products (0.1%) and the production of drinking milk.

## Distribution and marketing

The distribution system of dairy products in Montenegro is characterized by a pronounced duality. On the one hand, large retail chains — most often with foreign capital — control the majority of the market, imposing high standards of quality, packaging and logistics, which are unattainable for most domestic producers. On the other hand, direct sales “at the doorstep”, through markets or through informal chan- nels, remain dominant for a significant number of farms, especially in the northern regions. The lack of cold storage facilities, collection centers, quality monitoring and branding systems further limits the market visibility of domestic products, and thus their competitiveness.

Institutional purchasing (schools, homes, catering sector) shows growing potential, especially through public policies such as the School Meals program and the promotion of local food in tourism. However, administrative barriers, poor coordination between producers and the public sector, and low integration into supply chains remain obstacles to greater public consumption of domestic dairy products.

The storage and refrigeration infrastructure remains unevenly developed and is often inadequate or in- sufficient, particularly during periods of market oversaturation. At the same time, distribution is largely controlled by major retail chains that impose stringent requirements regarding quality, quantity, and continuity of supply — requirements that most domestic producers are unable to meet independently. The value chain is additionally constrained by an unequal distribution of added value; producers retain only a minimal share of the final product’s price, while intermediaries and retailers capture the largest portion of the profits. This situation adversely impacts producers’ motivation to improve production

12 and participate in formal market channels, thereby perpetuating a cycle of low investment, low returns, and limited market success.

The value chain in the dairy sector is shown below.

**Figure 3.** Value chain in the milk sector

**INPUT PROCUREMENT:**

* Hay collection or purchase of concentrates;
* Other inputs.

**RAW MILK PRODUCTION**

**SALES OF DAIRIES AND CHEESE FACTORIES COLLECTION AND PURCHASE OF RAW MILK**

* Collection of milk on farms
* Transport to purchase centers or dairies

**RAW MILK PROCESSING**

* Standardization (internal redistribution of fat and protein)
* Pasteurization
* Processing into products: fresh milk, cream, yogurt, fermented products, cheeses

**Source:** Own elaboration based on workshops’ discussions

**On-farm consumption:** consumption and consumption for the cow-calf system

**On-farm processing** – cheese and cream

**Direct sales** –

from farms, (green) markets

**Retail** – supermarkets, local shops Institutional sales –

schools, hospitals, tourist facilities

**Export**

****



****

## Import-export balance and external competitiveness

Foreign trade data clearly indicate a serious disproportion between imports and exports of dairy prod- ucts. During 2024, Montenegro imported more than 51 million kilograms of dairy products, with a total value of 79.8 million euros, while exports amounted to only 357,000 kilograms, worth 250,000 euros. These data illustrate the deep structural dependence of domestic consumption on foreign suppliers, but also the untapped potential for the promotion and placement of high-quality Montenegrin cheeses on foreign markets. The main import partners are the countries of the region (BiH, Serbia, Croatia), which have more developed and subsidized dairy sectors, and thus achieve a price advantage.

According to available data, Montenegro recorded a significant imbalance between imports and exports of milk and dairy products in the period from 2021 to 2024. Exports in 2021 amounted to only 32 thou- sand euros, mainly raw milk, while in 2024 exports amounted to 286 thousand euros, noting that half of exports were at times of surplus raw milk, while the other half of exports related to cheese. Businessmen believe that exports could be even higher if we introduced a mechanism to encourage exports, and they also appeal for the procedures for VAT refunds on exports to be accelerated.

**Table 5.** Export of milk and dairy products

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **EXPORT (in KG)** | | | | **EXPORT (in EUR)** | | | |
|  | **2021** | **2022** | **2023** | **2024** | **2021** | **2022** | **2023** | **2024** |
| **MILK AND DAIRY PRODUCTS (∑)** | **97,426** | **52,751** | **113,915** | **357,639** | **32.21** | **55,254** | **116,904** | **250,149** |
| **Milk and milk products except cheese** | 96,901 | 51,416 | 111,276 | 352,675 | 26,839 | 30,748 | 61,056 | 162,106 |
| **--Unconcentrated** | 96,794 | 42,314 | 108,088 | 348,577 | 26,610 | 22,882 | 59,233 | 156,258 |
| **--Concentrated** | 0 | 5 | 2 | 250 | 0 | 35 | 23 | 1,498 |
| **--Sour milk, yogurt, sour cream, whey** | 97 | 9,031 | 3,186 | 3,848 | 229 | 7,831 | 1,800 | 6,661 |
| **-Cheese** | 525 | 1,351 | 2.64 | 4,965 | 5,371 | 24,505 | 55,848 | 85,733 |

### 13

**Source:** MONSTAT

Trends from previous years indicate Montenegro’s continued dependence on imports of these products, with minimal exports. These data highlight the need to strengthen domestic production of milk and dairy products in order to reduce dependence on imports and improve the country’s food security. Also, strong competition from imported products makes it difficult to market domestic products, even though they are competitive in price and quality with foreign products. The largest imports of milk and dairy products were recorded from Bosnia and Herzegovina, the Republic of Serbia and the Republic of Croatia. The lack of UHT milk production has led to huge imports for years, while imports of fermented milk, yogurt and other fermented dairy products have been increasing year by year, despite higher domestic production.

**Table 6.** Import of milk and milk products

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **IMPORT (in KG)** | | | | **IMPORT (in EUR)** | | | |
|  | **2021** | **2022** | **2023** | **2024** | **2021** | **2022** | **2023** | **2024** |
| **MILK AND DAIRY PRODUCTS** | **45,525,170** | **47,129,553** | **48,906,809** | **51,153,904** | **46,420,100** | **65,767,724** | **73,890,286** | **79,771,480** |
| -Milk and milk products except cheese | 41,002,975 | 42,547,578 | 42,778,123 | 44,914,637 | 28,698,022 | 41,204,144 | 49,221,750 | 49,445,304 |
| --Unconcentrated | 26,107,327 | 26,880,774 | 26,341,779 | 27,906,394 | 13,599,059 | 20,042,537 | 21,244,203 | 22,290,703 |
| --Concentrated | 44,896 | 62,720 | 92,999 | 98,756 | 128,423 | 170,211 | 277,351 | 283,909 |
| --Sour milk, yogurt, sour cream, whey | 13,494,192 | 14,186,957 | 16,343,345 | 16,909,488 | 14,970,540 | 20,991,396 | 17,726,105 | 26,870,692 |
| -Cheese | 4,522,194 | 5,084,670 | 6,128,687 | 6,239,266 | 17,722,079 | 24,563,581 | 24,668,537 | 30,326,176 |

**Source:** MONSTAT





## Support and institutional mechanisms

The system of public support for the dairy sector in Montenegro includes direct payments per head, premiums for delivered and processed milk, quality subsidies (based on microbiological and somatic parameters), as well as capital investments in equipment and infrastructure. Although these measures are formally aligned with the principles of the EU Common Agricultural Policy, their effectiveness remains limited due to complex administrative procedures, insufficient education of users, and fragmentation of the sector. Stronger horizontal coordination between the MAFWM, AFSVPA, dairies, purchasing organizations and producers is needed, as well as the implementation of a system for monitoring the effects of public policies based on the actual performance of the sector.

Direct payments in livestock farming, linked to milk production, include *per-animal subsidies for cows and breeding heifers* and *per-animal subsidies for breeding sheep and goats. Cow and breeding heifer premiums* can be obtained by an applicant who keeps one or more heads of that type of livestock on his holding, and for each head. The criterion is met if the applicant keeps that number of heads on his holding for at least seven months in the current year. The basic head premium for breeding cows and heifers is up to €100. *Sheep and goat premiums* can be obtained by an applicant who keeps 10 or more sheep or 10 or more goats in the herd on his holding. The payment applies to each head. The criterion is met if the applicant keeps that number of heads on his holding for at least seven months in the current year. The basic head premium for breeding sheep and goats is up to €15.

**Table 7.** Direct payments in livestock farming, linked to milk production

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year 2023** | | | | | | **Year 2024** | | | | | |
| **Number of owners** | **COWS** | **COW - CALF** | **SHEEP** | **GOATS** | **Support per head Total** | **Number of owners** | **COWS** | **COW - CALF** | **SHEEP** | **GOATS** | **Support per head Total** |
| **8,527** | **40,348** | **383** | **111,593** | **14,718** | **4,594,455** | **8,658** | **40,232** | **294** | **105,780** | **13,564** | **5,441,347** |

### 14

**Source:** MAFWM

Support is given to producers who deliver milk to approved facilities for milk processing (dairies/cheese dairies), which are registered in the Register of Approved Facilities. The basic premium is €0.08 per liter.

The condition for receiving the premium is that the quantity of milk delivered per farm is at least 300 liters per month and that the milk complies with the quality criteria for raw milk in relation to the number of microorganisms and somatic cells, in accordance with the Regulation on specific hygiene requirements for products of animal origin in relation to the number of microorganisms and somatic cells for raw cow’s milk, namely the number of microorganisms (number of colonies on the substrate) at 30 ℃ (in 1 ml) ≤ 200,000 and the number of somatic cells (in 1 ml) ≤ 400,000. For sheep and goat milk, up to 1,500,000 microorganisms are allowed.

Support in the form of a quantity premium in the amount of €0.01 per liter is provided to producers who deliver more than 5,000 liters of milk per month to dairies that complies with the prescribed raw milk quality criteria, for the entire quantity of milk delivered.

Support in the form of a quality premium is realized in the following way:

* €0.11 per liter of delivered cow’s milk for raw milk that has up to 100,000 microorganisms and up to 400,000 somatic cells per ml.





* €0.11 per liter of delivered goat and sheep milk for raw milk containing up to 1,500,000 microor- ganisms per ml.

A functional system for calculating the geometric mean for the number of microorganisms and the number of somatic cells has been established in accordance with the Regulation on specific hygiene requirements for products of animal origin. The quality is determined, for purchases in the first half of the month based on the first analysis of milk in that month, and for purchases in the second half of the month based on the second analysis, with the geometric mean as a corrective factor.

**Table 8.** Support for the development of market milk production

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number of subcontractors** | | | **Total quantity** | | | **Paid in EUR** | | |
| **2022** | **2023** | **2024** | **2022** | **2023** | **2024** | **2022** | **2023** | **2024** |
| **1,054** | **869** | **843** | **24,811,235** | **25,250,678** | **26,153,307** | **3,353,977** | **3,979,558** | **4,917,477** |

**Source:** MAFWM

The processing of raw milk into dairy products on family farms represents a significant part of the total production of dairy products, and they are mostly sold at home and in markets.

However, in recent years, there has been significant demand from tourist facilities and retail chains for dairy products produced on family farms. Support is provided to producers who process raw milk on their farms in the form of a basic premium of €0.12 per liter of processed milk. The total number of ben- eficiaries in 2023 was 2,529, while in 2024 3,446 beneficiaries have been registered so far, which means that the total has increased by around 36%. The total funds paid for this support in 2023 amounted to

€2,801,208, while in 2024 they reached €4,613,910, which is an increase of around 64.7%. These data clearly indicate an intensification of support for the development of small and medium-sized family dairy

capacities. The increase in the number of beneficiaries and payments indicates an increased interest of 15

producers in processing raw milk, which may be the result of improved rural development measures, increased economic incentives or better information for producers. This dynamic also indicates the ex-

pansion of capacities for local processing and the possibilities for greater inclusion of these farms in the market with final products, which is essential for adding value in the milk production chain, reducing raw material losses, as well as for improving the quality and diversification of the offer.

The program for the free distribution of fruit, vegetables, milk and dairy products is implemented in order to align with EU policy, within the framework of the Common Market Organization, as a program to improve food availability, which aims to create healthy eating habits in children. In addition, its impact will be recognized in connecting children with agriculture and educating them about food production, the importance of healthy nutrition and healthy lifestyles. The goal is to make a difference in the meals that are available to children during the school day, so that they recognize the importance of healthy foods and form healthy eating habits on their own, outside of school and programs, and at an early age. This measure also stimulates the distribution of domestic agricultural products, since it ensures the placement of domestic agricultural products. In the second half of 2023/2024, meals worth €53,448.74 were delivered. In the first semester of the 2024/25 school year, the delivery of yogurt lasted a total of 5 days in the period 09.12-27.12. 2024. Meals were delivered to 25 primary schools for a total of 11,454 students from the following municipalities: Bar, Berane, Bijelo Polje, Danilovgrad, Nikšić, Pljevlja, Pod- gorica and Ulcinj. The Srna and Lazine dairies were contracted, as well as the Falcon distributor, which delivered “Nika” dairy products. The products were delivered in quantities of 180 to 250g per student. A total of 20,695.96 euros was paid for this period of meal delivery.

The problem of unstable quantity and quality has been recognized as one of the main problems in milk procurement and marketing. Milk quality will be improved through activities that will lead to a reduc-





tion in the number of microorganisms and somatic cells, in accordance with the National Program for Improving the Quality of Raw Milk with a Plan for Handling Non-compliant Raw Milk, which was adopted by the Government of Montenegro on 21 June 2018. Support is provided for:

* procurement of equipment for storing and cooling milk;
* procurement of milking machines/mobile systems;
* procurement of roasting buckets for milk;
* procurement of means and dippers (immersers) for disinfection and hygiene of udders, before and after milking, means for cleaning udders (“dry cleaning”), means for controlling the presence of bacteria on site, etc.;
* a container with a double bottom;
* mastitis test (support for this cost cannot be obtained if milking equipment or milk cooling equip- ment has not been purchased).

**Table 9.** Support for improving milk quality

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **2022** | | **2023** | | **2024** | |
| **Number of users** | **Support** | **Number of users** | **Support** | **Number of users** | **Support** |
| 136 | 76,776 | 193 | 129,390 | 119 | 106,819 |

**Source:** MAFWM

The measure to support the strengthening of the milk purchase network was introduced when most mu- nicipalities did not have organized milk purchase. However, in the last ten years, this segment has been improved, while the number of dairies has significantly increased. Despite the evident improvement of the purchase network, the purchase of raw milk is still not organized in some municipalities. The right

16 to support is granted to facilities that are registered in the appropriate register of the administrative authority and that purchase milk from 20 or more domestic producers.

**Table 10.** Support for strengthening the milk purchasing network

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2022** | **2023** | **2024** |
| **Number of dairy/ cheese producers** | 26 | 27 | 27 |
| **Number of farmers** | 1326 | 1264 | 1191 |
| **Support amount** | 463,089 | 484,432 | 509,841 |

**Source:** MAFWM

This structural overview reveals that dairy farming, while culturally embedded, remains economically fragile and disconnected from modern value chains.





# Analysis of Performance (economic, social, environmental)

The location of the terrain, the quality and arable land, and other conditions have contributed to the reduction of fertility, and thus its degradation. Without vegetation cover, the soil is exposed to erosion processes, and degradation is caused by floods, structural deterioration and other forms of physical, chemical and biological degradation.8) From the perspective of rural development, livestock and dairy farming provide continuous employment of the workforce, as well as additional employment of the female workforce, which is especially important in conditions of high unemployment affecting rural areas. In addition, livestock farms generate higher income throughout the year than crop production, which has a positive impact on the liquidity of farms and the standard of living of the rural population.9)

For example, the dairy sector market chain is characterized by a fragmented structure of mostly small players, and therefore the difficult task of introducing as much of the raw milk and finished product supply as possible into safety and quality control. Small farms engaged in milk production still dominate the total production, which participate in the total supply with about 67% of raw milk. On the other hand, the processing capacities of the dairy industry and on-farm processing are similar, but the two chains differ significantly because on-farm processing has a low degree of dependence on other actors.

The Strategy for the Development of Agriculture and Rural Areas of Montenegro recognizes the importance of focusing on the development of products based on traditional production methods, while ensuring high quality standards. Given the above, one of the opportunities for the development of Montenegrin agriculture is to direct as many products as possible into one of the quality schemes, which creates added value. Labeling dairy products with a geographical indication guarantees that their specificity and quality

are the result of a combination of natural characteristics, knowledge and duration. Producers of Pljevlja 17

cheese, Kolašin puff cheese and Durmitor skorup have protected their name and association with quality

dairy products, and in addition to these, there are a large number of products that can be protected by one of the quality scheme labels such as Kučki sir, Njeguški sir, etc.10)

Through the implementation of the FADN (Farm Accountancy Data Network) survey in Montenegro, a comprehensive and structured data set was collected that covers various aspects of the supply chain in the agricultural sector, including production capacities, economic performance, inputs and market flows. These data enable an in-depth analysis of the structure and sustainability of agricultural holdings, and represent an important tool for formulating evidence-based policies. It is particularly significant that the FADN data system sheds light on the situation in livestock production, and in particular in the dairy sector, which faces serious sustainability challenges. The analyzes showed that the economic profitability of this sector is extremely low, and that, in the absence of direct financial support from the state, most producers would be forced to cease production. High production costs, including the costs of animal feed, veterinary services, labor and energy, combined with limited purchase prices and narrow

1. UNEP (2014): Support to Montenegro for the development of National Action Programs aligned with the UNCCD 10-year strategy and reporting process under the UNCCD: https://[www.feasee.org/projects-10/](http://www.feasee.org/projects-10/) support-to-montenegro-for-development-of-national-action-programs-aligned-to-the-unccd-10-year-strate- gy-and-reporting-process-under-unccd [accessed June 11, 2025]
2. FAO/EBRD (2017): Improving standards meat quality in Montenegro and exchange learned lesson in South- east Europe, Countries Southeast Europe: Census traditional products from Montenegro, FAOEBRD project: [www.eastagri.org/docs/group/480/Inventory%20of%20traditional%20products%20from%20Montenegro.](http://www.eastagri.org/docs/group/480/Inventory%20of%20traditional%20products%20from%20Montenegro) pdf [accessed June 11, 2025]
3. MAFWM (2023): Strategy for the Development of Agriculture and Rural Areas 2023-2028: https://www.gov. me/dokumenta/1e9c16c3-8814-49ab-ba89-de4f60f796af [Accessed 14 2025].





market demand, lead to a continuous negative balance. 11)In this sense, state support, whether through subsidies per liter of milk delivered, direct payments per head of livestock or infrastructure investments, is a key factor in the survival of the sector. The findings of the FADN survey thus indicate not only the urgency of improving support policies, but also the need for comprehensive reforms that would include strengthening farmers’ capacities, developing markets, increasing competitiveness and sustainability of production in line with European Union standards.

The performance analysis of the dairy value chain in Montenegro was conducted in accordance with the FAO approach to measuring sustainability, through the assessment of three key dimensions: economic, social and environmental. Each dimension was analyzed based on indicators adapted to the Montenegrin context and the specificities of the dairy sector.

## Economic Performance of the Milk Value Chain

The economic sustainability of the dairy sector in Montenegro is seriously threatened by a number of systemic problems, including low productivity, an inadequate purchase system, fragmentation of pro- duction and limited access to markets. Most producers operate in conditions of low economic efficiency, with a high dependence on public subsidies. The added value in the chain is most often appropriated by distributors and processors, while primary producers, who bear the greatest production risk, achieve low returns. The lack of branding, certification, standardization and digital connectivity further hinders the development of the sector. Exports are marginal, while imports of dairy products are growing year by year. Structural weaknesses of the production base (e.g. genetic potential, organization of animal nutrition, collection system) contribute to the negative balance.

**Table 11. Assessment of the economic sustainability of the dairy sector in Montenegro**

### 18

|  |  |  |
| --- | --- | --- |
| **Indicator** | **Description** | **R at i ng (1–3)** |
| Productivity per head | Low yield per cow (3,465 liters), significantly below the EU average | 1 |
| Degree of processing and added value | Limited number of products, low technological equipment, low level of processing | 1 |
| Farm profitability | High dependency on subsidies, low per capita income | 1 |
| Market access and sales channels | Limited access to retail chains, dominance of direct and informal sales | 2 |
| Export-import balance | High dependence on imports, marginal exports | 1 |

Average score of economic sustainability: 1.2 – Low sustainability

## Social Performance of the Milk Value Chain

The dairy sector plays a strong social role in Montenegro. More than 8,000 households participate in the sector, most often in remote and poorer rural areas. Milk production provides a basic income, the preservation of the rural population and social cohesion, especially in mountainous areas. Many activi- ties in the chain (milking, processing, packaging) also have an important gender dimension, as they are predominantly performed by women.

However, there is a serious lack of youth in the sector, low youth participation and low frequency of educational programs. Participation in formal organizational forms (cooperatives, producer groups) is almost symbolic. Networks for technical support and knowledge transfer are not sufficiently developed, although interest exists.

1. Ministry of Agriculture, Forestry and Water Management (2025): Report from the FADN system, available at: [www.fadn.gov.me](http://www.fadn.gov.me/) [accessed June 11, 2025]





**Table 12.** Assessment of the social sustainability of the dairy sector in Montenegro

|  |  |  |
| --- | --- | --- |
| **Indicator** | **Description** | **Rating (1–3)** |
| Rural employment and income | With a large number of households involved, the sector contributes to livelihoods in poor areas | 3 |
| Women’s participation | High representation of women in all stages of production and processing | 3 |
| Participation of young producers | Low degree of youth involvement, present process of rural migration | 1 |
| Association and cooperation | Very weak organization of producers, lack of cooperatives | 1 |
| Access to training and support | Limited training programs, lack of targeted technical assistance | 2 |

**Average social sustainability score: 2.0 - Moderate sustainability**

## Environmental Performance of the Milk Value Chain

Compared to industrialized systems, the Montenegrin dairy sector is much more environmentally sus- tainable. The dominant grazing production on natural pastures contributes to landscape conservation, erosion prevention and maintenance of local biodiversity. The use of synthetic fertilizers and antibiotics is limited, and the intensity of greenhouse gas emissions is low.

However, there are challenges: infrastructure for cooling and preserving the hygiene of raw milk is not standardized, waste and wastewater management systems in processing are weak or non-existent, and climate change is increasingly affecting pasture availability and production stability.

**Table 13. Assessment of the environmental sustainability of the dairy sector in Montenegro**

|  |  |  |
| --- | --- | --- |
| **Indicator** | **Description** | **Rating (1–3)** |
| Pasture use and landscape conservation | High degree of extensive grazing, positive landscape impact | 3 |
| Emissions and ecological footprint | Low emission intensity compared to industrial systems | 3 |
| Waste and by-products management | Insufficient regulation and investment in environmentally friendly processing systems | 1 |
| Water and hygiene | Problems in the hygienic correctness of milk in some parts; weak control system | 2 |
| Climate resilience | Sector vulnerable to climate extremes (droughts, erosion, reduced pasture productivity) | 2 |

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#### Average environmental sustainability score: 2.2 – Moderate to high sustainability

Analysis of the performance of the dairy value chain in Montenegro reveals an uneven level of sustainability across three dimensions: economic, social and environmental. Although the sector plays a strong social role in sustaining rural communities, and exhibits a relatively low ecological footprint thanks to exten- sive grazing and limited use of synthetic inputs, its economic sustainability remains seriously impaired.

Low productivity, fragmented production, lack of market integration and high dependence on imports structurally weaken the sector and limit its resilience. The absence of associations and poor access to knowledge further reinforce the cycle of stagnation. At the same time, the existence of a long tradition in milk production, the strong presence of women in the sector, the growing demand for local products and the available natural resources indicate significant development potential.

To overcome the existing challenges, a profound transformation of the sector is necessary, based on the principles of smart specialization, digitalization, institutional cooperation and inclusive rural development. Only such a systemic approach can enable the transition from subsistence agriculture to a sustainable, market-oriented and competitive dairy economy, which contributes to both food sovereignty and social cohesion of Montenegro.





## National policy recommendations for sustainable food chains (Policy recommendations for each sustainability principle)

Based on a multidimensional analysis of the sustainability of the dairy value chain in Montenegro, a number of structural weaknesses have been identified that directly threaten the long-term sustainability and competitiveness of the sector. Although the sector has strong social and environmental potential, economic challenges, including low productivity, market marginalization and poor processing, limit its development. In this context, strategic recommendations have been formulated that provide a basis for transforming the sector towards a sustainable, inclusive and resilient food system, in line with the principles of the EU Common Agricultural Policy and the FAO approach to developing sustainable food value chains.

The recommendations are structured across three key dimensions of sustainability: economic, social and environmental, with clear objectives and precise measures that can be operationalized through public policies and program instruments.

## Economic dimension: Strengthening the competitiveness and added value of the dairy sector

**Strategic objective**: Increasing the economic sustainability of the milk value chain through productivity growth, market integration, product diversification and improved processing.

#### Strategic measures:

* + 1. **Increasing production efficiency on farms**

20 o Introduction of selective subsidies based on performance (output-based payments).

* Subsidizing the purchase of high-quality livestock and genetic material.
* Establishing a national platform for livestock data management (e-herdbook).

#### Development of processing capacities and modernization of infrastructure

* + - * Establishing a public-private investment program in processing, especially at the micro and medium level.
      * Support for the development of products with geographical origin and traditional spec- ifications (PDO/PGI labels).
      * Introducing a performance-based incentives for processors that demonstrate growth in the local market and innovation in the portfolio.

#### Stabilization of the purchase system and fair distribution of value

* + - * Establishing a reference model for milk prices according to quality classification (the “fair milk pricing” model).
      * Establishment of regional collection centers with public guarantee for micro-producers.

#### Internationalization of the sector and improvement of market presence

* + - * Formation of an export consortium for Montenegrin dairy products with institutional diplomatic support.
      * Facilitation of export procedures through certificates of origin and quality.





#### Digital transformation and market transparency

* + - * Establishing a digital platform for recording the purchase, transport and processing of milk.
      * Digital exchange for dairy products at the national and regional level.

## Social dimension: Inclusivity, generational renewal and rural cohesion

**Strategic goal** : Ensuring socially just and territorially balanced development of the dairy sector through the empowerment of women, youth and local communities.

#### Strategic measures:

* + 1. **Support for young producers and generational renewal of the sector**
       - Introduction of multi-year start-up grants for young people in livestock farming.
       - Priority access to land and infrastructure subsidies for producers up to 40 years old.
       - Inclusion of the dairy sector in dual education models at secondary and higher education levels.

#### Empowering the role of women in the value chain

* + - * Specialized funding and training programs for women in dairy processing and marketing.
      * Establishing a national registry of women’s farms and formally recognizing their role in politics.

#### Reform of the advisory support system

* + - * Establishing mobile agrotechnical teams with a focus on livestock farming, especially 21

in mountainous areas.

* + - * Development of modular education and accredited courses for farms through public knowledge platforms.

#### Revitalization of associations and production organizations

* + - * Legal redefinition of cooperatives as socio-economic enterprises with tax benefits.
      * Establishing a solidarity and technical support fund for the development of cooperatives in the dairy sector.

#### Territorial programs for rural integration

* + - * A special package of measures for northern municipalities with a high share of livestock production (e.g. Pljevlja, Berane).
      * Linking local products with tourism and educational infrastructure (school meals, eco-tourism).

## Environmental dimension: Sustainable resource management and climate change resilience

**Strategic objective**: Reducing the ecological footprint of the dairy sector and improving resilience to climate change through land, waste and energy management.





#### Strategic measures :

* + 1. **Agro-ecological management of pastures and land**
       - Introduction of agro-ecological schemes (AES) for landscape conservation and soil carbonization through rotational grazing.
       - Subsidizing the management of common pastures with local use plans.

#### Waste management and loss reduction

* + - * Obligation to create an “ecological management plan” for all dairies that use more than 500,000 liters per year.
      * Support for whey processing technologies and biosafety disposal of by-products.

#### Green investments and energy efficiency

* + - * Preferential loans for the installation of solar systems and biofilters in production facil- ities.
      * Introduction of green packaging standards and refund of environmental taxes for users of recyclable materials.

#### Climate resilience and biodiversity

* + - * Genetic protection program for indigenous breeds resistant to climate stress (e.g. busha).
      * Inclusion of the milk sector in the National Strategy for adaptation to climate change.

#### Monitoring the environmental performance of the sector

* + - * Development of a system for monitoring emissions, water and land consumption in the dairy chain.

22 o Inclusion of environmental indicators in the conditionality of support from public funds. Therefore, the proposed package of recommendations is designed as an integral, multi-layered and ap- plicable strategy for the sustainable transformation of the dairy sector in Montenegro. It is crucial that their implementation is accompanied by strengthening inter-institutional coordination, involving local communities and implementing a system for continuous monitoring of results. Only through such an approach is it possible to achieve synergy between sectoral efficiency, social inclusiveness and environ- mental responsibility – and thus position milk as a model for sustainable food chains in Montenegro.





# Conclusion

The study on the national policy of sustainable food systems and livelihoods in rural areas of Montenegro points to the necessity of a fundamental and strategically focused transformation of the existing food system. Although positive developments have been recorded in the previous period, especially in terms of increasing the number of beneficiaries of support measures and diversification of rural development instruments, systemic challenges continue to deeply burden the efficiency, competitiveness and resil- ience of the sector. A key weakness is reflected in the dysfunctionality of the value chain, especially in the dairy sector, which is still dominated by fragmented farms, low technological equipment, limited market access and insufficient processing within the domestic production structure. The Montenegrin food sector is characterized by a strong dependence on imports, especially when it comes to highly processed products, while at the same time underutilized domestic potential. In the dairy sector, despite the growing interest in processing on family farms, there is a lack of effective connectivity between raw milk producers and market-oriented processing capacities. This results in a low level of value added remaining in the country, reduced income for primary producers, and the marginalization of domestic products in retail channels, especially in large retail chains.In this context, public policies must be aimed at establishing an integrated and inclusive food system, where all segments of the value chain, from inputs and production, through processing, to distribution and consumption, are connected through functional institutional, market and infrastructure mechanisms. In the milk sector, this implies multiple interventions: from improving hygiene standards, the availability of modern technologies and logistics, to strengthening the capacity for collective organization of producers and supporting small dairies that produce authentic, locally branded products. In addition to the economic dimension, the food system of Montenegro must become a carrier of social cohesion and territorial balance. The north of the country, as a dominantly rural area, has the potential to become a development lever of the national economy through the revitalization of the dairy sector through synergies with rural tourism and local gastronomy

and local gastronomic offer. A sustainable food system must therefore enable the creation of new jobs, the 23

preservation of traditional knowledge, the affirmation of the role of women and youth, and an obvious reduction in migration flows from rural areas.

The market position of domestic producers must be strengthened through the establishment of fair rela- tions in the supply chain, including rules on the mandatory participation of local products in retail chains during the season, the creation of functional producer organizations, and the creation of institutional frameworks that will enable their negotiating balance in relation to buyers and distributors. Without this, domestic production will continue to be hampered by uncertain placement and market imbalance in pricing negotiation, which threatens its sustainability. An equally important component of future devel- opment is digital and technological modernization. Digitalization of production processes, e-commerce, precision agriculture and supply chain management platforms must become accessible and adapted to small and medium-sized producers. This would ensure greater transparency, efficiency and resilience of the system, but also increase the ability of domestic production to respond to market demands, including international safety and quality standards. Finally, the development of Montenegro’s food system must be synergistically linked to the country’s tourism strategy. Montenegro, as a recognized destination for sustainable tourism, has the capacity to valorize authentic domestic products through the integration of local food into the tourist offer, especially through rural tourism, wine and cheese routes, and thematic events, generating added value for local communities and affirming the national food identity. Therefore, it is necessary that future policies are based on three key pillars: economic sustainability (efficient and profitable production with a high level of added value), social inclusiveness (balanced rural development and reduction of social inequalities) and environmental resilience (sustainable resource management and compliance with the Green Agenda for the Western Balkans). Only an integrated, evidence-based policy framework, rooted in fairness, innovation, and environmental responsibility, can ensure the long- term resilience of Montenegro’s food systems





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*Note: The content of this document is the sole responsibility of the NGO- Network for Rural Development of Montenegro and does not necessarily reflect the views of the European Union or the Ministry of Public Admin- istration of Montenegro*

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Note

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NATIONAL POLICY