POLICY AND ECONOMIC FRAMEWORK FOR THE SUSTAINABLE DEVELOPMENT OF THE SHEEP AND GOATS SECTOR IN THE REPUBLIC OF MOLDOVA

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Abstract: *The sheep and goat sectors are an important component of the agricultural and food systems in the Republic of Moldova. It has a wide potential to contribute to the rural development and to ensure food security. However, the growth of sheep and goat sector is constrained by important structural challenges, like insufficient technological modernization, limited diversification of products, constrained market access, as well as vulnerability to climate change. The paper analyses the current policy and economic framework that governs the sector and emphasizes the existing achievements and shortcomings. Based on the analysis of statistical indicators, policy documents and public support programs in the field, the paper identifies the main areas that are needed to be aligned with EU standards and international best practices that must be implemented. The research acknowledges the importance of targeted subsidies for the sheep and goat sector that may lead to a better value chain integration, improved veterinary services, as well as the promotion of high-value traditional sheep and goat products or organic ones. The findings reflect that a coherent policy framework coupled with economic incentives in the shape of public support could contribute to increase of competitiveness, sustainability and resilience in the sector. The article concludes with recommendations for improving policy coherence and strengthen the institutional mechanisms to ensure the sustainable development of sheep and goat farming in the Republic of Moldova.*

Keywords: *agricultural policy, sheep sector, goats farming, sustainable development, Republic of Moldova*

JEL classification: Q01, Q18, O13

INTRODUCTION

The sheep and goat sector represent an important part of the food system in the Republic of Moldova. It is largely contributing to the development of rural areas and has a positive impact in ensuring food security (Baltag & Baranov, 2022), mainly due to the milk and cheese products. However, the progressive growth of this sector is being constrained by some important structural challenges (Stratan et al, 2022), such as insufficient technological and equipment modernization, limited diversification of products, the constrained access to markets, and more recently, the vulnerability to climate change. Due to its increasing adaptability, the sheep and goat sector has a potential for its development in a sustainable manner, especially if the traditional high added value products will be valorized. Potential directions in this regard may be organic farming, development of GI, PDO and TSG products, etc.

The paper aims to analyze the economic dynamics of the sector, as well as the policy framework, identifying successes and existing deficiencies. At the same time, in the context of the Eu integration path, there is noted the necessity to align the national priorities in the sheep and goat sector to the Eu standards. These priorities must concern primary the safety issues related to the quality of production.

MATERIALS AND METHODS

The carried-out research is built on the analysis of the statistical data from the National Bureau of statistics of the Republic of Moldova. The data on internal production and number of heads covers the period 2015 – 2025, while the foreign trade data covers the period 2015 – 2024 and was obtained from the UNComtrade Database. The policy documents are represented by annual reports from the Agency of Intervention and Payments in Agriculture. Analytical and statistical methods were used to analyzed the evolution of the number of heads and production indicators.

For the assessment of the international competitiveness, the Revealed Comparative Advantage indicator was calculated, according to the standard formula:

$$RCA = \frac{\frac{X_{ij}}{X_{it}}}{\frac{X_{nj}}{X_{nt}}} = \frac{\frac{X_{ij}}{X_{nj}}}{\frac{X_{it}}{X_{nt}}}$$

where, X is represented by export, i – a country, j – a product, t – a set of products, n – a set of countries (Balassa, 1965).

The data were processed in a synthetic manner, with an accent on trends, regional structures and public support measures.

RESULTS AND DISSCUSION

During the period 2015 – 2025, the number of sheep in the Republic of Moldova in all types of farms decreased significantly from 729.8 thousand heads to 423.6 thousand heads. This decrease is mainly due to the decrease in the number of sheep in households from 707.1 thousand heads to 392.7 thousand heads. The share of the number of sheep in households decreased slightly during the analyzed period from 96.9% to 92.7%. The main causes that lead to this diminish are connected to the lack of the labor force, migration phenomenon, especially of youth from rural areas to urban ones, or even abroad, together with the low profitability of keeping the pastoral traditions due to increases in input prices. This phenomenon is being aggravated also by the excessive fragmentation of households, hindering the investments in modernization of the sheep sector.

Within agricultural enterprises and peasant farms, the period between 2016 and 2022 was marked by a downward trend, being followed in the last 3 years by an increase in the number of heads, reaching 30.9 thousand heads in 2025. This slow, but progressive increase may be caused by the effects of the public policies in this field, namely the introduction of direct payments per head of animal. Thus, the registered number of sheep has increased, aiming at creation of larger exploitations by farmers, with a higher number of livestock and productivity. However, the share is still on the low side, mainly due to the existing obstacles in the field related to high input costs and limited access to credit lines.

During the same period, the goat population, overall, decreased from 144.9 thousand heads to 138.1 thousand heads. It is more fluctuating than the one of sheep, with periods of growth recorded in the years 2015 - 2018, the peak being reached in 2018, with 162.2 thousand heads. If in 2015 almost 100% of the goat population was concentrated in households (99.2%), then in 2025 this indicator reached 93.6%. In households, the number of goats decreased from 143.7 thousand heads to 129.3 thousand heads, while in agricultural enterprises and peasant farms, in 2025 their number reaches 8.8 thousand heads (from 1.2 thousand heads in 2015).

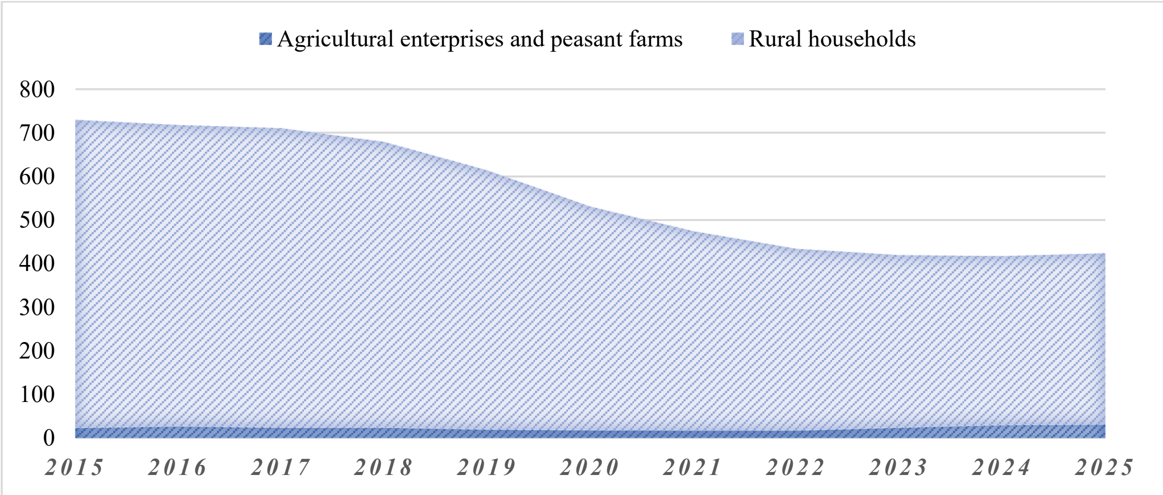

Figure 1. Sheep population in all types of farms, thousand heads, 2015 - 2025

Source: National Bureau of Statistics, 2025

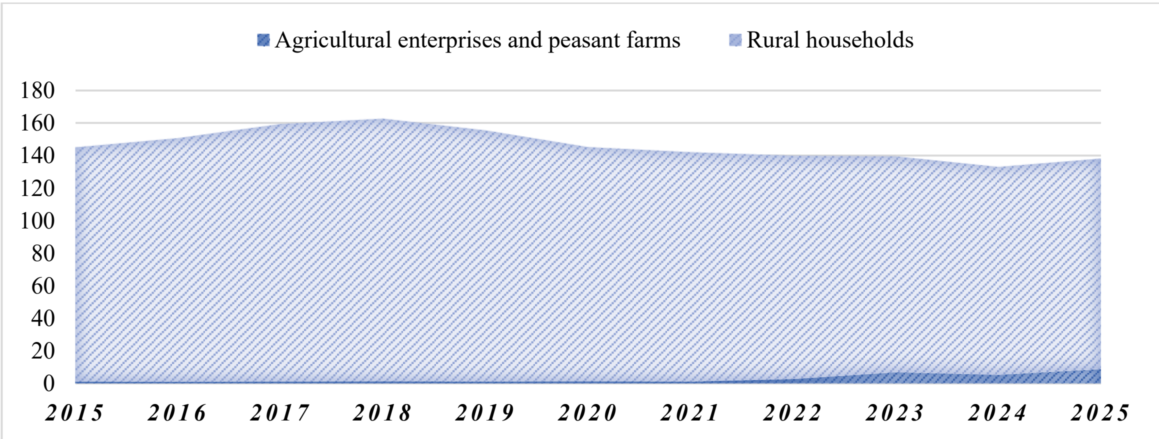

Figure 2. Goat population in all types of farms, thousand heads, 2015 - 2025

Source: National Bureau of Statistics, 2025

By country regions, across all types of farms, the number of sheep and goats is higher in the South (decreasing from 317.2 thousand heads in 2015 to 197.7 thousand heads in 2025), followed by the North (decreasing from 210.2 thousand heads to 141.1 thousand heads) and the Center (from 220.6 thousand heads to 143.8 thousand heads). In the Gagauzia ATU, the number of sheep and goats is decreasing from 126.8 thousand heads to 76.4 thousand heads.

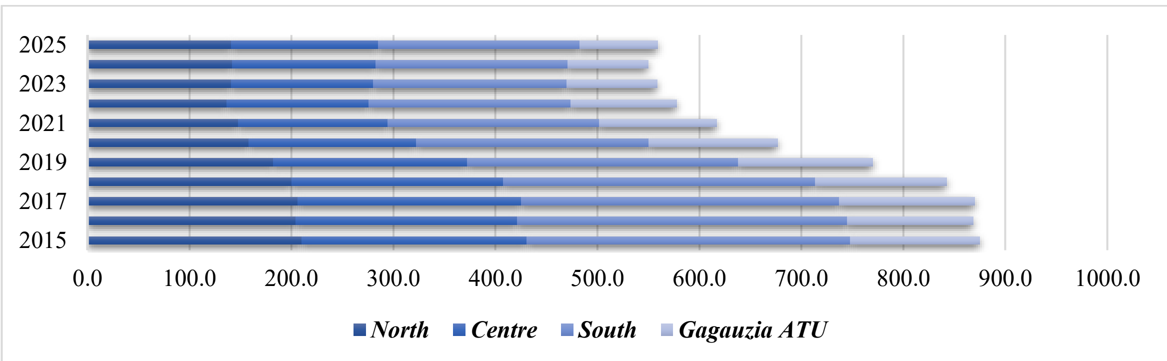

Figure 3. Sheep and goat numbers in all types of farms by country region, thousand heads, 2015 - 2025

Source: National Bureau of Statistics, 2025

Within all types of farms, the production of sheep and goats in live weight is decreasing from 4.4 thousand tons in 2015 to 2.4 thousand tons in 2024. Its share in the total number of animals for slaughter in live weight varies between 2.6% in 2019 and 1.2% in 2022. In 2024 this indicator accounted for 1.4%. The lack of specialized abattoirs and processing infrastructure at the local and regional levels, determine the selling abroad (export) of sheep in live weight rather that the production of sheep and goat meat or by-products. The climate changes also play a significant role, as due to frequent droughts, especially in the Southern part of the country, the forage production is highly affected, together with the animals' productivity.

Within agricultural enterprises and peasant farms, the maximum production was reached in 2021 – 2.3 thousand tons, followed by a decrease to 0.3 thousand tons in 2024. Its share in the total number of animals for slaughter within agricultural enterprises and peasant farms reached only 0.3% in 2024. Within rural households, production decreases from 4 thousand tons in 2015 to 2.1 thousand tons in 2024. Its share in the total number of animals for slaughter within households reached 3.3% in 2024.

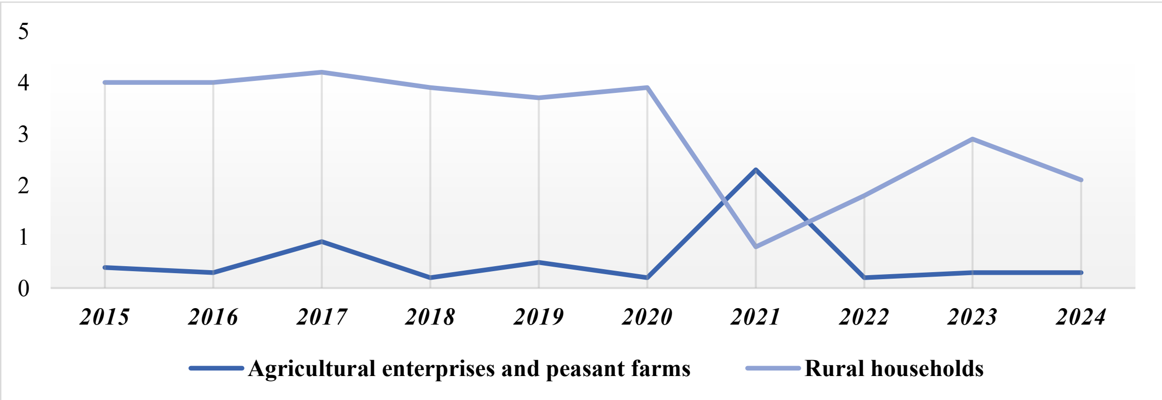

Figure 4. Sale of sheep and goats for slaughter (in live weight) in households of all categories, thousand tons, 2015 - 2024

Source: National Bureau of Statistics, 2025

Foreign trade in live sheep is a one with a positive trade balance in the period 2015 – 2024. Exports increased by about 4 times, and imports – by about 7.5 times. However, the nature of live sheep exports is not constant, with interruptions in some of the analyzed years.

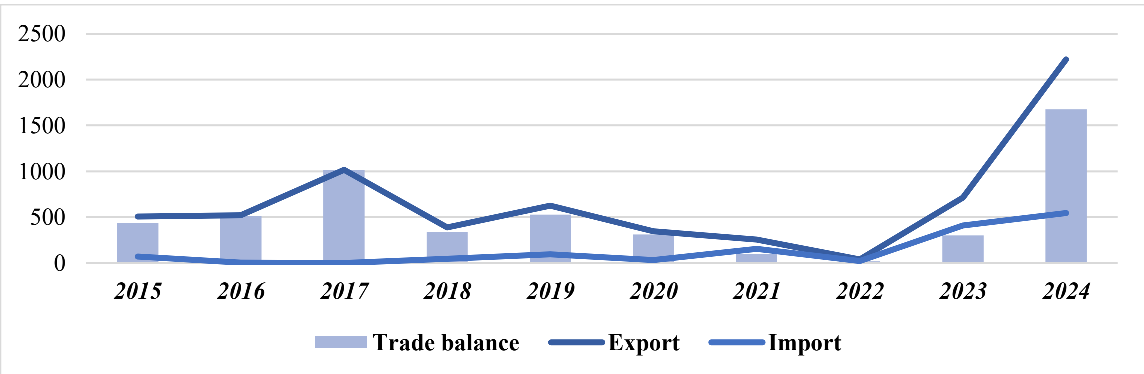

Figure 5. Foreign trade in live sheep, thousand USD, 2015 - 2024

Source: Author's calculation based on UNComtrade, 2025

As for the added value production, the trade balance in fresh, chilled or frozen meat of sheep or goats in the period 2015 – 2024 is positive. Exports increase from 1304.1 thousand USD to 2318.9 thousand USD (with a maximum value of 5330.2 thousand USD in 2018), and imports from 47.8 thousand USD to 112.3 thousand USD.

The export fluctuations are resulted from the geopolitical instability of the destination countries, as well as the issues arising from the lack of sanitary and veterinary certifications for other types of markets, more demanding ones, like the EU market, for example.

During the period 2015 – 2024, on average, the Republic of Moldova exported live sheep to Lebanon, Jordan, Libya, Saudi Arabia, Syrian Arab Republic and less to other countries. Imports of live sheep in the same period were mainly from Spain, Bulgaria, Austria, Germany, Ukraine, and other countries.

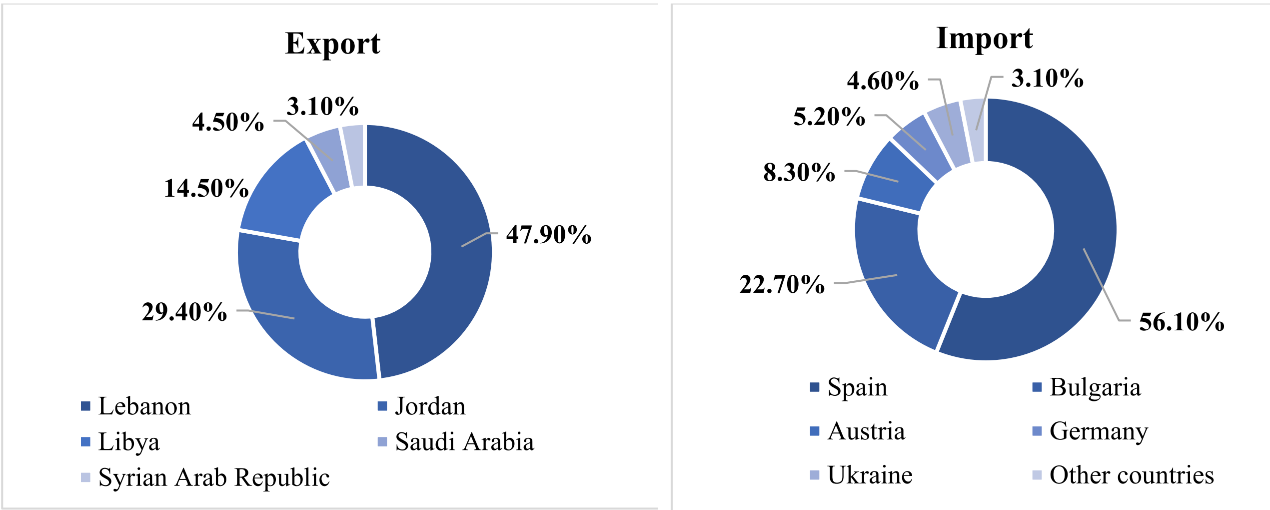

Figure 6. Main economic partners for foreign trade in live sheep, average values, 2015 – 2024, %

Source: Author's calculation based on UNComtrade, 2025

Unlike the sheep sector, foreign trade in live goats is fluctuating and insignificant. The maximum export value reached 32.2 thousand USD in 2016, and the import value – 22.6 thousand USD in 2024. During the period 2019 – 2023, no live goats were exported, as the local market represents the main destination of live goats. At the same time, the Republic of Moldova is lacking in specialized breeds for exports, compared to the sheep sector, where there is a relatively constant demand.

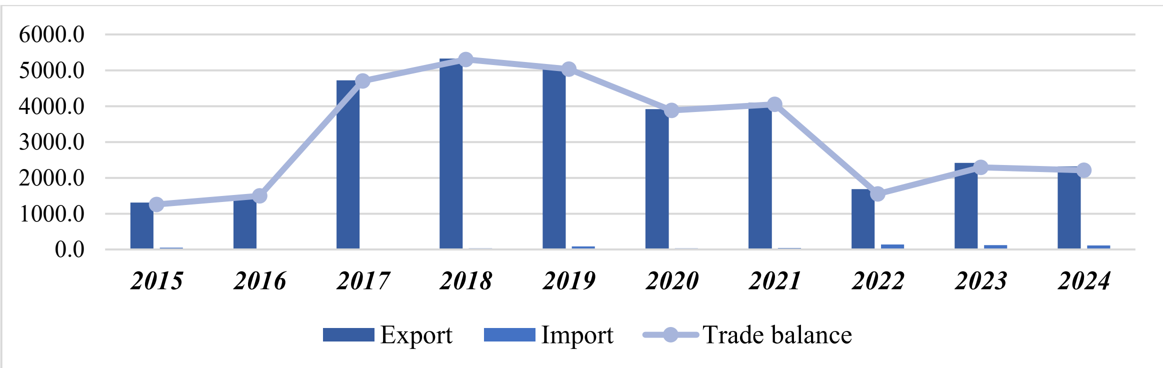

Figure 7. Foreign trade in meat of sheep or goats, fresh, chilled or frozen, thousand USD, 2015 - 2024

Source: Author's calculation based on UNComtrade, 2025

During the period 2015 - 2024, on average, the Republic of Moldova exported meat of sheep or goats to the Russian Federation, Bahrain, Iraq, Qatar, Egypt, Oman, Jordan, Kuwait and other countries.

Imports of meat of sheep or goats in the same period were mainly from Unspecified countries, New Zealand, Germany, Ireland, Romania and other countries.

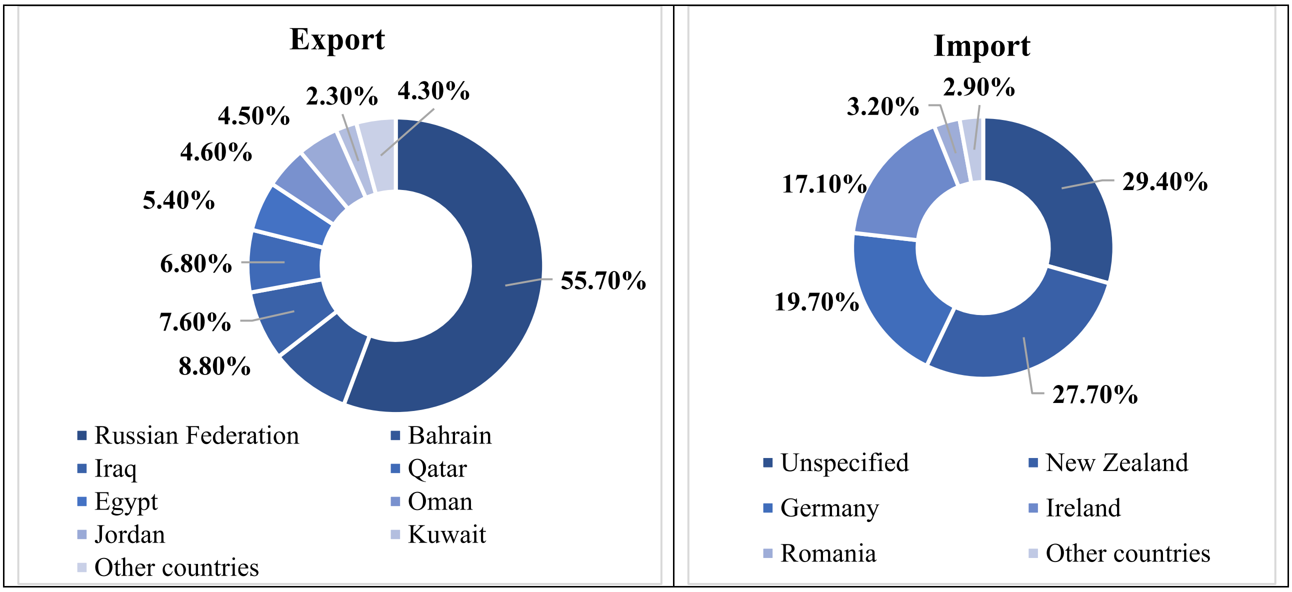

Figure 8. Main economic partners for foreign trade in meat of sheep or goats, fresh, chilled or frozen, average values, 2015 - 2024, %

Source: Author's calculation based on UNComtrade, 2025

In order to assess the competitiveness of the sheep and goat sector at the international level, the RCA indicator has been calculated, which revealed important values for live sheep (increasing from 2.1 in 2020 to 13.6 in 2024) and sheep and goat meat (decreasing from 23.3 in 2020 to 11.4 in 2024, but still situated at a quite high level. Taking into account the fluctuating character of exports of live goats, the 1.9 value of RCA in 2024 may indicate on some future positive developments, in case of a continuous support from public policies. The high RCA values derive from relatively low costs of growing sheep and goats, lower costs for labor force as well as the relatively stable demand for live sheep from the traditional markets, consumers of sheep meat (Lebanon, Jordan, Libya).

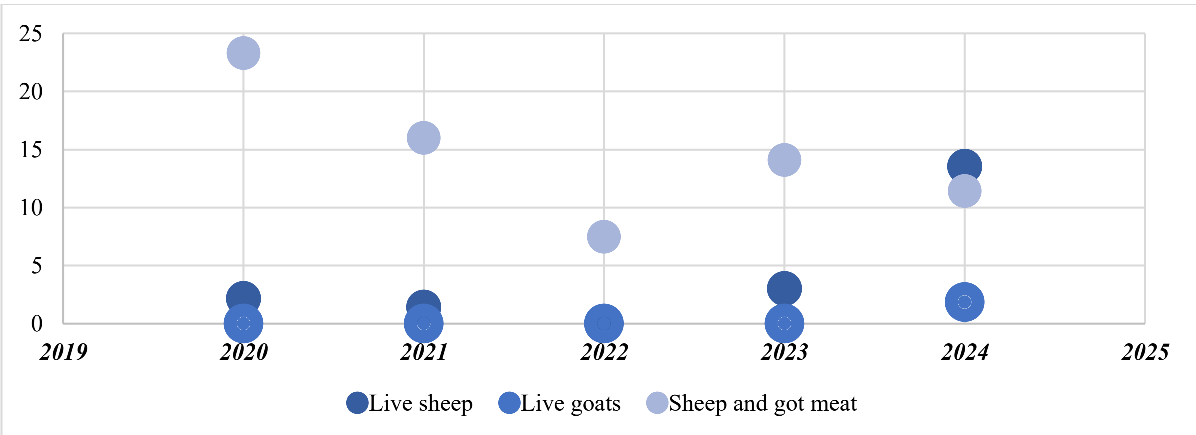

Figure 9. RCA indicator for live sheep and goats and sheep and goat meat and meat products, with respect to world, 2020 - 2024

Source: Author's calculation based on UNComtrade, 2025

Public support for the sheep and goat sector has the aim to boost the number of heads, increase the production and bring added value to the agricultural sector of the Republic of Moldova. It takes the shape of several measures in the framework of the aid for the livestock sector, namely:

Investments in livestock facilities, with the eligibility criteria comprising at least 30 sheep/goats.

Thus, for the construction or modernization of the livestock farm, subsidy is granted for equipment and technique in a proportion of 50% for sheep / goats' facilities, but no more that 5 mil. MDL per beneficiary. For purchase of genetic material, there are subsidized 50% for rams or goats aged 6-20 months, but not more than 200.0 thousand MDL per beneficiary and 50% for ewes or baby goats aged 6-20 months, but not more than 1.5 million MDL per beneficiary (Government of the Republic of Moldova, 2023b).

Investment for production, processing or marketing infrastructure of livestock products.

This measure takes the shape of construction or modernization of milk, meat storage units and products obtained from them; construction or modernization of primary/final processing units, slaughterhouse, cutting section, packaging, refrigeration, freezing or storage of meat, milk, etc.; modernization of the processes for performing test analyses for meat and meat products, milk and milk products, etc.; equipping primary/final processing or marketing units with specialized machinery, installations, equipment or means of transport for the purpose of collecting raw materials, processing and/or marketing products of animal origin - component part of the project.

Direct payments per head of livestock, granted for animals registered in livestock farms, with at least 3-month-old, in a minimum amount of 30 sheep or 30 goats (Government of the Republic of Moldova, 2023a).

Thus, in 2024, under this measure, 44415 heads of sheep were subsidized, of which: 22575 22575 heifers over 3 months, 1686 sheep of specialized breeds for meat production, 20154 sheep of specialized breeds for milk production and mixed breeds. The value of the paid subsidy - 23.5 million MDL. At the same time, 11810 goats were subsidized, of which 5925 she-goats over 3 months, 5885 goats. The value of the paid subsidy - 6.4 million MDL (AIPA, 2024).

CONCLUSIONS

The sheep and goat sector of the country faces a decline in livestock and production, even if there is a positive RCA in live animal and exports of meat. The structural challenges tend to limit the sectors' development potential. The existing public support, in the shape of targeted subsidies for investments, genetic material and direct payments per head of livestock is a positive step, but remains insufficient for better integration of the value chain and alignment with EU standards.

Therefore, the following recommendations are provided for the sustainable development of the sector:

Initiation of a development program dedicated to the sheep and goat sector, that should be aligned with EU standards and priorities in the field and that will contain clear and viable medium-term and long-term objectives on the modernization of farms and integration in value chains.

Promotion of traditional products like cheese, processed meat and certified products. It could be done via marketing campaigns, applications for GIs, PDOs and TSGs., an enhancement of organic production.

Improvement of veterinary services through investments in laboratories and vaccination campaigns. At the same time, there is needed an improvement of knowledge for farm managers in order to reduce the sanitary risks and facilitate the access on more demanding foreign markets.

Climate change adaptation measures combined with subsidized agricultural insurance schemes may increase the resilience of the sheep and got sector.

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