

Mariana GRODEA, Diana-Maria DRIGĂ

*Institute of Agricultural Economics, Romanian Academy, Bucharest, Romania
marianagrodea@yahoo.com*

EFFECTS OF POST-ACCESSION FINANCIAL SUPPORT MEASURES ON THE CATTLE SECTOR IN ROMANIA

ABSTRACT

The performance of the cattle farming sector in Romania is seriously affected by the low average yields of milk and beef and by the scattered supply, due to the excessive fragmentation of farms.

From the analysis of the effects of financial allocation from national and European funds on the cattle farming sector for the period 2007–2018, it results that although the sector has received financial support to increase its competitiveness, there are still significant productivity gaps between Romania and the developed countries of the EU–28. Thus, in the investigated period, we could notice a diminution in the total number of cattle and female breeding herds and a significant increase of milk and dairy imports; in terms of average milk yields, Romania ranks last in the EU–28.

Key words: cattle, direct payments, yields, farm size.

JEL Classification: Q11, Q02.

1. INTRODUCTION

Romania is one of the EU–28 member states that fully benefitted from the CAP instruments: in the period 2007 – 2013 our country received investments worth 10 billion euros in the agricultural sector and rural areas to stabilize farmers' incomes, for the modernization and sustainability of agricultural holdings and to supply safe and quality foodstuffs at affordable prices for its citizens (Toderiță, A./Foarfă, T., 2017).

For the period 2014–2020, the funds allocated to Romania amount to 19.5 billion euros, out of which 11.4 billion euros for Pillar 1 and 8.1 billion euros for Pillar 2 (Toderiță, A./Foarfă, T., 2017).

At the same time, in the period 2012–2014, several de minimis state aid schemes were implemented, funded from the state budget, by which farmers were prepared for the current programming period 2014–2020 (de minimis aid for the procurement of heifers from specialized cattle breeds, heifers from buffalo species

and/or breeding bulls from meat breeds; de minimis aid for the procurement of milk cooling tanks (MARD, 2014).

Nevertheless, the EU funds represented the main financing source of Romania's agri-food sector, as well as of investments in rural infrastructure and economy (Constantin, D., 2019).

The Common Agricultural Policy implementation in Romania (through the support measures under Pillar 1 and Pillar 2), corroborated with the support measures from national funds had as first effect the increase of farm incomes, but at the same time generated changes in the farm structure and production orientation of farms (Alexandri, C., 2019).

The steady increase of incomes on the Romanian farms is almost exclusively due to the increase of subsidies received by farmers. The share of subsidies in farm incomes increased from 10% in 2007 to 40% in the year 2016 (Alexandri, C., 2019).

2. STATE OF KNOWLEDGE

From the very beginning, the Common Agricultural Policy (CAP) successfully achieved its initial objective, i.e. to provide income support to farmers, while the direct payments – as essential part of the CAP – significantly contributed to stabilize farmers' incomes, and thus the European citizens could benefit from a stable supply of quality foodstuffs, at affordable prices.

Direct payments provide an important safety net for incomes, contributing to the existence of the farming activity across the European Union, inclusively in the areas facing natural or other specific constraints (European Commission, 2017).

However, the direct payments cover only partially the difference existing between the incomes from the farming sector and those from other economic sectors (European Commission, 2017).

The analysis of direct payments per hectare and of the incomes from EU agriculture, in the period 2007–2013, reveals that on the average, about 70% of the incomes of dairy farmers are based on CAP direct payments (Venus, T. / Wesseler, J., 2017). Direct payments significantly contribute to the stability of farmers' incomes, who are facing significant volatility of prices and production. This percentage reveals that in the absence of these payments, dairy farmers' incomes would be much lower (Venus, T. / Wesseler, J., 2017).

Direct payments are estimated to be much more important for the farms specialized in cattle fattening than for dairy farms (European Commission, 2017).

It is also estimated that maintaining the current system of direct payments and introducing the voluntary coupled support under the current CAP 2014–2020 have a relevant and efficient contribution to meet the needs of the sector and to the significant improvement of cattle farmers' incomes (Venus, T. / Wesseler, J., 2017).

3. MATERIAL AND METHODS

The research was based on a comprehensive quantitative analysis, which includes both a descriptive part of the dairy cattle farming sector in its post-accession evolution in the period 2007–2018, and an analysis of statistical indicators specific to this sector, which refer to herds, average yields, dairy cow farm size and prices.

The impact of competitiveness growth measures under CAP on the cattle farming sector in Romania was quantified by processing the information on the allocated amounts under the measures included in the National Rural Development Program (M 121 “Modernization of agricultural holdings” and M 112 “Setting-up of young farmers”), having as source the annual progress reports on the implementation of the National Rural Development Program in Romania for the period 2007 – 2014 (MARD), as well as the payments from the national budget (transitional national aids and other support schemes). The necessary data for the present study resulted from consulting a vast literature on this subject (papers and articles, scientific treatises and other materials published by specialized organizations in Romania and abroad). The statistical information was taken from national databases (Tempo online, NIS, APIA, MARD), Community (EUROSTAT, European Commission) or international databases (FAOSTAT) as well as from specialized websites. Some data of interest were taken from official statements or from the economic media.

4. RESULTS AND DISCUSSIONS

The funding measures under NRDP 2007–2013 and NRDP 2014–2020, having as objectives farm production increase, economic farm size increase and the increase of production sold by farmers on the market, to the detriment of self-consumption, targeted the following:

- improvement of general farm performance – *Investments in agricultural holdings (4.1.)*
- improvement of small-sized farm management and encouraging market orientation – *Support to the development of small farms (6.3.)*
- increasing the number of small farmers who start a farming business for the first time as farm heads/managers – *Support for setting-up of young farmers (6.1.)*

As it can be seen in Table 1, in terms of contracted public value, for Measure 112 “Setting-up of young farmers”, the highest share (46.2%) is found in mixed farms (crops and animals), as against 3.7% in the herbivore farms or 4.5% in the dairy farms.

Table 1

Contracted public value by types of funding measures under NRDP 2007–2013 (million euros)

Measure	Total, out of which:	Herbivores (except those in the dairy sector)		Mixed (crops and animals)		Milk and dairy products	
	million euros	million euros	%	million euros	%	million euros	%
121 “Modernization of agricultural holdings”	904.19	56.67	6.3	32.21	3.6	67.76	7.5
112 “Setting-up of young farmers”	326.20	11.93	3.7	150.85	46.2	14.72	4.5
142 “Setting up producer groups”	12.35	0.16	1.3	0.23	1.9	0.96	7.8
Total	1242.74	68.76	-	183.29	-	83.44	-

Source: author’s calculations based on the Annual Progress Report on the Implementation of the National Rural Development Program in Romania in the Year 2015

At the same time, the Romanian cattle farming sector received national financial support under MARD programs, which targeted: encouraging producers’ association – de minimis aid for the procurement of milk cooling tanks, improving the genetic value of cattle herds by the purchase of specialized breeds for increasing the meat and milk yields as well as their quality – de minimis aid for the purchase of heifers from specialized cattle breeds, buffalo heifers and/or breeding bulls from meat breeds, specific aids for milk and beef producers from less-favoured areas (EAGF), state aid scheme for covering the administrative costs related to the drawing up and maintenance of the genealogical register, as well as the costs for determining the genetic quality or the genetic yield of animals, transitional national aids.

In the year 2015, in order to increase productivity, maintain production and reduce the risk of abandoning the livestock farming activities, a new payment scheme was introduced at EU level, funded from EAGF (European Agricultural Guarantee Fund), namely Coupled Support (CS) to the livestock sector.

As regards the coupled support for the two sectors (milk and meat), it was mentioned that in the year 2015, Romania decided to use 219 million euros, i.e. 12.3% of the budget allocated to direct payments, for coupled support measures (Dumitru, M., 2019).

In Romania, from the perspective of the sector that received coupled support, it can be mentioned that the livestock sector benefited from a total amount of 679.3 million euros in the period 2015–2019; the share of this support increased in total coupled support (crop and livestock) from 52% in 2015, to 67% in 2019.

In the same period, the cattle farming sector was allocated an amount of 470.8 million euros, i.e. 69.3% of the value of coupled support for the livestock sector. As regards the coupled support, for the two sectors (milk and beef), we can

mention that the largest part, i.e. 416.4 million euros went to the dairy cow and buffalo sector.

As a conclusion, the cattle farming sector benefitted from considerable funds in the period 2013–2017, the funding sources coming both from the national budget and the EU budget (Table 2).

Table 2

Financial support to the cattle farming sector (million euros)

Item	Funding source	2013	2014	2015	2016	2017	2018	2019
Transitional national aids bovines	National budget	192.0	154.2	144.6	134.9	125.3	115.6	106.1
Coupled support bovines	EAGF	-	-	80.8	87.5	95.5	97.8	109.2
De minimis aid cooling tanks	National budget	-	-	-	15.9	-	-	-
De minimis aid for the purchase of female calves/heifers from specialized breeds	National budget	-	-	-	4.1	-	-	-
Specific aids for milk and beef producers from less-favoured areas	EAGF	29.7	33.4	-	-	-	-	-
State aid to cover the administrative costs for drawing up and maintaining the genealogical register (cattle, buffaloes, pigs, horses)	National budget	-	-	10.0	10.0	10.0	10.0	10.0
Total	-	221.7	187.6	235.4	242.4	230.8	223.4	225.3

Source: author's calculations based on MARD data

It is worth noting that in the year 2016, more payment schemes from the national budget were implemented to support cattle farmers, compared to previous years. Unfortunately, these national support schemes were not resumed in the next years (2017–2019).

As regards the “De minimis aid for the procurement of female calves/heifers from specialized breeds”, although this scheme was applied only in the year 2016, we consider it beneficial to continue this scheme to increase the efficiency of small farm activity and at the same time to support the large farms that have the capacity to supply high quality genetic material under this scheme.

“De minimis aid for the procurement of milk cooling tanks” had in view to support livestock farmers who got organized in an association established at commune level. This funding scheme was implemented in the context in which the market developments proved that the collection of raw milk from small-sized farms on a daily basis had become increasingly non-attractive for processors, due to the costs incurred by milk collection and the lack of a concentrated supply.

“The state aid to cover the administrative costs for drawing up and maintaining the genealogical register (cattle, buffaloes, pigs, horses) and the costs related to tests for determining the genetic quality or the genetic yield of herds” is granted from national budget for the period 2015–2020. The total allocated budget amounts to 198.2 million euros, out of which 30% for cattle, buffalo, pig and horse species and 70% for sheep/goat species.

The accession to the European Union has presupposed increased requirements from farmers, in the sense that gradually, these had to adapt their production to the EU quality standards.

However, a large part of farmers, mainly small farmers, due to insufficient financial capital and inadequate management, have not had the possibility to make investments in technology (purebred livestock, nutrition, equipment), so that these have remained uncompetitive compared to farmers from Western Europe.

The non-attractive farmgate milk prices, the lack of small-sized local slaughterhouses, where farmers can slaughter their animals, the export bans, as a result of disease outbreaks and the low association into strong organizations to represent their interests have determined many farmers to abandon the cattle raising activity, which was reflected in the decline of herds and of production implicitly.

Thus, in the period 2007–2018, the total cattle herds decreased by 482 thousand heads (-30%), and the female breeding stock decreased by 52 thousand heads (-26,1%).

The decreasing trend of cattle herds, of female breeding stock (cows, buffalo cows and heifers) respectively, was also reflected in the decrease of total liveweight beef production by 43.6% (from 333.3 thousand tons in 2007 to 187.8 thousand tons in 2018) and of milk production by 26% (from 54.9 million hl. in 2007 to 40.6 million hl. in 2018).

Yet a positive aspect is worth mentioning: in the period 2007–2018, beef production obtained in specialized units (slaughterhouses) had an upward trend, and its share in total slaughtered production for human consumption increased from 26.4% in 2007, to 53.8% in 2018.

Average milk yield per cow had a slightly decreasing trend in the investigated period, from 3583 litres/cow head (2015) to 3510 litres/cow head (2018); compared to other countries that joined the EU later (Czech Republic, Hungary, Slovakia, Slovenia, Poland, Bulgaria), Romania experienced the lowest

increase of yields, i.e. by only 3.8%, in the period 2007–2016, as against 60.1% (Poland), 23.2% (Czech Republic).

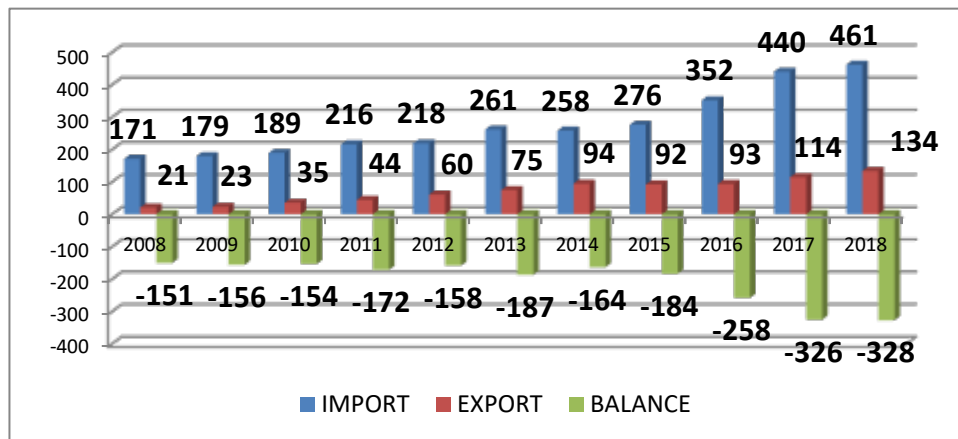
The average dairy farm size did not increase significantly in the period 2007–2018, remaining still low (2.74 cow heads/farm in 2018, as against 1.63 heads/farm in 2007). At the same time, the total number of farms decreased by half, from 1052028 in 2007, to 531851 in 2018 (-49.4%) and the number of commercial farms (with more than 50 animal heads) increased from 512 in 2007, to 1319 in 2018. Although the share of commercial farms in total farms is low (0.25%), they concentrate 12% of the female breeding stock (2018).

The same is true for the young cattle farming, where the average farm size increased only very little, from 1.83 cattle heads/farm in 2010, to 2.36 cattle heads/farm in 2018, while the total number of farms was down by half, from 237377 in 2010, to 126077 in 2018 (-46.9%).

This situation is mainly the result of farm consolidation, i.e. the diminution in number of farms with 1–2 heads by 50% in the year 2018, as against 2010, alongside with the increase in number of those with over 16 heads.

In the period 2007–2018, but mainly after the removal of milk quotas in April 2014, the quantity of raw milk collected for processing remained relatively constant between 1202 thousand tons in 2007 and 1291 thousand tons in 2018. The structure of the two milk supply sources reveals a significant increase of imported raw milk quantities from 44 thousand tons in 2007, to 128 thousand tons in 2018, alongside with a constant quantity of raw milk collected from the Romanian farms (from 1158 thousand tons in 2007 to 1163 thousand tons in 2018).

In the period 2008–2018, Romania constantly had a negative trade balance in milk and dairy products. The highest trade deficit was noticed in the year 2018 (-328 million euros), 2.2 times higher than the trade deficit in the year 2007 (Figure 1).



Source: Export Helpdesk-Europa EU

Figure 1. Trade balance in milk and dairy products (2008–2018) – million euros –

In Romania's trade with live cattle, the situation is different than in the trade with dairy products, as the analysis made for the period 2008–2018 reveals that in this case the balance of trade was positive, with the largest trade surplus in the year 2017 (+184 million euros).

5. CONCLUSIONS

Although after Romania's accession to the European Union in 2007, the cattle farming sector benefited from both direct payments and from (national and European) funds, in the next post-accession period (2007–2018) no revigoration of the milk and beef sector was noticed, on the contrary, a strong decline of livestock herds and production followed, together with maintaining the excessive fragmentation of the sector.

Thus, in the period 2007–2018, the total cattle herds decreased by 482 thousand heads (-30%), while the female breeding stock decreased by 52 thousand heads (-26.1%).

The decreasing trend of cattle herds, of female breeding stock (cows, buffalo cows and heifers) respectively, was also reflected in the decline of total beef production by 43.6% (from 333.3 thousand tons live weight in 2007, to 187.8 thousand tons in 2018) and of milk production by 26% (from 54.9 million hl. in 2007 to 40.6 million hl. in 2018).

In the period 2007–2018, beef production obtained in specialized units (slaughterhouses) followed an upward trend, and its share in total production intended for slaughter for human consumption increased from 26.4% in 2007, to 53.8% in 2018.

The average farm size did not increase significantly throughout the period 2007–2018, being still low: 2.74 heads/farm in 2018, compared to 1.63 heads /farm in 2007 – dairy cows and 2.36 heads/farm in 2018 as against 1.83 heads/farm in 2010 – young cattle.

The structure of the two sources of raw milk for processing reveals a significant increase of imported raw milk from 44 thousand tons in 2007, to 128 thousand tons in 2018, together with a constant collection of raw milk from the Romanian farms (1158 thousand tons in 2007 and 1163 thousand tons in 2018).

The relative great number of small subsistence farms in the cattle sector contributes to a lower performance of the sector, as these farms lack capital, on the one hand, and on the other hand they lack a proper training of farmers for a good management of their farms.

All these aspects result in low incomes for farmers in their activity. As a result, subsistence farmers practically have no motivation or ability to comply with European standards, including those referring to environmental quality, animal welfare and food safety. Another extremely important issue is that animal diseases

usually occur on these small farms, and their effect can be felt in the level of competitiveness of the entire sector.

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