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SPOS Project 2008 – Strategy and Policy Studies

Study no. 1

Milk quota impact upon the Romanian farmers in the Common Agricultural Policy context

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Bucharest December 2008

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Introduction

The Common Agricultural Policy experienced continuous adjustment in the last 50 years, as a reaction to the socio-economic evolution of the EU Member States, to the gradual enlargement process and under the pressure of globalization. The Common Market Organization and the policy instruments related to the milk and dairy sector were subject to a series of changes in the last 40 years, following the general CAP trend; yet, compared to the other sectors where the reforms were radical, in this case the changes had slower rates and did not target radical reforms.

The global and European dairy market evolution as well as the diversification of consumers' preferences in the context of socio-economic development and production diversification due to the introduction of new technologies, the influence of related sectors (beef and veal meat, arable crops and feeds), which experienced deep reforms of the political instruments in order to facilitate the connection of the players in the respective chains to the market signals, will increasingly influence the milk production and processing sector, which is supported by policy instruments that are no longer suitable in the current economic context.

At the end of the year 2007, the European Commission submitted to the European Parliament and Council the document named CAP Health Check, meant to prepare the continuation of reforms, in which the sectors that needed reforms were mentioned. An important issue in this document is the proposal to abolish the milk quota beginning with the year 2015. This document proposed the elimination of this instrument only after the sector has been prepared for such a radical measure. In this respect, it was proposed that one of the measures would be the gradual increase of quotas until 2015.

A series of studies and research works were initiated by the scientific and professional community in this field, meant to estimate and evaluate the magnitude of implications that this measure can have.

The main worries refer to the possibility of milk production concentration in the areas where this activity implies lower costs and its disappearance in certain zones (e.g. in the mountain areas). In order to avoid such situations it is necessary to create alternative policy instruments for maintaining this activity in the mountain areas.

Although Romania is already a EU Member State, it is confronted with significant structural difficulties with regard to farm structure in general (excessive fragmentation of agricultural holdings) and to processing. The farmers, processors and traders have to comply with the EU milk quality standards and to the rigours imposed by the acquis communautaire in this field. Although the situation of the milk production and processing sector in Romania is at present largely different from that in the EU-15 and even from certain EU New Member States, and there is an obvious need to change this situation, the policy makers should be aware of the fact that no wonders can be done in a short time in order to bridge up the gap between Romania and the other Member States, the more as the sector opposed the structural changes for a long time. The most feasible actions of the decision-makers should target an equilibrium between complying with the norms imposed by the acquis communautaire and Romania's agricultural interests, based upon the national realities and possibilities and the active involvement in the European decision-makers debates on the sector reforms. This represents a true challenge for Romania's future agricultural policy.

The main objective of this study is to contribute to the substantiation of decisions that Romania should make in the context of the sector policy reforming. Thus, on the basis of the analysis of sector evolution and of its reactions to the national policies that have been implemented so far, of the European policies that have been under implementation since 2007 and of the characteristics of production in Romania, we have in view to identify certain policy instruments specific to the mountain zone that could be affected by the phasing out of quotas and to estimate the effects of the gradual increase of milk quotas and their phasing out after 2015, upon the national production – processing – consumption chain. In this respect, the milk

and dairy market dynamics is investigated at European and world level (demand and supply for each main dairy category; price level – in correlation with quality; production capacity – current production and estimates).

The study attempts to estimate the impact of gradual increase of quotas and their phasing out after 2015 upon the small and large Romanian farmers (by regions). On the basis of these detailed analyses we suggest certain solutions (e.g. modifications in the intervention system or providing new payments and other decoupled support modalities) in order to attenuate the foreseeable effects of quota abolishment and to facilitate the transition to the implementation of an undistorting policy. The analysis will be based upon the development of certain scenarios designed according to mostly realistic working hypotheses. As part of this analysis, we tried a simulation by several types of (small and medium-sized) farms of the effects of implementing the current sector specific policies and those proposed by the Commission 2008 in order to identify certain support measures that could lead to maintaining the dairy cow raising activities in the mountain areas.

Chapter 1. The Common Agricultural Policy in the dairy sector

1.1. Dynamics and current support policy to the sector in EU -27

The Common Market Organization in the milk and dairy sector continuously evolved since its implementation (since 1968¹) up to the present moment, practically following the general trend of CAP adjustment as a reaction to the socio-economic evolution of the Member States, to the enlargement process to 25 and then to 27 Member States and to the globalization pressure. Yet, compared to other sectors in which the reforms were more radical, in this case the changes were slower and a radical reform is already a must and a certitude in the years to come. At the beginning, the main objective of the sector policy was circumscribed to the classical objective of the Common Agricultural Policy, namely food safety and market stability, ensuring reliable and stable incomes for farmers and processors through price support, subsidizing the market surplus stocks, the withdrawal of surplus produce in the case of world price diminution (public intervention) and subsidies to exports. Agenda 2000 and then its reform of 2003-2004 (Mid-Term Review) changed a part of the philosophy in this sector as well, in the direction of improving competitiveness and encouraging the farmers and the processors towards business that is increasingly market oriented.

At present, the common milk and dairy policy includes three types of support instruments, namely: domestic market support², direct payments provided to farmers and certain support instruments to foreign trade. The main legislation regulating the sector is presented in Box 1.

¹ Reg. EEC 804/68

²Raw milk perishability determined the indirect application of support measures, in certain products derived from processing, namely butter, skimmed milk powder and certain types of cheese.

Box 1

Main European regulations in the milk and dairy sector

(EC) Regulation no. 1255/1999 of 17 May 1999 on the common organization of the market in the milk and milk products

(EC) Regulation no. 1152/2007 of 26 September 2007 amending (EC) Regulation no. 1255/1999 on the common organization of the market in the milk and milk products

(EC) Regulation no. 1788/2003 establishing a levy in the milk and milk products sector and (EC) Regulation no. 595/2004 laying down detailed rules for its application

(EC) Regulation no. 1468/2006 of 4 October 2006 amending (EC) Regulation no. 595/2004 laying down detailed rules for applying the (EC) Regulation no. 1788/2003 of the council establishing a levy in the milk and milk products sector

(EC) Regulation no. 1782/2003 of 29 September 2003 establishing common rules for the direct support schemes under the Common Agricultural Policy and establishing certain support schemes for farmers and amending Regulations (EEC) no. 2019/93, (EC) no. 1452/2001, (EC) no. 1453/2001, (EC) no. 1454/2001, (EC) no. 1868/94, (EC) no. 1251/1999, (EC) no. 1254/1999, (EC) no. 1673/2000, (EEC) no. 2358/71 and (EC) no. 2529/2001 and (EC) Regulation no. 1973/2004 laying down detailed rules for the application of Council Regulation no. 1782/2003

<u>The support measures for the domestic market</u> having in view price stabilization and support can be classified as follows:

- market stabilization measures through:
 - public intervention for the acquisition of butter and skimmed milk powder targeting their price support (intervention purchase, storage, then sale);
 - private storage measures for butter and cream, skimmed powder milk and cheese, in order to eliminate the disequilibrium on the dairy market as a result of the demand and supply (seasonal storage targeting processors' protection);
 - world trade control measures through border protection measures (high tariff protection, minimum import prices and quotas) and export subsidies;
- Demand stimulation measures through:
 - Support scheme for purchasing at low prices, by the nonprofit organizations, of the butter, concentrated butter and concentrated cream for use in pastry and ice-cream products;
 - Support for the use of skimmed milk powder for animal feed;
 - Support for the use of skimmed milk powder for casein production;
 - Support for milk consumption in schools;
 - Support for milk consumption by disabled persons.

<u>Farmers' income support measures</u>, meant to attenuate the losses resulting from the intervention prices diminution through:

• Single payment scheme (that since 2007 has also included the milk premium for the milk production obtained according to quota and the additional premium or the permanent pasture premium).

Supply control (limiting) measures through:

• The production quota system, introduced in 1984³ in order to limit the milk quantity subsidized from the EU budget and to limit the budgetary expenses at an acceptable and predictable level⁴. At the beginning, the maintenance of this instrument for ten years was desired, yet in time (in 1992, 1999 and then at Mid-Term Review in 2003 it was decided that this system should be in place until 2015, and the decision of an

³Calculated on the basis of deliveries since 1981 +1%

⁴ The expenses had reached 40% of the CAP budget and the milk powder and butter stocks over 1 million tons each

eventual prolongation of this term to be taken afterwards). The key element of this instrument is represented by the milk quantity (that meets certain quality standards and a certain fat content established by the law) that can be delivered on the market (for processing or through direct sale) by each EU Member State (and each farmer of the Member State as the national quota consists of the individual quotas for each farmer) that is not subject to penalties in case it is not exceeded. Each Member State is free to design its own policy with regard to the quota transfer both at regional level and within the categories (direct sales and delivery to dairies); in certain specialists' opinion, the freedom and mobility level is a determining element in the structural movements of production and processing.

• Levies in the case of exceeding the quantities established by quotas.

Diagram 1 briefly presents the dynamics of the utilization of common policy instruments in this sector and their perspectives).

Diagram 1. Evolution of support mechanisms that are used in the milk and dairy sector and their perspectives until 2015

								Image: Sector of the sector										inch	uding payments under single payment scheme																			
									support to butter and milk consumption in schools												elimination of support to direct butter consumption																	
	support for butter consumption provided to non-profit organizations and military units																																					
	support of state containpatien provided to that provide to that provide the support of state and the support of state containpatien provided to the provide to the support of state and the support													opt	ional m	ainte	nance (of supp	ort mea	sure																		
													optio	optional maintenance of support measure for casein production																								
									private storage support for skimmed powder milk												optional - market function																	
	private storage support for butter and cheese												removal of private storage support for chees and optional maintenance for butter optional maintenance of public intervention				er																					
										price	supp	ort m	easure	s, pul	blic int	erventior	for b	utter a	and p	owder	milk p	ourcha	ise									market function					chuon	
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															esta	blishmer	t of le	evy in t	the ca	se of e	xceedi	ng the	e refer	ence o	quota								lev	vy sys	tem pr	olongat	ion	
			prer	nium	f <mark>or n</mark> a	n-ma	rketeo	l milk	and l	herd o	conve	rsion																										
								C	o-res	ponsit	oility	levy																										
	Border protection measures																																					
Export subsidies [1968 1970 1975 1977 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009											2010	201	1 201/	2012	2014	2015																						
1968	1970	19/5	197	1980	1981	1982	1983	5 1984	4 198	5 198	6 198	198	8 1989	9 199	0 1991	1992 19	93 199	94 199	199	96 199	/ 1998	5 1999	2000	2001	2002	2003	2004	200	200	6 2007	2008	2009	2010	201	1 2012	2013	2014	2015
	border protection measures supply limiting measures market support measures demand support measures									pl	ati dir	ecte																										

Source: untill 2005 based on J.Wilkin, D Milczarek, J. Fałkowski, A. Malak Rawlikowska, The dairy sector in Poland, since 2005, own interpretation based on EU legislation and the Commission proposals presented on May 2008

The EU enlargement process (by 17 new member states) determined the entry of 103 million new consumers on the Single Market, since 2008, and an increase of the milk quota by 24.5 million tons compared to the quota envisaged by the 2003 reform, so that at present the total value of quota for EU-27 is 142 million tons.

The 2003 Reform (MTR) had the declared objective to create a competitive agricultural sector, more adapted to the market economy, focusing on the environment and animal health protection. This general objective also targeted the milk and dairy sector, and the main modifications had in view the following aspects specific to the policy instruments used for sector support:

Intervention price diminution for butter and skimmed milk powder⁵;

- Partial compensation for the intervention price diminution for the dairy farmers⁶;
- Discouraging the purchase of butter at the intervention price: by opening a bidding procedure for intervention purchase in addition to the purchase of 30 000 tons at fixed price;
- Expiry of the quota system on April 1, 2015;
- Delay by one year of the gradual increase of quotas by 1.5%, in three stages of 0.5% each for 11 Member States, as it was provided for in Agenda 2000. The increase corresponds to a quantity of 1.4 million tons of milk;
- Diminution of the additional levy: in four stages, from 35.63 EUR/100 kg in 2003/2004 to 27.83 EUR/100 kg beginning with 2007/2008.

At that date is was estimated that production would be discouraged by the guaranteed price diminution in butter and skimmed milk powder, and the processors would be stimulated to diversify their supply by manufacturing certain products with high value added (cheese and fresh dairy products). The simultaneous increase of the EU quota and of the consumption potential would have promoted the stimulation and restructuring of processing and an additional production upstream implicitly, which could have encouraged business in the milk production sector, mainly in the young farmers.

1.2. National sector support policy

As Romania joined the European Union, the European legislation regulating the sector (Box 1) is also valid for Romania, with certain exceptions, being harmonized with the national legislation. The national legal framework for milk and dairy products mainly regulates the following:

- approval conditions of milk buyers, application form for approval and their registration in the Buyers' Registry⁷;
- milk and dairy market organization⁸;
- methodology of granting individual milk quota and the allocation modality and national milk reserve reconstitution⁹. Thus, starting with April 1, 2007, the marketing of milk, i.e.

 $^{^{5}25\%}$ in butter (from 328.20 EUR to 246.39/100 kg) and 5% in skimmed milk powder; (from 205.52 EUR to 174.69/100 kg)

⁶ A direct payment worth 24.49 EUR/100 kg by quota and a top-up payment per Member State of about 11 EUR/100 kg that should be decoupled from production in 2007 at latest;

⁷ ORDER no. 1388 of December 30, 2005. According to this order, the economic operators that buy milk from farmers, for processing purposes or for sale to processors, can perform this activity only if they are approved and registered, on their demand, in the Buyers' Registry. These are approved following the analysis of files and field check-ups by the specialists from the regional offices of the Milk Quota Administration Department;

⁸ORDINANCE no. 48 of August 11, 2005. This ordinance clearly defines all the elements that characterize the market organization of the sector, namely the intervention system and the commercial market measures for milk and dairy products, the methodological principles for granting milk quotas (requested and approved quantities, penalties), establishment of the national milk reserve, defining the traditional and organic products as well as the establishment of dairy products identification codes.

milk and milk products delivery and direct sales can be performed only by milk quota owners, within the limit of the available reference quantities, on the basis of farmers' written request, to the competent authority Milk Quota Administration Department, and of the registration in the Quota Registry. The farmers who deliver milk and/or directly sell milk and dairy products to consumers should keep an evidence of the dairy cow herds and yields in the Farmer's Notebook;

- the activities for which financial support is received by the livestock farmers in the year 2007 as well as the financial support value¹⁰, according to which a support worth 0.3 RON /liter is received for the quality milk delivered to the milk collection centers, which meets the EU standards;
- the collection, processing, interpretation and dissemination of statistical data on the agricultural and food products market that will be submitted to the European Commission and that include data referring to a certain number of dairy products for which EC developed price statistics from all the Member States¹¹;

1.3. Support policy reform proposals for the milk production and processing sector in CAP-HC context

The pressure of changes on the world agricultural markets and the EU enlargement to 27 Member States stimulated the debates on the continuation of the last CAP reform of 2003 and the agricultural policy implementation improvement. This action, known under the name "Health Check", does not envisage a radical reform and the change of general objectives, but rather performance increase, bureaucracy diminution, evaluation and improvement of the policy instruments that are being used.

In November 2007, the European Commission presented the document CAP Health Check to the European Parliament and the Council, which listed the sectors to be reviewed and reformed, where the milk quota abolishment was mentioned among other things beginning with 2015. In order to prepare the sector to eliminate this instrument after 2015 and to attenuate the expected shock determined by the removal of this milk supply control instrument, the Commission proposed a gradual increase of quotas (until 2015), in order to create the opportunity of sector consolidation and increase its competitiveness. The decision on the size of gradual increase of quota and then the possible phasing out of this mechanism left open the option ranging from 2 to 5% annually, depending on the conclusions of the impact studies initiated by the EU Member States, by different professional, scientific organizations, and even by inter-disciplinary teams that worked under the Commission guidance. The reason of this proposal is based on the very CAP dynamics and on the fact that this policy instrument introduced 20 years ago in order to limit the supply (for avoiding surplus production and the accumulation of stocks), as a result of the production-coupled support, that had been practiced in EU for quite a long time, is no longer of actuality, given the evolution of markets after 2003, when the reforms targeted a form of support decoupled from production in most of the products.

⁹DECISION no. 852 of 28 June 2006 and DECISION no. 760 of 11 July 2007 for the modification and completion of the methodology for granting the individual milk quota, as well as of the allocation modality and national milk reserve reconstitution (situations of inactivity, transfer, conversion or reallocation of quotas, as well as the fees established for exceeding the quotas);

¹⁰ DECISION no. 141 of 14 February 2007 and DECISION no. 735 of 11 July 2007 for the modification of Annex to Government's Decision no. 141/2007 on the approval of activities for which funancial support is received by the farmers from the livestock sector, in the year 2007, of its value, as well as of the total amount allocated to each activity

¹¹ ORDER no. 445 of 4 July 2008;

In the last years, the demand for products with a low processing level (fresh milk, skimmed powder milk or whole milk and butter (that are practically the object of the CAP support) is stagnant or even down; the domestic and foreign demand for the dairy products with high value added is up instead, mainly for cheese and fresh dairy products. As a result, the continuation of this supply limiting system after 2015, too, might enlarge the difference between the efficient farmers and the less competitive farmers from the less favoured areas, mainly from the mountaineous areas, as well as between the sectors of agriculture that suffered major reforms and had the possibility to receive true market signals, undistorted by certain policy instruments.

However, the worries related to the fact that the expected beneficial effect of quota abolishment upon the sector competitiveness might not have the same intensity at zonal and regional level are justified, mainly for the mountain areas, where the effect might be quite opposite. In this respect, the Commission proposed that specific rural development measures should be introduced in these regions, meant to support production (of dairy products with high value added eventually); in this respect, the provisions of Art. 69 of the Commission Regulation no. 1782/2003 could be used, that can be amended for this purpose. All these proposals were submitted to public debates and in parallel a series of studies on this subject were completed, providing decision-makers with a large range of opinions and topics for pro/con debates. The study and the results of the debates on this subject mainly led to the conclusion that a gradual increase of quotas might be the main option so as to provide a feasible solution for "preparing the ground" for a radical reform of the sector through this instrument elimination. Thus, the Commission decided to take action and proposed the increase of quotas by 2% on an equal basis to all the EU Member States starting with April 1, 2008 (market year 2008/2009); this proposal was approved on March 17, 2008.

On June 3, 2008 the European Commissioner for Agriculture announced that following the debates on CAP-HC, the Commission prepared the official reform proposal and submitted it to public debate. Compared to the signal provided in November 2007, the document presents precise and well-documented proposals. The main issues related to the milk production and processing sector are the following:

- milk quota elimination beginning with 2015 (as established in MTR in 2003) as this instrument became obsolete in the context of the evolution of markets and current CAP philosophy;
- gradual elimination of restrictions limiting the supply; thus, in order to prepare the sector for this radical reform, it was proposed that besides the 2% increase of quotas beginning with April 1, 2008, already adopted by the Council, quotas will also gradually increase by 1% per year for five years starting with 2009;
- adjusting the current support measures and instruments of the sector, which are irrelevant or became obsolete in the present economic context. In this respect, the Commission proposed that certain intervention measures for butter and certain support measures for the direct consumption of butter and milk powder should become optional, depending on the market conjuncture; another proposal is that the private storage support for certain types of cheese and for direct butter consumption and its use for pastry and ice-cream industry should be eliminated.

In order to ease transition towards a policy enabling the farmers to receive undistorted market signals starting from 2015, mainly for farmers from the mountain areas considered as most exposed to the shock of change, the Commission proposed the amendment of Art. 69 of the Commission Regulation no.1782/2003 so as to be valid for this sector, too, mainly for the less-favoured areas; in the year 2011 the Commission is to prepare a detailed analysis in this respect. According to the initial provisions of this article (Box 2), the Member States that implement the single payment scheme may retain up to 10% of the value of national ceilings for direct payments allocated to the sectors that are the object of the regulations and use this amount for support measures that are considered by the respective Member State as important

for the protection or improvement of environment conditions or for the improvement of agricultural products quality and marketing.

In order to provide the Member States with more flexibility and the possibility to respond to the specific support needs on certain segments, the amendment of this article is proposed through:

- elimination of the restriction regarding the uniform diminution of the national ceiling for each sector in part;
- expanding the possibility to provide support to disadvantaged farmers from certain regions specialized in the production of milk, beef, sheep or goat meat, as well as including the support for the rice plantations from such zones;
- utilization of funds for completing the value of the direct payment in the sectors that are the object of development and restructuring programs;
- utilization of funds for certain risk management measures (production insurance schemes for natural disasters and animal epizootics, granted under certain conditions);
- utilization of certain distorting support measures (according to WTO, which cannot be classified in the Green Box) and which should be limited to 2.5% of the ceiling value; expanding the intervention area of this article for the Member States that apply the single area payment scheme (SAPS), hence for Romania, too.

Box 2

Article 69: Optional implementation for specific types of farming and quality production

Member States may retain up to 10 % of the component of national ceilings referred to in Article41¹² corresponding to each sector referred to in Annex VI.

In the case of the arable crops, beef and veal and sheep and goat sectors, this retention shall be taken into account for the purpose of application of the maximum percentages fixed, respectively, in Articles 66, 67 and 68.

In this case and within the limit of the ceiling fixed in accordance with Article64 (2), the Member State concerned shall make, on a yearly basis, an additional payment to farmers in the sector or sectors concerned by the retention. The additional payment shall be granted for specific types of farming which are important for the protection or enhancement of the environment or for improving the quality and marketing of agricultural products under conditions to be defined by the Commission in accordance with the procedure referred to in Article 144 (2).

Source: (EC) Council Regulation no. 1782/2003 on establishing the common rules for direct support schemes under the Common Agricultural Policy and establishing certain support schemes for farmers and amending (EEC) Regulations no. 2019/93, (EC) no. 1452/2001, (EC) no. 1453/2001, (EC) no. 1454/2001, (EC) no. 1868/94, (EC) no. 1251/1999, (EC) no. 1254/1999, (EC) no. 1673/2000, (EEC) no. 2358/71 and (EC) no. 2529/2001

On November 18, 2008 the Commission presented the revised proposals on the CAP Health Check¹³; the results of the negotiations for Romania that would have a significant influence upon the milk and dairy sector are the following increase:

increase of the national co-financing of direct payments starting with the year 2010 (50% of the level of direct payments applied in the Community on April 30, 2004, compared to 30% as initially agreed) – topping up direct payments by about 800

¹²Article 41 Ceiling: (1) For each Member State, the sum of the reference amounts shall not be higher than the national ceiling referred to in Annex VIII. (2) Where necessary, a Member State shall proceed to a linear percentage reduction of the reference amounts in order to ensure respect of its ceiling. ¹³*Revised and Final Presidency Compromise on Health Check Proposals*, (9656/08 – COM (2008) 306 final - is

¹³ Revised and Final Presidency Compromise on Health Check Proposals, (9656/08 – COM (2008) 306 final - is adopted as modified by doc. 15558/08 with addenda 1-5)

million EUR from the national budget in 2010 –2012 hence by 40 EUR more than the levels referred to in the Accession Treaty)¹⁴;

- funding the measures provided for in Art. 68 starting with 2010 (budgetary year 2011) - referring to the possibility of using up to 10% of the national budgetary ceilings for direct payments (per hectare) in their priority sectors, for measures referring to environment protection or improvement or for improving the quality and marketing of agricultural products. Following the negotiations additional funds were allocated for the EU New Member States amounting to 90 million € per year; Romania and Bulgaria are the main beneficiaries of these. The support will last 6 years (compared to 3 years in the case of the EU New Member States from EU 10) and Romania's part is 17.7 mil. € per year on a 6-year period, summing up 106.2 mil $€^{15}$. The sectors for which these funds can be used are the following: *dairy sector*, *rice growing*, agricultural activities carried out in areas with difficult conditions for agricultural production, etc.; the maximum percentage that can be used out of the 10% for payments coupled with production (i.e. direct support to agricultural production) was established at 3.5%, versus 2.5% as it had been initially proposed
- the milk quotas were expanded by 1% per year for 5 years (2009 2013) up to their elimination in the year 2015.
- the measure referred to in the National Rural Development on investments on dairy farms can be funded until March 31, 2014 (national co-financing being an accepted state aid). Thus, the restriction on the limitation of investments from the European rural development funds only to the farms that had been allocated quota was eliminated.
- The fees applied in the case of exceeding the milk quotas and the milk fat content were reduced. The farmers whose delivered milk has a lower fat content than the current reference level are exempted from paying additional fees.
- The market intervention was maintained as a "safety net" for durum wheat, rice and _ milk sector.
- An increase of the upper limit was obtained for the investments for setting-up young _ farmers from 55 thousand € to 70 thousand € per fam. The Member State can establish a maximum limit, which should not exceed this level.

Chapter 2. Milk production and processing in Romania – characteristics and tendencies

Milk production comes on the second place in Romania after meat production as regards its importance; in 2006 it accounted for 21% of the animal production value and 8% of the agricultural production value. Milk is an extremely perishable product, so that it requires a functional logistic system along the production – processing – consumption chain that should have the capacity to provide the consumer with the desired products in the shortest time possible, under an adequate form and high quality.

2.1. Sector dynamics in the transition period and in the pre-accession period

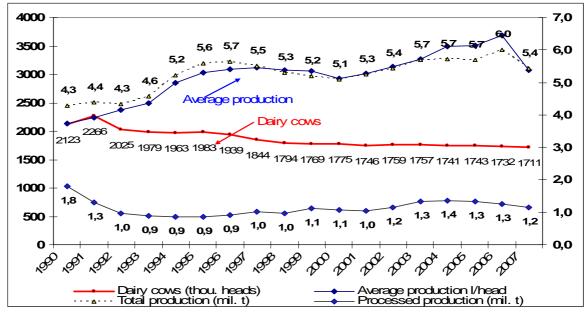
2.1.1. Primary production dynamics

¹⁴ 18 November 2008, Revised and Final Presidency Compromise on Health Check Proposals, (9656/08 – COM (2008) 306 final - is adopted as modified by doc. 15558/08 with addenda 1-5) ¹⁵ Poland has to receive an amount of about 92 million EUR

In the period of transition to the market economy, deep changes were produced in the agri-food sector and in the milk production and processing sector implicitly. In the first three years after 1989 a drastic diminution of bovine herds took place (35%) as well as of the dairy cow herds (8%) as a natural reaction of the livestock sector after an aberrant policy, focusing on the increase in the number of herds by all means, with no economic rationality. The elimination of the political provisions, by which animal slaughtering was restricted, led to massive slaughtering of diseased, old animals, with low yielding potential. As a consequence, in the same period, productivity largely increased (by 33%) and in the next years the trend was positive, up to 2006 when the highest productivity was reached after 1990 (see Graph 1).

Although a significant productivity increase took place in the sector, this is quite modest compared to the EU-15 and even with that from the EU New Member States¹⁶.

Compared to other sectors¹⁷, 82% of the milk production and the bovine herds had been concentrated in the private sector until 1990 (agricultural production cooperatives and small producers)¹⁸.



Graph 1: Dynamics of herds, milk production and yields in the period 1990-2007

Source: based on data from the NIS Yearbook collection and data provided by MARD for 2007

The abolishment of the agricultural production cooperatives after 1989, the diminution in size of the state sector as well as the decline of the oversized processing industry¹⁹ produced great structural changes in the early years of transition, which persisted up to the accession moment. In the first years of transition, the small farmers adjusted their herds in relation to their own needs and economic possibilities, so that in the period 1993 -1998 the decline of these continued but at slower rates, then a stabilization period followed, even a slight increase, while productivity continued to improve. As a consequence, total production increased as a response to the support policies addressed to farmers throughout this period (subsidies materialized into payments per animal head for three years, premia for the milk sold to certain processors, grants for purchasing dairy cows, input subsidies, etc.). Yet, the

¹⁶ according to Eurostat data, in the year 2006 the average yields obtained in Romania reached only 55% of the average yields in EU-15 and 75% of the EU-10 average

¹⁷ over 50% of pork and poultry meat production was obtained in the state sector

¹⁸ in 1989, 18% of production was obtained on the state farms, 28% on the agricultural production cooperatives (cooperative farms), and 56% on the population's households

¹⁹ since 1997

policies applied at that moment did not result in the revigoration of production delivered to the processing industry, which continuously declined until 1997.

In the period 1998-2001 the subsidies to the livestock sector were stopped, the state sector was practically liquidated and prices were liberalized. The sector reaction proved to be sensitive to the support policies, as in this period a slight decline of herds, of yields and total production was noticed; with the partial reintroduction of the support dedicated to the livestock sector recovery (subsidies for buying purebred animals, slaughtered meat premium, subsidies for reproduction, subsidies for the milk delivered to dairy factories, etc.) stabilized the dairy cow herds, positively influenced productivity (by about 10% per year) and total production, which increased by about 15% up to 2006, and at the same time stimulated raw milk deliveries to dairies, which increased by 10% on the average (Annex 2).

In the year 2006 the support policy in the sector changed, by introducing a support scheme similar to that existing in the EU (by granting decoupled payments per animal head while maintaining the national support for reproduction and purchasing purebred animals).

In 2007 the Common Market Organization and the quota system were implemented, as well as the complementary national direct payments and a premium for milk delivered to dairies (the quality of which is conform to the EU standards). The unfavourable conjuncture due to the prolonged drought from the summer of 2007 led to the diminution of the livestock herds and total milk production, of the processed production and productivity implicitly²⁰. In these conditions, the effects of the new support policy in the sector one year after its implementation are practically difficult to measure and are certainly not the expected ones.

2.1.2. Structural evolution of the sector

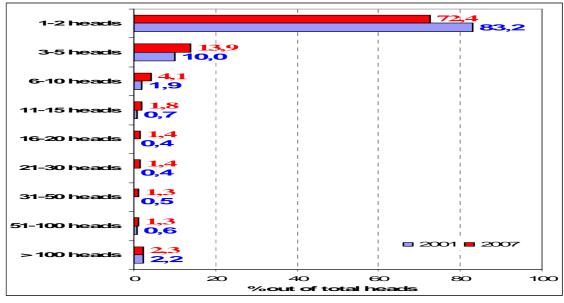
Although Romania had a long transition period to the market economy and it is now a EU Member State, farm restructuring is far from being completed. In the year 2007 ²¹ milk production was obtained on 1.05 million holdings, with an average size of 1.63 cow heads and 72 % of the total dairy cow herds were raised on very low-sized agricultural holdings (1-2 heads). The farms with more than 100 heads that we consider commercial or potential commercial farms account for only 2.23% of total farms, which own only 0.02% of the national dairy cow herds. In the last 7 years the restructuring process was very slow, with very low differences compared to the year 2001 (see Graph 2 and Annex 2), mainly for the medium-sized farms (20 - 100 heads) that would feature development potential.

In the year 2005 there were 2.8 million dairy farms in EU-27 out of which 2 million with 1 and 2 dairy cows. Out of the 2 million small-sized farms, 1.6 million were found in Romania and Poland. The number of dairy farms drastically declined in the period 1995 - 2005, in Italy by 50%, while in Spain by two-thirds. At the same time, the dairy farm size changed, the average number of cows per farm significantly increasing in Denmark, Greece and Portugal.

In contrast with the low farm size from Romania and Poland, the average farm size in United Kingdom was 80 heads in 2005, 85 heads in Denmark and more than 100 heads in Cyprus.

²⁰ The main cause was the increase in the feed price, which increased up to 30% by the end of the year. At the same time, the small grains harvest (wheat, barley, two-row barley) in the year 2007 was very low, i.e. 3.5 million tons, which is 55% of the previous year harvest, which exceeded 6.3 million tons. In the areas severely affected by natural disasters from Muntenia, Moldova and part of Transylvania the peasants had to face the situation of selling their animals at one quarter of the normal market price. Thus, in many cases, they had to sell a lactating cow for 500 RON lei, when normally its price ranges from 2000 to 5000 RON. The most affected region was the south (counties Ialomiţa, Constanta, Dolj and Olt) where a large part of farmers with two or three cows prefered to sell their animals at modest prices, or most often to slaughter them. (Source:www. fas. usda. Gov/Romania Dairy and Products, 2008)

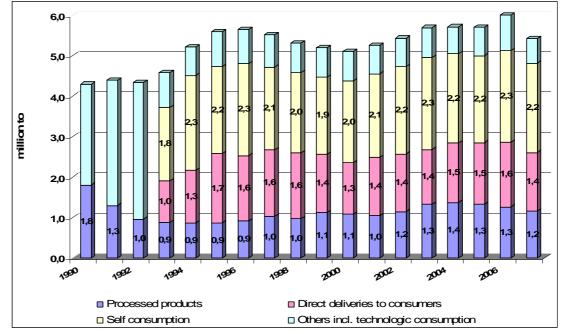
²¹ evaluations based upon MARD data



Graph 2: Structure of cow herds by types of farms

Source: based on data provided by pe MARD l 2001and 2007)

The fragmented farm size, the insufficient development of infrastructure corroborated with the inconsistency of agricultural policies as well as the dynamics of the economic environment mainly in the rural areas are also reflected in the structure of milk production destination (Graph 3).



Graph 3: Milk production utilization in the period 1990-2007

Source: estimation based on data from the colection of NIS publications regarding the consumtion availability "Disponibilitatea de consum pentru populație, 1990-2000", producers balances and for 2007 data provided by MARD.

According to the statistical data, from 1993 up to the present moment no significant changes have been produced with regard to the share of self-consumption; self-consumption remained quite high throughout the period, averaging 40% of total production, with oscillations ranging from 37% to 45%. The milk that went to the market (deliveries to dairies and direct sales) accounted for 45% on the average, to get near 50% of total milk production

in recent years, which provides a positive signal in relation to processing sector revigoration and market stabilization.

After 1994, out of the total milk production obtained each year, 20% was processed on the average, and 25 - 30% was directly sold on the market (mainly under the form of liquid milk, cheese or cream).

Both milk quality and quantity are affected by the high farm fragmentation level. The logistics of the milk collection process is still deficient and infrastructure in the rural areas is still insufficiently developed. Out of economic reasons, processors rather prefer to collect milk from a single source on an area of 500 km, than from 100 sources on a 10 km area.

It can be concluded that at present, out of total 3.3 billion liters of milk produced in Romania, 2 billion liters are sold on the peasant markets, on market stalls, or go from farmers directly to consumers, under the subscription system, while the remaining 1.3 billion liters go to processing.

2.1.3. Milk processing dynamics and structure

In the period 1990-2000, the processed milk production constantly declined in all types of products, mainly due to the industrial sector restructuring, which was oversized for the milk production structure in Romania (after 1989) and as a reaction to the economic environment evolution and price liberalization (after 1997).

More than 50 milk processing factories were privatized until 2002 and at the same time many new processing units were established in the investigated period. According to the data of the National Institute for Statistics, there were over 870 dairy factories in the year 2002, most of them being small-sized as regards the number of employees (780 units with less than 50 employees), replicating the primary production structure. The number of dairy units with less than 50 employees was down by 12% by 2005 (682 units) while those with more than 50 employees was down by 23%.

As the moment of accession was getting closer, the concentration and structural change tendency in the milk processing sector was more and more obvious, so that in late June 2006, according to the NIS data, there were 361 processing units, out of which 117 with high capacity (over 2000 tons of milk/year), 165 with medium capacity (500-2000 tons of milk/year) and 79 of low capacity (under 500 tons of milk/year).

The largest part of these units tried fast to conform to the EU standards so that by the year 2008, according to the data of the National Sanitary-Veterinary and Food Safety Agency (ANSVSA), out of the total 264 processing units, 35 units are authorized for Intra-Community trade, 44 correspond to the EU standards and 185 units are still in the transition period (until 31.12.2009, when they will have either to conform to the EU standards or to stop their activity) (see Table 1).

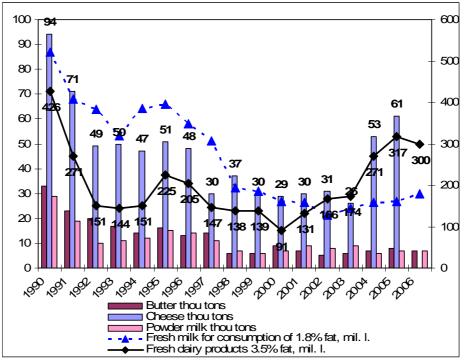
Table 1: Milk	processing un	its, May 2008
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Category	Total units
A. Units authorized for Intra-Community trade	35
B. Units conform with the Community structural requirements, authorized to receive and process conform and non-conform milk on unseparated lines	42
C. Units in conformity with the Community structural requirements, authorized to receive and process conform and non-conform milk on separate lines	2
D. Units authorized for a transition period until 31.12.2009	185
TOTAL	264

Source: The National Authority for Sanitary Veterinary and Food Safety, 2008

Out of total dairy market, cheese accounts for about 50%, while milk and yoghurts 30% and 20% respectively. The specialists' estimates are optimistic: in the next three-four

years the industrial output value is to reach over 1 billion EUR. At the same time, a change in the market structure is expected, in which the fresh consumption milk and cheese will have their shares diminished, in favour of the fresh dairy products, mainly yoghurts; the milk quantities that will be processed in the next 3-4 years will reach 2 billion liters each year, almost double compared to the milk quantity processed at present.



Graph 4: Dynamics of milk production and processed dairy products

2.1.3.1. Dynamics of investments and characteristics of investors

The number of multinational companies present on the Romanian dairy market is not high compared to other industries; yet the market share of these enterprises is quite significant. The processed dairy market – estimated at about 900 billion EUR by the specialists from the industry (APRIL) in the year 2007, is disputed by the following great processors: Friesland (subsidiary of Friesland Coberco Dairy Foods from Netherlands, into partnership with Napolact), Danone, LaDorna Lactate (that in 2008 changed its owner joining Lactalis portfolio, the largest producer in Europe in the dairy segment and the second at world level) and Hochland. These companies together account for 77% of the processed milk market. In the year 2007 the company Tnuva from Israel also penetrated on the Romanian market.

According to APRIL statistics and the data published by the Financial Gazette (*Ziarul Financiar*)²² on the basis of the analysis of the public data supplied by the Ministry of Finance, Friesland Foods Romania²³ (Friesland Romania, Napolact and Industrializarea Laptelui Targu-Mures) was the leader company in 2007. This company had a turnover of over 600 million RON, a net profit of over 111 million RON (a much better financial result compared to 2006) and a market share of 20-25%.

Source: based on data from the Yearbooks collection -INS- and data from MARD

²² www.financiarul.com (05/09/2008)

²³ producer of brands Milli, Napoca, Napolact and Oke!.

Danone held the second position, with a turnover of 369 million RON in 2007 (on the rise by 62 million RON compared to 2006) and a profit of 31.7 million RON²⁴ (by 7 million RON lower compared to previous year) and a market share on the yoghurt segment of 50%. Hochland Romania (the greatest cheese producer on the local market) is on the third position with 8 million RON profit in 2007 and 170.6 million RON turnover (slightly higher compared to previous year when the turnover was 158 million RON and the net profit 7.5 million RON); according to the company information, it had 80% notoriety among consumers and a market share on the segments it is present ranging from 30 to 80%. According to the same source, Albalact²⁵ had a turnover increase by over 50% in 2007 compared to the previous year, its value being 154 million RON; yet its profit was down significantly, from 6.02 million RON profit in 2007 and 71 million RON turnover (up by half million RON compared to the previous year).

The smaller domestic producers were also quite important players on the Romanian dairy market. Thus, in 2007, Lactate Harghita had 311,823 RON net profit, with almost 50 million RON turnover, while Prodlacta SA had 380,866 RON net profit, with 53 million RON turnover. Tyrom Covasna had 289,639 RON net profit and 37 million RON turnover. New on the market, the company Tnuva from Israel had 5.65 million RON losses last year, with 18 million RON turnover, yet it was fast to enter in the top greatest players on the dairy market from Romania.

The analysis of the volume and structure of investments from the milk production and processing sector in the period 1998 – 2006 highlights the following aspects:

- In the year 2000 the volume of investments was the highest as share in the total value of investments in the food industry (19.6%), i.e. 57.3 million EUR;
- In the period 1998 2006, the value of investments in the milk sector was 10930 billion RON (360.5 million EUR), with the highest volume in the year 2006 (75.1 million EUR) and in 2000 (57.3 million EUR) (Graph 5 and Table 2);
- In the majority private sector, the share of investments increased from 84% to 100% in the same reference period;
- in the year 2006, about 73% of total investments came from own funding sources, the difference being represented by domestic credits or other sources.

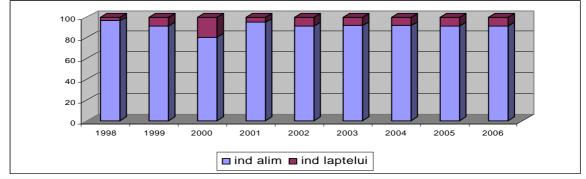
Referring to the structure of investments (Table 3) by main items, the following can be mentioned:

- the highest share (over 55%) of total investments was in equipment, which denotes the main interest of the companies in the improvement of production technologies;
- the largest investments in "transport means" were in 2005 (26%), while in buildings and special constructions in the year 2006 (31%) and 1999 (30%).

 $^{^{24}}$ In 2007, Danone was confronted with the guar-gum scandal, which probably affected the sales of the company, though not found in the products from Romania

²⁵ owner of brands Fulga and Zuzu

Graph 5: Share of investments value from the milk sector in total investments value in the food industry in the period 1999-2006 (%)



Source: based on data from INS " Results and performance of enterprises from industry and constructions ", 2000-2008

Table 2: Evolution of investments in the milk industry

Years	Mil Euro
1998	15,1
1999	26,7
2000	57,3
2001	24,2
2002	34,3
2003	38,4
2004	37,5
2005	51,9
2006	75,1
Total	360,5

Source: based on data from INS " Results and performance of enterprises from industry and constructions ", 2000-2008

Specification	1998	1999	2000	2001	2002	2003	2004	2005	2006
specification	1990	1999	2000	2001	2002	2003	2004	2005	2000
Total investments, out of which:	100	100	100	100	100	100	100	100	100
- buildings and special constructions	16	30	22	24	23	22	20	18	31
- equipment	64	56	67	56	64	64	55	55	50
- transport means	19	13	10	18	11	13	24	26	18
- other investments	1	1	1	2	2	1	1	1	1

Source: "Results and performance of enterprises from industry and constructions", 2000-2006, National Institute of Statistics

According to the specialists' estimates APRIL²⁶, the market of non-processed milk sold on the free market and consumed on households exceeded 1.8 billion liters in 2007, and its value is estimated at about one billion euro. The "power" of this market segment cannot be neglected, as it is part of the dairy market from Romania; it is a "particular" case that, on one hand, can serve to the substantiation of investment plans in this industry in relation to the development and diversification of dairy production for the next years; at the same time, taking into consideration the sector evolution after 1989, which demonstrated the sector

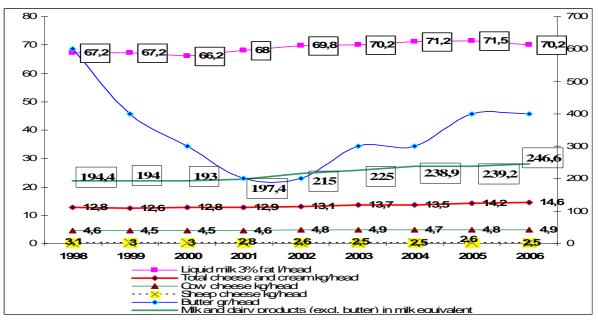
²⁶ Valeriu Steriu, president of APRIL

rigidity and the fact that this consumption segment was maintained almost constant as share on the market, it is possible that in the next years as well, even though the volume may diminish, this segment will be the main competitor of the great players on the processing market.

2.2. Dynamics of milk and dairy consumption in Romania and worldwide

The consumption of milk and dairy products in milk equivalent (butter exclusively) increased by 76% in the period 1990-2006, this increasing trend also characterized the consumption of liquid processed milk (3.8% fat content), of cheese and cream; at the same time, the consumption of *telemea* cheese was maintained at a constant level, while butter consumption decreased, by 35% lower compared to that in 1995 (see Graph 6 and Annex 3).

Graph 6. Milk and dairy products consumption in Romania



Source: based on data from "Coordinates of the life standard in Romania. Population incomes and consumption for the 2000-2007 period", published by INS

Although the fresh dairy market is increasing (mainly in yoghurts), Romania still lies behind the other European Union countries as regards the consumption of these products. In Romania, the average consumption of fresh dairy products per capita is about 5.4 kg/year, while in Germany it reached 33.6 kilograms, in France 33.7 kg and in Bulgaria 16.2 kg.

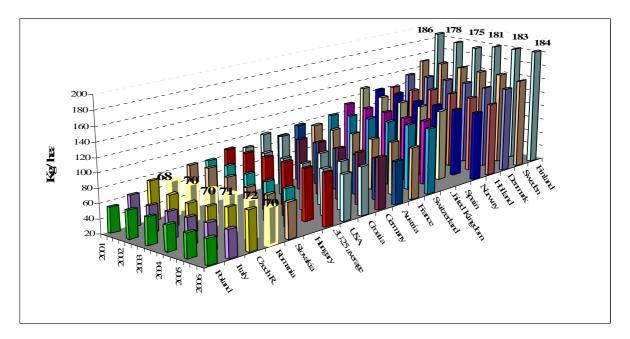
The analysis of data presented on a yearly basis by the "International Dairy Federation" in the publication "The World Dairy Situation - 2007" (no. 423 of 2007) highlights that in Romania the milk and dairy products consumption (in milk equivalent) accounts for 65 -70% of the EU-15 average, while butter consumption is much lower compared to the EU average, being the lowest in the region. In cheese, consumption is comparable to that in the Czech Republic and the United States, even higher than that in the United Kingdom. The consumption of liquid milk and fresh dairy products (yoghurts, creams) followed the increasing trend from all the EU countries, being close to that from the Czech Republic, Slovakia and Hungary.

Graphs 7, 8 and 9 present the dynamics of milk, butter and cheese consumption in Romania on a comparative basis with the European average and certain EU and world countries, selected on the basis of data presented in the same report.

We opted for presenting the suggestive trend of milk and dairy consumption in Romania compared to other countries, in order to highlight that in certain dairy products the consumption is strongly influenced by the regional "consumption pattern". As it can be seen from Graph 9, in Romania the butter consumption is very low compared to that in the countries taken into consideration. Besides the fact that the consumption is probably dictated by prices to a large extent, we cannot overlook the importance of the consumption pattern. While in Hungary, for example, the price may be a constraint to consumption, in Spain, which has a similar consumption as Romania, it is the consumption pattern that is the determinant factor.

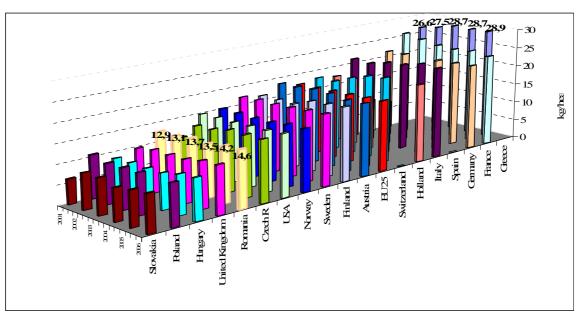
Maybe the absence of butter from the market and its substitution by margarine until 1989 changed the Romanian consumers' preference, which next to price is the following constraint to butter consumption.

Graph 7: Comparative dynamics of milk and fermented dairy products consumption in selected countries from the world and from Europe



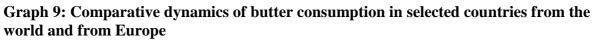
Source : based on data from the report" The World Dairy Situation 200", Bulletin of the International Dairy Federation, no. 423-2007

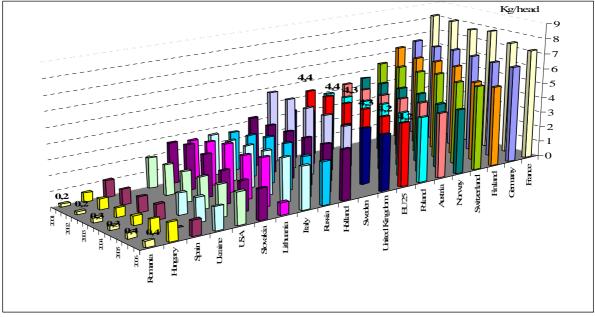
Graph 8: Comparative dynamics of cheese consumption in selected countries from the world and from Europe



European Institute of Romania – Strategy and Policy Studies (SPOS 2008)

Source : based on data from the report" The World Dairy Situation 200", Bulletin of the International Dairy Federation, no. 423-2007





Source : based on data from the report" The World Dairy Situation 200", Bulletin of the International Dairy Federation, no. 423-2007

According to some recent studies conducted by specialized companies²⁷, at present the highest dairy products consumption in Romania is found in plain yoghurt and cream. Products such as *sana*, *soured milk* and *kefir* are less consumed, mainly by young people under 24, maybe as a result of their association to a traditional, "old-fashioned" product. The people with lower incomes and education eat significantly less fruit yoghurt (which may be too expensive for their incomes), but more plain yoghurt instead. *Sana* is preferred by people with higher incomes, but lower education, probably due to its perception as "healthy, consistent

²⁷ Daedalus Consulting for the year 2006, market research company Nielsen in 2008

product" cultivated in the past. As regards the UHT liquid milk market, it is considered that this segment is still insufficiently developed, due to the low purchasing power, as well as to the lack of education in consumers and the national consumption pattern, in which the share of self-consumption and the consumption of products coming from direct sales is quite significant.

The adult population from Romania has its food tastes and preferences developed before 1989, and a large part of this consumers segment largely appreciates the unprocessed "countryside milk", which in many people's opinion is fat and healthy and less expensive compared to the low-fat milk on the store shelves, whose taste is totally different from the taste of milk they had been used to. This is one of the reasons why the UHT milk consumption does not have the expected growth rate, although considerable investments have been made in marketing and promotion campaigns in recent years. The companies Fulga and Zuzu from Albalact, Fresh Milk from Danone, or Milli from Friesland and more recently the company Tnuva were relevant in this respect. The population had a positive perception of these campaigns mainly in the urban areas and the consumers' behaviour significantly changed. As a consequence, the pasteurized milk, vacuum-packed cheese, yoghurts and milkbased desserts, mainly sold in supermarkets, increased the share of dairy products in the daily food basket. The consumption of these products gradually increased by about 5%, so that Romania is among the first three countries in the world with regard to the growth rate of consumption of dairy products with high value-added (fruit yoghurts, puddings and creams or cheese packed in special packages and forms). The increase rate of cheese sales slowed down, and the peasant products, which covered at least 50% of the market in the past will gradually lose position, under the background of a more mature demand, focusing more on the hygiene and quality of products. All these evolutions lie at the basis of the statement made by the processors' representatives, who in the summer of 2008 estimated that the market will maintain its growth rate by 10% annually 28 .

The analysis of milk and dairy products consumption by types of households and residence areas, in the year 2005, highlights the following aspects (Table 4):

- compared to an average consumption of 5.96 liters at national level, the highest milk consumption is found in the pensioners households (6.62 liters);
- the highest milk consumption in all types of households is found in the rural areas; here, too, the pensioners have the highest milk consumption (6.85 liters);
- the lowest milk consumption is found in the households of unemployed (4.51 liters), mainly in the rural areas (3.24 liters).
- in the case of dairy products (cheese and cream) consumption, high consumption levels are found in the employers' households (1.36 kg), mainly in the urban areas (1.24 kg). A high consumption (1.27 kg) is also found on the pensioners' households, with the difference that in this case the highest consumption is found in the rural areas (1.24 kg);
- The lowest cheese and cream consumption, as in the case of milk, is found in the households of unemployed (0.88 kg), mainly in the urban areas (0.84 kg);

		Average monthly quant	ities per person
Specification	Milk	Cheese and sour cream	Butter
Total households	5.962	1.186	0.030
Employees	5.406	1.165	0.042
Employers	6.018	1.363	0.089
Self-employed	5.572	1.030	0.024
Farmers	6.599	1.196	0.008

Table 4: Milk and dairy products consumption in the year 2005

²⁸ Valeriu Steriu, president of APRIL, statement made in DailyBusiness.ro

-	U		
Specification	Milk	Cheese and sour cream	Butter
Unemployed	4.506	0.886	0.017
Pensioners	6.616	1.270	0.026

European Institute of Romania – Strategy and Policy Studies (SPOS 2008)

Source: "Coordinates of the life standard in Romania. Population incomes and consumption for the year 2006", National Institute for Statistics (NIS)

2.3. Foreign trade dynamics

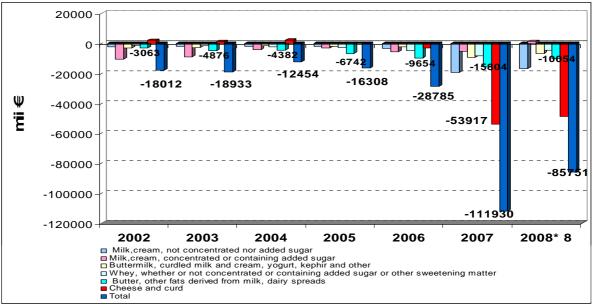
In the period 2002-2008, Romania was a net importer of milk and dairy products and the deficit grew worse each year, to reach the highest level after accession (about 112000 thousand euros in 2007; by the end of the year 2008 it will be probably larger, as in the first 8 months it had already reached 87000 thousand euros) mainly on the EU relation.

Only in the cheese category the trade balance had positive values in the period 2002-2005 (Graph 10). The analysis of the volume and structure of exports in the period 2002 - 2008 (Graph 11) reveals that in the year 2007 the share of cheese in total milk and dairy exports was significant, yet it decreased after accession, as the structure of exports significantly changed in the favour of milk and concentrated cream category.

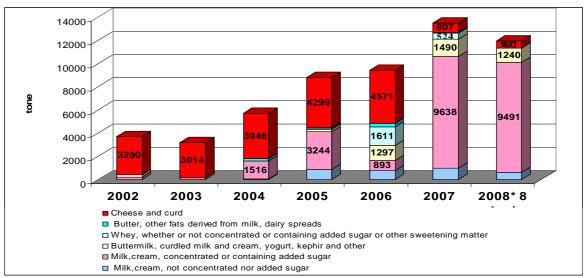
The Intra-Community sales of milk and dairy products accounted for 83% of total exports in 2007; the main destinations of these exports both in 2007 and in the first 8 months of 2008 were Greece (53% in 2007 and 39% respectively in 2008), followed by Bulgaria with 15% and 29% respectively in the first 8 months of 2008 – Graph 12.

Before 1989, Romania exported about 60,000 tons of cheese and in the period investigated by us the cheese exports totaled about 3000 - 4500 tons/year in 2002-2006; cheese exports were significantly lower after accession, so that in the year 2007 and in the first 8 months of 2008, the cheese exports totaled only about 800 tons.





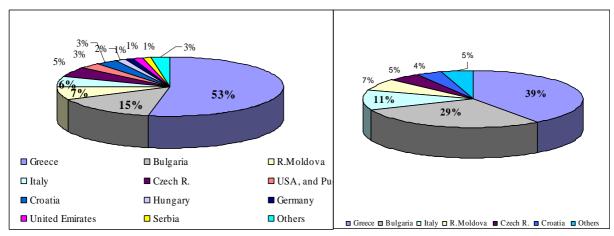
Source: based on processed trade data base for the period 2002-2008 (2008 only 8 months) provided by MARD



Graph 11: Volume and structure of milk and dairy products exports

Source: based on processed trade data base for the period 2002-2008 (2008 only 8 months) provided by MARD

The sales of milk and dairy products to the EU countries in 2007 accounted for 83% of total exports; the main destination, both in 2007 and in the first 8 months of 2008 were Greece (53% in 2007 and 39% in 2008), followed by Bulgaria with 15% and 29% respectively – Graph 12.



Graph 12: Structure of milk and dairy products exports by destination

Source: based on processed trade data base for the period 2002-2008 (2008 only 8 months) provided by MARD

Before 1989, Romania exported about 60,000 tons of cheese, while in 2007 the exported amount was less than 1000 tons. According to the specialists in the dairy industry²⁹, Romania might become again an important player on the regional dairy market, as well as on other markets such as United States, Russia, or the Orient countries. At present, only a few companies from Romania are also exporters: the local branch Danone to the Republic of Moldova and Bulgaria; LaDorna, which recently joined Lactalis portfolio, delivers products to the markets from Greece and the United States.

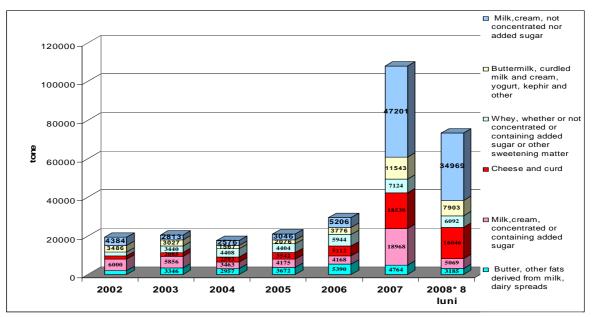
Taking into consideration the increasing trend of investments (modernization of factories and new investments), the EU membership by which producers can export their

²⁹ Valeriu Steriu, president of the Romanian Employers' Association from the Milk Industry (APRIL) made this declaration for Business Standard.

products by paying no fees, it was estimated at mid-year that the value of exports in 2008 would increase; this statement was based on the values of exports in the first 8 months of 2008 (when the value of dairy products exports had reached almost 15000 thousand euros). However, the recent economic conjuncture and the expected increase in the prices of raw materials will strongly affect this sector as well, and it is possible that the dynamics of exports will not be as it has been expected by the end of the year.

The milk and dairy products exports significantly increased after accession, mainly in the category of raw milk for processing and cheese (more than 9 times compared to the previous year in milk and over 3.6 times in cheese), with an increasing trend taking into consideration the values in the first 8 months of 2008 (see Graph 13 and Graph 15). The milk and dairy products imports after accession came from Germany (31% of total imported dairy products in 2007 and 33% in the first 8 months of 2008), followed by Hungary (21% in 2007 and 16% in 2008), Poland (16% in 2007 and 14% in 2008) (Graph 14). About 5% of the total imports come from Bulgaria.

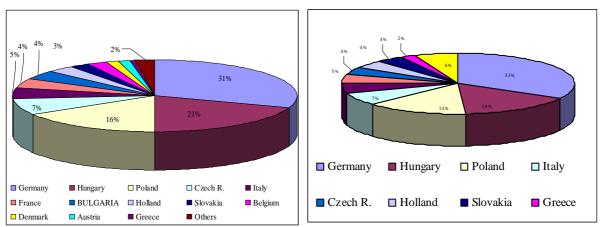
The net imports of milk and dairy products were significant in all the categories in the investigated period, the largest volume of imports being found in the milk for processing (over 46 thousand tons in 2007 and 35 thousand tons in the first 8 months of 2008) and in cheese (over 17 thousand tons in 2007 and 15 thousand tons in the first 8 months of 2008), followed by the other investigated products (with one exception in milk and concentrated cream where the trade balance, still provisional for the year 2008, was positive) – see Graph 15.



Graph 13: Volume and structure of milk and dairy products imports

Source: based on processed trade data base for the period 2002-2008 (2008 only 8 months) provided by MARD

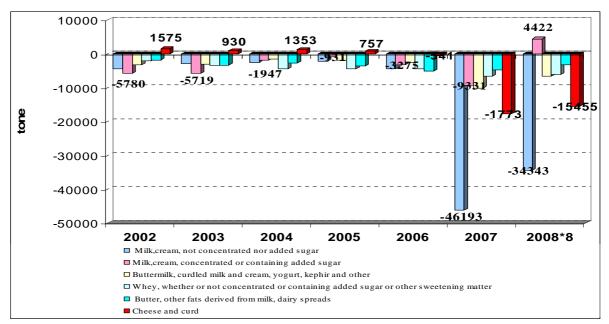
The main source of milk and dairy products imports after the accession is Germany (31% of total imported products in 2007 and 33% in the first 8 months of 2008) followed by Hungary (21% in 2007 and 16% in 2008) and Poland (16% in 2007 and 14% in 2008) (Graph 14) while 5% of total imports come from Bulgaria.



Graph 14: Origin of milk and dairy products imports after the accession

Source: based on processed trade data base for the period 2002-2008 (2008 only 8 months) provided by MARD

The volume of net milk and dairy imports was significant in all the investigated categories in the investigated period, the largest volume of imports being found in the milk for processing (over 46 thousand tons in 2007 and 35 thousand tons in the first 8 months of 2008) and in cheese (over 17 thousand tons in 2007 and 15 thousand tons in the first 8 months of 2008), followed by the other investigated products, with one exception in milk and concentrated cream where the trade balance was positive in the first 8 months of the year 2008; yet it is possible that this balance of trade will change by the end of the year (see Graph 15).

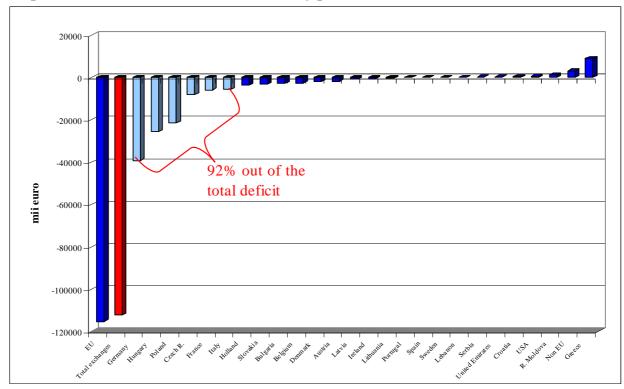


Graph 15: Volume of net imports of milk and dairy products

Source: based on processed trade data base for the period 2002-2008 (2008 only 8 months) provided by MARD

The detailed analysis by categories of products with 4 and 8 digits according to the Combined Nomenclature (Table 5) reveals that in the last 7 years Romania had a positive balance of trade in certain products and their analysis would provide a picture of the potential competitiveness in certain products.

The trade balance by countries (Graph 16) reveals that 93% of the total deficit is created in the relation with Germany, Hungary, Poland, the Czech Republic, France and Italy.



Graph 16: Balance of trade in milk and dairy products in 2007

Source: based on processed data base for foreign trade provided by MARD

CN	Specification	2002	2003	2004	2005	2006	2007	2008 (8luni)
code 401	Milk and cream, not concentrated nor containing added sugar or other sweetening matter out of which:	-4362	-2797	-2483	-2134	-4438	-46193	-34343
4011010	of a fat content by weight of $\leq 1\%$, in immediate packings of ≤ 21	-57	-110	-73	-12	309	461	73
4011090	of a fat content by weight of <= 1%: other packings	-631	-19	-57	-138	-192	0	-2555
4012011	of a fat content by weight of $\leq 3\%$ but > 1%, in immediate packings of ≤ 21	-1717	-1548	-909	-1050	-2243	-5662	-4212
4012019	of a fat content by weight of <= 3% but > 1%: other packings	1	4	-31	1	-38	-26866	-5577
4012091	of a fat content by weight of $> 3\%$ but $<= 6\%$, in immediate packings of $<= 2$ l,	-205	-107	-174	803	-738	-4310	-2839
4012099	of a fat content by weight of > 3% but <= 6%: other packings	-887	-39	-220	-802	-381	-7831	-17394
4013011	of a fat content by weight of $\leq 21\%$ but > 6%, in immediate packings of ≤ 21 ,	-460	-447	-646	-721	-832	-935	-751
4013019	of a fat content by weight of <= 21% but > 6%: other packings	-214	-336	-116	-154	-84	-363	-204
4013031	of a fat content by weight of $> 21\%$ but $<=$ 45%, in immediate packings of $<= 21$	-86	-16	-7	-15	-18	-88	-93
4013039	of a fat content by weight of > 21% but <= 45%: other packings	-107	-180	-250	-47	-201	-598	-751
402	Milk and cream, concentrated or containing added sugar, out of which:	-5780	-5719	-1947	-931	-3275	-9331	4422
4021011	without added sugar or other sweetening matter. In immediate packings of <= 2,5 kg	-37	-11	-39	-10	-1	-30	-139
4021019	without added sugar or other sweetening matter: other packings	-1530	-1688	-216	-737	-892	-1885	-1065
4021091	Other packings of =< 2,5kg	0	0	-3	-5	-2	-86	-18
4021099	Others	-32	-471	-94	0	0	-65	-169

Table 5. Dynamics of Romania's foreign trade balance for milk and dairy products, tons

CN code	Specification	2002	2003	2004	2005	2006	2007	2008 (8luni)
4022111	of a fat content by weight of $> 1,5\%$, in immediate packings of $<= 2,5$ kg	-3	-13	-35	-6	-1	-109	-124
4022117	Others: of a fat content by weight of $\leq 11\%$ but $> 1,5\%$	-3	-23	-28	-3	1	-67	-55
4022119	Others of a fat content by weight of $> 11\%$ but $\leq 27\%$	-1261	-1760	-879	-969	-1355	-455	-298
4022199	of a fat content by weight of > 27% in others packings	-1021	-70	-65	-19	-20	-156	-164
4022911	of a fat content by weight of $> 27\%$ and special milk for infants in hermetically sealed containers of ≤ 500 g, of a fat content by weight of $> 10\%$	-565	-975	-575	-2	-111	-255	-205
4022915	Others in immediate packings of <= 2,5 kg	-1310	-666	-513	-454	-300	-10	-66
4022919	Others	-1	-6	-2	-1	-22	16	-30
4029111	of a fat content by weight of $\leq 8\%$ in immediate packings of $\leq 2,5$ kg	1	0	-3	0	0	-431	-154
4029119	of a fat content by weight of <= 8% in other packings	-5	-20	-373	-1364	-1304	-12167	-1826
4029131	of a fat content by weight of > 8% but <= 10%, in immediate packings of <= 2,5kg	0	0	0	0	-19	-18	-2
4029139	of a fat content by weight of $> 8\%$ but $<= 10\%$, in other packings	0	0	382	1085	313	-1	-95
4029159	of a fat content by weight of $> 10\%$ but $<= 45\%$, in other packings	0	-4	159	533	89	8482	7025
4029191	of a fat content by weight of $> 45\%$, in immediate packings of $<= 2,5$ kg	0	0	254	0	0	0	0
4029199	of a fat content by weight of $> 45\%$, unsweetened, in other packings	0	0	0	552	0	0	0
4029911	of a fat content by weight of $\leq 9,5\%$ in immediate packings of $\leq 2,5$ kg	0	0	0	406	370	62	-15
4029919	of a fat content by weight of <= 9,5% in other packings	0	0	72	77	0	-1950	-5

CN	Specification	2002	2003	2004	2005	2006	2007	2008 (8luni)
code								
4029939	of a fat content by weight of > 9,5% but <= 45% in other packings	0	0	24	-10	-20	-111	-1
403	Buttermilk, curdled milk and cream, yogurt, kephir and other out of which:	-3283	-3001	-1557	-1899	-2480	-10053	-6664
4031011	without added sugar or other sweetening matter, of a fat content by weight $\leq 3,0\%$	0	0	0	-7	14	-62	-150
4031013	without added sugar or other sweetening matter, of a fat content by weight of $> 3\%$ but <= 6%	-48	-17	1	9	-95	-50	-59
4031019	without added sugar or other sweetening matter, of a fat content by weight of $> 6\%$	0	0	0	0	0	-23	-46
4031051	powder, granules or other solid forms, of a fat content by weight of $\leq 1,5\%$	0	0	-7	-14	-19	53	-10
4031053	powder, granules or other solid forms, of a fat content by weight of >1,5% but <= 27%	-316	-506	-709	-631	-637	-21	-17
4031091	Others, of a fat content by weight of $\leq 3\%$	-252	-524	-240	45	104	-3287	-1730
4031093	Others of a fat content by weight of $> 3\%$ but $<= 6\%$	-154	0	0	-2	-66	-73	-124
4031099	Others of a fat content by weight of $> 6\%$	-29	-1	0	0	-423	-2261	-792
4039011	without added sugar or other sweetening matter, with a fat content by weight of <= 1,5%	-9	-9	-12	-24	-7	-14	-11
4039051	without added sugar or other sweetening matter, of a fat content by weight of $\leq 3\%$	0	0	0	0	-2	-756	-651
4039053	without added sugar or other sweetening matter, of a fat content by weight of $> 3\%$ but <= 6%	-20	-19	-17	-10	-1	-273	-221
4039059	without added sugar or other sweetening matter, of a fat content by weight of $> 6\%$	-135	-2	-10	0	0	-74	-100
4039061	Others, of a fat content by weight of <= 3%	0	0	0	-399	-273	-361	-259
4039063	Others, of a fat content by weight of $> 3\%$ but $\leq 6\%$	0	0	0	0	0	-119	1

CN code	Specification	2002	2003	2004	2005	2006	2007	2008 (8luni)
4039073	powder, granules or other solid forms, of a fat content by weight of $>1,5\%$ but $<= 27\%$	-2	0	-9	0	1	-18	-18
4039091	Others, of a fat content by weight of $\leq 3\%$	-982	-1052	-516	-865	-1208	-2403	-2154
4039093	Others, of a fat content by weight of $> 3\%$ but $\leq = 6\%$	-394	-48	0	15	148	-287	-269
4039099	Others, of a fat content by weight of $> 6\%$	-919	-823	-15	-14	-15	-16	-8
404	Whey, whether or not concentrated or containing added sugar or other sweetening matter	-2029	-3439	-4408	-4362	-4333	-6599	-6081
4041002	of $\leq 15\%$ by weight and a fat content, by weight, of $\leq 1,5\%$	-1685	-3085	-4204	-3453	-3836	-5038	-3827
4041004	of $\leq 15\%$ by weight and a fat content, by weight, of $> 1,5\%$ but $\leq 27\%$	-179	-165	-59	-810	-1170	-639	-73
4041014	of > 15% by weight and a fat content, by weight, of > 1,5% but $\leq 27\%$	-46	-47	-101	-99	-170	-247	-130
4041036	of > 15% by weight and a fat content, by weight, of > 1,5% but $\leq 27\%$	-35	-12	0	-2	-3	-8	-425
4041038	of > 15% by weight and a fat content, by weight, of > 27%	0	0	0	0	0	-109	-241
4041048	of $\leq 15\%$ by weight and a fat content, by weight, of $\leq 1,5\%$	0	0	0	0	1511	400	-425
4049021	without added sugar or other sweetening matter, of a fat content by weight of 1,5%	-26	0	-2	-1	-663	-347	-403
4049023	without added sugar or other sweetening matter, of a fat content by weight of $>1,5\%$ but $<= 27\%$	-11	-8	-10	-12	-63	-100	-435
4049083	Others of a fat content, by weight, of $> 1,5\%$ but $<= 27\%$	0	-3	0	0	-1	-497	-471
405	Butter and other fats derived from milk, dairy spreads	-1808	-3342	-2764	-3527	-5089	-4715	-3182
4051011	Natural butter in immediate packings of <= 1 kg	-558	-886	-823	-832	-714	-830	-610

CN code	Specification	2002	2003	2004	2005	2006	2007	2008 (8luni)
4051019	Natural butter in other packings	-1170	-2253	-1653	-2242	-4187	-3166	-1866
4051030	Recombined butter of a fat content, by weight, of $\geq 80\%$ but $\leq 85\%$	0	-49	0	0	-59	-103	-40
4051090	Butter: others	0	0	0	-20	-1	-14	-251
4052010	Dairy spreads of a fat content, by weight, of $\geq 39\%$ but $< 60\%$	0	0	0	0	2	-50	-20
4052030	Dairy spreads of a fat content, by weight, of $\geq 60\%$ but $\leq 75\%$	0	0	0	51	292	-4	-45
4059010	Others, of a fat content, by weight, of $>=$ 99,3% and of a water content, by weight, of $<= 0.5\%$	-1	-154	-274	-576	-419	-537	-320
4059090	Others	-79	1	0	90	-2	-11	-29
406	Cheese and curd	1575	930	1353	757	-541	-17731	-15258
4061020	Fresh cheese "unripened or uncured cheese", incl. whey cheese and curd of a fat content, by weight, of $\leq 40\%$	-424	-482	-540	873	1842	-6397	-5572
4061080	Fresh cheese "unripened or uncured cheese", incl. whey cheese and curd: others	1774	1508	1751	-278	-684	-884	-1059
4062090	Grated or powdered cheese of any type: others	-119	-117	-120	-139	-71	-140	-112
4063031	of a fat content, by weight, of $\leq 36\%$ and of a fat content, by weight, in the dry matter of $\leq 48\%$	-188	-186	-306	69	103	-726	-577
4063039	of a fat content, by weight, of $\leq 36\%$ and of a fat content, by weight, in the dry matter of > 48%	-57	-223	-258	-535	-771	-1207	-1018
4063090	Others, of a fat content, by weight, of $> 36\%$	-80	-83	-134	-90	-41	-166	-13
4064010	Blue-veined cheese and other cheese containing veins produced by "Penicillium roqueforti": Roquefort	-3	0	-2	-2	-2	-9	-15
4064050	Blue-veined cheese and other cheese containing veins produced by "Penicillium roqueforti": Gorgonzola	-7	-10	-15	-21	-32	-63	-34

CN code	Specification	2002	2003	2004	2005	2006	2007	2008 (8luni)
4064090	Blue-veined cheese and other cheese containing veins produced by "Penicillium roqueforti": other types	-54	-74	-110	-143	-177	-244	-348
4069001	Other cheese for processing	61	2	9	40	-2	297	181
4069013	Others: Emmental	-25	-36	-40	-88	-131	-413	-338
4069021	Others: Cheddar	429	503	416	543	-263	-2038	-168
4069023 4069025	Others: Edam Others: Tilsit	-1 0	-3 0	-1 0	-39 0	-176 -3	-69 -34	-36 -15
4069029	Others: Kashkaval	79	4	294	304	-99	-3383	-3220
4069032	Others: Feta of sheep or buffalo milk	84	60	130	103	22	-306	-208
4069033	Other type of Feta	-134	-80	-161	-108	-211	0	0
4069050	Others: Sheep or buffalo milk cheese, in containers containing brine, or in sheepskin or goatskin bottles	392	222	331	285	314	96	110
4069061	of <= 47% by weight: Grana Padano, Parmigiano Reggiano	-16	-22	-32	-39	-55	-103	-72
4069063	of <= 47% by weight: Fiore Sardo, Pecorino	7	73	104	5	0	-1	-1
4069078	of > 47% but <= 72% by weight: Gouda	-1	-2	75	-69	-71	-243	-167
4069082	of > 47% but <= 72% by weight: Camembert	-19	-35	-36	-55	-68	-90	-85
4069084	of > 47% but <= 72% by weight: Brie	-17	-20	-25	-58	-69	-117	-78
4069085	of > 47% but <= 72% by weight: Kefalograviera, Kasseri	0	0	0	19	64	0	0
4069087	Other cheese, of a water content, by weight, of non-fatty matter of $> 52\%$ but $\leq = 62\%$	-72	-101	-64	-96	-115	-331	-178
4069088	Other cheese, of a water content, by weight, of non-fatty matter of $> 62\%$ but $<= 72\%$	-15	-10	-8	-26	-36	-79	-512

CN code	Specification	2002	2003	2004	2005	2006	2007	2008 (8luni)
4069093	of a fat content by weight of $\leq 40\%$ and a water content, by weight, of non-fatty matter of $> 72\%$	-14	-11	-7	-26	-56	42	-37
4069099	Other products	-6	59	113	341	249	-1081	-1479

Source: based on processed data base for foreign trade provided by MARD

2.4. Price dynamics and evolution

There is a scarcity of information sources referring to the evolution of milk and dairy products prices in Romania; the values provided by NIS are the only official reliable sources, yet insufficient for a detailed analysis. The data on the milk farm gate price are provided by EUROSTAT for all the Member States, and the large processing companies transmit the milk delivery prices. An example of the type of information provided by the processors is presented in Table 6.

Table 6. World price for the milk³⁰ delivered in August 2008 paid by the processing companies, depending on the specific payment and bonus system

The Company	Country	Quality bonnus	Quantity bonnus	Season bonnus	Price for deliveries August	Suppleme ntary Payment	Average 12 months
		€/100 kg	€/100 kg	€/100 kg	€/100 kg	€/100 kg	€/100 kg
Milcobel	Belgium	0.73	1.37		30.60	0.37	37.54
Humana Milch Union	Germany				35.75	-0.22	37.21
Nordmilch	Germany		0.15		32.78	-0.17	34.90
Arla Foods Denmark	Denmark	0.69		3.46	38.52	1.42	37.18
Hämeenlinnan	Findland	2.14		11.97	45.49	3.88	42.63
Bongrain CLE (Basse Normandie)	France	0.74			36.70	-	35.82
Danone (Pas de Calais)	France	0.58			38.87	-	37.01
Lactalis (Pays de la Loire)	France				36.51	-	35.63
Sodiaal	France				38.41	-	35.45
Dairy Crest (Davidstow)	UK	-0.25	0.37		32.77	0.00	33.29
First Milk	UK	0.61	2.30		32.64	0.00	31.61
Glanbia	Ireland				32.46	0.00	36.57
Kerry	Ireland				31.83	-	35.04
Campina	Holland	0.05	0.75	3.60	36.44	1.20	37.95
Friesland Foods	Holland	0.04		3.70	35.85	1.86	38.30
USA *		0.14			28.73	-	30.56
New Zeeland **					23.78	-	30.94
Average price August 2008					35.71		36.41

* ajusted for milk with 4.2% fat content, 3.4% proteins and somatic cells:249,999

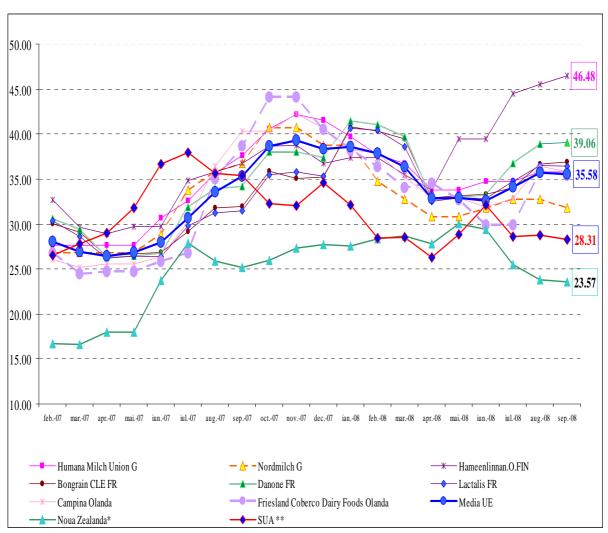
** estimations Fonterra, adjusted for milk with 4.2% fat content and and 3.4% proteins

Source: <u>http://www.infolapte.ro/noutati57.html</u>, LTO-Nederland, calculated byt Productschap Zuivel and European Dairy Farmers., 28 Octobre 2008.

Graph 18 presents the milk farm-gate price dynamics in the last five years in EU-15 compared to EU-10, while Graph 19 presents the farm-gate price dynamics in Romania compared to the EU-25 average and to its main competitors from EU-10. It can be noticed that the average milk farm gate price was generally lower in the EU New Member States, the

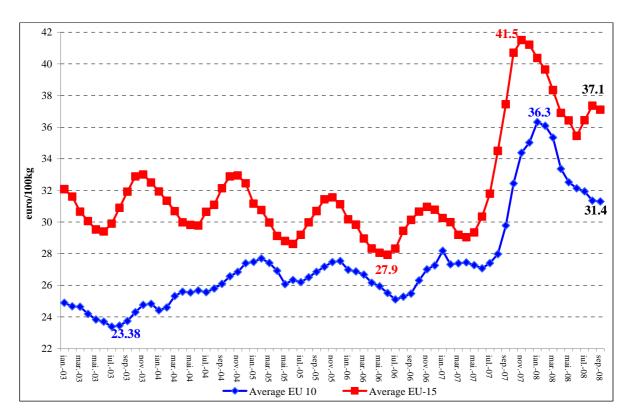
³⁰ Price free of VAT paid to producers for 100 kg standard milk with 4.2% far, 3.4% (raw) proteins, total number of germs 24.999 and of somatic cells: 249.999. Milk is collected every two days, minimum quota/producer 500 thousand kg per year.

difference between the average price in EU-15 and EU-10 being 5.75 euros in September 2008. At the same time, it is worth mentioning that in the market year 2008, in Romania, the farm gate price was the lowest in EU-27, at great distance from Bulgaria and Hungary. This may be a consequence of the support modality to the sector, of the low productivity and quality, as well as a consequence of the high share of self-consumption and of direct sales for which the price is more roughly estimated.



Graph 17: The price paid to producers by the main EU processors for 100 kg conform milk

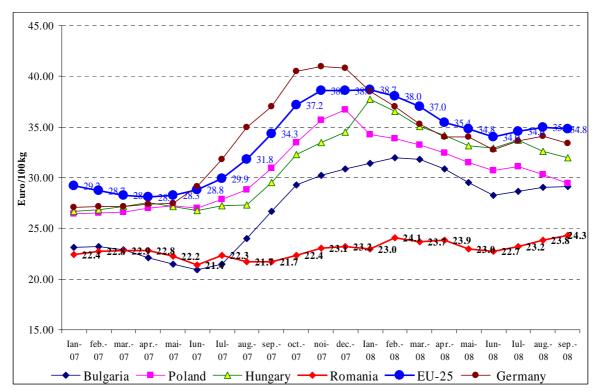
Source: based on processed data base provided byDairyCO – Datum, UK <u>http://www.mdcdatum.org.uk/index.html</u>



Graph 18: Dynamics of farm gate milk price, in EU 15 and EU 10

Source: based on processed data base provided byDairyCO – Datum, UK <u>http://www.mdcdatum.org.uk/index.html</u>

Graph 19: Milk farm gate price in Romania compared to certain EU 10 and EU 25 countries



Source: based on database provided by Consultancy and Market Research Food and Dairy. Italy www.clal.it

The dynamics of milk farm gate price and of the price paid by processors for the delivered milk confirms the price volatility and the fast reaction to market stimuli. According to the press release published on November 25, 2008 by "Dairy Herd" on the occasion of the publication of the recent report "The Global Dairy Industry - Reshaping in a New Market *Era*³¹ designed by Rabobank Food & Agribusiness Research, it is stated that the global milk and dairy market has experienced a continuous metamorphosis and increasing dynamics, regardless of price fluctuations, even though these are increasing. The main determinant of this development is represented, according to the above-mentioned study, by the diversification of the types of consumers and the increase of their educational level, demographic growth as well as the increase in the living standard, mainly in the poor countries, which opened the way to the accessibility of these products. Yet the recent economic evolutions strongly affected the market and the probable impact will be felt both on the short and the longer term. On the short term both the demand and the supply will be temperated, due to the expected cost increases and price increase implicitly. The credit market dynamics will adversely impact the investments, so that the main players on the market will have to prepare new strategies. These statements are valid for Romania as well, which will be also affected by recession. The sector growth and development forecasts, the dynamics of investments may need to be reconsidered, and the development strategies will have to be adjusted.

The same types of estimations can be also found in the recent report on the world dairy market in 2008, developed by a group of researchers from 72 countries that was published in November 2008 ^{32.}

Chapter 3. Quota system implementation in Romania

An analysis that falls into the thematic framework of the present study can be carried out both by presenting certain benchmarks that should define the most important aspects, at national level, and by capturing those characteristic details in the territory. As it has been presented in the previous chapters, the agrarian model specific to the socialist economy, characterized by a high concentration level, was subject to radical changes following the reforms that took place in the transition period.

After 1989, a decreasing trend of herds in all the animal species was noticed. The bovine species experienced a strong decline, as it has been already mentioned. Under the background of this evolution, milk production had a relatively oscillating trend. Milk is mainly obtained in the private sector, mainly on small-sized farms that have been confronted with serious financial and technical problems, which often results in the limitation of the productive potential of this sector.

The small household farms most often produce milk for their own consumption and sell only the surplus to the milk collection centers or at the market place. According to the MAFRD statistics, in the year 2006, there were 1.1 million registered farms raising dairy cows. Out of these, 93% had 1-2 cows.

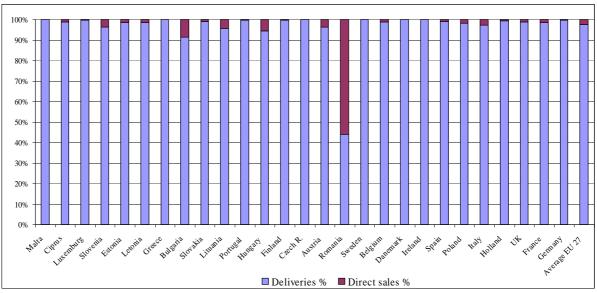
The typical modality of milk production and processing in Romania and the slow rate of change, presented in the previous chapters, characterized by the primary production atomization, modest competitiveness, incomplete restructuring of the processing sector and a non-functional market impacted by an unusual high self-consumption and direct sales on the market, result in a CAP implementation model that is totally different from the other EU Member States.

³¹ http://www.rabobank.com/content/research/FoodAndAgriResearch/dairy/

³² Hemme et al. (2008): IFCN Dairy Report 2008, International Farm Comparison Network, Dairy , Research Center, Kiel, Germany. http://www.ifcndairy.org/

3.1. The milk quotas allocated to Romania and in EU-27 – a comparative analysis of structure and fulfilment

The milk quota allocated to Romania (3.057 million tons) was considered by the specialists as being much under Romania's potential (50% of total production in 2005, used as reference year on which quota calculation was based); yet this was a consequence of the situation of the sector, with small-sized farms, a processing sector in an early development stage, with high self-consumption and a statistical data system with quite inconsistent data on the milk production destination. The ratio of the two components of the quota (44% deliveries to dairies and 56% direct sales obtained as a result of negotiations) is quite strange compared to the quota structure in EU, the share of direct sales being the largest in EU-27 (Graph 20), yet explicable due to the Romanian milk production specificity.



Graph 20: Structure of quotas allocated in EU 27 in the year 2007/2008

Source: based on data provided in the Annex of the report "Milk quota : levies for milk quota exceeds accounted 340 milions EUR", 13 Oct 2008

Romania holds 2.1 % of total quota allocated in EU -27 (Graph 21) being on the twelfth place as regards quota size in EU-27; Germany, France, United Kingdom, Netherlands and Italy together account for over 62% of total quota in EU-27. As it can be seen in Graph 22, the largest number of individual quotas (farmers) for milk delivery to dairies and direct sales are found in Romania (23.1% of total milk delivery quotas from EU-27 and over 82% of total direct sales quotas from EU-27).

It is worth mentioning the huge logistic and administrative effort needed from Romania's part for the processing and monitoring of 43% of the total number of individual delivery and direct sales quotas from EU -27, which in reality represents 2.1% of the overall quota allocated to EU -27, as compared to Germany, for example, which is allocated 19.7% of the EU-27 quota and must process and administer only 6.3% of total individual quotas from EU-27. Poland, after 4 years of quota system implementation (when significant structural changes were produced)³³, in the year 2007/2008 Poland has to administer about 15% of the

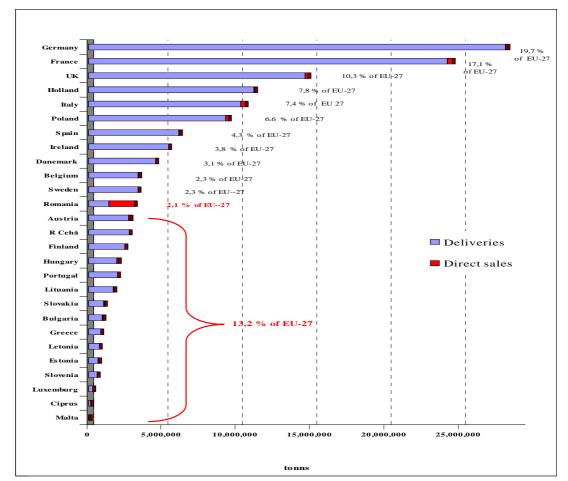
³³ The significant increase of the average number of animals/farm, the diminution of the number of farmers and an increase in the amount of processed milk ("The restructuring process at farm level: evidence from the dairy sector in Poland", in "Re-governing Markets; The Agrofood Sector Studies 2007, www.regoverningmarkets.org.

individual quotas from EU -27, which corresponds to an allocated amount of 6.6% of the EU-27 quota.

Maybe this should be a subject for reflection for the decision-makers: whether the financial effort to administer such a large number of quotas will not result in losses – taking into consideration the fact that most quotas are allocated to direct sales and small farmers, while at the level of many of these the expected effect will not be obtained.

Within the quota, the transfers from one category to another are permitted as long as the allocated amount is not exceeded; the transfer can be requested if the demand exists from the farmers' part. The milk quota is allocated only once to farmers³⁴ and these can use it as they wish: they can sell it, lease it, transfer it by inheritance or ask for its conversion between deliveries and direct sales, and this can be requested once or several times a year. A farmer can have both quota types.

According to the data supplied by DACL in Romania, after the first year of quota administration, 134069 change procedures were registered, out of which 43% were conversion requests, 41% were buyer change requests, 15.5% were transfers and leasing and 0.5% inheritances cases.



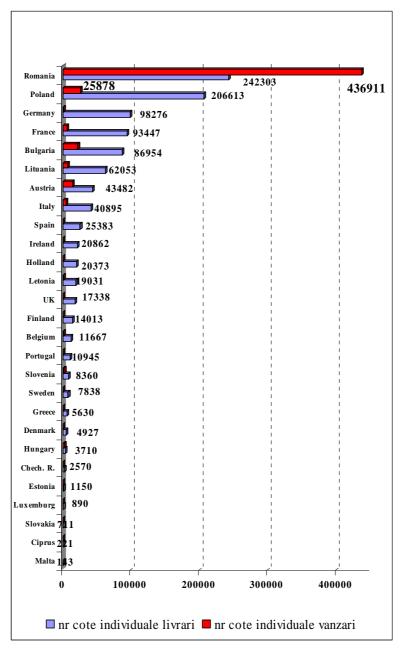
Graph 21: The milk quota allocated in EU-27 in 2007/2008

Source: based on data provided in the Annex of the report "Milk quota : levies for milk quota exceeds accounted 340 milions EUR", 13 Oct 2008

 $^{^{34}}$ The quota could be requested by any farmer who obtained, by milking his cows, a milk production that he wants to sell to the dairy factories and/or directly to consumers (at the market, at farm gate or to neighbours) and who proves that he did that in the reference period (April 1, 2005 – March 31, 2006), for the milk and dairy products that he produced.

As a result after the first year of quota implementation in Romania, the allocated quota structure suffered changes compared to the initial values, so that the deliveries to dairies increased by 27% while the direct sales quota decreased by 9%.





Source: based on data provided in the Annex of the report "Milk quota : levies for milk quota exceeds accounted 340 milions EUR", 13 Oct 2008

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 $^{^{35}}$ The quota could be requested by any farmer who obtained, by milking his cows, a milk production that he wants to sell to the dairy factories and/or directly to consumers (at the market, at farm gate or to neighbours) and who proves that he did that in the reference period (April 1, 2005 – March 31, 2006), for the milk and dairy products that he produced.

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The dynamics of the process provides a first pertinent signal by which it can be estimated that the application of this policy in Romania can represent the "propeller" of a more accelerated restructuring process, which can also have negative consequences for certain segments, mainly for the small-sized and subsistence farms.

After processing the annual declarations of the Member States and the publication of the provisional data on milk quota fulfilment/exceeding³⁶ in the year 2007/2008, per total EU-25, according to the presented data, the exceeded quantity is by 53% higher compared to the year 2006-2007, i.e. by 767000 tons under the background of a total quota increase by 491000 tons in the year 2007-2008. The countries that exceeded the delivery quota were Germany by 1.3%, Ireland by 0.7%, Italy by 5.6%, Cyprus by 3.9%, Netherlands by 1.3%, Austria by 3.2%; the following countries exceeded the direct sales quota: Cyprus by 17%, Luxemburg by 5.9% and Netherlands by 5.9%. According to the provisional data published by the European Commission in October 2008, in 2007-2008 in Romania only 69.7% of the delivery quota and 83% of the direct sales quota were fulfiled; the percentage of total allocated quota fulfilment was 77%. Bulgaria, which is also in the first year of quota system implementation, fulfiled 85.1% of the delivery quota and 61% of the direct sales quota; overall, it fulfiled 83% of the allocated quota. Hungary fulfiled 89.2% of the allocated delivery quota and 48% of the direct sales quota, i.e. 87% of its total allocated quota while Poland fulfiled 96.4% of the delivery quota and 79% of the direct sales quota, i.e. 97% of the total quota that was allocated to it.

A thorough analysis of the allocated quota in the territory that has been fulfiled by a Member State can provide certain significant benchmarks for the identification of certain national policy measures that are complementary to the European policy; these are extremely necessary as the quota system implementation (policy measure targeting the control of supply) is applied in Romania due to the harmonization with the EU policy and legislation imposed by the accession process rather than out of economic reasons justifying its necessity. This statement is perfectly sustainable as in Romania it cannot be considered that a supply limiting measure is suitable to the specificity and dynamics of the Romanian market. In exchange, the milk quality rigors, which are imposed to the whole chain, would not have been a desideratum for the Romanian milk producers if this had not been imposed and possibly supported by funds dedicated to restructuring through CAP.

3.2. Quota distribution – a regional analysis

As we have presented in the previous chapters, the milk quota allocated to Romania represents only a part of the total cow milk production obtained in Romania and presents significant differences in the territory (Figure 1). Out of total milk production obtained in the year 2007, the allocated quota represents 56.1%. The territorial distribution is significantly heterogeneous. High quota shares (over 74% of total production fulfiled) are found in the

³⁶ AgraEurope, 15.10.2008 and The milk quotas : the fees for exceeding the milk quotas total 340 million EUR", 13 October 2008

counties Constanța, Covasna, Harghita and Mureș. The counties Gorj, Dâmbovița, Prahova, Buzău, Ialomița and Bucharest lie at the opposite pole; in these counties the shares of milk quota in total production are lower than 40%.

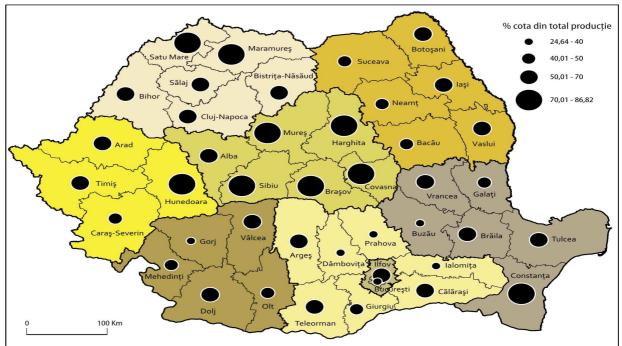


Figure 1: Territorial distribution of milk quota in total production

Source: based upon the processing of DACL data (2008)

At national level, the average milk yield was 3079 kg in the year 2007. (figure 2)

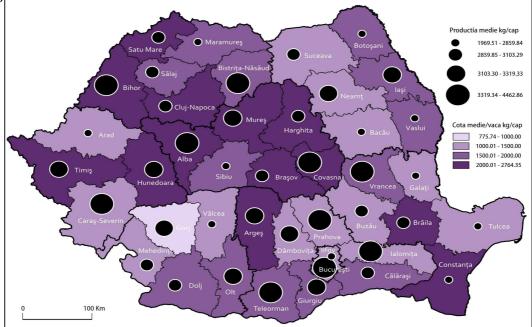


Figure 2: Territorial distribution of average vield and milk quota

As we have already mentioned, Romania, as well as each Member State, received a national quota that was distributed to the individual producers under the form of: a) delivery quota and b) direct sales quota. A producer can have both types of quota.

The structure of direct sales and delivery quota practically reflects the specificity of dairy cows raising in our country, which takes place mainly on small-sized household farms; it should be mentioned that Romania is the only country in EU-27 with this structure in which the direct sales quotas prevail (see Graph 16). In the territory there is an unequal distribution with regard to the share of deliveries and direct sales in total allocated quota (Figure 3).

Seven counties located in the northern and central part of Romania have a significant share of deliveries in total allocated quota. These are: Covasna, Sibiu, Mureş, Cluj, Bistrița-Năsăud, Suceava and Botoşani. In the south-western part of Romania there are counties with low and very low shares (under 12%) of deliveries in total quota. Among these, the following can be mentioned: Hunedoara, Vâlcea, Argeş, Olt, Dolj and Mehedinți.

The territorial analysis of the share of direct sales quotas in total allocated milk quota reveals an identical situation to that found in the case of the delivery quota share.

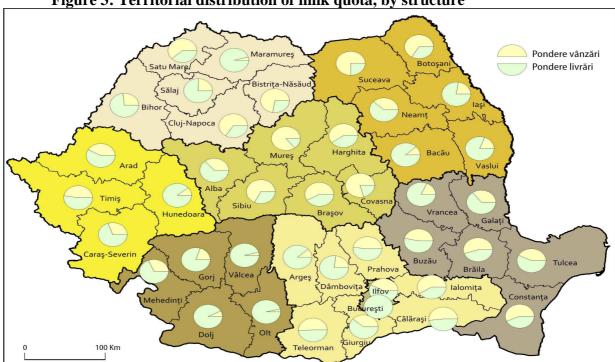


Figure 3: Territorial distribution of milk quota, by structure

Source: based upon the processing of DACL data (2008)

The analysis of milk quotas allocated for deliveries to dairies and for direct sales was carried out by five size classes: i) under 3000 kg; ii) 3000-5000 kg; iii) 5000 -50 000 kg; iv) 50 000 -100 000 kg; v) over 100 000 kg. Within these categories, the number of producers under each size class of allocated quota was also taken into consideration.

3.2.1. Distribution of delivery quotas

A territorial analysis by classes of the number of producers that are allocated delivery quota reveals the following situation (Figure 4):

- class: under 3000 kg: the largest number of producers that have been allocated small quantities of milk are found in the counties Tulcea and Dâmbovița and the smallest

number of producers are found in Sălaj, Maramureş, Bacău, Hunedoara, Gorj, Vâlcea, Argeş and Ialomița;

- class 3000 5000 kg: the counties Vâlcea, Giurgiu, Dâmbovița, Bacău and Vaslui have the largest number of producers that fall into this class, while Tulcea, Prahova, Ialomița, Ilfov and Hunedoara have the smallest number of producers in this class;
- class 5000 50000 kg: in the counties Gorj and Vâlcea there is no milk producer that falls into this category. The county Hunedoara has the largest number of producers that have been allocated delivery quotas ranging from 5000 to 50000 liters;
- 50000-100000 kg: the largest number of producers that have been allocated delivery quotas from this category are found in the counties Ilfov and Hunedoara. On the other hand, the smallest number of producers are found in the northern part of the country in 11 counties as well as in the southern part of Romania (Caraş-Severin, Gorj, Vâlcea, Dâmboviţa and Prahova);
- over 100000 kg: the largest number of producers with delivery quotas of over 100000 kg cow milk are found in the county Hunedoara. In the counties Gorj and Vâlcea there is no producer that falls into this category.

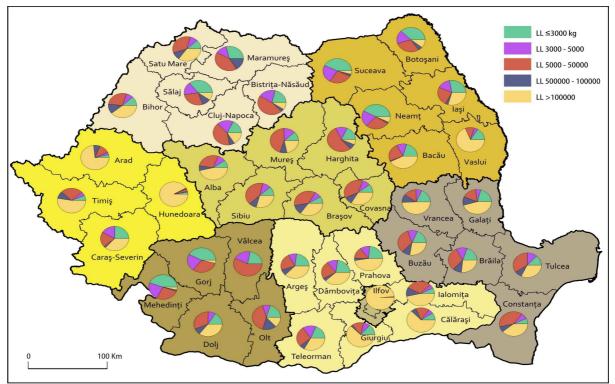


Figure 4: Territorial distribution, by classes, of the agricultural producers that have delivery quotas

Source: based upon the processing of DACL data (2008)

The territorial analysis, by classes, of the total milk quantity allocated to delivery quota, has the following particularities (Annex 5):

- class: under 3000 kg: the largest amount of quota allocated under this class is found in the counties Tulcea and Dâmbovița, while the lowest in 8 counties located in the south-western and western part of Romania;
- class 3000 5000 kg: the counties Hunedoara, Tulcea, Prahova, Ilfov and Teleorman have the lowest milk delivery in this group. The counties Bacău, Vaslui, Vâlcea, Dâmbovița and Giurgiu lie at the opposite pole;

- class 5000 50000 kg: in this group the counties Hunedoara and Ilfov have the largest delivery quotas. Five counties from the south Romania and eleven in the north have extremely low delivery quotas that fall into this size class;
- 50000-100000 kg: the largest delivery quotas in this group are found in the county Hunedoara and the lowest delivery quotas are found in the counties Gorj and Vâlcea;
- over 100000 kg: in the counties Mehedinți and Vâlcea there are no delivery quotas that fall into this category, while seven counties are on a top position in this respect.

From the analysis and processing of information supplied by DACL on delivery quota allocation to buyers/processors and producers related to each of them (Table 7) it can be noticed that out of total delivery quota allocated to Romania, 53% is distributed to 30 "active buyers" (7% of the total number of buyers/processors) among which the great players on the market are found, namely SC Friesland Romania SA, SC Danone SRL, SC Hochland Romania SRL, SC Napolact SA, SC Covalact SA, SC Albalact SA, SC Industrializarea laptelui Mureş SA, SC lactate Harghita SA, SC Dorna lactate SA (Lactalis), SC Prodlacta SA, etc. These 30 buyers/processors that have been allocated over 50% of the milk quota have to collect the milk from more than 115 thousand producers (43% of total producers with delivery quota). 155 buyers/processors (36% of total) should collect milk from about the same number of producers while 57% of buyers/processors that have been allocated 11.4% of the delivery quota have to collect milk from over 37 thousand producers (13.7% of total).

Analyzing the delivery quota distribution by the number of producers with individual quotas allocated to buyers, 14 of these (among which SC Friesland, SC Napolact SA, SC Dorna lactate (Lactalis), SC Hochland Romania SRL, SC Covalact SA, SC lactate Harghita SA etc) have to collect milk from 13000-3000 producers, most of them with an average number of 3-4 cows / agricultural holding. 10 buyers have to collect milk from only one producer, most of these having medium-sized farms ranging from 35-55 to 250 heads. Other 12 buyers (among which SC Tnuva Dairies, SC Danone) collect milk from 1-2 producers with average farms of 250-50 heads.

Table 7 Categories of buyers/processors classified by the size of allocated delivery quota
and the number of producers from whom they have to collect the milk

No of buyers/processors by categories according to % of delivery quota allocated to a buyer/processor in total delivery quota	Allocated delivery quota Kg	% of total allocated delivery quota	No of producers /buyer- processor	% of total producers with delivery quota
The first 30	699041360	53.56	115028	43.1
7.5 % ≥ 0.6% The next 155	456956208	35.01	117088	43.2
0.5% ≥0.11%			11/000	
The last 248 0.10% ≤ 0	149096774	11.43	37777	13.7

Source: based upon the processing of DACL data (2008)

A more detailed analysis based upon the estimation of the average size³⁷ of farms (producers) that deliver milk to buyers/processors (Table 8) reveals that 236 buyers/processors (among which 12 of the first 30 great buyers on the market) have to collect

 $^{^{37}}$ for the producers with large average quotas / farm a high productivity was considered (3500-4000 kg/cow exclusive of technological consumption, while for the producers with medium quotas under 3000 kg a medium productivity was considered 1750 KG exclusive of technological consumption, self-consumption) and 2500 – 3000 kg for medium quotas over 3000 kg.

the allocated milk (45% of total quota) from over 189 thousand small producers (with 1-2 cows per farm). 141 buyers/processors (among which 14 of the first 30 great players on the market) have to collect the allocated milk (44% of total quota) from almost 78 thousand producers with an average number of 2-5 cows. 25 buyers/processors (among which 2 of the first 30) have to collect the milk (4.6% of total delivery quota) from 2367 producers with 5-20 cows per farm on the average. 6 buyers collect milk from 161 producers with 50-100 animal heads/farm on the average and other six buyers from 19 large farms (with 100-250 cows), the two categories having a quota of 4.9% and 1% respectively from the total delivery quota.

Table 8. Number of buyers / processors by categories, according to their position in relation to the size of allocated quota in total delivery quota and the related number of producers by categories of size (average number of cows/farm and the volume of average delivery quota) from which these have to collect milk

The position of the buyer/food Nr of outcar Nr of moducers Nr of process Nr of moducers Nr of producers Nr of producers </th <th></th> <th></th> <th>- -</th> <th></th> <th></th> <th>D</th> <th>NT C</th> <th></th> <th>D</th> <th></th> <th></th> <th>D</th> <th>NT (</th> <th></th> <th>D</th> <th>NT 6</th>			- -			D	NT C		D			D	N T (D	NT 6
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	Total	256	585.9	189431	141	581.7	77945	25	60.1	2337	6	64.0	161	6	13.5	19

The first 30 buyers / food processors according to the allocated deliveries quota	The allocated delivery quota 699 Th tonns	% of the total allocated deliveries quota in the total deliveries (53 %)	No of producers with deliveries quota 115028 (42.6 % of the total producers with deliveries quota)	Average size of farms Heads/farm
	217.8	16.7	62567	
	49.2	3.77	11365	
OUP SRL, SC . LAPTELUI ZAL SRL, SC NAPOLACT S/ SA, SC DORNA .SC LACTO .ARAUL SA, SC NAL, SC LACT	26.8	2.06	5642	
GROUP SRL IND. LAPTEI KAZAL SRL SC NAPOLA SC NAPOLA TA SA, SC D alis),SC LAC C RARAUL TONAL, SC I	25.6	1.96	9062	
IVE CONTINENTS GROUP SR UCOVINA SA, SC IND. LAPT ARGHITA SRL, SC KAZAL SF FULDA PROD SRL SC NAPOI ACTATE HARGHITA SA, SC LACTATE SA (Lactalis),SC LA DMONESCU SRL, SC RARAUI LMERA INTERNATIONAL, SC SA	21.9	1.68	6308	
DOL NZAZA SAZA NA NA NA	16.6	1.27	7003	
GR(KA) KA) KA) SC R alis)	13.7	1.05	4459	ad
NTS (, SC) , SC) , SC , SRL (GHI (GHI (GHI (GHI (CGHI (CGHI (SRL, S (SA)) SA	12.3	0.94	4922	1-2 head
INEN SRL, SRL, COD S COD S COD S COD S U SRI U SRI U SRI	11.7	0.90	3328	1-2
HZ A SHORE A S	10.9	0.83	3503	
	10.5	0.81	2697	
HOLE CONTRACTOR	10.1	0.78	2079	
FIVE CONTINENTS GROUP SRL, SC BUCOVINA SA, SC IND. LAPTELU HARGHITA SRL, SC KAZAL SRL, S ROMFULDA PROD SRL SC NAPOLACT SC LACTATE HARGHITA SA, SC DOR LACTATE SA (Lactalis),SC LACTO SOLOMONESCU SRL, SC RARAUL SA SC ALMERA INTERNATIONAL, SC LA SA	8.4	0.64	2199	
. r .	386.2	29.6	51459	
SC FRIESLAND ROMANIA AND ROMANIA SRL, SC C.ALBALACT SA SC IND. SA, SC. SC CARMO-LACT C IND. LAPTELUI SA TYROM SA, SC GORDON HWABEN MOLKEREI, SC SRL, SC ILVAS SA, SC JLACTA SA	97.3	7.5	13002	
NM/ SC SC SC SC SC SC SC SC SC SC SC SC SC	55.8	4.3	6348	
SC FRIESLAND ROMA AND ROMANIA SRL, S C.ALBALACT SA SC II SA, SC. SC CARMO-L. SA, SC. SC CARMO-L. TYROM SA, SC GORL HWABEN MOLKEREI, SRL, SC ILVAS SA, SC VLACTA SA	34.7	2.7	5848	
AIA SCALER AS	34.6	2.6	2455	
SA AC	33.2	2.5	5415	
A C I N S C S I S S I S S I S S I S S I S S S S	23.9	1.8	2878	р
A, SC FRIESLAND HLAND ROMANIA A, SC.ALBALACT S RES SA, SC. SC CAI L, SC IND. LAPTEL SC. TYROM SA, SC SCHWABEN MOL TO SRL, SC ILVAS SANLACTA SA	21.3	1.6	3854	2-5 head
SC FJ AND C.AI C.AI C.AI C.AI TYI HW/ HW/ SRL	17.3	1.3	2222	2-5
3000000A	16.9	1.3	2459	
SC S	12.3	0.9	2004	
PRODLACTA SA, SA, SC. HOCHLA SA, SC. HOCHLA COVALACT SA, S LAPTELUI MURES PROD SRL, SC PROD SRL, SC PROD SRL, SC LECH-LACTO SAN SAN	11.1	0.8	1202	
SC. SC. SC. SC. SC. CH	9.6	0.7	1596	
	9.6	0.7	1141	
PR(S CO CO LAH PR	8.7	0.7	1035	
—	25.0	1.9	839	5-20 heads
2 buyers procesors	13.1	1.0	611.0	e no neado
2 bu roci	11.9	0.9	228	
-	60.9	0.9 4.7	151	50 -100
1 buyers procesors 1 buyers procesors	9.2	4.7 0.7	131	50 - 100 heads 100 - 250 heads

3.2.2. Distribution of the milk processing units in the territory

Since mid-1990s, many dairy factories have had as main objective the modernization of existing production capacities and their utilization at a level as closest possible to the designed capacity. In this respect, new equipment and transport means were bought, the production premises were modernized, so that these companies can comply with the quality requirements imposed by the international standards. The situation improved from the quality point of view through the purchase of new equipment (for the analysis of the physicalchemical properties of raw milk and dairy products; cleaning and disinfection systems of the technological flows, of the technological equipment and installations, etc.) and of transport means; the production and storage premises were also modernized.

According to the data supplied by the National Sanitary-Veterinary and Food Safety Authority, in mid-2008 in Romania there were 264 dairy factories classified into four categories, namely: 35 units authorized for Intra-Community trade; 42 units conform to the Community requirements, authorized to receive and process conform and non-conform milk on non-separated lines³⁸; 2 units in conformity with the Community requirements, authorized to receive and process conform and non-conform milk on separate lines³⁹; 185 authorized units for a period of transition until 31.12.2009⁴⁰.

There is a significant concentration of processing units in the northern part of Moldova, mainly in the counties Suceava, Botoşani şi Neamţ; in the central and northern part of Romania, in the counties Mureş, Bistriţa-Năsăud, where there are favourable conditions for livestock raising, not only due to the presence of large areas under pastures and hayfields, but also due to the local tradition in raising bovines and cheese making. Another zone featuring a high concentration of dairy factories is in south-east Romania.



Figure 5: Distribution of dairy factories in the territory

³⁸ Chapter 1 from Annex to Commission Decision 2007/557/EC

³⁹ Chapter 2 from Annex to Commission Decision 2007/557/EC

⁴⁰ Annex to Commission Decision 2007/710/EC

An important issue with regard to milk processing is the raw milk collection from the producers, as we have already mentioned in the previous chapter (in Romania's case, milk is largely collected from the small producers).

The fluctuations of the raw milk quantities throughout the year are quite high due to the seasonal production and to the scattering/sometimes concentration of producers at regional level. The utilization of production capacities is different each year and also from one month to another and from one region to another.

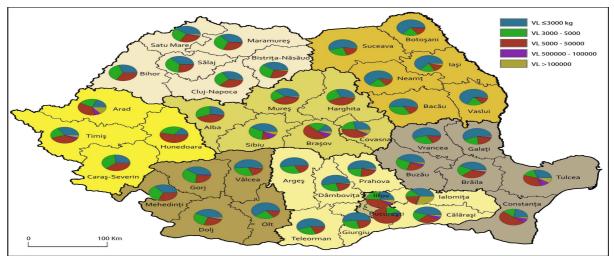
With regard to the location of raw milk collection centers, there is no favourable relation between the supplied quantity and the distance to the collection centers, because significant quantities also come from great distances (and as it could be seen in the foreign trade chapter, even from imports).

3.2.3. Distribution of direct sales quotas

A territorial analysis, by classes, of the number of producers who have direct sales quota, reveals the following situation (Figure 6):

- class: under 3000 kg: the largest number of producers with direct sales quota that fall into this category is found in the county Braşov, and the smallest number in the counties Maramureş, Buzău, Vrancea and Mehedinți;
- class 3000 5000 kg: the largest number of producers with direct sales quota that fall into this category is found in the county Buzău. The county Braşov lies at the opposite pole. A compact group of counties can be noticed with quite low direct sales quotas (Sibiu, Mureş, Harghita, Covasna, Prahova);
- class 5000 50000 kg: under this category, the lowest level of direct sales quotas is found in the county Sibiu. In the county Hunedoara and a group of three counties located in the south-eastern part of the country (Călăraşi, Constanța and Tulcea) the largest milk quantities allocated for direct sales from this size category are found;
- 50000-100000 kg: the largest number of producers with direct sales quota under this size category are found in the county Braşov. On the other hand, the smallest number of producers from this group are found in the counties Caraş-Severin, Bistrița-Năsăud, Covasna, Prahova, Teleorman and Giurgiu;
- over 100000 kg: the largest number of producers with direct sales quota over 100000 kg of milk are found in the counties Iaşi and Ialomița. Four counties are found in this category (Maramureş, Caraş-Severin, Gorj și Mehedinți).

Figure 6: Territorial distribution of the agricultural producers with direct sales quota, by classes



- class: under 3000 kg: the largest milk quantity allocated to this group is found in the counties Iaşi, Vaslui and Argeş and the lowest in five counties with a non-uniform distribution, namely Braşov, Covasna, Tulcea, Ialomița and Ilfov;
- class 3000 5000 kg: the lowest quantities under this size class are found in the counties Covasna, Ialomiţa, Călăraşi and Tulcea. The counties Bihor, Hunedoara and Argeş lie at the opposite pole;
- class 5000 50000 kg: the largest milk quantities allocated to direct sales that fall into this category are found in the western part of the country, in the counties Bihor, Hunedoara and Alba. The counties with the smallest direct sales quotas under this size class are found in the south and south-eastern part of the country (Galați, Tulcea, Ialomița and Călărași) as well as in the counties Sibiu and Prahova;
- 50000-100000 kg: the counties Arad, Braşov and Constanța have been allocated the largest direct sales quotas under this size class. Three counties in the south part of Romania (Teleorman, Giurgiu and Ialomița) and three in the north (Bistrița-Năsăud, Suceava and Iași) have been allocated small direct sales quotas that fall into this size category;
- over 100000 kg: under this size class, the largest direct sales quotas are found in the county Arad. Twelve counties scattered on the whole territory of Romania lie at the opposite pole.

3.2.4. Regional analysis of the milk quota quality

Romania's accession to the European Union implies the respect of the *acquis communautaire* in the first place, asking for products quality improvement in the case of milk and dairy sector. Reaching the minimal performance parameters in the milk sector presupposes both dairy cow farms modernization and the restructuring of dairy factories in the food industry and obtaining a high quality milk, conform to the requirements imposed by the EU standards.

Milk production in conformity with the European standards represents a stringent problem in Romania for all the categories of producers, regardless of their size. Complying with these requirements implies adopting modern production technologies.

Raw milk quality in Romania is regulated by the standards established at EU level by the Council Directive no. 46/1992. Thus, out of total allocated quota, only 17.2% reached these standards in the market year 2007-2008. If we take into consideration the delivery quotas, the conform milk percentage is 39% per total country.

The territorial distribution of conform milk percentage, out of total allocated quota, reveals above the average situations in the counties Bistrita-Năsăud, Suceava, Mureş and Gorj). The share of milk delivered as conform milk is extremely high (over 80%) in the counties Hunedoara, Dolj, Vâlcea, Argeş, Olt and Bacău (Figure 7).

For the estimation of the share of milk that conforms to the EU quality standards in total production and allocated quota, the value of payments received by counties as premium for the conform delivered milk was taken into consideration, as lever used for stimulating milk quality increase.

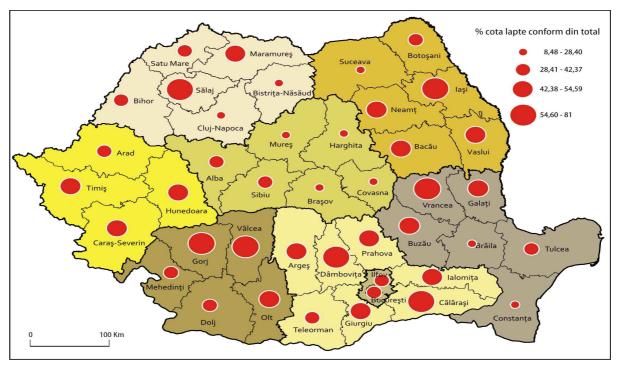


Figure 7: Territorial distribution of the conform milk share in total allocated quota

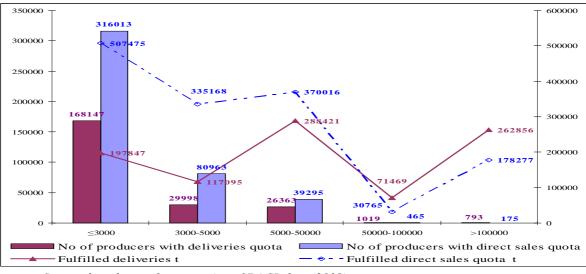
Source: based upon the processing of DACL data (2008)

3.3. Quota fulfilment after the first year of quota system implementation

According to the provisional results published by the European Commission⁴¹ one year after the milk quota system was implemented, 242 303 active buyers reported a total milk quantity for processing of 937 689 tons, which represents 71.4% of the delivery quota; 436911 producers reported direct sales of milk and dairy products in milk equivalent of 1421 thousand tons, which accounts for 82.1% of total direct sales quota allocated for the year 2007/2008. Graph 23 present the situation of quota fulfilment at national level in the market year 2007/2008 by categories of producers according to the allocated quota.

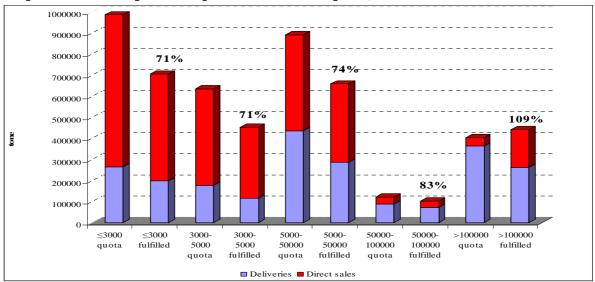
The quota non-fulfilment percentage per total country is quite high, mainly in deliveries - almost 30% and about 18% in direct sales. Graph 24 presents on a comparative basis the structure of quota allocation and fulfilment both for delivery and for direct sales, by categories of producers and allocated quotas.

⁴¹October 13, 2008, "Milk quotas: the fees for exceeding the milk quotas totaled 340 million EUR"



Graph 23: Milk quota fulfilment, 2007-2008

Source: based upon the processing of DACL data (2008)



Graph 24: Fulfiled quota compared to allocated quota, 2007-2007

Source: based upon the processing of DACL data (2008)

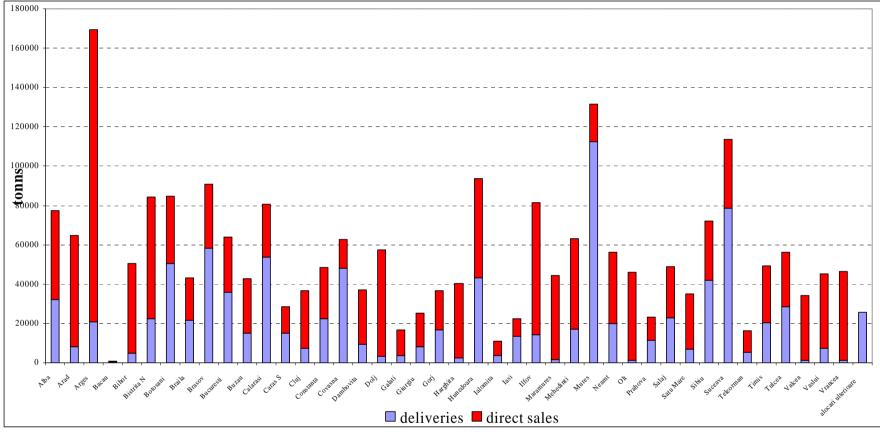
As it can be easily noticed, the highest percentage of quota non-fulfilment (71%) is found in the small producers categories with allocated quotas under 3000 kg and 3000-5000 kg, hence in the producers that have 1-2 cows, up to 3-4 animals/farm on the average. The large commercial farms (over 100000 kg) even exceeded quotas by 9%, while the farms with quotas ranging from 50000 to 100000 kg fulfiled their quotas in a percentage of 83%. The medium-sized producers (quotas of 5000-50000 kg) fulfiled 74% of the allocated quota on the average.

Graph 25 presents the structure and volume of milk quotas fulfiled by counties in 2007/2008; Graph 26 presents the volume and percentage of quota fulfilment versus initial allocations by counties. If the DACL data have a high accuracy level, on the basis of which these results were obtained, it can be concluded that there are significant differences between counties as regards the structure (% deliveries and % direct sales fulfiled) and the volume of quota fulfilment.

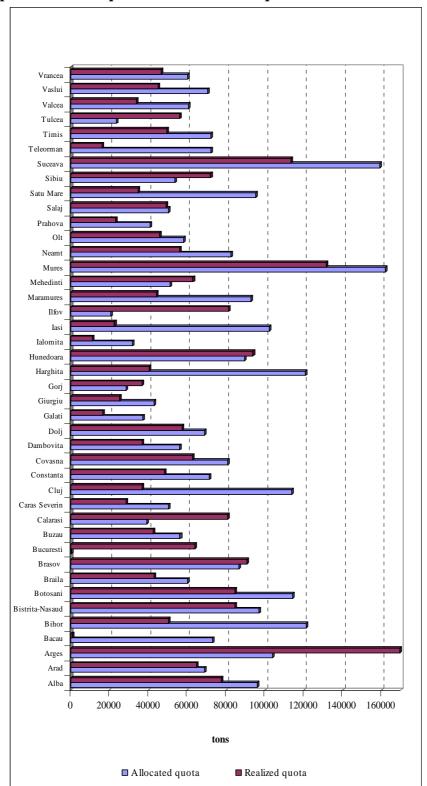
This situation, if analyzed in correlation with the situation of initial allocations at regional level, may give a first picture of the quota fulfilment potential and on the quota dynamics in the future.

Graphs 27 and 28 present the quota fulfilment/non-fulfilment dynamics in relation to the size and number of producers with delivery and direct sales quotas. The picture is extremely suggestive and can provide an insight into the quota potential and future evolutions. The most significant category of producers that have not submitted declarations is represented by the small producers, under 3000 kg both for deliveries and for direct sales; those who submitted declarations with 0 are mostly found in the case of deliveries.





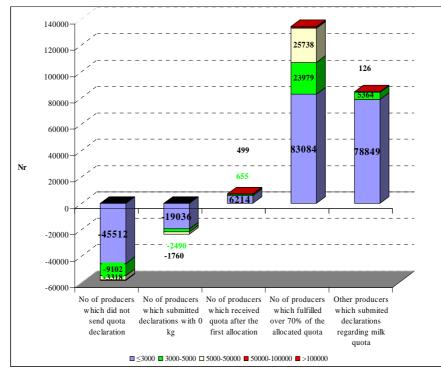
Source: based upon the processing of DACL data (2008)



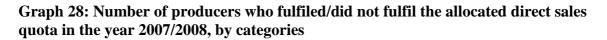
Graph 26: Fulfiled quota versus allocated quota

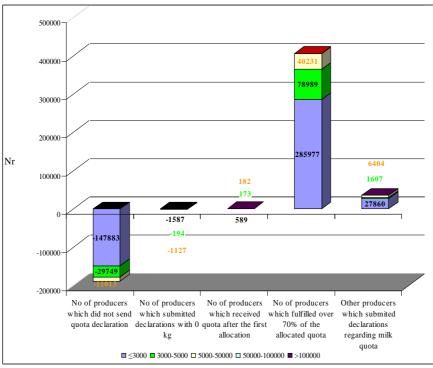
Source: based upon the processing of DACL data (2008)

Graph 27: Number of producers who fulfiled/did not fulfil the allocated delivery quota in the year 2007/2008, by categories



Source: based upon the processing of DACL data (2008)





Source: based upon the processing of DACL data (2008)

Considering these results, obtained after one year since quota system implementation, as well as the atomized structure of their distribution, where the small producers have a

significant share both in deliveries and in direct sales, and the fact that Romania is at the first exercise of this system implementation, the non-fulfilment of quotas was expected, even in a higher percentage.

The main causes that lie at the basis of this judgment, merely exploratory, are related to the following aspects that we have identified and that we next submit to debate.

Quota allocation to the small producers has been probably made *ex officio* by the authorities (mainly in the case of direct sales), as an absolutely necessary solution not to lose the allocated quota for Romania, which was under our country's potential. This statement belongs to us and is based on our finding after processing the database supplied by DACL and MARD. The delayed reaction of the small farmers when submitting the quota declarations comes to support our hypothesis. Maybe another reason that lay at the basis of the decision to allocate quotas to small producers envisaged the creation of premises for a quota market, which has not happened, at least not at the expected level. The processors who intended to make investments could have been the first buyers of quotas from the small producers, and this did not happen; the transfers between categories (direct sales and deliveries) were not dynamic enough, and the processors' expectations were rather allocations from the national reserve.

The analysis of the structural dymamics of the sector, corroborated with our perception in the field (discussions with the small producers and the consultancy organizations) lead us to the conclusion that the quota non-fulfilment percentage at the level of these small producers exceeded our expectations in a positive sense. Probably the consultancy structures (ANCA and OJCA) and the General Directorates at county level supported the small producers in filling in their documents and declarations, which is a good thing, as this requires a very large amount of work. (in annex 5 is a completed declaration).

The most important aspect that we want to signal out is the lack of information or rather the way in which the milk quota system operation in the rural area is explained. The correct information, in advance, could have largely changed the small producers' perception of "quotas", who invariably, mainly in the case of older people, consider that quotas are rather an obligation and not a benefit that will continue to give them the right to produce.

After the unfortunate experience of imposing quotas in the communist period, it is difficult to destroy this myth", as it is very difficult for them to have a right perception of the cooperative concept. The low understanding level of the utility and need of a quota system that practically does not bring them any benefit at present, but only complicates their activity as it obliges them to keep written evidence (that can be checked up) of sales, makes them reticent with regard to this practice.

The lack of information with regard to this policy will result in implementation problems in the future, as this segment of producers has a considerable size and hence it cannot be neglected. Although in most EU New Member States the quota system implementation effect induced production concentration and significant restructuring, on the basis of our previous analysis, we estimate that the restructuring rate in Romania will not be as high. The habits that have been accumulated in time and the precarious economic situation in the rural area will be the main determinants, so that this segment of small producers and the direct sales will continue to have quite a high hare in the future. A producer with 1-2 cows who already have customers that give him a better price for his milk than the processor without asking for a better milk quality, will continue to sell the milk in the same way and use it for self-consumption by virtue of inertia; this inertia is due, on one hand, to the suspicion raised by the need to make declarations and keep an evidence of the sold quantities, that can be subject to taxes, and on the other hand because the largest part of this segment of producers do not understand at present the benefits that the quota system can provide and consequently the disadvantages of losing this quota. Maybe if the quota market had operated in this first year, an eventual possibility to sell the quota would have been the only reason why the small

producer would have been extremely interested in requesting the milk quota or make the necessary declarations in due time.

Chapter 4. The milk quota system in the mountain area

In Romania, the mountain zone, which is declared less favoured area, has a particular importance: it covers 70,101 km² (29.4% of Romania's total area) and have a population of 2,405,746 inhabitants (11% of total population) (Table 10). The dominant characteristic is the low population density, i.e. 34.30 inhabitants/ km², which represents one third of the national average population density.

Specification	The mountain less	Total
	favoured area	national level
Total area (km2)	70.101,73	238.391,00
Total no of inhabitants	2.405.746	21.784.072
Population density (inh/ km2)	34,32	91,36
Population dynamics 1992 - 2002 (%)	95,55	95,74
Total employed population (TEP)	815.297	7.798.011
Employed population in agriculture (EPA)	328.101	2.148.631
Share TEP/EPA (%)	40,24	27,55

Table 10. Dem	ographic indicato	ors in the mo	ountain area
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Source: based on authors calculation upon statistical informations of each village (2002); RLP(1992;2002)

Due to the restrictive conditions of the geographic environment in the mountain area, the evolution of the number of inhabitants had negative values in the period between the two censuses. This phenomenon of population decrease has several causes, among which the population migration, the low birth rate and high death rate are the most important.

In the mountain area, the employed population totals 815,297 people (10.4% of the employed population in Romania), with a high share of the population employed in agriculture (40.24%) compared to the national average (27.55%).

The transformations produced at legislative, economic and social level after 1989 acted as an attraction-rejection mechanism for the population in the mountain area. While the young population preferred to migrate to other areas, more developed from the economic point of view, the older population, which became unemployed or the retired population in the urban area had the tendency to return to their native rural localities. The attraction of the unemployed population from the urban areas to the rural areas was also favoured by the land reform initiated in 1991.

The mountain areas classified as less favoured areas (in conformity with EU standards) are characterized by a considerable limitation of the possibilities to use the land and the increase of the land operation costs due to: i) the existence of difficult weather conditions, due to the high altitude, the effect of which is a considerably shorter plant growing season; ii) at lower altitudes, the presence of too steep slopes for the utilization of the usual agricultural machinery and the need to use expensive special equipment for these relief conditions; or iii) combinations of these two factors, when the resulting handicap considered separately is less severe, but in combination the handicap is more serious⁴².

2,761,602 ha agricultural land is found in the mountain areas. The natural conditions largely permit the development of natural pastures and hayfields, which cover 77.93% of the agricultural land area (Table 11).

⁴² Art. 36

Specification	The mountain less favoured area	Total national level
Agricultural land (ha)	2.761.602	14.808.215
Share of agricultural land in the total area (%)	39,39	62,10
Arable (ha)	555.598	9.388.892
Pondere arabil în agricol (%)	20,12	63,40
Orchards (ha)	48.573	240.656
Share of orchards in agricultural land (%)	1,76	1,63
Vineyards (ha)	5.221	2.59.377
Share of vineyard in agricultural land (%)	0,19	1,75
Pastures (ha)	1.258.810	3.411.576
Share of pastures in agricultural land (%)	45,58	23,04
Fânețe (ha)	893.400	1.507.714
Pondere fânețe în agricol (%)	32,35	10,18

Table 11. Agricultural land area utilization in the mountain areas

Source: based on authors calculation upon statistical informations of each village (2002); RLP(1992;2002)

The measures to support agriculture in the mountain areas could contribute to the maintenance of young population in the rural area and even to the return of some of the people who left this area. In the absence of the support to this less-favoured area, there is a risk for the continuation of this area depopulation and for the agricultural land abandonment.

Livestock raising is a traditional activity in the mountain areas due to the large areas under natural pastures and hayfields that cover the slopes and plateaus of the Carpathians. 18.2% of the total number of animals expressed in conventional units is raised in the mountain areas. The number of animals is low both by hectare (0.45 LLU/agricultural ha) and by agricultural unit (1.55 LLU) (Table 12).

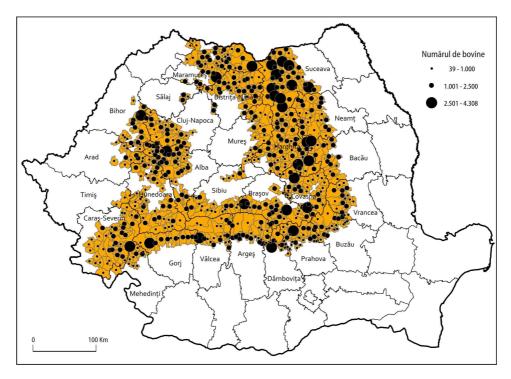
Table 12. Livestock raising in the mountain areas

Specification	The mountain less favoured	Total
	area	national level
Number of LLU	1.254.768	6.892.397
LLU / ha agricultural area	0,45	0,47
LLU / agricultural unit	1,55	1,45
Number of bovines	694782	2870782
Share of bovines herds from mountain area in the total herds	24,20	100,00

Source: based on authors calculation upon statistical informations of each village (2002); RLP(1992;2002)

Raising bovines is one of the main livestock production activities in the mountain area economy. According to the data of the General Agricultural Census, almost 700 thousand bovines are raised in the mountain areas, which represent 24.2 % of the total number from Romania.

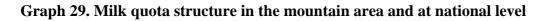
The analysis of the bovines distribution by communes reveals the following situation: a) 49.20% of the communes have bovine herds under 1000 heads; b) 46.40% have bovine herds ranging from 1001 to 2500 heads; c) in 4.20% of communes more than 2500 heads are raised (these localities are mainly found in the counties Suceava and Harghita) (Figure 8). Figure 8. Territorial distribution of communes by the number of bovines in the mountain areas

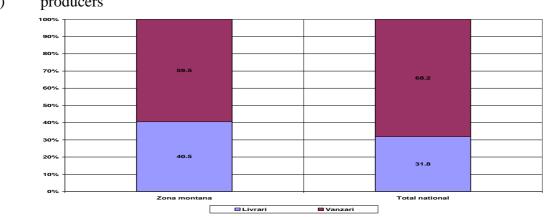


Source: based upon the processing of DACL data (2008)

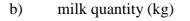
4.1. Milk quota distribution in the mountain areas

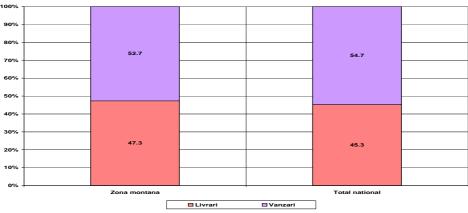
According to the data supplied by MARD and DACL, there are 88676 farmers raising bovines in the mountain areas who have milk quotas. These account for 10.70% of the total number of producers registered at national level. The milk quota assigned to them totals 287 651 003 kg, which is equivalent to 9.80% of the milk quota at national level. The milk quota structure is more balanced compared to the situation at national level, both in the case of the number of producers and in the case of the milk quantity (Graph 29).





producers a)





Source: based upon the processing of DACL data (2008)

The analysis of the territorial distribution of the milk quota by its two components, in the mountain area, reveals the following situation:

i) in the territory there are three categories of communes with regard to the number of producers who have milk delivery quota (Figure 9, Figure 10). Thus, the communes with less than 100 producers are mainly located in the Apuseni Mountains and the Southern Carpathians. In the northern area of the Western Carpathians there are communes where the number of producers with milk delivery quota is larger than 250, mainly in the counties Suceava, Bistriţa-Năsăud, Harghita and Covasna. The territorial distribution in the case of the milk quantities for delivery to dairies generally follows a similar pattern. The communes with significant milk quantities for sale are located in the southern part of the Eastern Carpathians, in the counties Braşov, Covasna and Harghita.

ii) for the direct sales component the situation is quite different (Figure 11, Figure 12). The territorial distribution of communes by the number of producers and by the milk quantity that goes to direct sales is more balanced/uniform. These areas are concentrated mainly in the counties Maramureş, Harghita, Argeş and Dâmbovița.

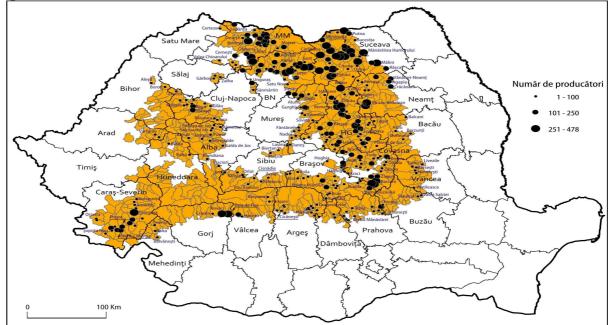


Figure 9: Territorial distribution of the number of producers who have milk delivery quotas in the mountain areas

Source: based upon the processing of DACL data (2008)

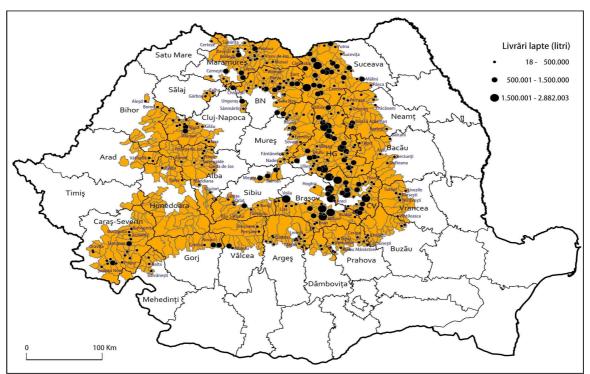
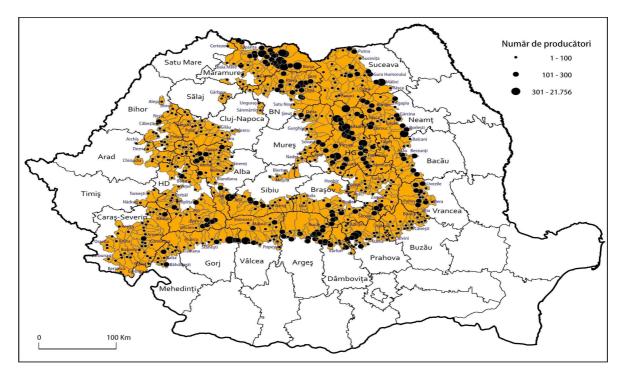


Figure 10. Territorial distribution of the milk delivery quotas in the mountain areas

Source: based upon the processing of DACL data (2008)

Figure 11: Territorial distribution of the number of producers who have direct sales quotas in the mountain areas



Source: based upon the processing of DACL data (2008)

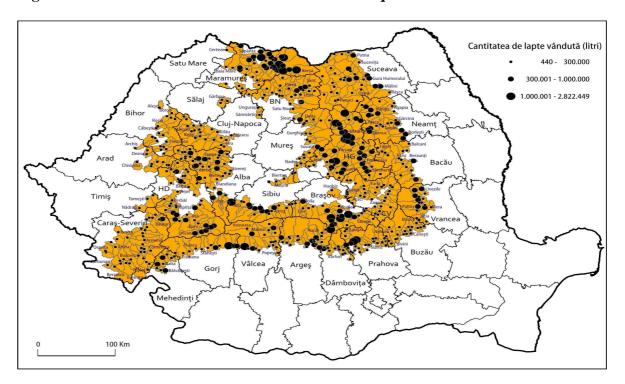


Figure 12. Territorial distribution of the direct sales quotas in the mountain areas

Source: based upon the processing of DACL data (2008)

4.2. Fulfilment of milk production allocated to quotas in the mountain areas

After processing the information from the declarations on the milk quota fulfilment, supplied by DACL and synthesized in Table 13, we found out that the fulfilment percentage is slightly higher than the result at national level for delivery quotas, i.e. 75.2% compared to the initial allocated quota; in the direct sales quotas, quota fulfilment is 85.5% compared to the initial quota. 6% of the producers with delivery quotas did not declare milk deliveries, while 19% of the producers who had to deliver the milk to milk buyers or processors were not registered with "NULL" as the buyers/processors did not report the milk deliveries out of different reasons or because they ceased their activity; the unfulfiled amount totaled 20535 tons of milk, i.e. 15% of the initial quota. Only 0.2% of the producers with delivery quota fulfilled 100% the allocated quota, and 864 new producers subsequently received delivery quotas (2.5% of the initially allocated value in the mountain area).

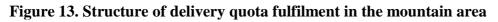
From our evaluations, it results that a quantity of 55216 thousand tons of milk (about 38% of the initial delivery quota) represents the surplus quantities compared to the initially allocated quota, which can suggest that in certain areas the premises for the processing industry development have been created, and that there are already clear tendencies of concentration and transfers to the delivery category. This tendency can be also noticed in the graphical representations at territorial level from Graphs 13-18.

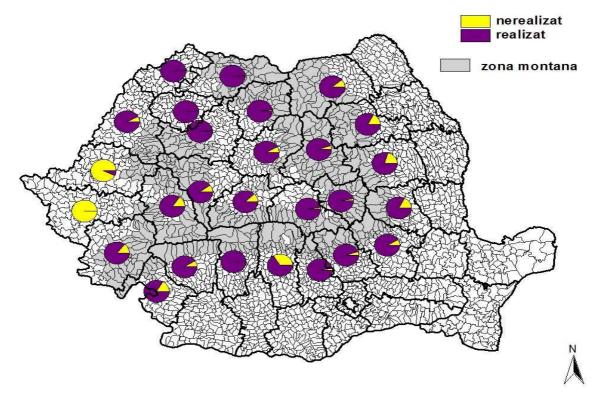
With regard to the direct sales, 9% of the producers with quota did not declare that they had fulfiled their quota, summing up over 9700 t (6% of total initial quota). In the case of direct sales as well there is a slight exceeding of the initially allocated quota, the total exceeding cases representing only 0.6% of the initial allocated quota.

The regional analysis of the direct sales quota fulfilment (Figures 19-22) reveals a higher non-fulfillment share, namely in the zones where the direct sales quota value in total mountain area is lower, i.e. in the area of the Carpathians Ring.

Specification	Kg	No of	Specification	Kg	No of	Specifications	Kg	%
		producers			producers			
Deliveries quota (initial	13603460	37187	Direct sales (initial	157670127	48534	Total quota initially allocated	293704727	100
allocated)	0		allocated) out of			(deliveries+ direct sales) out of		
out of which:	0004001	2.000	which:	0471100	1000	which:		
Unfullfilled quota (0 kg)	8284331	2606	Unfulfilled direct sales quota (0 kg)	9471188	4296			
Deliveries "NULL"	12251128	7088						
Total unfulfilled quota (0 + NULL)	20535459	9694	Unfulfilled direct sales quota (0 kg)	9471188	4296	Total unfulfilled quota (deliveries + direct sales)	30006647	10.2
Deliveries quota 100% fulfilled	297336	92	Direct sales quota 100% fulfilled	43068657.7	14801	Total fulfilled quota 100 % (deliveries+ direct sales)	43365993.7	14.8
Deliveries quota allocated during the year	3392707	864						
Deliveries exceded quota	51823740		Direct sales quota exceded toward the initial allocation	1042799		Total quota (deliveries+ direct sales) execeeded as regards the initial allocation	52866539	18.0
Deliveries (allocated quota durring the year + exceded quota)	55216447							
Compensation Deliveries quota (allocated during the year / exceded) - (unfulfilled quota/ NULL)	34680988		Compensation (exceded direct sales quota –direct sales quota unfulfilled)	-8428389		Compensation (exceded quota /allocated later) - (unfulfilled quota)	26252599	8.9
Fulfilled deliveries quota in 2007-2008 according to the declarations.	10232925 9	28357	Fulfilled direct sales quota <i>in</i> 2007-2008 <i>according to the</i> <i>declarations.</i>	134854890	44238	Total quota fulfilled <i>in</i> 2007-2008 <i>deliveries+ direct sales) according to the declarations</i>	237184149	80.8
% of milk quota in the mountain less favoured areas în the total fullfiled quotacotă realizată la nivel at national level	10.9	11.7		9.5	10.1		10.1	

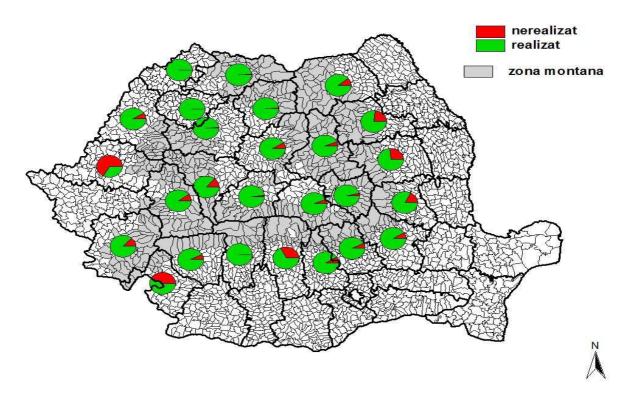
Table 13. Milk quota fulfilment in the mountain area in the year 2007-2008

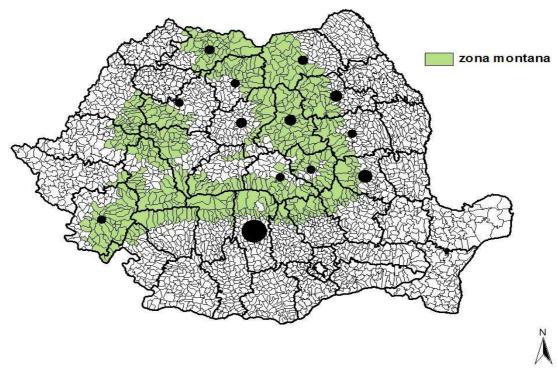




Source: based upon the processing of DACL data (2008)

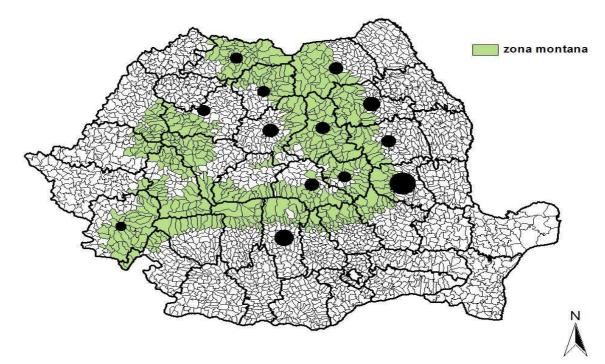
Figure 14 Structure of producers according to the delivery quota fulfilment, in the mountain area



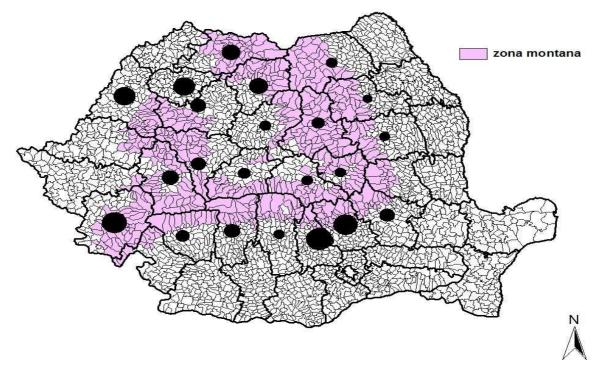


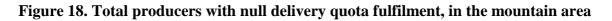
Source: based upon the processing of DACL data (2008)

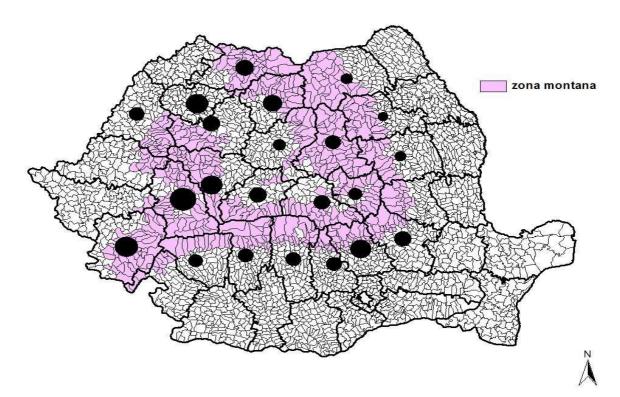
Figure 16. Total producers who 100% fulfiled the milk delivery quota, in the mountain area



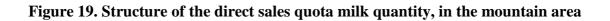
Source: based upon the processing of DACL data (2008)

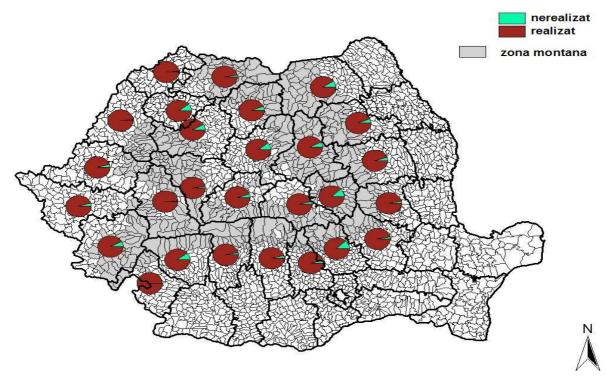






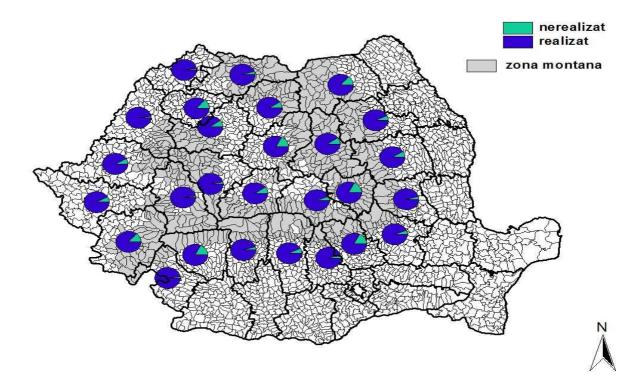
Source: based upon the processing of DACL data (2008)





Source: based upon the processing of DACL data (2008)

Figure 20. Structure of producers according to the fulfilment of direct sales quota, in the mountain area



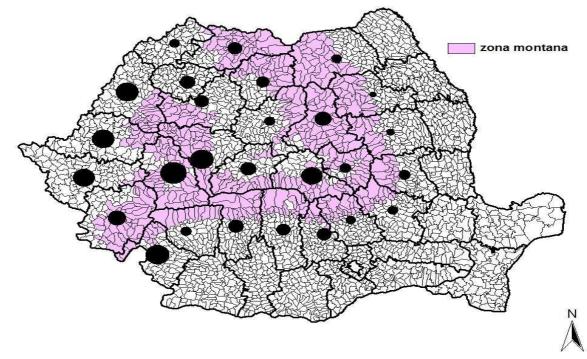
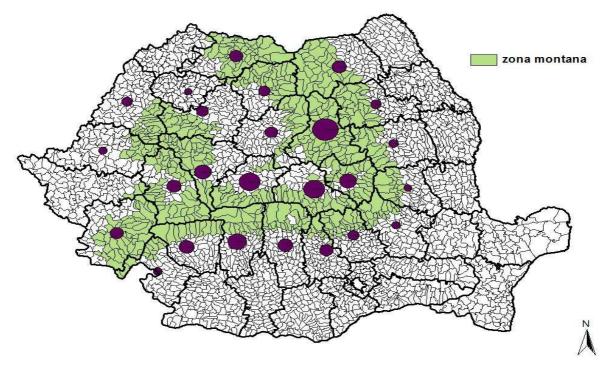


Figure 21. Direct sales milk quota in total, in the mountain area

Figure 22. Allocated production and 100% fulfiled direct sales quota, in the mountain area



Source: based upon the processing of DACL data (2008)

The raising of dairy cows is a traditional activity in many areas from the mountain zone. The identification of the constraints and opportunities to the future development of this sector is an approach that is limited by the lack of available data, in the first place.

Following the trend at national level, in the mountain areas since early 1990s the bovine herds and the milk production declined as a result of the ownership structure modification and out of the need to adapt to the market economy conditions. Due to the low financial resources of the farmers, the development of investments in the bovine raising sector was limited.

Milk production slowly increased, as a result of livestock farm structure in the first place, based upon a low number of animals (1-2 cows). Another problem is represented by the fact that from the quality point of view, the genetic material does not correspond to a quantitative and qualitative production at the EU standards.

The processing units are interested in the processing coming from the mountain areas, yet the primary production sector (great number of small producers) make out of milk collection and quality control expensive operations, difficult to organize.

For example, a dairy factory that processes 100 000 liters of milk per day needs 10,000 suppliers, which means about 200-300 collection points, with an equal number of employees. The same activity, in Germany, takes place with no man at the collection point, because the van goes directly to the farm and load the milk from the farmer's cooling tank. The significant cost difference results in considerable competitiveness differences. If the deficient infrastructure in the hilly and mountain areas where milk is collected is also taken into consideration, even 10 times greater differences may result. While in the EU Old Member States the logistics needed to bring the milk to the dairy factory has the value in euros of 0.03 RON/liter, in Romania this value may reach even 0.3 RON/liter.

The services meant to provide support to farmers, mainly the veterinary and consultancy services, are performed with great difficulty in this area.

The sector is also confronted with the lack of investments and available capital. The credit is difficult to obtain and it is considered a risk factor by the milk producers in the mountain areas.

Considering the zone-specific opportunities and constraints, a series of measures could be recommended to support the sector in this area:

- promoting a modern and efficient production technology;
- establishment of professional associations for strengthening the economic power of dairy cow farmers;
- promoting measures meant to provide technical alternatives to the small producers who probably will lose their milk quota, by stimulating the meat production (support to the artificial insemination cost for meat breeds and to the embryo transfer);
- intensification of professional training actions for training the milk producers in the field of hygiene standards for obtaining milk conform to the EU standards;
- providing consultancy services to farmers for accessing the funds for milking equipment (for those with more than 1-2 cows) and for facilitating the investments in the "cold chain" and in small processing centers for obtaining traditional and/or organic dairy products; in this respect, it would be useful to partially or fully support the cost of organic certification of the farm and products, as well as a part of their promotion cost, through projects. Another option that would give more freedom to producers in the area is the receiving of additional direct payments (their value being estimated according to the cost and productivity difference compared to a farmer of similar size who is not confronted with the difficulties existing in the less-favoured mountain area.
- the support to the milk quality control operations in the milk collection centers or the establishment of mobile centers might represent another option; yet we consider that

this is not feasible on the short term as it is still costly and difficult to implement in certain areas.

- support to the establishment of services that should modernize and render more efficient the traditional direct sales to the already established customers of producers and permit the fulfilment of allocated quotas; eventually providing services that facilitate the continuation of the "subscription" system for the direct delivery of processed products (cheese, cream and even milk) to the old customers who will maintain their preference for this type of products.
- rural tourism and eco-tourism development in the areas where the potential exists and the support, funding (through small projects eventually) of "agro-tourism" activities (active participation in taking care of animals, in the preparation of traditional products, organization of contests on such themes during the tourism season;
- improvement of the breeding stock quality through the application of financial support measures in livestock breeding, in order to improve the quality parameters of the cow milk that goes to processing;
- support to the development of viable and efficient farms in order to provide highquality raw material to the processing units and the market;
- improvement of the dairy cow farmers' professional training; development and supporting the pro-active consultancy for these areas, eventually co-opting the local primary school teacher, priest, as part-time consultant, as it is easier for the consultant to be the person to provide the information rather than waiting for the producers to look for him for information;
- development of the bovine raising sector in the mountain areas while respecting the biosecurity measures with impact upon the environment protection conditions;

In this area still under structural inertia, the population will not fully give up the dairy cow raising activity, which practically ensures a minimum income for them and part of their daily food. Quota system implementation in this first year has not brought any benefit to the small farmers with 1-2 cows; the farmer continued to produce if he had fodder, sufficient pasture, a few neighbours or relatives to buy a part of the milk production. The only problem for the small dairy farmer this year was to keep evidence of his sales, so as not to be penalized by the authorities if he sells or donates milk to neighbours or relatives. The quota concept value will increase in time if the price offered by the processor is better than the price offered by the subscriber buyers, if the producer buys more animals and if in time the quota monitoring and control are intensified, so that the farmer will have to respect the legal requirements in order to continue his activity.

The milk quota abolishment, with minimum costs for the Romanian farmers, mainly for those from the less-favoured mountain areas, should take place gradually. For the producers from the mountain areas, the issue of milk quota phasing out or abolishment can present specific and extremely different aspects compared to those from the EU Old Member States or even to those from EU-10. The strategies should be based upon the production specificity at regional level and not to follow certain models.

Until milk quota abolishment in the year 2015, the national policy measures should focus upon the sector consolidation and its competitiveness increase, because Romania has different particularities.

Until the quota abolishment moment, a series of prospective studies should be also initiated, based upon real statistical data (the low milk quota allocated to Romania compared to its production potential is on one hand the consequence of the deficient national statistics and on the other hand the consequence of the inflexible system, of the calculation "model" imposed by the European legislative rigors, which do not take into consideration the specificity of each country.

Chapter 5. Evaluation of the impact of the Common Market Organization implementation in milk and dairy products in the context of CAP-HC at national and farm level

As the experience of quota system implementation in Romania is quite recent, the results that have been obtained after one year cannot substantiate accurately enough an impact analysis upon the Romanian producers of milk and dairy products. From the analysis of the sector evolution in recent years it can be considered that the strongest impact upon the processing sector and farmers is not due to the quota system implementation but rather to the non-reformed structure of the sector and to the lack of competitiveness on the Single Market. The EU membership and the removal of restrictions to trade favoured the increase of the balance of trade deficit in milk and dairy products in the first place.

The beneficial effects of milk quota system implementation upon the sector restructuring (as proved by Poland's experience, whose sector featured atomization when joining the EU) were delayed and probably will not follow the rate of other countries as at the moment of accession to the EU the sector was quite unprepared and the decision to be accepted in the second wave provided an advantage to competitors. In this respect, the idea of "gradual increase of milk quotas in order to eliminate the milk quota abolishment shock upon producers" is in fact a measure that is rather dedicated to the producers from the EU Old Member States and to the competitive producers who joined the EU in the first wave.

For the Romanian producers, at least in the following years, this policy implementation will have a single beneficial effect that we could name a "necessary evil", i.e. it will put the sector under pressure, so that it could get restructured; this will bring about both benefits and significant costs.

The gradual increase of quotas will rather have a beneficial effect upon our competitors, which could process a larger quantity of milk and consolidate their position on the already gained markets, or penetrate on the markets of countries with a non-structured sector.

The hypotheses that lie at the basis of designing the scenarios on the Common Market Organization implementation in the milk and dairy sector, so as to provide the decisionmakers with a basis for the different policy options in the milk and dairy products sector have in view the following assumptions:

Optimistic scenario	Realistic scenario
≜	for the period 2009-2015
	projections for the Euro ⁴³ area until 2010 and
after 2011 according to the Forecast C	Commission projections (value for agriculture) –
Table 14	
- Milk and dairy products consumption a	and price trend – according to OECD and FAPRI
projections for EU-27 – Table 14	
- Maintaining self-consumption – decre	easing trend – 25% (in the period 2009-2015)
compared to 2008 – in 2015 milk a	and dairy self-consumption 28% of total milk
production	
0 1	ecreasing trend – 30% (in the period 2009-2015)
compared to 2008	
1 1	rears beginning with 2008 (5%) according to the
Commission proposal	
Sector-specific l	ypotheses (Graph 30)
- 100 % fulfilment of allocated quotas	- 100 % fulfilment of allocated quotas in 2013-

⁴³ Economic Outlook No. 84, 25 November 2008

European Institute of Romania – Strategy and Policy Studies (SPOS 2008)

Optimistic scenario	Realistic scenario
beginning with 2009	2014
- 100% delivery quota allocated to small	- deliveries to sale ratio:
producers who did not submit	2009 - 48% -52%
declarations (Graph 27) – will be found in	2010 - 54% - 46%
the medium or large-sized producers (as	2010 - 54% - 40%
volume - about 40% of the quotas	2011 00%- 40% 2012 - 66%-34%
allocated to very small producers in	2012 - 00%-34% 201372% - 28%
2008)	2013-72%-28%
2000)	2014 - 74% - 20% 2015 - 75% - 25%
	the delivery quota allocated to small producers
	who did not submit declarations (Graph 27)
	will be found in the medium or large-sized
	producers (as volume - about 40% of the quotas
	allocated to very small producers in 2008)
- conform milk by the end of 2009 – 90%	- conform milk by the end of $2009 - 60 \%$ of
of total allocated quota out of which:	total allocated quota out of which:
- 85% milk from delivery quota –	- 55% milk from delivery quota – without
without very small producers	very small producers
- 5% of the direct sales quota (allocated	- 5% of the direct sales quota (allocated to
to very large producers)	very large producers)
- 100% of total allocated quota will be	- 80% of total allocated quota will be fulfiled
fulfiled in the mountain areas, out of	in the mountain areas, out of which 50%
which 85% conform milk from the	conform milk from the allocated delivery
allocated delivery quota and 5% of	quota and 5% of the allocated direct sales
the allocated direct sales quota	quota
- The share of allocated quotas in the	- The share of allocated quotas in the
mountain areas will account for 11%	mountain areas will account for 11% of
of total quota (deliveries and direct	total quota (deliveries and direct sales)
sales)	- The number of producers with delivery and
- The number of producers with	direct sales quota in the mountain areas will
delivery and direct sales quota in the	decrease by 15% compared to the period
mountain areas will decrease by at	2007-2008 (mainly the small and medium-
least 30% compared to the period	sized producers)
2007-2008 (mainly the small-sized	1
producers)	have quotas but they will rise animals for
	self-consumption

Table 14. Dynamics of general and specific indicators for the sector - forecasts

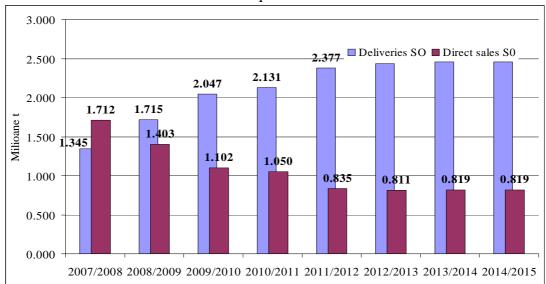
	2008	2009	2010	2011	2012	2013	2014	2015
Gross domestic product	100	99.4	100.6	103.3	105.9	108.2	109.4	109.7
Average farm-gate price	100	96.5	92.5	94.4	93.6	94.7	95.4	96.4
Butter consumption	100	98.9	97.3	96.7	96.1	95.5	94.8	94.0
Whole powder milk consumption	100	98.5	96.8	95.7	94.5	93.1	91.9	90.7
Skimmed powder milk consumption	100	99.2	98.8	98.2	97.8	96.8	95.7	94.7
Cheese consumption	100	101.9	103.1	104.1	105.1	106.0	107.1	108.1

Source: GDP (2008-2010) OECD for the EURO area forecasts of 25 Nov 2008, after 2010 according to the Forecast Commission for the agricultural sector forecast of October 2008, data for the sector according to FAO-OECD forecasts, June 2008

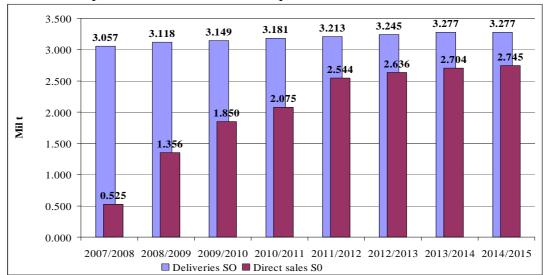
In building up these hypotheses, in the optimistic variant we had in view an ideal situation that in our opinion is less likely to take place in reality. In the realistic scenario, we had in view a possible trend that is likely to be achieved with regard to milk production conform to EU standards (on the basis of the existing situation and of a foreseeable dynamics based upon sector realities, on the basis of achievements after the first year of quota system implementation, and an estimation of the number of producers and of the amount of related quota in the mountain area, which could be supported through specific measures.

Graph 30. Hypotheses

a) Optimistic scenario

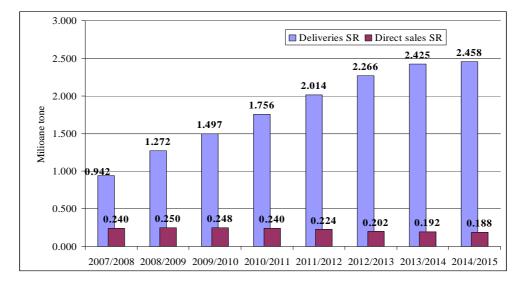


Structure and volume of fulfiled quota



Conform milk production from the fulfiled quota

b) Realistic scenario



Structure and volume of fulfiled quota

3.500 3.3 3.3 3.1 3.1 2.9 3.000 2.8 2.7 2.458 2.425 2.500 2.040 2.000 1.712 1.500 1.264 Milt 0.928 1.000 0.700 0.523 0.500 .000 000 0.000 $2007 \frac{200}{200} 8 2008 \frac{200}{200} 9 2009 \frac{201}{201} 0 2010 \frac{201}{201} 1 201 \frac{1}{10216} 201202097 2013/2014 2014/2015$ -0.500 0.378 -0.468 -0.703

Conform milk production from the fulfiled quota

Source: own calculations

-1.000

In order to provide a most realistic picture of the situation of most small-sized farms from Romania, we chose 7 case studies (producers) on a random basis with bovine herds ranging from 2 to 12 heads, which can be considered as typical to the households in the mountain area. Table 15 presents the structure of these farms and the results of their activity (according to the declarations in the field), while Table 16 presents a detailed situation of the specific activity of the milk and dairy sector. As it can be noticed in certain cases (F1, F3 and F7) the result of the activity was negative or at the limit of covering the costs. Even in the

■ Fulfilled quota ■ Milk with EU standard quality □ Unfulfiled quota

case of large farms⁴⁴ (farm with 450 heads and average milk yield of 3800 liters/cow), the cost of the milk hectoliter is extremely close to the selling price and the profitability is minimal in the conditions in which the subsidy represents 36% of costs.

Specification	F1	F2	F3	F4	F5	F6	F7
Utilized Agricultural Area ha	2.78	6.45	2.92	13.5	5.5	4.35	22.33
Bovines no.	2	3	4	5	4	11	12
Pigs no.	3	16	0	0	0	8	3
Poultry no.	13	18	11	19	24	35	-
Sheep and goats no.	-	-	6	10	14	6	-
Total incomes RON out of which:	2250	6129.6	4627.97	7560	11985	36298.6	33121.6
from milk direct sales	2250	3108	2887	3450	8925	600	525
from milk sold to dairies	0	0	0	0	0	17500	17500
value of sold bovines (RON)	0	0	680	2000	0	6696	6744
other incomes from livestock production	0	1830	0	1390	2100	3640	0
Total value of subsidies RON	0	1191.6	1060.97	720	960	7862.6	8352.6
Total expenses (RON)	2644	4100	5850	4380	6920	20707	64750
Result	-394	2029.6	-1222.03	3180	5065	12091.6	-34953.4

Table 15. Farm structure, incomes and expenses

Source: own calculations based upon field data

Table 16. Incomes and expenses from the specific activity of the milk and dairy sector on the investigated farms

Specification	F1	F2	F3	F4	F5	F6	F7
Total allocated milk quota (Kg) o ut of which:	2260	4600	4683	4155	7000	18454	18403
Direct sales	2260	4600	4683	4155	7000	412	361
Deliveries	0	0	0	0	0	18042	18042
Yield kg/head	2800	2800	2800	1800	1625	4040	3350
Total milk production (Kg)	2800	5600	5600	3600	6500	20200	20100
Self-consumption on the farm (kg)	700	1400	2100	1300	550	0	0
% self-consumption out of total production	25	25	38	36	8	0	0
Other (technological) consumption kg	600	0	0	0	0	2300	2250
Milk directly sold on the market (Kg) of which:	1500	4200	3500	2300	5950	400	350
Consumption milk Kg		1500	1500	2300	5950		

⁴⁴ Comprehensive studies on the main agricultural sectors, August 2008, IEA-INCE study, chapter Milk, author Mariana Grodea

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Specification	F1	F2	F3	F4	F5	F6	F7
Processed products in milk equivalent (Kg) out of which:	600	245	182				
Cheese	55	2700	2000				
% milk directly sold on the market in total milk production	53.6	75.0	62.5	63.9	91.5	2.0	1.7
% direct sales quota fulfillment	66.4	91.3	74.7	55.4	85.0	97.1	97.0
Milk delivered to dairies	0	0	0	0	0	17500	17500
(Kg) Delivery quota fulfilment %						97.0	97.0
Value of milk and dairy products directly sold on the market (RON)	2250	3108	2887	3450	8925	600	525
Value of milk sold to dairy (RON)	0	0	0	0	0	14000	14175
Bovines sold (heads)	0	0	1	2	0	4	5
Value of bovines sold (RON)	0	0	680	2000	0	6696	6744
Value of milk and bovines sold (RON)	2250	3108	3567	5450	8925	21296	21444

European Institute of Romania – Strategy and Policy Studies (SPOS 2008)

Source: own calculations based upon field data

Having in view the previously formulated hypotheses and the economic crisis that will affect our country as well, the dairy farmers and the processing industry will have to face great difficulties in the year 2009. The accelerated and significant growth of the processing industry that has been estimated for the year 2009 (in the first part of the year 2008) is unlikely to take place; the investment rate will not increase either, as it has been initially estimated. In these conditions, Romania will have to maximize the subsidies that it can provide to the sector, through the complementary national direct payments, to try and justify and obtain a derogation for non-conform milk processing after 2009, at least for the domestic consumption, to use at maximum the facility to provide certain direct payments to the producers in the mountain area, to intensify the vocational training and information measures with regard to the minimal technological conditions for obtaining conform milk, etc.

Chapter 6. Conclusions and recommendations

Having in view the situation presented above and the fact that the deadline for getting in line with the standards is the year 2009, we could state that at present Romania is in a delicate situation. Having in view the slow progress of the sector (proved by the presented evolutions) there are not too many reasons for an optimistic outlook, yet a basis for a realistic strategy to solve up the problems could exist.

The Romanian milk producers, mainly the very small producers, are not used to working with the quota system. Probably the situation mentioned above in this study will not be the same after several years and if we look back to what happened after this mechanism was introduced in the European Union⁴⁵ we can estimate that the number of farmers will decrease and the farms with a larger number of animal heads will increase; at the same time, the farmers with 1, 2 or 3 cows will gradually give up the milk quota, as meeting the milk

⁴⁵ The number of farms decreased by 72%, the number of the dairy cows decreased by 40%, farm size increased

quality standards becomes an obligation and meeting the standards needs modern milk collection equipment, this investment not being justified on a farm with 1-2 cows.

At the same time, the ratio of milk deliveries to direct sales, which is almost equal due to sector specificity, will probably be subject to significant changes in time.

Another problem that could be raised by this fragmented structure of the sector is related to the possibility of non-fulfiling the allocated quotas. The non-fulfilment of at least 70% of the individual quota for two years entails quota diminution by the non-fulfiled amount, which goes to the national reserve. We consider that the sector is not sufficiently restructured so as to be put into the situation of exceeding quotas and paying penalties, maybe only in isolated cases, i.e. at processing level and in the case of large farmers with competitive farms.

The emergence of a more dynamic milk quota market is also expected, but its functionality will not reach the optimum parameters on the short term, due to the lack of information and experience in this respect. Probably the small producers will be "chased" on short-term by the farmers who made investments but do not have milk quota yet, and on medium term by the large producers.

As regards the possible measures that could contribute to the sector development and restructuring, we can mention the following:

- Development of infrastructure that could enable milk collection from the mountain area as well
- Stimulating producers' association and strengthening their role in the relation with the processors
- Stimulating the processors for the development of "integrating" activities dedicated to farmers
- Continuation of subsidies for the conform milk delivered to dairies and even the subsidy value adjustment
- Development of national breeding programs and including in this program the farms with development potential and extension potential to other farms
- Promoting measures meant to provide technical alternatives to the small producers who probably will lose their milk quota, by stimulating the meat production (support to the artificial insemination cost for meat breeds and to the embryo transfer)
- Market information system implementation and development and the access to information of all the players from the chain
- Intensification of the vocational training actions for preparing the dairy farmers to comply with the minimum hygiene standards so as to obtain milk conform to EU standards. In this respect, at the beginning a particular focus should be placed on the producers with small delivery quotas and to the producers with large direct sales quotas 50000 and over 100000 kg; in the next stages, this action should gradually cover all the categories of producers
- Providing consultancy services to producers for accessing the funds for milking equipment (in the case of farmers with more than 1-2 cows) and for facilitating the investments in the "cold chain" and in small processing centers for obtaining traditional and/or organic dairy products; in this respect, maybe it would be useful to partially or fully support the cost of organic certification of the farm and products, as well as a part of their promotion cost, through projects
- Another option that would give more freedom to producers in the mountain area is the receiving of additional direct payments (their value being estimated according to the cost and productivity difference compared to a farmer of similar size who is not confronted with the difficulties existing in the less-favoured mountain area)
- The support to the milk quality control operations in the milk collection centers or the establishment of mobile centers might represent another option; yet we consider that

this is not feasible on the short term as this operation is still expensive and difficult to implement in certain areas

- Intensification of (Intra-Community) imported milk control operations by neutral organizations in order to eliminate the unfair competition of domestic producers (for example Hungary and Poland did not fulfil the delivery quotas allocated at national level but they export massive milk quantities mainly on the Romanian market
- Support to the establishment of services that should modernize and render more efficient the traditional direct sales to the already established customers of producers and that should permit the fulfilment of allocated quotas; eventually providing services that facilitate the continuation of the "subscription" system for the direct delivery of transformed products (cheese, sour cream and even milk) to the old customers who will maintain their preference for this type of products
- Rural tourism and eco-tourism development in the areas where the potential exists and the support, funding (through small projects eventually) of "agro-tourism" activities (active participation in taking care of animals, in the preparation of traditional products, organization of contests on such themes during the tourism season
- Improvement of the breeding stock quality through the application of financial support measures in livestock breeding, in order to improve the quality of the raw cow milk delivered to processing;
- Improvement of the dairy cow farmers' professional training; development and supporting the pro-active consultancy for these areas, eventually co-opting the local primary school teacher, priest, as part-time consultant, as it is easier for a consultant to be the person to provide the information rather than waiting for the producers to look for him for information;
- Development of the bovine raising sector in the mountain areas while respecting the biosecurity measures with impact upon the environment protection conditions.

These are only a few orientative measures based upon the current situation of the sector and its possible evolution. Maybe after another year of CAP running in this sector, the analyses could be made with higher accuracy.

References

- 1. AGRAFACTS, No. 88-08 (15/10/08), News for agribusiness executives immediate and direct from Brussels
- 2. Dominika Milczarek-Andrzejewska, Agata Malak-Rawlikowska, Jan Fałkowski and Jerzy Wilkin, Regoverning Markets: Agrifood Sector Studies, The restructuring process at farm level: Evidence from the dairy sector in Poland
- 3. Euromontana, ARC LATIN, May 29, 2008, Brussels, "Active marketing solutions to the depopulation problem on depopulated and mountain areas"
- 4. Euromontana, July 26, 2008, Brussels, Seminar on the future of the CAP in mountain areas
- 5. FAPRI 2008, U.S. AND WORLD AGRICULTURAL OUTLOOK
- Felicity Proctor and Larry Digal, (July 2008) Regoverning Markets: Opportunities for small-scale producers' inclusion in dynamic markets in developing countries and transition economies: A synthesis of findings from eight country level chain-wide learning workshops
- 7. GIURCA D.(coord.), LUCA, L HURDUZEU G., (2006), Scenarii privind impactul măsurilor de dezvoltare rurală asupra structurilor agricole românești după aderarea la Uniunea Europeană, Institutul European din Romania
- 8. GIURCA D (coord), Gheorghe Hurduzeu, Marioara Rusu, Cosmin Sălășan, Sectorul agricol în perspectiva aderării României la Uniunea Europeană: implicații asupra sistemului de plăți, Institutul European din România
- 9. Hemme et al., (2008), IFCN Dairy Report 2008, International Farm Comparison Network, Dairy, Research Center, Kiel, Germany.
- 10. Hrabrin Bachev, Ivan Manolov, Institute of Agricultural Economics, Sofia, Agricultural University, Plovdiv (2007), Regoverning Markets: Innovative practice, Inclusion of small scale dairy farms in the supply chain in Bulgaria: A case study from the Plovdiv region
- 11. INS, (2008), Coordonate ale nivelului de trai în România. Veniturile și consumul populației în perioada 2000-2007"
- 12. INS, Comunicat de presa nr. 183 din 8 septembrie 2008, Laptele de vacă colectat și producția de produse lactate în luna iulie și perioada 1.I 31.VII.2008
- 13. J.Wilkin, D Milczarek, J. Fałkowski, A. Malak Rawlikowska, (2005) The dairy sector in Poland,,
- 14. Jerzy Wilkin, Dominika Milczarek, Agata Malak-Rawlikowska, Jan Fałkowski (December 2006), Regoverning Markets: Agrifood Sector Studies, The dairy sector in Poland
- 15. OECD, (2005) Dairy Policy Reform and Trade Liberalisation
- 16. OECD, (2008) OECD-FAO Agricultural Outlook 2008/2017 Summary
- 17. OECD-FAO, Agricultural Outlook 2008/2017 Highlights
- Rusu, M., (coord.), Giurcă, D., Luca, L., (2007), Analiza evoluției şi orientărilor Politicii Agricole Comune dintr-o perspectivă românească, Institutul European din România

- 19. Rusu, M., (coord.), Simion, G., Dărășteanu, C., (2007), Identificarea zonelor defavorizate din spațiul rural și sprijinirea lor după aderarea României la Uniunea Europeană, Institutul European din România
- 20. UE, (2008), Revised and Final Presidency Compromise on Health Check Proposals, (9656/08 COM (2008) 306
- 21. USDA, Circular Series FD 1-08 (July 2008), Dairy: World Markets and Trade

*** Oana Anton, (13 August 2008), Ziarul Capital, Iaurtul, campion la vânzări pe piața lactatelor

* * * Bulletin of the International Dairy Federation ,,The World Dairy Situation - 2007" (nr. 423/2007)

- * * * www. fas. usda. Gov/Romania Dairy and Products, 2008
- * * * www.financiarul.com (05/09/2008)
- * * * www.infolapte.ro/noutati57.html
- * * * www.mdcdatum.org.uk/index.html
- * * * <u>www.clal.it</u>
- * * * www.rabobank.com/content/research/FoodAndAgriResearch/dairy/
- * * * <u>www.ifcndairy.org/</u>
- * * * www.regoverningmarkets.org.

*** www.telegrafonline.ro Marti, 18 Martie 2008, Producatorii viseaza la echitate pe piata laptelui

*** www.foodscience.psu.edu

Annexes

Annex 1: Dynamics of the sector in the period 1990-2007

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Dairy cow herds, thou heads	2123	2266	2025	1979	1963	1983	1939	1844	1794	1769	1775	1746	1759	1757	1741	1743	1732	1711
%	100	106.7	95.4	93.2	92.5	93.4	91.3	86.9	84.5	83.3	83.6	82.2	82.9	82.8	82.0	82.1	81.6	80.6
Yield / head/ year %	2133 <i>100.0</i>	2245 105.3	2366 110.9	2495 117.0	2848 133.5	3034 142.2	3096 145.1	3116 <i>146.1</i>	3071 144.0	3066 143.7	2925 137.1	3014 <i>141.3</i>	3133 <i>146.9</i>	3263 153.0	3493 <i>163</i> .8	3510 <i>164.6</i>	3688 172.9	3078 144.3
Total milk production, mil. tons	4.29	4.39	4.34	4.58	5.22	5.59	5.65	5.52	5.32	5.20	5.10	5.25	5.43	5.69	5.71	5.70	6.01	5.42
%	100	102.2	101.2	106.8	121.5	130.1	131.7	128.6	123.8	121.2	118.8	122.4	126.6	132.7	133.0	132.8	139.9	126.3
Processed production, mil. tons	1.80	1.30	0.96	0.88	0.87	0.87	0.92	1.03	0.97	1.12	1.08	1.04	1.15	1.33	1.37	1.32	1.26	1.16
%	100	72.2	53.3	48.9	<i>48.3</i>	48.3	51.1	57.2	53.9	62.2	60.0	57.8	63.9	73.9	76.1	73.3	70.0	64.4
Processed milk share in total production, %	41.9	29.6	22.1	19.2	16.7	15.6	16.3	18.7	18.2	21.5	21.2	19.8	21.2	23.4	24.0	23.2	21.0	21.4
Direct deliveries to consumers, mil. Tons				1.02	1.30	1.71	1.61	1.64	1.63	1.44	1.28	1.44	1.42	1.35	1.47	1.53	1.60	1.45
Direct sales share in total production, %				22.3	24.9	30.6	28.5	29.7	30.7	27.7	25.1	27.4	26.1	23.7	25.7	26.8	26.6	26.7
Self-consumption, mil. tons				1.81	2.35	2.15	2.28	2.05	1.98	1.91	2.01	2.07	2.16	2.27	2.21	2.15	2.26	2.21
Self-consumption share in total production, %				39.6	45.0	38.5	40.3	37.1	37.3	36.7	39.4	39.4	39.7	39.9	38.7	37.7	37.6	40.7
Yearly consumption/capita	140.1	163.3	154	176.5	179.5	188.6	192.7	192.4	194.4	194	193	197.4	215	225	238.9	239.2	246.6	
%	100	116.6	109.9	125.98	128.12	134.62	137.5	137.3	138.8	138.5	137.8	140.9	153.5	160.6	170.5	170.7	176	

Specification	UM	1998	1999	2000	2001	2002	2003	2004	2005	2006
Liquid milk	l/head	67,2	67,2	66,2	68,0	69,8	70,2	71,2	71,5	70,2
(3% fat)										
Cheese and cream total, out of which:	kg/head	12,8	12,6	12,8	12,9	13,1	13,7	13,5	14,2	14,6
- cow milk <i>telemea</i>	kg/head	4,6	4,5	4,5	4,6	4,8	4,9	4,7	4,8	4,9
- ewe milk <i>telemea</i>	kg/head	3,1	3,0	3,0	2,8	2,6	2,5	2,5	2,6	2,5
- fresh cow cheese	kg/head								3,3	3,3
- sour cream and cream	kg/head								2,2	2,4
-caciocavallo cașcaval	kg/head								0,8	0,9
Butter	kg/head	0,6	0,4	0,3	0,2	0,2	0,3	0,3	0,4	0,4
Ice-cream	kg/head								0,34	0,43
Milk and dairy products (butter excluded) in milk equivalent	l/head	194.4	194	193	197.4	215	225	238.9	239.2	246.6

Annex 2: Milk and dairy products consumption

Source: "Coordinates of the life standard in Romania. Population incomes and consumption for the year 2000-2007", National Institute for Statistics

Nr.	County	under	3000-	5000-	50000-	above
crt.		3000	5000	50000	100000	100000
1	Alba	10.20	9.05	28.43	6.30	46.02
2	Arad	3.84	3.09	12.43	7.17	73.47
3	Argeș	23.12	9.28	22.90	7.67	37.03
4	Bacău	21.08	11.49	23.66	1.43	42.35
5	Bihor	12.11	8.36	27.81	12.81	38.93
6	Bistrița-Năsăud	21.28	19.75	45.61	3.95	9.40
7	Botoșani	37.58	17.62	29.05	4.95	10.80
8	Brăila	19.80	12.55	30.99	10.16	26.49
9	Brașov	8.79	8.17	35.86	12.59	34.59
10	București	0.00	0.00	0.00	0.00	0.00
11	Buzău	18.54	11.36	33.29	9.48	27.33
12	Călărași	9.41	5.86	15.68	5.99	63.06
13	Caraş -Severin	25.01	16.48	20.27	1.87	36.38
14	Cluj	18.04	18.74	40.90	6.02	16.30
15	Constanța	7.36	7.67	38.64	7.53	38.79
16	Covasna	10.65	9.58	36.91	9.47	33.38
17	Dâmbovița	22.63	12.52	23.11	3.87	37.87
18	Dolj	16.25	8.31	31.86	8.16	35.42
19	Galați	20.73	6.08	16.44	11.26	45.49
20	Giurgiu	13.98	7.65	13.67	2.07	62.63
21	Gorj	41.90	23.01	31.09	0.00	3.99
22	Harghita	18.39	13.40	54.50	6.87	6.83
23	Hunedoara	2.50	1.20	3.19	1.67	91.44
24	Ialomița	7.29	5.35	29.29	11.57	46.50
25	Iași	27.79	15.18	24.88	2.78	29.37
26	Ilfov	0.15	0.09	1.26	0.82	97.68
27	Maramureş	44.32	23.40	26.62	2.03	3.63
28	Mehedinți	28.80	13.09	41.53	16.58	0.00
29	Mureș	12.09	13.47	44.62	7.94	21.88
30	Neamț	42.14	20.76	27.75	2.12	7.23
31	, Olt	20.68	8.73	41.61	15.61	13.36
32	Prahova	23.94	10.79	14.74	3.44	47.10
33	Sălaj	35.61	17.04	27.56	9.83	9.96
34	Satu - Mare	12.09	8.81	34.30	10.09	34.71
35	Sibiu	11.90	9.63	40.44	9.02	29.01
36	Suceava	42.78	23.18	26.90	2.99	4.14
37	Teleorman	19.06	15.39	27.09	5.98	32.48
38	Timiş	6.70	5.28	25.49	9.71	52.82
39	Tulcea	13.28	11.50	35.05	8.51	31.66
40	Vâlcea	22.37	20.33	57.30	0.00	0.00
40 41	Vaslui	16.17	4.29	10.14	0.86	68.53
42	Vrancea	18.95	6.43	14.43	10.75	49.45
	Total	20.00	13.48	33.11	6.74	26.66
Nr.	County	under	3000-	5000-	50000-	above
crt.	County	3000	5000-	5000- 50000	100000	100000
1	Alba	10.20	9.05	28.43	6.30	46.02
2	Arad	3.84	3.09	12.43	7.17	73.47
3	Argeș	23.12	9.28	22.90	7.67	37.03
4	Bacău	21.08	11.49	23.66	1.43	42.35
5	Bihor	12.11	8.36	27.81	12.81	38.93

Annex 3 : Territorial distribution of the allocated delivery quotas by classes (%)

	-	U	0.	•		
6	Bistrița-Năsăud	21.28	19.75	45.61	3.95	9.40
7	Botoșani	37.58	17.62	29.05	4.95	10.80
8	Brăila	19.80	12.55	30.99	10.16	26.49
9	Brașov	8.79	8.17	35.86	12.59	34.59
10	București	0.00	0.00	0.00	0.00	0.00
11	Buzău	18.54	11.36	33.29	9.48	27.33
12	Călărași	9.41	5.86	15.68	5.99	63.06
13	Caraş -Severin	25.01	16.48	20.27	1.87	36.38
14	Cluj	18.04	18.74	40.90	6.02	16.30
15	Constanța	7.36	7.67	38.64	7.53	38.79
16	Covasna	10.65	9.58	36.91	9.47	33.38
17	Dâmbovița	22.63	12.52	23.11	3.87	37.87
18	Dolj	16.25	8.31	31.86	8.16	35.42
19	Galați	20.73	6.08	16.44	11.26	45.49
20	Giurgiu	13.98	7.65	13.67	2.07	62.63
21	Gorj	41.90	23.01	31.09	0.00	3.99
22	Harghita	18.39	13.40	54.50	6.87	6.83
23	Hunedoara	2.50	1.20	3.19	1.67	91.44
24	Ialomița	7.29	5.35	29.29	11.57	46.50
25	Iași	27.79	15.18	24.88	2.78	29.37
26	Ilfov	0.15	0.09	1.26	0.82	97.68
27	Maramureş	44.32	23.40	26.62	2.03	3.63
28	Mehedinți	28.80	13.09	41.53	16.58	0.00
29	Mureș	12.09	13.47	44.62	7.94	21.88
30	Neamț	42.14	20.76	27.75	2.12	7.23
31	Olt	20.68	8.73	41.61	15.61	13.36
32	Prahova	23.94	10.79	14.74	3.44	47.10
33	Sălaj	35.61	17.04	27.56	9.83	9.96
34	Satu - Mare	12.09	8.81	34.30	10.09	34.71
35	Sibiu	11.90	9.63	40.44	9.02	29.01
36	Suceava	42.78	23.18	26.90	2.99	4.14
37	Teleorman	19.06	15.39	27.09	5.98	32.48
38	Timiș	6.70	5.28	25.49	9.71	52.82
39	Tulcea	13.28	11.50	35.05	8.51	31.66
40	Vâlcea	22.37	20.33	57.30	0.00	0.00
41	Vaslui	16.17	4.29	10.14	0.86	68.53
42	Vrancea	18.95	6.43	14.43	10.75	49.45
	Total	20.00	13.48	33.11	6.74	26.66

Nr. crt.	County	under 3000	3000-5000	5000-50000	50000-	above
					100000	100000
1	Alba	24.87	31.79	40.58	1.53	1.24
2	Arad	19.53	21.68	37.11	7.12	14.57
3	Argeș	52.56	28.04	18.18	0.84	0.38
4	Bacău	50.47	31.80	16.01	0.69	1.03
5	Bihor	29.52	36.61	32.46	0.84	0.57
6	Bistrița-Năsăud	39.15	31.42	26.68	0.64	2.11
7	Botoșani	64.13	18.74	14.85	1.30	0.98
8	Brăila	40.70	21.99	30.74	3.19	3.38
9	Brașov	14.53	21.48	49.88	8.30	5.81
10	București	9.10	16.85	74.05	0.00	0.00
11	Buzău	42.16	29.09	20.19	4.70	3.87
12	Călărași	44.46	18.86	25.60	7.21	3.87
13	Caraş - Severin	26.85	35.56	37.43	0.15	0.00
14	Cluj	32.83	29.75	35.16	0.84	1.42
15	Constanța	22.52	15.13	49.99	8.89	3.46
16	Covasna	28.22	21.23	37.76	3.47	9.32
17	Dâmbovița	54.46	24.41	18.32	1.08	1.73
18	Dolj	41.88	28.44	24.06	2.04	3.58
19	Galați	57.41	18.94	19.95	2.11	1.59
20	Giurgiu	50.93	26.04	21.70	0.40	0.93
21	Gorj	38.45	35.41	24.24	1.89	0.00
22	Harghita	30.47	27.20	40.11	0.80	1.42
23	Hunedoara	14.98	30.52	52.91	0.92	0.67
24	Ialomița	35.98	15.20	18.65	1.61	28.56
25	Iași	64.29	17.86	13.61	0.34	3.90
26	Ilfov	25.67	23.13	38.86	4.96	7.38
20	Maramureş	34.89	34.36	30.24	0.51	0.00
28	Mehedinți	34.93	34.30	29.73	1.04	0.00
20 29	Mureş	37.33	21.73	36.86	1.92	2.16
30	Neamț	63.65	20.53	13.73	0.91	1.19
31	Olt	61.54	23.22	13.92	1.03	0.29
32	Prahova	51.66	21.99	21.50	2.00	2.84
33	Sălaj	36.13	37.40	24.66	1.49	0.32
33 34	Satu - Mare	37.92	28.89	24.00	1.49	0.32 3.34
34 35	Sibiu	41.36	32.37	8.05	1.92	5.34 6.98
35 36	Suceava	41.36 54.76	52.57 24.72	8.03 18.70	0.23	0.98 1.59
37 28	Teleorman	55.80	24.08	18.89	0.83	0.39
38 20	Timiş	33.11	22.63	35.10	4.32	4.84
39 40	Tulcea	29.15	15.52	34.51	10.67	10.15
40	Vâlcea	50.80	29.04	17.73	1.01	1.42
41	Vaslui	67.46	18.15	11.37	1.39	1.64
42	Vrancea	54.75	27.05	16.68	1.03	0.49
	Total	42.30	26.82	26.59	1.94	2.35

Annex 4: Territorial distribution of the total milk quantity allocated for the direct sales quota



