



# Regional restructuring and modernization of Bulgarian dairy sector after the accession to the EU

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# INTRODUCTION

After 2007, the dairy sector is facing a number of problems:

- lack of a clear, long-term national policy for development of the sector
- poor institutional and personnel training
- low administrative capacity in funds management
- limited acquisition of European funds for restructuring and modernization of dairy farms.

# **The aim of this study is**

**to analyze the condition and the main problems of restructuring and modernization of the dairy sector after the accession of the country to the EU and the effect they have on the economic status of dairy farms in regional aspect.**

# Methodology and data

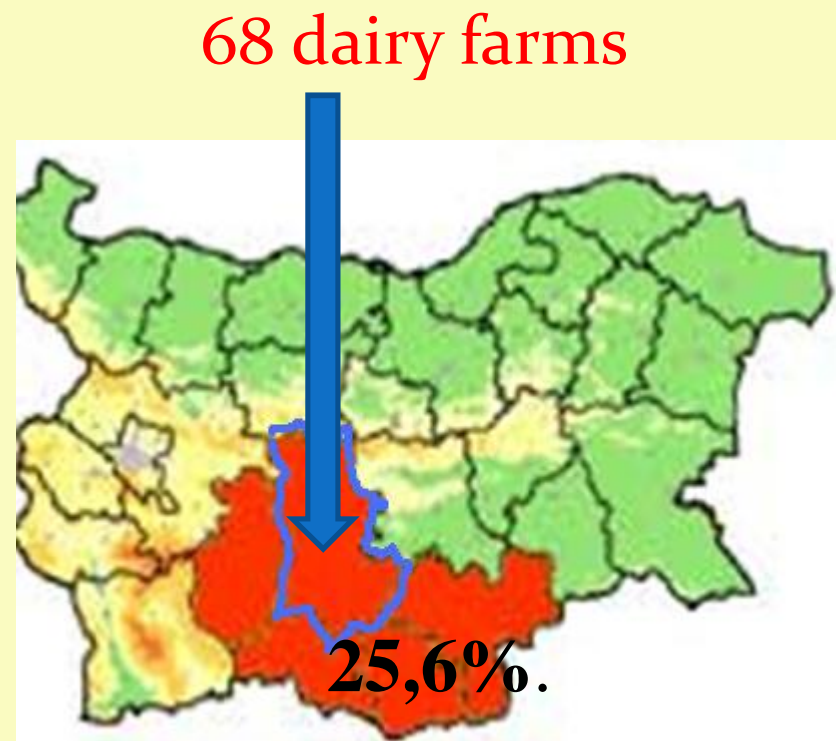
## Indicators

- number of dairy cattle;
- average yield of milk ;
- volume of production;
- size and structure of dairy farms.

sole proprietors (SP) 45%.

one-man limited companies (Ltd.)  
22%

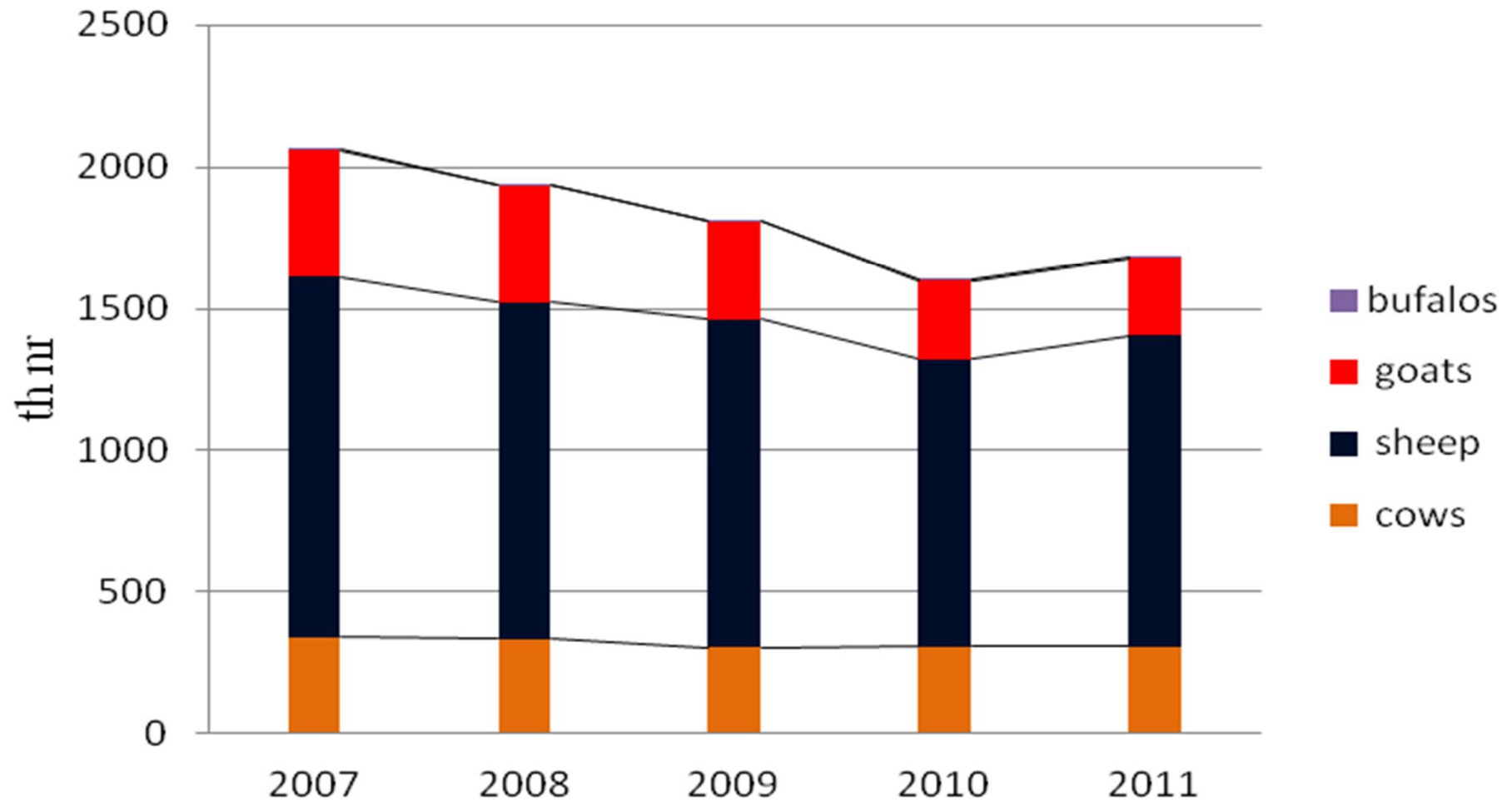
limited liability companies (LLC).  
33%



# Results and discussion

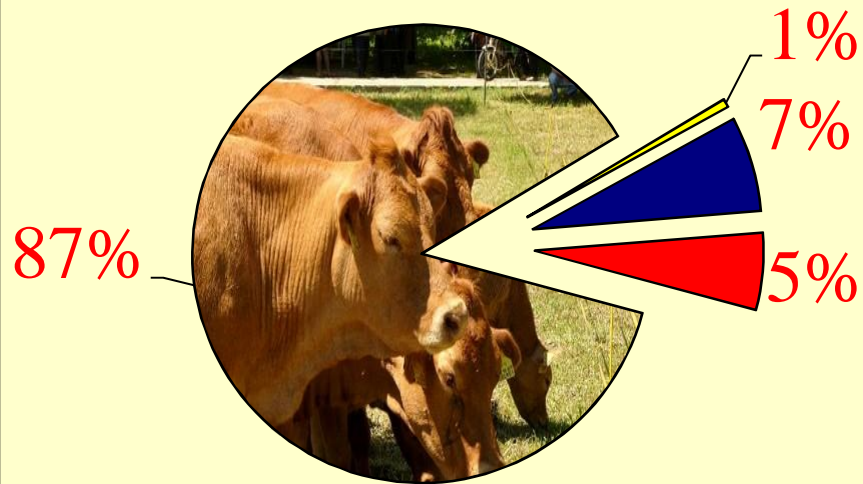
## Milk Production

Number of dairy cattle

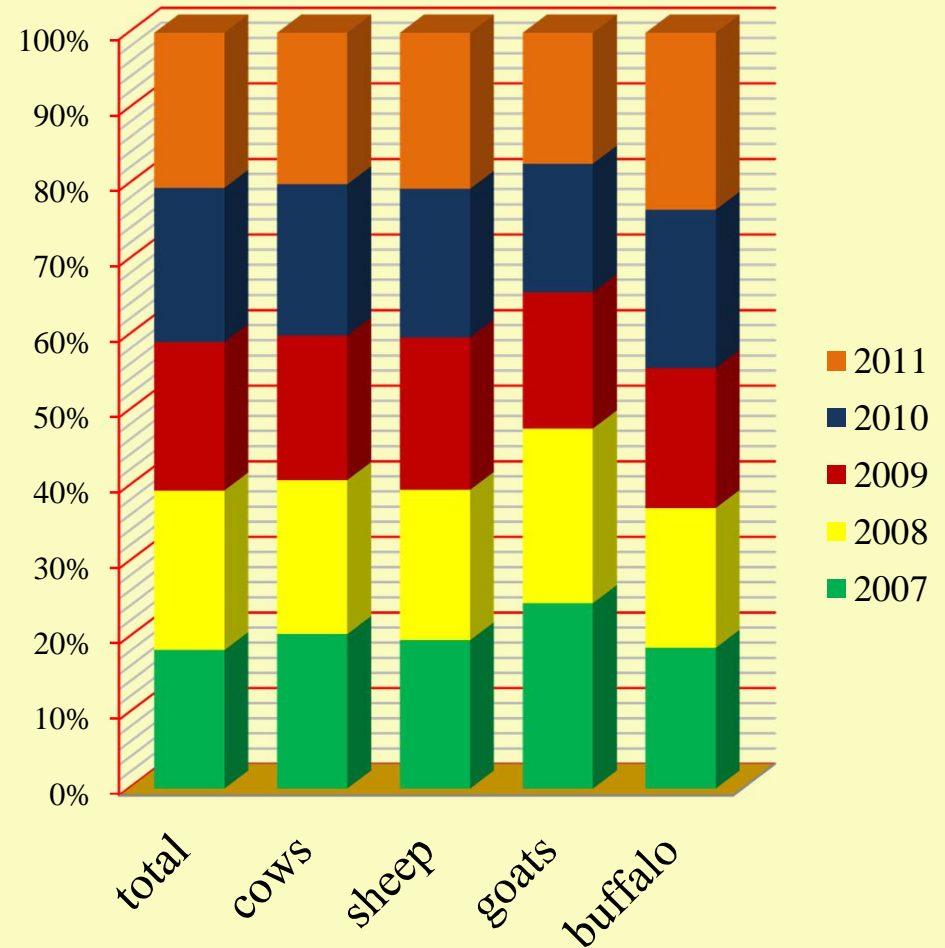


# Milk production

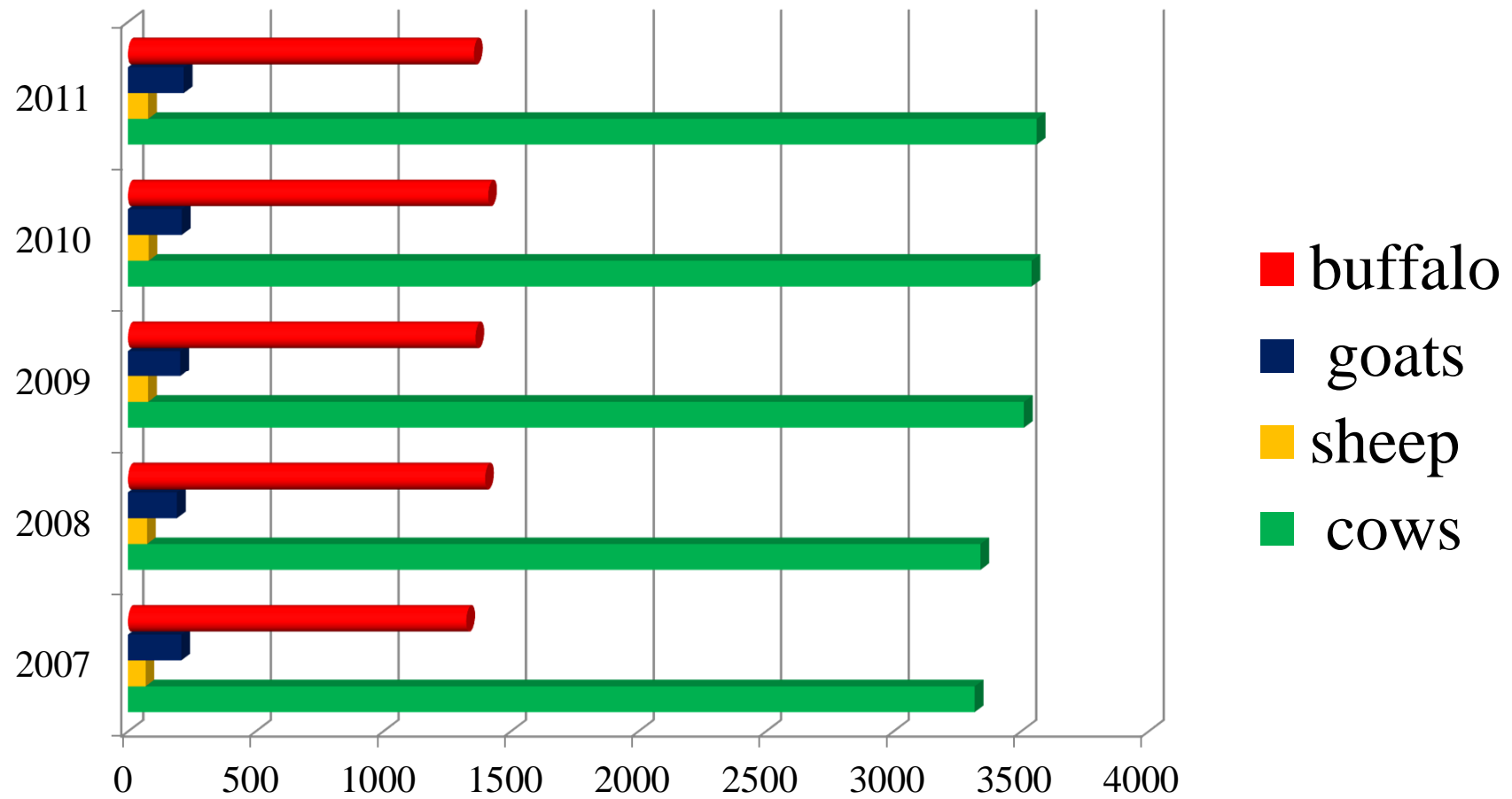
Milk production in Bulgaria, 2007/2011



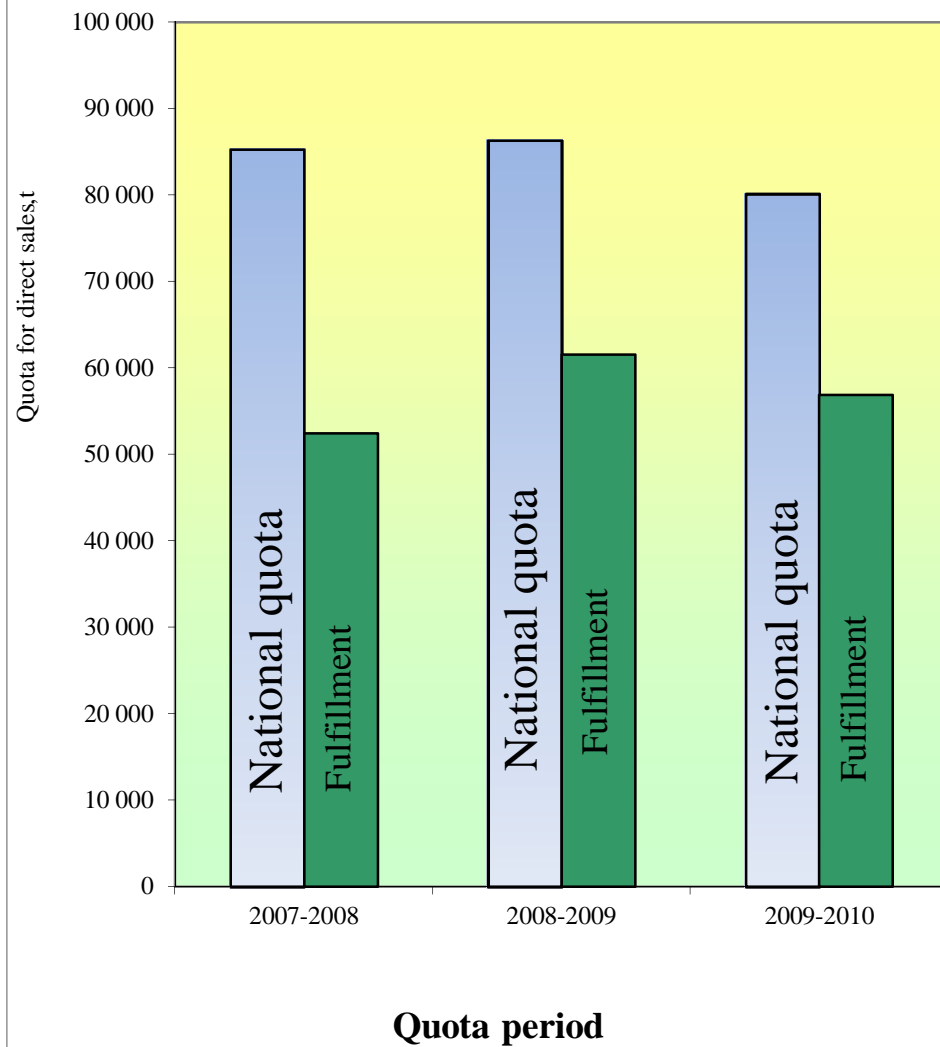
- Cow Milk
- Buffalo Milk
- Sheep Milk
- Goat Milk



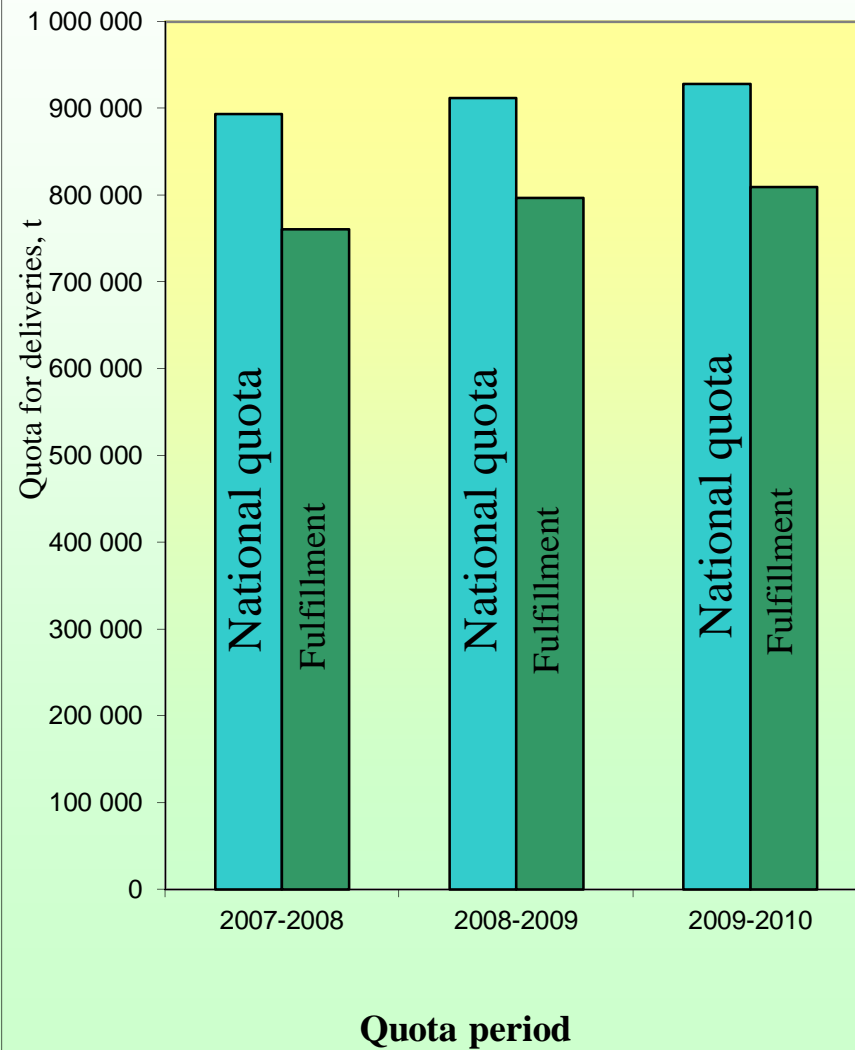
# Milk yield



## Fulfillment of the national quota for direct sales



## Fulfillment of the national quota for supplies





# Structure of dairy farms-features and problems

## CHANGE IN THE NUMBER AND SIZE OF DAIRY FARMS

Type	Alteration,%		Alteration,%		Alteration,%		Alteration,%		Total	
	farm	head	farm	head	farm	head	farm	head	farm	head
	1-2		3-9		10-19		20and >			
<b>2008/2007</b>										
Cows	-13,8	-13,1	-14,8	-13,5	-8,5	-6,8	9,4	9,8	-13,4	-6,3
Buffalos	-7,6	-10,1	12,2	37,5	15,1	16,7	-13,2	-4,7	-2,8	3,1
<b>2010/2009</b>										
Cows	-20,3	-20,9	-18,7	-20,4	5,2	-0,2	48,9	39,2	-17,5	3,8
Buffalo	21	22,2	-26,8	-36,9	49,1	48,6	-8,3	3,2	10,9	8,2
<b>2008/2007</b>										
Goats	1-9		10-49		50-99		100 and >			
	-18,1	-19,0	-18,8	-20,5	40,6	50,3	8,5	17,3	-17,9	13,2
Sheep	-13,0	-14,7	-10,3	-10,9	-15,1	-14,2	21,8	22,3	-11,9	-3,7
<b>2010/2009</b>										
Goats	-12,2	-10,4	-24,7	-24,7	-23,5	16	-17,6	-15	-12,4	-9,2
Sheep	-7,7	-7,7	-25,5	-26,3	-18	-22	16,8	12,4	-9,3	-3,6

Variable-Criteria and indicators	Dairy farms			
	Total	Sole Proprietor (S L)	Ltd.	LLC
Number of cows	0,794**	0,448*	0,811**	0,968**
Total production, l	0,849**	0,520*	0,948**	0,883**
<b>First criterion - average number of staff</b>				
Total employed in the farm	0,924**	0,823**	0,958**	0,632*
Of which, management staff	0,876**	0,879**	0,932**	0,811**
Age of 15 to 35	0,639**	0,001	0,823**	0,619*
Age of 36 to 55	0,613**	0,946**	0,369	0,331
Aged above 56	0,246	-0,162	0,211	-0,028
Men	0,461*	0,179	0,493*	0,238
Ladies	0,476**	0,118	0,511*	0,093
Work experience to 15 years	0,838**	0,096	0,913**	0,638*
Work experience from 16 to 35	0,506**	0,941**	0,458*	0,311
Work experience above 36	0,060	-0,168	0,104	0,017
<b>Second criterion – qualification of personnel</b>				
Bachelor	0,513**	0,291	0,836**	0,823**
Master's degree	0,726**	0,394*	0,948**	0,996**
Experience in the specialty to 15	0,838**	0,428*	0,794**	0,832**
Experience in the specialty from 16 to 35	0,643**	0,933**	0,583*	0,611*
Work experience above 36	-0,244	-0,781**	-0,482*	0,033
Specializations in the country	0,402*	0,000	0,584*	0,961**
Specialized trainings abroad	0,658**	0,000	0,631*	0,994**
English speaking	0,546**	0,179	0,611*	0,843**
<b>Third criteria - Labor Productivity</b>				
Gross Output / lev	0,690**	0,244	0,828**	0,624*
Gross Output per employee / lev	0,378*	0,490*	0,346	0,244
Gross Output per man / lev	0,475**	0,232	0,581*	0,390
<b>Fourth criteria - Payment and incentives labor</b>				
Primary payment and benefits, lev.	0,749**	0,956**	0,638*	0,548*
Additional incentives, lev	0,499**	0,330*	0,548*	0,811**
Observations, %	100	45	22	33

# Conclusion

- All decisions taken in the dairy sector after 2007 are resultant from the new organizational, market economy environment after the accession to the EU.
- Restructuring and modernization of the dairy sector is going at a slow pace due to delayed administrative measures and government support, especially for the farms of the first and second groups. The slow pace of the process of enlargement of farms is expected to be kept for the next few years.
- Though the period for unification of the standards for cow milk quality in accordance with European requirements was extended, modernization of small-sized farms did not take place as anticipated.
- The educational and qualification level, as well as the remunerations of dairy farm employees will be of decisive significance for acceleration of the processes of restructuring and modernization in dairy farms.

A scenic landscape featuring a large blue lake in the middle ground, surrounded by green hills and mountains under a blue sky with scattered white clouds. In the foreground, a brown cow with a white face stands in a field of tall grass. The entire scene is enclosed within a white, dotted outline that follows the general shape of the landscape.

**Thank you!**