ISSN 1450-9156 UDC 636 DOI:10.2298/BAH1202155K

# STATE AND OUTLOOK OF THE BULGARIAN ANIMAL PRODUCTION AFTER THE ACCESSION OF BULGARIA TO THE EU

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**Abstract:** An analysis of the Bulgarian livestock development for the period 1990-2010 was made. The major conclusions were as follow:

- ✓ Bulgarian animal husbandry collapsed during the period 1990 2000. After the entry of Bulgaria into the EU there was a trend towards revival. The way out of this crisis depends on an active intervention of the country;
- ✓ Grants in animal husbandry are insufficient and do not create interest in the livestock development;
- ✓ It's necessary to increase the national payments for farmers breeding animals. In this direction may be sought other decisions as well;
- ✓ Bulgaria's perspectives in the field of animal husbandry are in the following directions: sheep, goat and buffalo breeding, meat cattle and organic farming;
- ✓ Financial incentives for producers of animal products to construct processing plants;

It is imperative to initiate national intervention about returning Bulgaria and its products to markets of Russia, former USSR countries and Arab countries with its specific animal husbandry products.

#### INTRODUCTION

Bulgarian agriculture in the last 21 years was in deep crisis. Particularly serious were the condition of animal husbandry.

The various livestock and poutry species number are shown in Table 1.

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 Table 1. Livestock and poultry numbers (thousand pcs.)

№	Animal species and		Variation			
	categories	1990	2000	2007	2010	2007 - 2010, %
1.	Cattle - total	1575.1	681.7	633.2	544.5	-14.0
1.	including dairy Cows	605.9	431	345.5	326.8	-5.4
2.	Buffalo- total	23	9.3	9.1	9.2	1.0
۷.	including Buffaloes dame	11.2	5.9	4.8	5.4	12.5
3.	Sheep - total	8130.3	2549	2073.6	1368	-34.0
3.	including Ewes	5007	1947.3	1336.2	1093	-18.2
4.	Goats- total	432.9	1046.3	1079.8	356.3	-67.0
4.	including female Goats	366.5	846.8	507.5	278.0	-45.2
5.	Pigs – total	4331.6	1512.3	816.3	664.0	-18.6
3.	including Sows	380.5	171.4	79.4	54.2	-31.7
6.	Poultry – total	36338.8	15007	19500	17400	-10.8
0.	including Laying hens	24250	8304	9549	8778	-8.1

Source: Agrostatistic, 2011

The data in the table shows progressive decline in the number of animals in the period 1990-2000. Particularly significant is the decrease in pigs and sheep number. A similar trend was observed in cattle and buffaloes.

Goats were the only species which showed steady increase (by 60%) due to their unpretentiousness to the conditions of breeding and feeding. Many families breed them in their personal backgrounds and farms

After Bulgaria's entry into the European Union in 2007 the number of animals continued to fall down. The decline was relatively less in dairy cows by 5.4%, and ewes - about 18.0%. Even more dramatic is the downgrade in goats and pigs .There was a negligible increase in the number of buffaloes during this period.

Bulgaria is the least developed country in the EU as per number of animal units kept at 100ha land and 1000 residents. Data are listed in table 2 (*Dardzhonov et al.*, 2010):

Table 2. Animal units (AU) per area of 100 ha and 1000 to 2007

	AU per area of 100 ha			Per area of 100 ha			
	Average	Maximum	Minimum	Average	Maximum	Minimum	
EU-27	82	335(NL)	32(BG)	267	1369(IR)	120(BG)	
EU-15	90	335(NL)	50(FN)	279	1369(IR)	169(IT)	
EU-12	57	117(SIN)	32(BG)	225	269(SIN)	120(BG)	

✓ *Important*: Bulgaria has the least developed husbandry in EU-27.

The data in the table shows that in the EU-27 the average AU per area of 100 ha was near 82 and the number of animals per 1000 residents was 267AU. In

Bulgaria, these parameters were significantly lower, 32 and 120 units respectively.

The amount of cow's milk production /fig. 1/ in 1990 was 2.101 thousand T, but in 2000 it fell off to 1.411 thousand tons. This reduction represents about 32.8%. Similar trends were seen in sheep and buffalo milk production, where the percentage of reduction was 56.2 and 64.5% respectively.

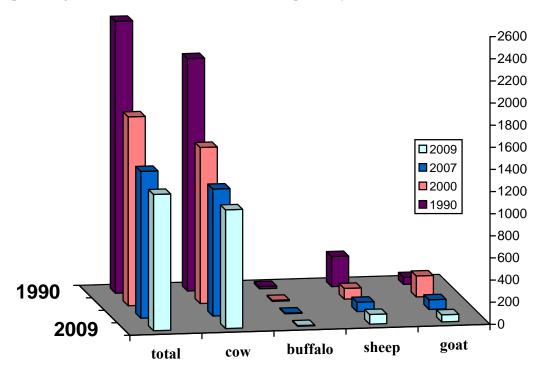


Figure 1. Total milk production, thousand tons

Goats were the only species in which milk production was doubled during this period.

With Bulgaria's entry into the EU milk production in different species continued to fall smoothly. The decline of milk production was 6.5% in cows, while in sheep it decline insignificantly by 2.7%. Reduction the number of goats as a result decreased production of goat's milk by 26.4%. Bulgaria is the unique EU country that could not meet the set EU milk quota and had to import milk (dried and raw) from other EU countries. In 2009 the imports accounted for about 61.0 thousand tons. Meat production after 1990 dropped dramatically /Fig. 2/.

Total meat production in 2000 decreased by 75.1% compared to 1990.

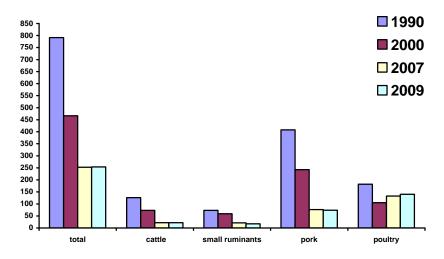


Figure 2. Total meat production, thousand tons

The yield of pork fell hardest / drop 84.2% /. After 2000 the downward trend in meat production continued. Pork and sheep and goat meat production declined more than 2-3 times.

After the entry of Bulgaria into the EU meat production continued to decline with the exception of chicken meat, where there was an increase of 11.8%.

Being an exporter of meat and meat products till 1989 Bulgaria has become an importer of these products since 1990. According to "Customs" Agency in 2009 were imported about 167.5 thousand tons of meat, which often did not meet quality criteria and had dubious origin.

The average animal performance decreased together with the total production of animal products. If there was improvement of animal performance in some farms it was insignificant. Table 3 shows the average performance of dairy cows in the EU.

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	2007	2008	2009	2010
EU- 27	6161	6259	6351	6445
EU-15	6784	6852	6927	7010
EU-10	5015	5255	6465	5606
EU-2	3040	3020	2963	3011
Bulgaria	3300	3644	3616	3680

Table 3. Average productivity of dairy cows in EU countries (kg / head):

The data in the table shows that the average productivity of dairy cows in Bulgaria was considerably lower than other EU countries, including those of former socialist countries / Czech Republic, Poland, Slovakia etc. /. Thus the average dairy cows productivity in 2009 is 6133kg, while in Bulgaria is 3800kg.

# WHAT ARE THE CAUSES OF THIS CONDITION OF BULGARIAN ANIMAL HUSBANDRY?

- ✓ Wrongly agrarian reform held in Bulgaria since 1990. Many Bulgarian farmers had no land for fodder production and did not receive EU subsidies;
- ✓ Separation of production from processing industry;
- ✓ Low productivity and competitiveness of animal husbandry during this period;
- ✓ Violated export markets, reduced purchasing power of a Bulgarian citizen;
- ✓ Products with low quality;
- ✓ Insufficient national financial support to the animal husbandry.

By 1989 about 90% of agricultural land was co-operated and managed by agro-industrial complexes. In 1990 a law was passed to return the land in real border to the former owners. In pursuance of this Act there were created liquidation councils to destroy the structures of the agro-industrial complexes. The land was returned in real borders to owners, irrespective of whether they demanded or were able to cultivate it. As a result a report, issued by MAF (2005) stated that the number of private agricultural farms amounted to over 7.6 million.

About 73.3 percent of the land size was 1 hectare and only 0.1% was larger than 1000 ha. The total number of farms in Bulgaria was 665.500 units in 2003 and – 534.600 units in 2005. The average area of arable land was 4.4 and 5.2 ha respectively. To prevent further fragmentation of Bulgarian agriculture in 1999 was removed the restriction on the maximum size of the land that a farmer was allowed to manage (600) hectares). This unleashed a large-scale land rent. That was confirmed by *Dardzhonov et al. 2010* shown in Table 4.

i able 4. Distribution of usable area (UA)	by farmers in Buig	arıa
Groups	Rural economy,	U

Groups	Rural economy,	UA,	%	Average,
	ths. units.	ths. ha	of UA	ha
to 0.5 ha	258	45.6	1.5	0.18
0.5 - 5.0 ha	184	249.3	8.2	1.35
5.0 – 100.0 ha	20	373.9	12.3	18.7
over 100.0 ha	3.8	2371.3	78.0	621.3
including over 1000.0 ha	0.5	1158.3	38.1	2428.3

In the EU-15 group of over 100 ha the average usable area was 224.8 ha (144.1F - 359.3PG). In the EU-12 the average usable area in the large farms was 341.6 (Czechoslovakia with 720.5 ha, Slovakia - 813.5 ha, but no farms with more than 2.000 ha).

The data in the table shows that the average size of a farm in the EU is 22,1 ha and in Bulgaria - 24,3 ha. Therefore, medium-sized farms did not constitute any problem. The trouble that 78% of the farmers had over 100 ha land and for the most part, were not interested in animal husbandry and vegetable-growing. They mostly grew grains and oilseeds as it is shown in Table 5

Crouns at 2007	U	UA		AU		
Groups at 2007	ths. ha	%	ths. heads	%	AU/100ha	
Small	668.8	18.0	856	87.5	128	
Large	2371.3	82.0	122	12.5	6	
Total	3040.1	100.0	978	100.0	32	

Table 5. Distribution of AU by groups of rural economy (Dardzhonov et al., 2010):

<u>Important</u>: In our animals are focused mainly on small farmers and large lead monoculture farming without livestock.

The data in the table above shows that about 87.5% of the animals were bred by small farmers, who operated only 18% of UA and bred 128 AU per 100 ha, while large farmers - only 6 animals.

Moreover, many of land owners refused to cultivate it (by various reasons). As a result 15.0 thousand ha of the land was deserted, which represents about 30% of the UA, although Bulgaria has a wonderful ground and climatic conditions for farming.

The above mentioned reform had strong repercussion on the development of animal husbandry. Under the law, animals from the agro-industrial complexes were distributed as an aequity to the owners. Most of them had no desire and conditions to be involved in this activity, resulting in mass slaughter of animals. The remaining animals were bred in very small and primitive farms making them ineffective.

Table 6 shows the distribution of dairy cows according to the number of animals on farms.

Table 6. Distribution of dairy cows according to the number of breeding anima	als in farm

Number of animals in		Farms (thousand), per year					Amendment, %
farm	2000	%	2007	%	2009	%	2009/2007
1-2	211.8	95.7	97.6	36.1	72.1	30.1	-32.8
3-9	9.0	4.1	19.6	25.2	13.3	20.0	-47.4
10-19	0.3	0.1	3.1	11.8	3.0	13.6	+22.8
over 20	0.1	0.1	1.9	26.9	2.2	36.3	+13.6
total	221.2	100	122.2	100	90.6	100	-34.9

The data report in the table above shows that in 2000 nearly 95.7% of the farmers have bred 1-2 cows, and the percentage of farms with over 20 cows was only 0.1%. After the entry of Bulgaria into the EU there was a trend to consolidation of farms. In 2009, 36.3 percent of the cows were bred on farms with over 20 heads. A similar trend of consolidation was seen in sheep breeding.

In poultry and pig production also took place the privatization process took place in poultry and pig production as well, but for the most part they kept their production structures. It should be noted that during these years only Bulgarian poultry maintained relatively stable rates of growth and development.

The small size of the farms has led to serious breach in the technology of animal breeding. Also feeding of the different species and categories of farm animals was worsening. Veterinary service and animal selection broke down.

The quality of livestock production worsened as a consequence of the deteriorated conditions under which animal products were produced and stored. About 45.0 percent of the milk had lower quality and did not meet European standards. According to a deadline set by Food Safety Agency all dairy farmers had to meet all EU standards up to 31.12.2011. Otherwise they would be closed. This created serious problems for the small farmers who faced the threat of losing their means of livelihood.

Besides, enterprises producing dairy products did not meet EU requirements either. Thirty four out of 345 enterprises producing dairy products were licensed to export dairy products to EU countries and 34 - to export its products to third countries. The remaining over 250 enterprises produced dairy products for local market only. For this reason, exports of dairy products / Fig. 3 / during the period 1990- 2000 decreased significantly till 2001, when it began slowly to rise. These data are shown in Fig. 3:

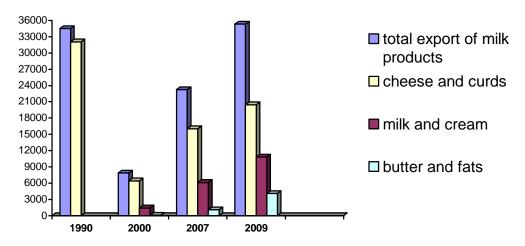


Figure 3. Milk and milk products export, tons

Exports in 2000 decreased about trice compared to 1990 and in 2000 it began to increase smoothly.

Similar trends were observed in exports of meat and meat products. Living standards of Bulgarian citizens after 1990 began to fall sharply due to deteriorating economic conditions. The debased standard of living had adverse effect on the consumption of animal products (Fig. 4):

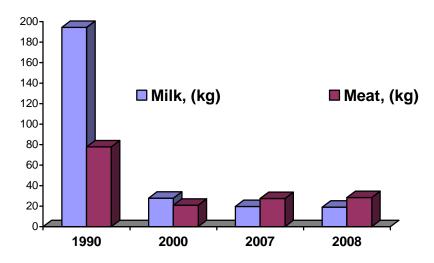


Figure 4. Consumption of animal products /average per capita /:

The data in the figure above indicates that in 2000 the consumption of milk in Bulgaria per capita has decreased by approximately trice, and meat - about 55% compared to 1990. Since 2000, a trend of increasing milk and meat consumption is being observed. This level of consumption of animal products is far away from the optimum requirements of the rational standards for healthy nutrition.

Animal husbandry development was further negatively influenced by the reduced consumption and the lack of state support.

During the period 1990 - 2000, the Bulgarian animal husbandry has been left without financial support. After this period, began promoting of animal husbandry development under the National Fund "Agriculture" and "SAPARD" program. Under the NF "Agriculture" many farmers who raised purebred animals were assisted via free of interest credits. Only in the pre-integration period of Bulgaria into the EU under the SAPARD program was offered help for construction of farms and processing plants where 50% of the costs were covered by the program. The requirements under this program were very high and only large and financially powerful farmers were able to benefit this subsidy.

According to an agreement between Bulgaria and the European Union in 2007 the country received development subsidies amounting to 1.552 billion euro

for the period from 2007 to 2009. Under the contract these funds were in the following directions:

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- Direct payments 431 million euro;
- Market support 388 million euro;
- Development of country regions 733 million euro.

## Schemes for payments to farmers in 2010:

Category	Subsidy
Single Area Payment:	
Arable land	140€/ha
Meadows and pastures	100€/ha
Per animal:	
For cows	100€/ha
For sheep and goats	50€/ha
Quality of milk:	35-50€/T
Modernization of farm:	till 1.5million €/ha
Implementation of the Nitrates Directive:	till 80% of costs
Exportation:	
Cheese	125-175€/T
Lamb meat	400€/T
Chicken meat	450€/T
Eggs	200€/T

Bulgaria is eligible to additional payments from the national budget as follows:

- 55% of direct payments in the community in 2007;
- 60% in 2008;
- 65% in 2009.

In 2010 Bulgarian farmers received payments under the following schemes:

• Direct payments are available to UA.

The minimum size of this area is from 0.5 to 1 ha, respectively perennials, vegetables and tobacco. For other crops this area should have dimensions not less than 1ha. Subsidy to be provided is 140 euro per hectare.

The disadvantage of this system is that many of our farmers who breed animals have no own land and can not receive financial support. Perhaps many of these farmers will fail or will not be competitive on the European market.

Moreover, this system of subsidity does not allow be encouraged industries where there is a niche in the European market. That refers to sheep and goat products. In European countries there is a shortage of sheep and goat products of around 60% in European market. Such a niche is breeding of specialized meat breeds. Animal husbandry could also be subsidized, by the national budget of the country, but at this moment it's limited options.

Analysis of subsidies' absorption in agriculture showed that Bulgaria has utilized only 20% from the allotted funds within various EU programs. The utilization of these funds in animal husbandry is scanty - about 6%, and has negative impact on the branch development. The utilization of subsidies granted by the EU is hampered by the high criteria set for Bulgaria by EU about food safety and quality, environment and humanely attitude to animal. Many of the farmers could not cover these requirements. Furthermore, projects drafting is a problem for farmers, which hinders them. Payment of the projects is carried out after their implementation, which greatly hinders small farmers. The lack of guarantee fund hampers the financing of small farmers. Administration servicing the farmers is not sufficiently motivated and in many cases instead of helping it obstructed them. Many of the farmers do not wish to apply for these programs.

#### **CONCLUSION**

Bases on the foregoing the following conclusions can be made:

- ➤ Bulgarian animal husbandry collapsed during the period 1990 2000. After the entry of Bulgaria into the EU There was a tendency for its revival. The way out of this crisis depends on an active intervention of the country;
- Grants in animal husbandry are insufficient and do not create interest in the development of livestock;
- It is necessary to increase the national payments for farmers breeding animals. In this direction could be sought and other decisions;
- ➤ Bulgaria's perspectives in the field of animal husbandry are in the following directions: sheep, goat and buffalo breeding, meat cattle and organic farming;
- ➤ Financial incentives for construction of processing plants by producers of animal products.

It is imperative national intervention about flashback Bulgaria and its products to markets of Russia, former USSR and Arab countries. Objects of this propaganda would be the specific products of Bulgarian animal husbandry.

# Stanje i izgledi u stočarstvu u Bugarskoj nakon ulaska u EU

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#### Rezime

Rad predstavlja analizu razvoja stočarstva u Bugarskoj u periodu od 1990-2010 godine. Kao rezime studije možemo zaključiti sledeće:

- Stočarstvo u Bugarskoj je doživelo kolaps u period od 1990 2000.
   Godine. Nakon ulaska Bugarske u EU, pojavila se tendencija njegovog oživljavanja. Ali, izlazak iz ove krize zavisi u velikoj meri od intervencije države;
- Grantovi/bespovratna sredstva u stočarstvu nisu dovoljna i ne stvaraju zainteresovanost za dalji razvoj stočarstva;
- Neophodno je povećati nacionalna plaćanja za farmere koji se bave odgojom životinja/stoke. U tom pravcu treba da se kreću i druge odluke;
- Perspektive bugarske u oblasti stočarstva moraju se kretati u sledećim pravcima: ovčarstvo, kozarstvo i uzgajanje bivola, tovnih goveda i u organskoj proizvodnji;
- Finansijski podsticaji za izgradnjuu preradjivačkih objekata za proizvodjače proizvoda životinjskog porekla.

To je imperativ u smislu nacionalne intervencije kako bi se Bugarska i lokalni proizvodi vratili na tržište Rusije i bivših sovjetskih država, kao i na tržišta arapskih zemalja sa specifičnim bugarskim proizvodima iz stočarstva.

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Received 31. October 2011; accepted for publication 21 February 2012