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CATTLE STOCK AND THE ANALYSIS OF TOTAL MEAT PRODUCTION IN THE REPUBLIC OF SERBIA¹

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Summary

Over the last few decades cattle stock has been greatly reduced and therefore the production of all kinds of meat has been reduced as well, as a result of those changes.

This work shows, based on the data of the Republic Bureau of Statistics, the results of cattle stock and total meat production variability in Serbia for the period from 2000 to 2009. In 2009 the production of all kinds of meat was 457.000 tons which was 1,5% less than in 2008 and 3,4% less than in 2000. However, in 2009 the production of beef was 1% higher than in 2008, as well as the production of mutton and lamb – 8,7% and the production of poultrymeat – 5,3% higher than in 2008. The biggest fall – 5,3% was recorded in the production of pork. If compared to the production in 2000, the production of mutton and lamb was 31,6% higher, the production of poultrymeat was 19,4% higher, while the production of beef was 2,9% less and the production of pork was 11% less.

Thanks to the Government of the Republic of Serbia measures for stimulating cattle breeding, cattle breeding has slowly been taking the place that it deserves in the economy again.

Key words: *cattle breeding, the production of beef, pork, mutton and poultry meat.*

JEL: *Q10, Q19*

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Introduction

Total level of agricultural production development in a country depends on the share of livestock production in the structure of agricultural production.

In 2009 the benefit of realized livestock production in Serbia was estimated at 1.675 million dinars and it was 69 million less than in the year before, while the share of 30% in total agricultural production benefit was 10,5% less.

These data point to the insufficient development of agriculture, one of the branches of the economy of our country.

There has been a deep crisis in cattle breeding in the Republic of Serbia, in spite of distinct favorable agroecological conditions. During the period of last two decades the number of head of cattle has been falling at an annual rate from 2 to 3%. As a result of such changes, the drop in the production of meat from 600.000 tons during the nineties to 457.000 tons in 2009 occurred, while in 2008 the consumption of meat was reduced from 65 kg per capita to 44 kg per capita (60,3 kg with meat products).

The reasons for such a bad condition are numerous, but above all the reasons are: disturbed price parity, the loss of markets, impossibility to export (except for young beef and thermally processed pork), reduced purchasing power, disturbed financial system and lack of government support, insufficient financial means in agrarian budget, disintegration of the production process in relations of primary production and procession (because the privatization process hasn't been done properly), inadequate stock management, etc.

Working method

Statistical data processing for the period from 2000 to 2009 on the number of cows and the production of beef, the number of pigs and the production of pork, the number of sheep and the production of mutton and total number of poultry and the production of poultry meat in the Republic of Serbia was done. During the research, apart from statistical data on livestock production, the data of the Ministry of Agriculture, Trade, Forestry and Water Management were used, as well as the data of the Food and Agriculture Organisation (FAO) and professional literature.

Basic aim of the work is to analyze recent tendency in realization of livestock production in the Republic of Serbia that could represent a solid base for making certain predictions about production range of livestock production that could be expected in the future.

Results and discussion

Basic socio-economic aims of meat production and meat products development are: to satisfy human nutritional needs, to provide raw material for the Food Industry, to make necessary food products reserves and to export meat and meat products.

Total number of head of cattle and meat production

Cattle breeding production in Serbia, which represents the base of modern livestock production, participates with 46,6%, while its share in total meat production is 21-23%. During the period of transition from 2000 there has been a tendency towards increase in the number of head of cattle and in 2009 statistical research recorded that the number of head of cattle (1.002.295) was 2,2% higher in relation to the average number for the period from 2000-2008, while it was 5,2% less in relation to 2008 (Table 1.).

Table 1. The total number of cattle and meat production in the Republic of Serbia

Year	Cattle (in thousands)			Meat (thousand tons)		
	Total number of cattle	Chain index %	Base index 2000=100	Beef meat	Chain index %	Base index 2000=100
2000	1.246	-	-	103	-	-
2001	1.162	93,3	93,2	93	90,3	90,3
2002	1.128	97,1	90,5	97	104	94,1
2003	1.112	98,5	89,2	95	97,9	92,2
2004	1.102	99,1	88,4	93	97,9	90,3
2005	1.079	97,9	86,6	90	96,8	87,4
2006	1.096	101,6	87,9	83	92,2	80,6
2007	1.087	99,2	87,2	95	114,4	92,2
2008	1.057	97,2	84,8	99	104,2	96,1
2009	1.002	94,8	80,4	100	101,0	97,0
Average	1.107,1	97,6	87,6	94,8	99,7	91,1

Source: Authors calculate according data from Statistical Office of the Republic of Serbia

Observed internationally, the share of the number of head of cattle in the world is about 0,2%, while its share in Europe is 1,2%, which points out relatively insignificant international importance of Serbian livestock production.

According to the data of the Republic Bureau of Statistics, at the beginning of 2010, 586.000 of cows and young cows in calf were recorded statistically, which represents reduction in relation to 2008, it is 6,3% less in relation to 2008 and 18,9% less in relation to the average number for the period from 2000-2008. Regarding breeding structure, *Simmental* breed is dominant, the share of *Half-breed* breed is also very high, while the share of *Holstein* is about 10%.

During the last three decades the average rate of decrease in the number of head of cattle was 2,5% and that represents the highest rate of decrease among all domestic animals breeds. During the last ten years total decrease occurred in Central Serbia, in other words in hilly and mountainous regions and it was 2,9%. In depression regions

which includes Vojvodina, during the same period, livestock production was 2,1% higher. Regional share in the number of head of cattle between Central Serbia and Vojvodina is 75,3% and 24,7% in relation to the Republic of Serbia. The share of Central Serbia in the total number of head of cattle was significantly higher two decades ago – almost 85%.

There is a strong genetic base for cattle breeding in Serbia and it represents the base for human nutrition. Above all, this claim is related to Simmental breed which represents basic production because the production of beef is based mostly on domestic colourful head of cattle – *Simmental breed* (56,6%) and *Pure Simmental breed* (25,3%), and less on *Holstein-Friesian breed* (6,5%) and other breeds and *Half-breed* (17,8%). Although the quality of our domestic *Simmental* head of cattle represents strength, not weakness of our meat production, recent import in mostly Simmental breed improved breeding structure for both purposes of production (meat and milk), however this improvement mostly happened on the farms which imported, but it haven't been spread among other population. The production of beef, young beef and veal was 100.195 tons in Serbia in 2009, which is 1% higher than in 2008, or 7,5% higher in relation to the average production for the period from 2001-2008 (Table1.) The share of these kinds of meat in total meat production is 21,9%. Observed internationally, the share of this production in the world production is about 0,17% or 1,3% in European production which points out relatively insignificant international importance of Serbian meat production.

Farms (farmers) specialized for the production of meat are aiming to the production of young beef for domestic demands and export. The future of Serbian meat export lies, above all, in the production of young beef with such quality that meets the requirements of a certain market (Italy, Greece etc.).

Over the last years Serbia significantly reduced export of beef and young beef. During the period from 2007-2009 the export of beef and young beef was 60% less. (Table 2.). During the same period, placement of beef and young beef on the EU market was reduced as well at the same rate. Preferential use of export quota (8.700 tons) was just 11% in 2009. Serbia lost the status of an important exporter of young beef which, during the eighties, represented special international brand regarding quality. Just as an example, in 1985 20.000 tons of beef and young beef worth 35 million USD was exported. On average, about 120.000 of young cows were exported and annual income in foreign currency was approximately 100 – 150 million of dollars, while at the same time import was far less (about 50 million per year).

Table 2. Exports of beef and baby beef in the period 2007 - 2009

Year	2007		2008		2009	
	Quantity in t	Value in mil. USD	Quantity in t	Value in mil. USD	Quantity in t	Value in mil. USD
Baby beef and beef - total	9.158	38,8	6.341	35,8	3.568	20,2
Baby beef-EU	2.289	12,3	993	6,2	984	6,2

Source: Statistical Office of the Republic of Serbia, Statistic of foreign exchange

Apart from the export of young beef, the export of livestock (young cows and calves) becomes more and more frequent on the markets in the surrounding countries, which produces negative effects on meat production in the Republic of Serbia. According to the data of the Republic Bureau of Statistics, the export of livestock was increased from 1.432 head of cattle in 2006 to 19.604 head of cattle in 2007, 72.492 head of cattle in 2008 and 65.232 head of cattle in 2009.

The export of cattle intended for slaughter and beef (young beef and veal) is being done in very complicated conditions, restricted by domestic restrictions and weaknesses, as well as by factors in the surroundings, in other words by international market. Only special quality and prices that are accepted and accredited by world market represent a guarantee for the placement of meat products - our products produced for foreign market.

Total number of pigs and the production of pork

Total number of agricultural households that are dealing with pig breeding is about 400.000, which is two times more than the number of agricultural households that are dealing with cattle breeding (about 200.000). Average number of pigs of all categories per agricultural household was 9 in 2008, and the share of non-family households in the total number of pigs was 17% and it is higher than in cattle breeding (family agricultural households had 93,8% of the total number - 1.057.000 head of cattle, and the remaining 6,2% belonged to non-family agricultural households).

The total number of pigs in Central Serbia is 62% on agricultural households and 38% is on agricultural households of Vojvodina.

Breeding structure of pigs is primarily *Half-breed* (58%) F1 and F2 generations of pure breed. Apart from *Half-breed*, there is also *Dutch Landrace* (30-34%), *Big Yorkshire* (3-5%), *Hampshire*, *Duroc*, *domestic meaty pig* and *other Landrace breeds* (3%). Therefore, pure breeds are dominant, as well as half-breed of pigs for meat and fat production, while the share of extremely meaty breeds (*Hampshire*, *Duroc* and *Pietren*) is only 3% and they are used as terminal sire breeds for crossbreeding with Half-breeds F1 and F2 generations aiming to get material for meat production. The presence of a large number of Half-breeds got by unplanned crossbreeding is characteristic, as well as the diversity of genetic material, but on average the level of quality of head is low. The data that shows that the percentage of artificial

insemination is below 15% also shows the conditions in which planned selection on small farms is. Until the mid – eighties of the last century hog raising in Serbia had had a growing trend and the total number of pigs had reached 5,5 million, but after mid – eighties there was a reduction in the number of pigs especially on the territory of Vojvodina. Sudden rise in fodder prices in 2008 caused decrease in the prices of all categories of pigs, which caused serious harm to pig fattening agricultural households.

The share of the production of pigs in the total livestock production reached 34,5% in 2009 and it was worth 591 million of USD, while its share in the total meat production was higher than 57%, depending on the year. According to the data of the Republic Bureau of Statistics the total number of pigs in 2009 reached the number of 3,631 million, which is 1% less than in the period from 2000-2008, but 1% higher in relation to 2008 (Table 3). At the same time, the number of sows and pregnant young sows was 3,7% higher. The share of the number of pigs in Serbia which numbers 3,6 million pigs in relation to the world number is about 0,45% and in relation to the European number is 2,1%. The number of pigs in the world continually grows (*according to FAO: Statistical Yearbook 2009*) and it reached 941 million in 2008 and 1,3 billion of pigs were also produced intended for slaughter during the same year.

Table 3. The total number of pigs and meat production in the Republic of Serbia

Year	Pigs (in thousands)			Meat (thousand tons)		
	Total number of pigs	Chain index %	Base index 2000 =100	Pork meat	Chain index %	Base index 2000 =100
2000	4.066	-	-	283	-	-
2001	3.615	88,9	88,9	254	89,7	89,7
2002	3.587	99,2	88,2	277	109,0	97,9
2003	3.587	100,0	88,2	258	93,1	91,2
2004	3.634	101,3	89,4	242	93,8	85,5
2005	3.439	94,6	84,6	253	99,2	89,4
2006	3.999	116,3	98,3	255	100,8	90,1
2007	3.832	95,8	94,2	289	113,3	102,1
2008	3.594	93,8	88,4	266	92,0	94,0
2009	3.631	101,0	89,3	252	94,7	89,0
Average	369,4	99,0	89,9	262,9	98,6	92,1

Source: Calculate according data from Statistical Office of the Republic of Serbia

The second, according to the benefits of agricultural production in Serbia is the production of pork which was 252.188 tons in 2009. It is dominant on family households (Total number of pigs on family households in 2009 was 2998.000 which was 82,5% of the total number of pigs in Serbia, while economic organizations and collective farms owned 633.000 pigs which was 17,4% of the total number of pigs in Serbia) and it has extremely distinctive natural features because of low market value which was

only 20% in certain years. The share of pork in the total meat production in Serbia is 55,2% while if observed in relation to 2008 the production is 5,3% less. In relation to the average realized production during the period from 2001-2008 it is 3,8% less, while in relation to 2000 it is 11% less (Table 3). The share of realized production of pork in 2009 in relation to the world production was 0,2%, and in relation to the European production it was 1,3% (*according to FAO*).

There was high demand for pork on Serbian meat market once, however trend of demand for pork has been decreasing and in 2007 it was 36%, but because of unfavorable price trend in 2008 decrease trend increased to 41%.

Recently Serbia has been importing more and more pork. In 2009, 3.751 tons of pigs intended for slaughter worth 6,3 million of USD were imported. At the same time, the import of pork and frozen meat products was 7.338 tons worth 18,2 USD (Table 4).

Table 4. Imports of live pigs for slaughter and pork meat in the period 2007-2009

Year Elemet	2007		2008		2009	
	Quantity in tons	Value in mil. USD	Quantity in tons	Value in mil. USD	Quantity in tons	Value in mil. USD
Live pigs for slaughter	-	-	304	0,7	3.751	6,3
Pork meat with frozen slaughter-house products	2.401	4,7.	5.912	16,1	7.338	18,2

Source: Statistical Office of the Republic of Serbia, Statistic of foreign exchange

CEFTA countries like Montenegro, Bosnia & Herzegovina and FYR Macedonia are the biggest importers of pork and meat products from Serbia. There is a strong demand for meat in Croatia, but this market is unavailable for our country because law regulations of our and their country are not in accordance regarding sanitary and veterinary supervision. Last year the total export of meat from Serbia was 88,3 million of USD and pork was dominant.

The total meat production in Serbia is 457.000 tons annually and more than half of it – 252.000 tons is pork. The average meat consumption per capita in Serbia is about 50 kg annually and more than half of it is pork – 25 kg per capita, while in Austria and in Holland it is 70 kg per capita.

Total number of sheep and the production of mutton

Nowadays, sheep breeding has been spread over the world thanks to their good features of acclimatization. World's leading sheep-breeders are in China and according to FAO there are 136 million of sheep. The number of sheep in the world regarding continents in 2009 was: Africa: 297,12 million, Asia: 452,6 million, Australia: 105,12 million (Just Australia with New Zealand – without other parts of Oceania), Europe: 131,2 million, South America: 72,4 million (without some parts of Central America) and North America: 65,7 million (without some parts of Central America). Total number of sheep in the world in 2009 was about 1,07 billion.

In spite of the fact that we own natural resources and tradition, sheep breeding in Serbia regarding productivity is on an unenviable level. The dominant breed is *Pramenka* (80%) with races like *Pirotski*, *Sjenicki* and *Svrljiski*, while the remaining 20% are *Cigaja* (5%) and half-breeds with foreign races, mostly *Virtemberg* and *Il d'France*.

According to the recent research (*Selection in Cattle Breeding, 2005 Institute for Cattle Breeding, Belgrade*) and statistical data the average fertility of important races of *Pramenka* (*Pirotski*, *Sjenicki* and *Svrljiski*) is 110%, income from wool is 1,8 kg, milk yield 45 l (without milk for sucking lambs) and sheep body weight 3,9 kg at their birth and 20 kg at the age of 90 days, before slaughter. Regarding *Cigaja* and *Half-Breed*, productivity is a bit higher, but because of small share in the total number of sheep, the effects are insignificant.

The estimated cattle breeding benefit regarding activity in 2009 for sheep breeding was 100 million USD with the share of 5,9%.

Sheep production is on the fourth place in cattle breeding of Serbia regarding the number of head of cattle, and regarding meat production. The number of sheep realized in 2009 was 1,504 million, which is 3,4% less in relation to the average number of head of cattle during the period from 2000-2008, in other words it was 6,3% less in relation to 2008. The total number of sheep in 2009 in relation to 2000, taken as the base year, was 6,7% less, while in 2007 and 2008 there was approximately the same number, which was only 0,3% less (Table 5).

In relation to the total number of sheep in the Republic of Serbia in 2009 (1.504 million), 83,2% was in Central Serbia and 16,8% in Vojvodina. 98,9% was on family households and 1,1% was on economic organizations and collective farms.

83,5% of the total number of sheep on family households in the Republic of Serbia is in Central Serbia and 16,5% is on agricultural households in Vojvodina. The share of economic organizations and collective farms in Central Serbia is 52,8% and 47,2% in Vojvodina in relation to the total number in the Republic of Serbia.

Table 5. The total number of sheep and sheep meat production in Serbia

Year	Sheep (in thousands)			Meat (thousand tons)		
	Total number of sheep	Chain index %	Base index 2000=100	Mutton	Chain index %	Base index 2000 =100
2000	1.611	-	-	19	-	-
2001	1.489	92,4	92,4	17	89,5	89,5
2002	1.448	97,2	89,9	15	88,2	78,9
2003	1.516	104,7	94,1	18	120,0	94,7
2004	1.586	104,6	98,4	20	111,1	105,2
2005	1.576	99,4	97,8	21	105,0	110,5
2006	1.556	98,7	96,6	20	95,2	105,2
2007	1.606	103,2	99,7	20	100,0	105,2
2008	1.605	99,9	99,6	23	115	121,0
2009	1.504	93,7	93,4	25	108,7	131,6
Average	1.549,7	99,3	95,8	19,8	103,6	104,6

Source: Calculate regarding data from Statistical Office of the Republic of Serbia, Belgrade

During the observed period, the data show that a significant productivity growth in the productivity of sheep production has been noticed. There is a trend of decrease in the total number of sheep, while meat production range, with small oscillations, remained on the same level from 2004-2007, but in 2008 and 2009 there was an increase in meat production.

The production of mutton and lamb in 2009 was about 25.000 tons and its share in the total meat production in Serbia was just 5,5%, while in relation to 2008 the production was 8,7% higher and in relation to 2000 it was 31,6% higher (Table 5.).

The share of Central Serbia in the total meat production in the Republic of Serbia in 2009 was 4,6%, while the share of Vojvodina was 0,6%.

Observing the production of mutton and lamb regarding the total meat production in Central Serbia its share is 7,7%, while its share in Vojvodina is 1,6%. Sheep breeding as a branch of cattle breeding is mostly related to hilly and mountainous regions, therefore it is least present in Vojvodina.

In the sector of individual agricultural producers, sheep production is realized at about 98% and therefore development programme should be adapted to this sector.

Of all the meat that we could offer for export, apart from young beef, the fastest results we could get with the export of lamb.

In 2009 we imported 72.071 kg of mutton worth 437.701 USD. At the same time, we exported 85.645 kg of mutton worth 587.417 USD. The data in the Table show that the import of mutton was 49.432 kg increased in relation to 2007 and the export was 25.211 kg or 22,8% reduced (Table 6.).

Table 6. Import and export of mutton

Year	Import		Eksport	
	kg	USD	kg	USD
2007	22.639	77.754	110.856	647.760
2008	70.694	160.18752	24.120	762.6458
2009	72.071	437.701	85.645	587.417

Source: Statistical Office of the Republic of Serbia, Belgrade

However, Serbia has to implement the complete system of EU regulations in order to be able to offer what EU market demands and accepts. This sector could contribute more significantly to the intensification of meat, milk and wool production by implementing new technologies.

Total number of poultry and the production of poultry meat

Poultry raising is dominant regarding livestock production on agricultural households in Serbia. Low level of specialization on family agricultural households results in the fact that the largest number of households are engaged in this type of production within the total productional structure. 66% of the total number of poultry in the Republic of Serbia in 2009 was on agricultural households and 33% was on economic organizations and collective farms.

That relation in 2010 was 73,2% on agricultural households and 26,8% on economic organizations and collective farms.

Poultry once had positive trend of growth, during the eighties and after that period the number of poultry, according to the official statistics, has been decreasing. During the nineties, the number of poultry was 29.907.000, in 1995 it decreased to 25.591.000, in 2002 it decreased to 19.000.000 and over the last several years it has been ranging from 16.500.000 to 17.500.000.

In 2009, the number of poultry was 22.821.000, however already during the following year 2010 it was decreased to something more than 20.000.000 (Table 7.). During the period from 2000-2008 the most significant decrease in the number of poultry occurred in the area of Central Serbia, while in Vojvodina the number has been continuously growing since 2004. The share of Vojvodina in the total number of poultry in the Republic of Serbia was increased to 43% in 2008 in relation to 2007, and in 2009 it was increased to 59,9% in relation to 2008. This increasing trend in Vojvodina leads us to the conclusion that the production of poultry is being moved from the South to the North of Serbia.

Globally observed, growth rate of poultry was recorded in all branches of cattle breeding. The total number of poultry was 3 % increased on average per year and in 2008 it reached 18,4 billion. An estimated benefit from poultry raising in our country in 2009 was 219.000.000 USD with the share of 12,8%.

The production of poultry meat represents the most intensive activity in livestock production and the quantity realized in 2009 was 80.204 tons with the growth of 5,3% in relation to the previous 2008. After the observed period from 2000 to 2008, the production of poultry meat in 2009 recorded growth of 19,4%, which points to the fact that poultry raising in Serbia, after years of decrease, is on the way to recovery. (Table 7.).

The share of poultry meat in the total meat production in the Republic of Serbia in 2008 was 16,4%, while in 2009 it was 17,5%. Regionally observed, 60% of poultry meat was produced in Vojvodina and 40% in Central Serbia. The share of poultry meat in total meat production in Central Serbia (262.000 tons) in 2008 was 12,6% and in Vojvodina 21,3%. The share of production of poultry meat in total meat production in Central Serbia (270.000 tons) was 13% and in Vojvodina 24,1% of 187.000 tons (total meat production).

Table 7. The total number of poultry and meat production in the Republic of Serbia

Year	Poultry (in thousands)			Meat (thousand tons)		
	Total	Chain index %	Base index 2000=100	Poultry meat	Chain index %	Base index 2000=100
2000	20.372	-	-	67	-	-
2001	19.290	94,7	94,7	62	92,5	92,5
2002	18.804	97,5	92,3	66	106,4	98,5
2003	17.677	94,0	86,7	59	89,4	88,05
2004	16.280	92,1	79,9	65	110,2	97,01
2005	16.631	102,1	81,6	67	103,07	100,0
2006	16.595	99,8	81,5	75	111,9	111,9
2007	16.422	98,9	80,6	70	93,3	104,5
2008	17.188	104,6	84,4	76	108,6	113,4
2009	22.821	132,8	112,0	80	105,3	119,4
Average	18.208	101,8	88,2	68,7	102,3	102,8

Source: Calculate regarding data from Statistical Office of the Republic of Serbia, Belgrade

Based on the data that was mentioned it could be concluded that the production of poultry meat, regionally observed, is the largest production in Vojvodina, which means that most of agricultural households are engaged in an intensive broiler production.

Through chicken incubators and broiler production of poultry meat and eggs, poultry production has been completely industrialized and therefore could be highly productive and profitable cattle breeding branch. (In the commercial sector which produces for the market, there are about 70 big broiler farms with the capacity of 10.000 to 120.000 poultry, where the total capacity is about 10 million broilers), (according to the Republic of Serbia-Effects of liberalization on the Agriculture in Serbia)

The consumption of poultry meat used to be up to 12 kg per capita once (at the beginning of the nineties), in 2008 it was about 10 kg and today it decreased to approximately 8 to 9 kg per year. In our surroundings, in Albania, the consumption is 7,9 kg per year; in Bosnia & Herzegovina it is about 4,8 kg; in Bulgaria it is 15 kg; in Croatia it is 6,8 kg; in FRY Macedonia and Romania it is 15 kg.

World production of poultry meat should reach a record of 85 million tons this year (100 million is expected in 2015, and even 143 million in 2030 which will represent 40% of world meat production), while 9 million tons will be exported.

80.000 to 85.000 tons of poultry meat is produced in Serbia each year, in other words about 70 million broilers. With that kind of production our farms and slaughterhouses have products to export, but that refers only to CEFTA countries – FYR Macedonia, Bosnia & Herzegovina and Montenegro. The export to the EU countries is impossible before basic international standards are not satisfied.

Table 8. Import and export poultry meat

Year	Import		Export	
	kg	USD	kg	USD
2007	196.133	429.108	2.305.637	5.495.131
2008	196.328	213.030	1.213.378	2.350.194
2009	376.352	821.848	1.676.971	4.753.776

Source: Statistical Office of the Republic of Serbia, Statistic of foreign exchange

Table 8. shows that the import of poultry meat in 2009 91,9% increased in relation to 2007 and the export 27,3% decreased. In relation to 2008, the import 91,7% increased, while the export 38,2% increased, which means that there was the increase in export in 2009.

Food safety system that exists in the EU is considered to be one of the strictest in the world, regardless that it is on the fourth place in the world according to the production of poultry meat, behind the USA, China and Brasil. All the participants in the poultry industry, beginning with food producers, farmers, slaughterhouses, meat processing plants, to trade associations must own detailed documentation about the origin of products. Serbia began with coordination of its regulations with the regulations of the EU, Russian Federation and the third countries. That means that Serbian producers of poultry, if they want to survive on the domestic market and especially if they plan to export poultry meat and eggs, will have to organize themselves better and quicker in order to reach quality standards and standards in food safety and hygiene, as well as efficient control systems requirements for the whole production line.

Conclusion

From the previously presented results, it could be concluded that cattle breeding in Serbia could be evaluated as unfavorable because the number of head of cattle of all domestic animals permanently decreases. This condition causes the fall in the production of cattle products, especially in meat production.

During the period from 2000-2009 the number of head of cattle had falling tendency and in 2009, when the number of head of cattle was recorded statistically – 1,002.295 – it was 2,2% higher in relation to the average number for the period from 2000-2008, but 5,2% less in relation to 2008.

The production of beef in Serbia in 2009 was 100.195 tons which is 1% above realized production in 2008 or 7,5% higher production in relation to the average realized production during the period from 2001-2008. In relation to 2000 the production of meat was about 3% less.

Apart from the export of young beef, there is a growing number of live animals exports (young bulls and calves), which has a positive effect on the level of meat production in the Republic of Serbia. According to the data of the Republic Bureau of Statistics live animals export was increased from 1.432 in 2006 to 19.604 in 2007, 72.492 in 2008, and 65.232 in 2009.

According to the data of the Republic Bureau of Statistics the total number of pigs in 2009 reached the number of 3.631.000 which was 1% less in relation to the period from 2000-2008 and it was also 1% more in relation to 2008.

The production of pork was second regarding benefit in agricultural production in Serbia and it is dominant on family households. In 2009 the production of pork was 252.188 tons. The share of pork in the total meat production was 55,2% in 2009, while observed in relation to 2008 the production was 5,3% less. In relation to the average realized production during the period from 2001-2008 it was 3,8% less.

In 2009 total number of sheep was 1,504 million, which is 3,4% less in relation to the average number during the period from 200-2008 and it was 6,3% less in relation to 2008. The total number of sheep has falling tendency, while the range of meat production remains on the same level, with small oscillations, from 2004-2007, but in 2008 there was an increase of 15% and in 2009 also – 8,7%. From the aspect of bigger involvement of our country in the *world* and *especially* in the European sheep market, the advantage could be the fact that there is an offer of young lambs (aged ninety days), with high quality meat, *because of a specific taste*, which resulted from the production in special conditions (preserved environment, abundance and variety of fauna) but also breeding population of meaty types which will offer quantity together with quality and therefore bigger profit.

In 2009 the number of poultry was 22.821 million which was 32,8% more than in 2008.

The most intensive activity in livestock production represents the production of poultry meat and its realization in 2009 was 80.204 tons, with the realized growth rate of 5,3% in relation to the previous year – 2008. During the observed period (from 2000-2009) the production of poultry meat in 2009 was 19,4% increased and its share in the total production of meat in Serbia was 17,5% , which points out the fact that the poultry production in Serbia after years of decrease, is on the way to recovery.

Regionally observed, various tendencies are present in the development of cattle breeding. The largest reduction in livestock production is on the territory of Central Serbia. On the territory of Vojvodina, there is an increase in the number of head of cattle, as well as in the production in cattle breeding and poultry raising, which points out the fact that there is larger number of commercial agricultural households on the territory of Vojvodina.

The available cattle stock, in spite of the unsatisfactory number of cattle in relation to the available arable land (30 conditional head of cattle per 100 ha in Serbia, 33 conditional head of cattle per 100 ha in Central Serbia and 25 conditional head of cattle per 100 ha in Vojvodina in 2009), it still represents a significant development resource, on condition that there must be a very intensive improvement process in genetic traits in cattle, as well as the improvement in technology and organization of production.

On the state level, certain measures should be taken aiming to increase agrarian budget and to increase stimulus measures supported by the Government of the Republic of Serbia, then bigger involvement of local self-management through its expert service and through the Fund for Agricultural Development and the Department of Agriculture, so that cattle breeding could take or bring back its deserved place in the Economy.

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STOČNI FOND I ANALIZA UKUPNE PROIZVODNJE MESA U REPUBLICI SRBIJI

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Rezime

Poslednjih nekoliko decenija dolazi do smanjenja stočnog fonda kao rezultat takvih promena javlja se i smanjena proizvodnja svih vrsta mesa.

Na osnovu podataka Republičkog zavoda za statistiku prikazani su rezultati kretanja stočnog fonda i ukupne proizvodnje mesa u Srbiji za period od 2000 do 2009. godine. U 2009. godini proizvodnja svih vrsta mesa bila je 457.000 hiljada tona što je za 1,5 % manje u odnosu na 2008. godinu, odnosno za 3,4% manje u odnosu na 2000. godinu. Međutim, u 2009. posmatrano u odnosu na predhodnu godinu, ostvarena je veća proizvodnja goveđeg mesa za 1%, ovčijeg i jagnječeg mesa za 8,7% i živinskog mesa 5,3%. Najveći pad od 5,3% ostvaren je u proizvodnji svinjskog mesa. U odnosu na 2000. godinu povećanje je u proizvodnji ovčijeg i jagnječeg mesa za 31,6%, i živinskog mesa 19,4%, dok proizvodnja goveđeg mesa za 2,9 % i svinjskog za 11% manja.

Zahvaljujući podsticajnim merama Vlade Republike Srbije, stočarstvo polako dobija odnosno počinje da vraća svoje zasluženo mesto u privredi.

Ključne reči: *stočarstvo, proizvodnja goveđeg, svinjskog, ovčijeg i živinskog mesa.*

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