Competitiveness of Livestock Production in Slovenia During the Process of Association to the EU

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SUMMARY

By joining the European Union (EU) Slovene livestock production will be faced with changed conditions. The production will have to adapt to the values and quality achieved during the negotiations with the EU. Currently, milk production in Slovenia nearly equals the negotiated quotas. In the coming years a decrease of about 14,000 dairy cows, and about 4,000 dairy herds is expected. The number of cows per farm will therefore increase from 9.3 to over 12.5 cows, while the purchased milk per cow will reach 5,100 kg and purchased milk per farm 63,000 kg. Existing estimates show that after the accession to the EU the prices of young fattened cattle and calves will increase. Hence the interest in meat production will improve, and home consumption (23 kg per capita) will be exceeded by about 10 %, if industrial crossing prevails. Large scale pig farms will have to solve the manure problems. In the coming years pig production on family farms will increase because family farms can better solve the slurry problem. In poultry production the production of turkeys has increased (15 %), and more free range broilers have been produced. The production will exceed the domestic consumption being now 25 kg per capita per year. We consume 180 eggs per capita, which equals the production. Our needs will thus be covered in future. The number of sheep and goats has been increasing for the past 10 years. It even exceeded the negotiated quota last year hence an increased number of small ruminants cannot be expected, but higher meat consumption and increased quantities of milk and milk products can be achieved.

KEY WORDS

livestock production, competitiveness, Slovenia

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INTRODUCTION

After the independence in 1991 Slovenia decided to access the developed world as soon as possible. For that reason the choice was an open economic system that should consider our limited natural possibilities. Therefore our objective in the passed documents was to orient to market economy that considers environmental and social conditions, i.e. sustainable social market economy. This decision has been chosen by agriculture as well as forestry that use most of Slovene land. The above objectives have been entered into the Development Strategy of Slovene Agriculture that was passed by the Slovene parliament in 1993.

The openness of Slovene economy to the international market was confirmed in 1994 when we joined the World Trade Organization (WTO). Thus our market opened to the foreign economic products, the import protections were eliminated hence the price of domestic agricultural products fell. Farmers, agricultural enterprises and food processing industry encountered totally new conditions. They started to think about competitiveness of their production and products and introduced changes to their systems of livestock production and products. Conditions have been aggravated and the process of restructuring of production has become very quick. The decision to access the EU brought negotiations on allowed production of milk, suckling cows and small ruminants on condition that environmental, ethological and other conditions that have already been accepted by the EU are considered. Slovene agricultural policy, advisory services and farmers are prepared to adjust to the new conditions as soon and as best as possible. Farmers are aware that they will be successful in the EU as long as they can compete for prices and quality with the farmers in the EU.

ALLOWED AMOUNTS OF PRODUCTION

Negotiations for production of cattle and small ruminants with the EU led to allowed amount of production and rights to pay subsidies for slaughtered animals. Both represent the base for the planning of animal production in Slovenia (Table 1). There are no limits in pig and poultry production.

CATTLE PRODUCTION

Negotiations for allowed amounts of beef production and especially milk production were very important for Slovenia. Slovenia has over 60 % of surfaces covered with grass. Field surfaces should be used for rotated grass and clover production to maintain the fertility. Therefore a lot of fresh fodder is produced that could be consumed only by ruminants, especially by cattle. When the negotiations are finished, it will be interesting to compare the past and present production and to estimate our opportunities after the accession to the EU. Special attention should be paid to production prices that together with allowed subsidies should enable the competitiveness of our products on the EU markets. This objective could be achieved only with significant structural changes.

Milk production

In cattle production, especially milk yield, a rapid progress has been achieved in the last few years, mostly due to Slovenia's membership and active participation in important international organisations, such as ICAR, INTERBULL, EAAP, IDF ant others.

Milk production has been the most important branch of agricultural production in Slovenia for 15 years. Last year Slovene farmers gained almost 30 % of income by milk purchase. Income changes are the final consequence of structural and technological changes and increased production abilities of cows reared by farmers, which is confirmed by data in Tables 2 and 3.

Data in Table 2 show that significant structural changes have occurred recently. Number of farms (herds) that produce market milk has been diminished. In the last five years over 50 % of farms stopped producing market milk. The number of cows diminished too but not significantly because herd size increased by over 50 % (Table 3). Owing to increased share of Black-

Table 1. Allowed amounts of production

Product	Unit	Amount
Milk – total	tons	560,424
Reserve for the year 2006	tons	16,214
Sale to dairies	tons	467,063
Direct sale	tons	93,391
Suckler cows	number	86,384
Small ruminants	number	84,909
Subsidies – bulls, oxen	number	92,276
Slaughter subsidies	number	196,989
Adult animals	number	161,137
Calves	number	35,852

Table 2. Number of herds and cows and amounts of purchased milk

Year	Herds, No.	Cows, No.	Purchased milk			Content, %	
			Total milk	Per cow	Per herd	Milk fat	Proteins
1980	55,533	150,694	303,831,000	2,016	5,471		
1985	58,194	175,696	352,454,200	2,120	6,063		
1990	43,656	161,992	359,184,200	2,217	8,228	3.74	-
1993	36,327	148,802	346,095,000	2,326	9,527	3.78	-
1995	30,040	132,532	388,394,400	2,968	12,942	3.92	3.24
1998	21,373	122,749	420,127,700	3,269	19,657	4.08	3.33
2000	16,869	117,775	447,831,000	3,758	26,516	4.10	3.36
2001	13,360	116,000	460,562,960	3,970	34,473	4.12	3.34
2002	12,274	114,000	473,500,000	4,154	38,577	4.13	3.33
2005	10,000	110,000	467,630,000	4,251	46,763	4.13	3.35
2008	9,000	105,000	490,000,000	4,667	54,444	4.13	3.40
2010	8,000	100,000	510,000,000	5,100	63,750	4.13	3.45

Data from Statistical Gazette (1980, 1985, 1990, 1993, 1996, 2000, 2001,2002) and Internal Reports GIZ – Animal Production Business Association of Slovenia (1985, 1990, 1993, 1995, 1998, 2000, 2001,2002) and estimations (simulation) for years 2005, 2008 in 2010.

Table 3. Herd structure and the number of cows on farms with purchased milk

Year	Percentage of farms with number of cows, %				No. of farms	No. of cows/farm
	1-4 cows	5-9 cows	10-15 cows	over 15		
1981	78.2	19.2	2.1	0.4	52,221	2.78
1985	78.6	18.0	2.7	0.7	58,130	2.86
1990	73.5	21.3	3.6	1.6	43,613	3.53
1992	71.8	22.0	4.6	1.6	38,154	3.92
1995	62.0	28.6	6.7	2.6	30,012	4.36
1997	58.5	28.1	9.4	4.0	25,063	4.90
2000	46.9	30.0	13.7	8.9	16,847	6.79
2001*	41	32	17	10	13,360	8.68
2002*	36	34	18	12	12,274	9.29
2005	20	35	30	15	10,000	11.0
2008	10	35	35	20	9,000	11.7
2010	5	30	40	25	8,000	12.5

Data from Statistical Gazette (1980, 1985, 1990, 1993, 1996, 2000, 2001,2002) and Internal Reports GIZ – Animal Production Business Association of Slovenia (1985, 1990, 1993, 1995, 1998, 2000, 2001,2002) and estimations (simulation) for years 2005, 2008 in 2010.

and-White cows and to higher production ability of Brown and Simmental breed cows, the total amount of purchased milk increased as well as purchased milk per farm and per cow (Table 2). In the year 2002 purchased milk exceeded the negotiated amount of milk for the year 2004 when we access the EU. Milk production cannot be increased until 2006 when the quota can be increased by allowed reserve - 16,214 tons (Table 1). Due to improved production technologies, better feeding regime and production abilities of cows the milk production per cow will increase. Therefore number of dairy cows is expected to drop to 100,000 in 2010. It is anticipated that a part of quota for indirect purchase can be moved to the quota for purchase to dairies. Hence it is estimated that farms will produce over 500,000 tons of purchased milk, which will be over 5,100 kg per cow and 63,000 kg per farm. Consequently the average herd size will increase to 12.5 cows or even more, while the number of farms with low number of cows will diminish. Small herds are now reared on semi-farms that will have to end the milk production. Milk production will be present only on big farms subsequently the number of farms with bigger herds will increase (Table 3).

A significant development has been achieved in the last decade in the microbiological quality of milk and somatic cell count in purchased milk, therefore Slovene milk can match the European standards (Tables 4 and 5). Nevertheless, milk producers should pay more effort to continuous microbiological and hygienic quality of milk. More attention will certainly be paid to the content and composition of proteins in milk.

Data on milk purchase show that milk production has been increasing for the last few years. Unfortunately it is the fact that in Slovenia we consume less milk than

Table 4. Microbiological quality of purchased milk

Year	% of purchased milk in different quality classes (No. of micro-organisms in ml)		
	Up to 400,000	Up to 100,000	Up to 50,000
1994	87.2	60.40	43.50
1995	93.0	78.60	61.49
1996	93.7	75.70	63.31
1997	94.7	82.82	68.33
1998	95.7	84.10	69.21
1999	96.9	85.88	69.86
2000	97.9	95.16	85.71
2001	99.1	96.74	90.55
2002	99.4	97.35	91.21

Table 5. Total somatic cell count in purchased milk

Year	% of purchased milk in different quality classes (somatic cell count in ml)		
	Up to 400,000	400,001 - 600,000	Over 600,000
1996	74.96	20.06	4.98
1997	80.35	16.06	3.59
1998	81.90	15.01	3.09
1999	85.01	12.82	2.17
2000	91.08	7.84	1.08
2001	93.38	5.82	0.80
2002	92.76	6.36	0.88

we produce. But on the other hand data on annual milk consumption per capita are comforting. We consume about 210 l per capita however we recede most of European countries. We hope that better offer and competitive prices as well as advertising activities will contribute to higher milk consumption after the access to the EU and that we will find buyers on the European markets.

Meat production

Beef and veal production was very important some decades ago in Slovenia. Due to good export possibilities of quality fattened young cattle prices were favourable and beef production was very important in Slovenia. In those years (till 1985) Slovene producers gained more for beef than for milk. After the independence in 1991 Slovene beef and veal production has centred primarily on Slovene production. No calves for fattening and fattened calves that used to be slaughtered in Slovenia are imported now (Table 6).

Table 6 shows that much more cattle were slaughtered in the Slovene slaughtering houses in the recent two years than before, which is not as much as are the negotiated amounts of slaughtered cattle per year (196,989 pc. – Table 1). The increase in the last two years was the consequence of the traceability of animals that caused less non-registered slaughters. In those years the registered slaughter of all categories increased significantly (Table 7).

In the coming years the question how to achieve the allowed annual slaughter of animals as well as high quality with allowed number of sucklers and allowed quotas of produced milk that limit the number of cows should be solved. According to the data on number of inseminations (Table 8) it could be stated that Slovene farmers rear about 180,000 cows that are in general involved in the production process for 5 years. Every year they leave out 36,000 cows that are replaced by pregnant heifers. A year long calving interval with 85 % fertility rate should gain at least 184,000 calves. Presuming that number of cows does not change the annual slaughter of cattle should correspond to the above number. In fact it is lower for about 30,000 animals, which is due to about 2 months too long calving intervals so that about 30,000 calves are lost every year. The problem can be solved by better fertility rate and by rearing heifers for slaughter. Both measurements can contribute to better production and higher number of slaughtered animals per year with the intention that allowed amount is reached.

The inclusion of Black-and-White cows into milk production and crossing of Brown breed with dairy American Brown breed causes that the amount of good calves for meat production has been diminished. In contrast, the quality of pure breed fattened slaughtered cattle has been worsened but consumers ask for beef and veal of the best quality. The quality is paid well, good quality calves for

Table 6. Beef cattle produced and slaughtered in Slovenia

Year	No., in 1000		Meat of sl. carcasses in 1000 tons	Estimated production of body mass, in 1000 t
	Slovene	Total slaughter	Slovene only	In Slovenia
1955	173	173	19	38
1960	159	159	18	56
1965	187	187	32	75
1970	138	180	26	60
1975	181	221	37	79
1980	136	152	36	85
1985	144	177	39	86
1990	147	172	39	88
1995	111	120	33	88
1996	121	124	34	88
1997	123	125	34	79
1998	123	125	34	81
1999	127	129	34	85
2000	126	130	34	91
2001	140	143	41	94.
2002	154	157	43	98

Source: Statistical Yearbook and calculations based on data from the Statistical Yearbook

Table 7. Structure of slaughtered animals in Slovene slaughter houses (No. in thousands, purchase is included)

Year	Calves		Bulls	Cows		Oxen	Young cattle	
	No.	%	No.	No.	%	No.	No.	%
1953	93	58	4	29	18	16	18	11
1955	110	64	4	29	17	16	13	7
1960	69	43	19	31	19	19	20	13
1965	57	30	35	26	14	12	57	30
1970	59	33	21	28	16	13	59	33
1975	69	30	31	19	9	5	97	45
1980	19	12	-	20	13	1	112	73
1985	14	8	-	20*	11	-	143	81
1990	13	7	-	19	11	-	142	82
1995	14	12	-	15	13	-	90	75
1996	19	15	-	17	14	-	88	71
1997	21	17	-	16	13	-	88	70
1998	25	20	-	17	14	-	83	66
1999	29	22	-	16	13	-	84	65
2000	29	22	-	20	16	-	79	62
2001	24	17	-	30	21	-	87	62
2002	28	18		36	23		92	59

* after 1985 older bulls and oxen are included into cows

Source: Statistical Yearbook and calculations based on data from the Statistical Yearbook

fattening reach good prices and breeders ask for them. Hence breeders of Black-and-White and Brown cows have become interested in industrial crossing. Last year above 22,000 Slovene cows were inseminated with bulls of meat breeds. Due to the fact that calves of Simmental cows are more suitable for fattening than Brown and Black-and-White ones it is estimated that for industrial crossing mostly Brown and Black-and-White cows have been used. Table 8 shows that breeders dedicate one third of worse milk producers of Brown and Black-and-White breeds for industrial crossing. This crossing is popular with suckler cows. Such crossing maintains the quality of young cattle which Slovenia used to be famous for.

Slovenia produces most of beef and veal for its own consumption. The average consumption per capita has been about 23 kg for years, which meant that the production covers 95 – 98 % of consumption. Nevertheless, prices do not stimulate the production. In Slovenia differences between the prices of beef, pork and poultry are very small in comparison to the

Table 8. Number of insemination with bulls of different breeds

Year	S*	B	BW	CH	LM	WBBB	RS	Total
1976	109.629	71.092	11.695	1.334	5.762	-	1.095	200.607
1980	113.077	63.198	16.097	8.191	5.518	-	419	206.968
1985	126.521	73.505	20.103	4.700	2.164	-	160	227.162
1990	116.642	56.262	22.672	3.955	3.481	-	42	203.054
1995	119.260	45.079	25.468	4.650	5.784	123	170	200.534
2000	113.827	29.338	33.257	2.689	11.564	6.432	359	197.484
2001	112.161	27.682	35.410	2.638	12.727	7.275	417	198.300
2002	107.764	24.849	36.409	2.493	12.703	7.663	465	192.346

*S – Simmental, B – Brown, BW – Black-and-White, CH – Charolais, LM – Limousine, WBBB – White-and-Blue Belgian breed, RS – Red spotted breed

EU where high quality beef reaches twice the price of poultry as well as of pork. Hence it is estimated that after the access to the EU the prices for cattle and calves will rise resulting in more interesting beef production that can compete with milk production. Suckler cow production on one hand and industrial crossing on the other will enable 110 % of self supply with beef and veal. Such production will also enable the export of quality young cattle to the traditional European markets.

PIG PRODUCTION

Tables 9 and 10 show the number of pigs on private and large scale farms in Slovenia.

Table 9 shows that 60 to 65 % of all breeding swine and pregnant gilts are bred on private farms. Table 10 shows that there are about 57 to 67 % of all pigs on private farms. Pig production on private farms varies more than on the large scale ones. Pig production on bigger farms is market oriented therefore about 60 % of pigs that are slaughtered in the slaughter houses originate from large scale farms. Besides market orientation the reason for lower share of pigs slaughtered in the slaughter houses is home slaughter.

Large scale pig farms represent an environmental problem. A huge amount of animal faeces is produced at one place. An expert use of pig manure requires long transportation to the agricultural surfaces. On these farms the highest percentage of slurry is contributed by fattening pigs. Therefore some Slovene large scale farms started to move their fattening pigs to private farms where farmers fatten them on the contract basis. This way bigger farms gain twice: the amount of slurry is lower and the space in pig houses can be used for other fattening pigs. Thus large scale pig farms will fulfil the requirements of EU directions on pig protection that utter the minimum area per pig.

Besides intensive pig production on large scale farms an intensive way of pig production has been noticed on private farms. Some production parameters achieved by private farms exceed those on bigger farms. It should be admitted that the variability among private farms is higher than among the large scale ones.

POULTRY PRODUCTION

Meat production

In the second half of the previous century poultry production developed at such a high rate in Slovenia and all over the world that it cannot be compared to any other branch of livestock production. High rate of production, especially of chickens began after 1960 when farm poultry production was introduced in Slovenia. Production of chickens increased until 1990. Between the years 1977 and 1993 more poultry was produced than beef and pork. Between the years 1980 and 1993 poultry represented about 40 % of all produced meat, while after 1995 its percentage ranged between 32 and 36. Surpluses were sold to other republics of former Yugoslavia. After the independence of Slovenia and the loss of Yugoslav market the poultry production diminished until 1994. Poultry producers started to produce turkeys and various poultry products. Therefore poultry consumption increased again after the year 1995 and ranged between 53 and 59 thousand tons in the recent years. In the total poultry production turkey meat represents about 15 %. In Slovenia no breeding turkey flocks are bred. Hatching eggs are imported, mostly BUT BIG 6. Also parents of broilers are imported, in the last years Ross and Cobb provenience prevail. Broilers of Slovene selection Prelux-bro grow at lower rate than chickens of foreign origin. Thus Prelux-bro chickens are suitable for less intensive systems of production that require lower growing rate. Prelux-bro chickens are reared by farmers that do not have a large production.

In Slovenia most of poultry is produced within three poultry companies, the biggest is Group Perutnina Ptuj Ltd.

Poultry groups are planning to increase poultry production in future despite surpluses of chicken

Table 9. Number of breeding swine and pregnant youngsters on private and large scale farms in Slovenia

Year	Private farms	Large scale farms	Total
1999	30,893	20,290	51,183
2000	37,313	19,672	56,985
2001	35,921	19,725	55,646

(Statistical Yearbook 2000)

Table 10. Total pig number on private and Large scale farms in Slovenia

Year	Private farms	Large scale farms	Total
1999	320,674	237,785	558,459
2000	402,245	201,349	603,594
2001	387,916	211,979	599,895

(Statistical Yearbook 2000)

meat. In Slovenia 25 kg per inhabitant a year is consumed. The consumption will increase in Slovenia but primarily they would like to increase the export. Perutnina Ptuj would like to become the most important poultry producer in the Central and South-East Europe and want to double their market share and sale until 2007.

Poultry production in Slovenia exists on co-operation basis. Chickens and turkeys are grown by co-operators that are organised as poultry cooperatives within a poultry company. According to the contract the poultry company delivers a day old chickens (broilers) or turkeys and supplies feed while co-operators offer houses, equipment and care. Health care is provided by veterinarians from poultry companies. The technologists from poultry companies provide advisory service.

Chickens and turkeys are grown in deep litter houses. In 2001 the Regulation on Quality of Poultry was passed stating the minimum conditions for special systems of rearing. The following less intensive systems of rearing exist: extensive indoor and free range, traditional free range and unfenced free range. The biggest poultry company in Slovenia started free range in 2001. They produce 128,000 free range chickens at co-operators a year. The free range production is limited due to regulation on free range areas but smaller breeders appear who want to grow chickens on supplementary basis. The majority of free range chickens are sold in areas with higher buying power. Most poultry is sold as carcasses, followed by cuts. Export seems opportune.

Table eggs production

Table eggs production closely follows the meat production pattern. The highest amounts of table eggs were produced in 1991, 458 mill. pieces. Since 1995 the production has ranged between 322 and 380 mill. eggs. Egg production never notices such surpluses as poultry production does. Self supply in eggs is satisfactory (current annual consumption is estimated to 180 eggs per inhabitant). In future higher production of table eggs is not expected.

Table eggs production in Slovenia depends on imports of parent flocks. Isa Brown prevails. In smaller and less intensive system of rearing (sustainable production) Slovene Prelux provenience is bred. There are three crossings of Prelux, namely Brown, Pea-coloured ad Black.

In Slovenia two different types of egg production prevail. The largest share that is primarily dedicated to market is produced by larger poultry companies and enterprises. Some breeders appear on the market on their own. All mentioned systems of breeding are of industrial type with intensive technology and purchased feedstuff. Most hens are grown in cages, some in deep litter system of rearing. The second type of growing, which is a traditional one on our farms, is the yard system and is primarily self supply with occasional home and market sale.

Concerning egg production the Regulation on Quality of Eggs minimum conditions for egg production in free range and deep litter house systems will be settled. “Eggs from fortified cages” should be laid in houses that respond to the regulations on laying hens protection in fortified cages and “eggs from not fortified cages” should be laid in houses that counter the regulations on laying hens protection in not fortified cages.

Organic farmers are interested in table eggs production now. Farmers should consider the Regulation on Sustainable Food Production and Processing (2001). Farmers who want to sell agricultural products and food under the trade mark BIODAR – the trade mark of Association of Organic Farmers of Slovenia should consider the Standards for Sustainable Production and Processing (2002). Some organic farmers grow hens according to sustainable principles and sell eggs on markets. We expect that more such farmers appear in future. Pea-colour and Black Prelux hens are suitable for such growing systems. Also the only Slovene autochthonous breed

Table 11. Augmented number of sheep and goats in Slovenia

Year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
SHEEP												
Total					39.118	43.192	52.807	72.361	72.533	96.227	94.068	107.400
Breeding sheep	11.044	13.514	15.898	19.595	23.116	28.089	33.243	45.990	50.830	66.333	66.033	75.896
GOATS												
Total		9.941	10599	10738	11.950	12.640	20.799	16.805	14.643	22.041	19.900	21.977
Breeding goats	5.000	6.656	6.916	7.765	8.319	9.499	10.189	11.428	11.444	16.103	14.799	16.744

Source: Statistical Yearbook, Statistical information (temporary data), Statistical Office of the RS

of hen – partridge Styrian will be suitable but due to lower laying capacity it is not very popular with farmers.

PRODUCTION OF SMALL RUMINANTS

In Slovenia small ruminants were very popular before the First World War. After the second World War the number of small ruminants decreased very quickly. The lowest number of breeding animals was noticed in the eighties followed by an increase due to governmental subsidies. Last year more breeding sheep and goats were bred in Slovenia than were supported by subsidies according to the negotiations with the EU (Tables 1 and 11). The number of animals cannot be augmented any more, but better production technologies and selection can improve the production. Also the consumption of meat and milk and milk products can be augmented in Slovenia.

Sheep milk production in Slovenia is limited to certain parts while meat breeds are grown everywhere. Most sheep is grown in mountainous areas where sheep have traditionally been always kept. Milk is produced by Bovec and Istrian Pramenka and by crossbreeds of Bovec with East Friesian breed. Recorded sheep produce 210 kg milk in lactation.

Sheep are primarily used for meat production (85 %). They are crossbreeds of Romanian and Jezersko-Solčava breed, of Jezersko-Solčava breed and of Belokranjska Pramenka breed. More sheep means higher meat production and higher consumption of mutton per inhabitant, being it 1 kg a year at present, which means that we are below the European average. Therefore no market inconveniences are expected in near future.

Most goats (90 %) are intended for milk production. The goats are of Saana (70%) and Alpine (39%) breeds. Goats for meat production are of Boer breed and are grown by some farmers in the vicinity of consuming areas. Meat of goat kids and goat milk and milk products are gaining in popularity, therefore it is estimated that allowed domestic production cannot cover the requirements, consequently the products should be imported.

CONCLUSIONS

By joining the EU, Slovenia will have to improve its animal production to reach the competitive European level, and to consider the negotiated quotas for animal products. All animal products will have to follow the European quality standards. Besides these changes, the ecological, as well as ethological principles will have to be considered with the aim to induce more sustainability to animal production.

1. In milk production the number of dairy cows and dairy farms will decrease, while milk yield per cow and the quantity of purchased milk per farm will rise.
2. Better fertility and shorter calving interval will increase beef production, better suckler cow production and industrial crossing with beef breeds will improve meat quality. Such meat production will exceed home market needs for about 10 %.
3. Pork will mainly be produced on family farms, while large scale pig farms will be involved with solving of the ecological problem. Self supply of pork is expected to be 70 to 80 %.
4. In poultry production the increase of turkey meat is planned to improve for further 15 %. Surplus of poultry meat in regard to self supply will presumably stay at the same level. Table eggs will cover the needs of home market.
5. Small ruminant inventory has reached the negotiated quota. From this point breeders will try to improve meat quality, attain better promotion for meat, milk and milk products of sheep and goats.

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