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CONTENT

1 Introduction to the meat sector

The present state of meat sector in Bulgaria is a direct function of socioeconomic changes which emerged after 1989 and the crisis, which cramped not only livestock production but the meat processing sector, meat consumption and trade too. Significant changes have occurred in the numbers, structure, husbandry and ownership. According to a Report of the Directorate General of the EC (1998), two basic trends may be identified over the transition period. “The first is a sharp reduction in the numbers of all types of animals. The second is the transfer of ownership of animals from the state and collective sector to the private sector” (EC, 1998). The number of cattle, pigs, sheep and poultry has decreased between two and threefold as compared with the pre-reform years. The most significant reduction was reported in pig production, which was the chief provider of meat during the period of socialism; for example, the average number of pigs over the period 1985 – 2006 has shrunk from 3.9 million heads down to 956 000 heads (24 % on the base 1985). Nowadays, the industrial production of pig meat has dropped to 38 512 tons (carcass weight), supplemented with 36 020 tons produced in households, while in comparison in 1989 the total production of pig meat was estimated at 410 thousand tons. This means a slump of more than 5 times, and identifies this production as that most harmed by the changes.

According to Stoyanov (2003), “actions initiated by the State during the 80’s, especially designed to support private livestock farming resulted in harsh livestock management systems, the emergence of new meat production structures and attainment of high production values close to those in advanced countries and much higher than average world levels”. In addition, the consumption of meat (red and white) per capita had reached 92 kg during the period of socialism, while in 2005, consumption fell to 46 kg per capita. Moreover, the distribution of these quantities is distorted because a significant fraction of the meat is produced on farms and is consumed within extended families, not delivered to the market. The national consumption pattern has also changed as the preferred and preferred meat seems to be the poultry at 16.5 kg per capita, followed closely by pig meat, assessed at up to 9.5 kg per capita. It turns out that poultry has become the largest meat sub-sector in Bulgaria, accounting for 59.1% of total meat output of the slaughterhouses in 2005. This is the first time that poultry production has had such predominance in the records of agricultural production, but this is not a testimony to dynamic growth of this product but rather to a significant decline in the pig meat and beef figures. For example, the production of poultry in 2000 made up scarcely 21% (about 106 000 tons) of total meat production and was significantly below level for pig meat, estimated in the same year at up to 240 000 tons. The reasons for this cataclysmic fall in pig production and loss of its primary positions to the poultry sector were disease conditions including the outbreak of Classical Swine Fever and BSE, leading to a great fall in consumption of pork, beef and veal, which were replaced by other meat varieties. Furthermore, the occurrences of Mad Cow disease and Classical Swine Fever in many countries within EU resulted in severe constraints in terms of trade as Bulgaria was affected by cheap imports for as long as the sales into other EU countries were stopped.

As for the poultry, the “Avian Flu”, which broke out in Asia and spread to other parts of the world, brought about a considerable decrease in the prices of chicken, but this situation did not strangle Bulgarian producers who managed to sustain their position. They overcame pressure from imports and increased their market prices. Regarding poultry, which is currently the leading sub-sector in the Bulgarian meat industry, internal analysis shows that 76% of the poultry meat comes from broilers, 20% from turkeys with other minor quantities coming from hens, cocks, geese, and so on. Poultry, such as ducks and geese have also decreased during the transition period but not to the same extent as the most important groups. As for the turkeys, the figures during this period remained stable or slightly increased. Altogether, the contemporary levels of meat production in Bulgaria and the structure of this production are too low and unreliable to meet the traditional level of domestic needs, which has resulted in an unprecedented rise in meat imports and reduction in self-sufficiency. In the last couple of years, Bulgaria transmuted from a net exporter of meat and meat products into a net importer. For example, in 2003 imports of meat, offal and bacon amounted to 61 225 tonnes, those of chicken and poultry liver reached 33 363 tonnes and adding other supplementary products, the total amount of meat imported was 104 011 tonnes. According to Annual Report of the Association of Meat-processors (2004), "the meat sector works exclusively in the domestic market, as the opportunities for entering and succeeding in the international market are considered to be still limited for the next couple of years". According to the majority of experts, the ability of the meat sector to raise exports and to enlarge its market frontiers will depend on the pace and the essence of the reforms to meet EU requirements.

2 Structure of the sector and recent evolutions

The meat sector was subject to major structural changes over the past 17 years, which can be attributed to reforms in ownership, new market rules, termination of State support, fragmentation of production businesses, lack of finance to fund developments needed to meet the EU requirements for accession, etc. After the drastic decrease in the numbers of livestock and production of all kinds of meat had occurred during the 90's, the new millennium started comparatively calmly and particular major products have begun to find their niches so that some market equilibrium was attained. Prior to starting the analysis of the meat processing industry, a brief review of the livestock base, the source of inputs for meat production, will be undertaken,. As may be seen in the Annex, pig and sheep production were the most affected by the changes during the 90's, but at the time of writing they are beginning to recover.

Regarding the swine sector, the total numbers of pigs in the last 2-3 years indicates a slight trend of growth; from 931 402 head in 2004, the number of the pigs is estimated to have risen to 1 104 293 in 2006. According to the Agro-statistics Directorate of MAF, in 2005, around 46% of all pigs in the country were kept on farms with herd sizes of more than 1 000 heads and a significant number of these were vertically integrated with processing companies and they are somewhat sheltered from the full effects of market uncertainty and volatile prices. According to Hadjieva (2006), "the small households are characterized as semi-subsistence farms and only sell part of their production on the market, thus the competitiveness of the sector will hinge on middle and large size farms". On the other hand, a significant percentage of big swine farms grow cereal crops on vast areas and are able to produce feed for their pigs at competitive price in order to combat the main challenge for the pig sector - high production costs. Along with high production costs, another problem for pig producers during the last couple of years has been farm-gate prices; for example in 2003, they dropped down to 80 Euros per 100 kg live weight, while in the EU these prices hovered around 120-130 Euro per 100 kg. This price pressure was due to imports of pork from South America which were offered at comparatively low price levels. Hence, after accession to the EU, this significant 20-25% the total pork imports which come from Brazil, Canada, and the USA will have prices increased and probably the greater part of this segment will be taken over by local producers. However, a major problem for pig production continues to be the vaccination of the pigs against Classical Swine Fever which was halted from the beginning of 2006 causing the European Commission to impose a prohibition on exports of fresh and non-thermal processed pork. In the Annual Report of USDA (2006) it was claimed that "among the new challenges to the red meat sector are the Classical Swine Fever eradication program, improved animal genetics and meeting food safety and quality standards".

Turning to sheep meat production, it is one of the most viable enterprises in the livestock sector in terms of export opportunities, which in the last decade suffered a great slump from about 9 million head down to 1.5 million sheep in 2006. Lamb meat is one of the three staple products derived from sheep and according to Ivanov (2004) this product accounts for 59% of gross revenue in sheep enterprises, which identifies it as the most important product from a financial point of view. The demand for lamb is comparatively high and it represents a guaranteed income for the sheep farmers. The number of the lambs purchased by the slaughterhouses was reported as increasing from 792 105 head in 2003 up to 864 900 head during 2005, which testifies to the availability of market demand, giving credence to relevant expectations of farmers regarding good trading conditions. Sheep meat is the most important livestock export, accounting for about 85% of total meat exported and 4.5% of aggregated agricultural exports at the present time. Thus this sub-sector plays the role of a counter-balance to significant imports of other meat types. Regarding exportability, the prominence of the sheep enterprise is confirmed by the figures: 337 million BGL (170 million EUR) or 27% of total livestock value in 2004, out performing other products – poultry (26%), pigs (25%), bovine (16%), etc. Furthermore, alluding again to Ivanov (2006) “the growth in export possibilities for lamb has recently induced local traders to undertake deals for the import of lambs from Romania; in 2004 they purchased and imported an estimated 219,270 lambs from Romania, profiting thereby from the price differentials”. These increased numbers of imported live lambs from Romania were mainly transferred into re-exports with a mere 10-15% being destined for the domestic market.

Another important sub-sector, which occupies the prime place in relation to meat production and market orientation is poultry production, which currently has the most potential for dynamic development. In 2005 the total production of poultry meat, including goose liver was 88 431 tonnes, while pig meat production amounted to 74 532 tonnes excluding a significant 48% of total production of pork which is produced on farms and serves for self-subsistence. By contrast a mere 14% of total poultry production is from, and used in, households. The balance is provided by the poultry industry and is bound for the market, indicating the relatively high reliability and market orientation of this sub-sector as compared with the pig, sheep and especially bovine ones. Furthermore, production concentration is relatively high as 17 percent of the farms produce 60 percent of the broilers. Poultry density is the highest in the north eastern part of the country. This region is the country’s granary, which makes the supply of foodstuff economic. According to FAO experts’ analysis (2006), the outbreak of Avian Influenza (AI) at the end of 2005 and beginning of 2006 caused the demand in domestic market to decline for a short while. Since May 2006, however, this trend has been stopped. “AI had one further effect, some slaughtering facilities could not meet the high hygiene standards and closed down, which affected 11 of the 59 poultry meat processing operations registered nationwide during the outbreak of the disease in Bulgaria” (FAO, 2006).

The cattle sub-sector in Bulgaria is known to be the enterprise with the lowest share in meat production due to an extremely high proportion of self-subsistence and low market exposure and poor_competitiveness. Moreover, through the whole transition period, the share of cattle production in the aggregated livestock value remained at low levels compared with other meat sub-sectors. For example at the end of last century, this percentage was 18%, while nowadays the fraction has decreased to 16% (MAF, 2005). The problems for cattle production are to a great extent related to customers’ preferences and the adverse economic consequences resulting from the drastic fall in incomes, the sharp increase in the prices, which provoked bias of consumption towards cheaper foods (the effects of price and income elasticities). Concerning consumer's preferences, beef (red meat) has never been consumed on a large scale in Bulgaria because it was not valued and sought by the people. Habitually, local customers considered veal from an economic point of view as affordable only by groups with high incomes. For most of the post-reform period, the retail prices of beef were lower than pork. According to the Directorate General of EC (1998), “due to the lack of consumer preference for red meat, Bulgaria has never produced high quality beef” thus a part of the issue of the marginal level of beef production in the country can be explained specifically by consumer preference. Cuts of low quality beef have been used by the processing industry, mainly for sausages and salami. The shortage of domestic supplies has drawn in beef meat imports, but mainly for processing. As a consequence, the import of beef has increased consistently from 8 017 tonnes in 2000 up to 65 485 tonnes (2005), which in great measure has been at the cost of local production. The statistics indicate that the national production had risen during the last decade peaking in 2001 when the total yield of beef was estimated at 75,000 tonnes. After that, production started to decline and in 2005 the total national production was 30,023 tonnes in carcass weight.

3 Policy and standards

The main goals for the meat sector are improvement in terms of better culinary processing and manipulation, improvement of hygiene and sanitary conditions, development of technology in order to achieve longer product shelf-life, increased specialization of particular meat plants, etc. As a result of joint agreements with the EU, the meat sector was subjected to substantial changes related to closure of a number of slaughterhouses, processing enterprises, etc. In the relatively short period from December 2004 – August 2006, the number of different businesses in the sector was reduced by 39%, or about 363 enterprises. The high requirements for safety, quality control and production standards in EU have forced local enterprises to raise their technological standards so as to approach the EU benchmarks. In addition, a great number of processing plants have already adopted modern computer programs and software for overall running and control, and a dozen of those enterprises have also introduced systems for quality management viz. ISO and HACCP. According to Malamova (2006), “as a result of an empirical investigation undertaken in 2005, the major needs for competitiveness in the meat sector after integration into EU will derive from the ability to procure the quality of meat to comply with EU standards, and to then promote and guarantee this quality. Apart from a few enterprises that have already been licensed to deliver into the EU, the remaining meat plants are reporting difficulties regarding tracing the source and quality of meat because of low level of involvement in EUROP, a system for classification of carcass meat according to quality. Hence, these plants will have difficulty in demonstrating the quality and safety of their products, which is a key feature of EU policy in meat sector. This meat traceability is a serious problem for processing plants due to significant fragmentation of the national livestock industry and deficiencies in the organization of breeding.

Concrete policy measures undertaken by the national government in relation to conform with the EU acquis communitaire, and particularly requirements in the meat sector, were connected with the obligatory adoption of the system for self-regulation and risk analysis, i.e. HACCP, as the meat industry has passed through several phases. Regarding agreements, by the end of 2005 all meat enterprises should have introduced HACCP, and so they were differentiated into 4 categories: Category I enterprises –were those that had accomplished adoption process; Category II enterprises were those ready to meet the requirements and were starting to restructure; Categories III enterprises had not initiated any modernisation; Category IV included those plants with no potential to implement the requirements and had to be shut down. As a result of these measures and the policy operated by the National Veterinary Department, 26 meat plants had been licensed to operate in the common market by December 2006. They are divided into 3 sections – plants working with meat from domestic ungulates (9 units), enterprises for meat from poultry (11 entities) and plants producing sausages, salami and other meat products (6 units).

However, according to the Food and Veterinary Office (FVO) mission in Bulgaria carried out from 27 November 2006 to 1 December 2006, certain processing establishments in the meat sector were not in compliance with the provisions of Regulation (EC) No 852/2004. That is why, the EU has introduced transitional measures which prohibit on the dispatch of certain meat products from Bulgaria to other Member States. At the same time, a derogation under Community legislation to permit certain processing establishments to export those products to the Community before 1 January 2007 was ushered in Finally, notwithstanding the larger number of enterprises applying to dispatch meat and meat products into other EU countries, the FVO decision postulated that only 26 establishments have managed to fulfill the criteria - 11 poultry slaughterhouses, 9 producers of red meats and 6 meat processing plants and currently only they will be entitled to deal in the common market. These enterprises are only a minority of the 363 meat plants registered by August 2006. The remaining enterprises have firstly to receive confirmation from the National Veterinary Medical Service that they meet European requirements, and then they have to be inspected by EU missions before receiving entitlement to export. Another aspect of National policy relates to the application of EU measures for market intervention and a new tax policy concerning importation from non-EU countries. Hitherto, there has been no intervention policy In Bulgaria, and according to Malamova (2006), it is very probable such leverage would not be very effective because the national prices of pork, beef and veal exceeded the basic intervention prices determined in EU. The most significant effect will be achieved by application of the EU Common Tax Policy because 23% of pork and 86% of beef imports come from South American countries (mainly Brazil and Argentina) and the new levies will cause up to a doubling of the prices of these products.

4 Market trends and perspective for meat consumption

In recent years, the production pattern of the meat industry was strongly affected by the crisis in the Bulgarian economy associated with incremental increase in food costs, the fall in personal incomes, and increased consumption of cheap foods of lower quality, etc. These assertions are confirmed by the figures recorded by the National Statistical Institute regarding the consumption of meat; for example in 1996, the consumption of meat including derivatives (salami, minced meat, etc) amounted to 36,8 kg per capita, but in the next year (1997), which features as the most difficult time, consumption fell to 25.4 kg per capita. Recovery from the economic crisis occurred in the second half of the 90’s when meat consumption reached 34,7 kg per capita in 2000, split between meat 23 kg and meat products 11.7 kg. Furthermore, meat consumption showed a stable trend upwards with an estimated level of 35.4 kg in 2003 and 46 kg in 2005. The forecast for 2006 is that consumption will increase by as much as 2-3% reaching 47.5 kg per capita due to a sustained increase in living standard of the people and stable prices of meat and meat products as a result of cheap imports. Average consumption varies between different customer groups since a significant share of meat production is generated on farms and is kept for internal consumption chiefly within the extended families of those farms. Regarding red meat, the farms produce and retain about 75,822 tonnes (33% of total domestic consumption), as these quantities are distributed to a restricted number of people. Regarding white meat production, the quantities kept for internal consumption on farms in 2005are estimated at 12,232 tonnes (10% of total quantity).Meanwhile the actual numbers consuming the products of these farms’ account for about 14% of the Bulgarian population (people engaged in livestock production). Hence, it can be concluded that 14% of the population account for 25% of meat consumption; in other words, each of them eats 82 kg (meat and meat derivatives) annually,

while the remaining 86% of the local customers consume 40 kg per capita on average. In addition, if the analysis takes into account the income factor and Gini coefficient of welfare disparity, (in Bulgaria the small disparity at the end of 90's of 0.20 leaped up to 0,34 and currently stands at about 0.26,) the dispersion about the mean will be even more skewed.
According to research by Ivanova (2002), the quantities of meat and meat products show a strong correlation with corresponding prices and personal incomes, indicating that consumption of meat and meat products is enhanced as their prices decline. The highest correlation was found for inferior meat goods such as minced meat, poultry meat and some fresh salami, where the evidence indicated that increases of incomes are associated with a fall in consumption. Meanwhile, referring to the same research, one of the most important conclusions alleges that "at low income levels the consumption of meat and meat products is strongly dependent on prices and incomes" (Ivanova, 2002). On the other hand, consumption of lamb is very price elastic. According to Ivanov (2004) "he income elasticity of demand for lamb is positive, as each decrease in income of 1% is associated with a 2.7 % decline in consumption". Lamb is a product which is very sensitive to incomes, therefore it is not a normal good but classified as luxury. However, and finally, the consumption of cheap products characterised by low quality has been decreasing (nutrition substitution), as firms transform their production into goods of higher quality and customers themselves have started to recognise and choose them. Regarding meat varieties, the greatest consumption is of white meat, including different offal (predominantly goose livers), is estimated at up to 16.6 kg per capita. However, breaking down the white meat category into particular products (chicken, geese, turkeys, rabbits, etc), chicken makes up the highest percentage at 82% of total white meat consumption, ranging up to 14.3 kg per capita. On the other hand, referring to red meat types, the highest consumption is of pork, estimated at up to 14.9 kg per capita. These figures demonstrate that pork consumption has overtaken that chicken, which is the most preferred white meat type (14.3 kg per capita), thus the amount of pork eaten per capita is the highest of all types of meat. According to NSI data, the consumption of pork in 2005 decreased in comparison with 2004 by 5.1%. Also, the consumption of pork as such in 2004 was assessed at up to 4.3 kg average, whilst the consumption of meat products derived from pork were adjudged at up to 12.7 kg per capita. These figures indicate that the bigger part of meat consumption is in the form of manufactured meat products. This is also true for beef, where the consumption of the fresh item is measured at up to 1 kg per capita, while the consumption of manufactured beef products is up to 12.7 kg per capita. The consumption of veal in the country is insignificant.

5 Recent evolutions and perspectives for the trade

Agricultural exports have traditionally been important in the Bulgarian economy, but, a statement in an EU Report (1998) concluded that, "despite its importance, the reforming strategies for foreign trade introduced by governments during the post-communist period have targeted, in most of the cases, short-term effects on domestic food markets and have impeded exports". In addition, agricultural imports have gradually but irreversibly increased, up from 6% of total country imports in 1985 to 10% in 1994. As for meat, in the first half of the last decade, and attributed to lack of confidence and ownership changes, a large proportion of the animals in the country were slaughtered and exported, thus the exports of meat substantially exceeded imports. After 1995, once this practice had diminished, imports of meat and mainly meat products started to rise, while vice versa exports noticeably declined. According to an EU Report (1998), "the increase in imported meat was due to the reduced duty for beef, veal and pigmeat, introduced in an attempt to maintain domestic prices for processed meat". Having recovered from the crisis which occurred in the middle of the 90's, the gap in foreign meat trade became bigger, as in 1998, total meat imports reached 63 995 tonnes, while exports amounted up to only 13 996 tonnes. Furthermore, the imports of meat during all years of the new millennium were at new record levels, although in some years there were small decreases for certain types. In 2005, total imports grew to 125 200 tonnes, of which 86 472 tonnes were red meat (69%) and 38 728 tons (31%) were white meat. This rising trend for meat continued reaching 143 393 tonnes in 2006, (MAF, 2006). The most significant increases were for beef and poultry meat, while imports of pork and bacon showed a small tendency to fall. This coincides with assumptions that the pig sub-sector would stabilize with attendant increasing domestic production and prospective changes in the structure of pig farms resulting in economies of scale, reduced transaction costs and marketing advantages.

The main reason for significant increases in pork imports might be considered to be comparative advantage for the meat coming from other countries (Denmark, Poland, France, and Brazil). The import price of frozen pork in 2004 was declared at $ 1 323 US per ton, while the local purchase price varied from $1 280 up to $1 320 US per ton live weight rendering this production non-competitive as compared with imports. However, the forecast for a decline in pork imports in the future can be supported because of the expected barriers to imports of cheap frozen meat from South America ($1 471 US per ton) and improvements in productive efficiency on local pig farms. The most adverse trade situation relates to beef which accounts for the highest percentage of imported red meat (61%), and accounted for 45% of total meat imports in 2005. This increase in imports of beef has grown significantly in last 2-3 years, e.g. in 2003, the incoming quantities were reported up to 29 224 tonnes, while in the next year these imports increased 80%, up to 43 380 tonnes. According to a study by IAE (2006), the main reasons for the large imports of beef are to be found in small cattle farm sizes characterized by low productivity and poor efficiency. In addition, production of beef and veal is sourced essentially from dairy breeds thus the quality is inadequate and carcass conformation is poor. As well as the adverse situation in national cattle farming practices, as with the pork trade, the importation of beef, especially from countries outside the EU is a low price activity, competing successfully with the prices in the domestic market. The major imports of beef come from South American countries (Brazil and Argentina), which provide 63% of the total. The primary reason for importing beef from countries outside the EU is attributed to the spread of “Mad Cow” disease in different European countries so that supplies are sought from countries free of this disease. Meanwhile, the causes of significant increases of imports over the last 2 years include sharp rises in pork prices in the domestic and international markets so that many processors and plants have started to replace expensive pork with beef at its lower price. At the opposite pole is sheep meat, which is the only commodity where exports exceed imports (in 2005, the exports of lamb and sheep meat were 8 265 tonnes, whereas the import were only 135 tonne). As regards the export of lamb and mutton, it should be noted that these products have a fundamental importance in the aggregated export of meat. Mutton export accounts for 4.5% of the agricultural exports of the country and about 85% of the total exports of red meat. The decrease in domestic consumption has encouraged the exploration of the exportability of sheep enterprise products in order to prop up sheep farming. There is evidence that about 92% of all lambs processed in the slaughterhouses in 2005 as well as 55% of all lambs produced were bound for export. Thus, the foreign markets represent the main channel for sheep meat sales. The opportunities for increasing sheep exports are related to the integration of Bulgaria into the EU market, which represents the main destination for Bulgarian sheep meat exports. It has been estimated that the deficit of domestic production and consumption in the EU reached 270 000 tonnes in 2003, and the demand will continue to be strong in medium term.

6 Expert views on the successes and challenges of the sector

The obvious successes in the meat sector might be found in the significant progress made in the restructuring and modernisation of many meat processing plants, which have managed in a very short period to comply with EU regulations. At the end of the last decade, four slaughterhouses and three meat packers had been approved for exports to EU markets but by the beginning of 2004, after 1-2 years, this number had increased almost fourfold. The preliminaries for this advance regarding the adoption of EU regulations and technological requirements in meat production are connected to the support from the EU pre-accession structural funds. The SAPARD fund had specifically helped the meat processors to embrace new technological lines and to introduce sophisticated systems for control and management of quality (HACCP and ISO). Bulgaria's meat processing sector has remained fragmented and has had a stark lack of investment since the fall of the communist government in 1989. On the other hand, a lot of enterprises that had been established and appeared significant during the 90's, were closed down and in this way the great share of doubtful and fouled meat production which tainted the good producers was eliminated. Figures from the Bulgarian Foreign Investment Agency show that audits of over 800 processing facilities led to 195 closures before 2002, while up to 2004 the closed enterprises according to Association data were 397. Currently leading companies in the sector are “Mekom”, “Tandem”, “Dakor”, “Nikas”, “Mesodobivka kompaniya” for red meat and “Galus-2004”, “Gradus-1”, “Pticeklanitsa-Chubra”, etc for white meat. Over the past 2 to 3 years, these enterprises have made significant investments accounting for 20% of all investments in the food industry in 2004. Direct foreign investments in the meat processing sector are not prominent representing a mere 4.6% of gross foreign investments made in the food industry during 2004.

According to Kovacheva (2006), the limited meat production in the country is the main problem which limits development of meat industry. This is based on the opinion of 70% of owners and managers of meat processing enterprises interviewed. It is the key challenge for the sector, which forces most of the enterprises to rely on imports of cheap beef, pork and, to a lesser, extent poultry meat. Along with this quantity challenge, the local processors face the problem of the adequacy of the quality of local raw materials, especially as regards beef and pork, since in Bulgaria the specialist meat breeds are not widely adopted. The reasons for the problems addressed above are the structure of livestock production units in Bulgaria with a predominance of very small, self-subsistent households which are not primarily oriented to selling their products in the markets but rather to supporting and sustaining their extended families. Most critical is the situation in beef production, where the processing of meat by slaughterhouses and other plants has consistently decreased from 8 587 tonnes in 2001 down to 5 273 tons in 2005. Furthermore, the production in carcass beef on farms has risen from 15 881 tons at the beginning of this century up to 24 751 tons in 2005. This meat is not wanted by the meat processing enterprises because its location, quantity, quality and purchase negotiation, are associated with high transaction costs and so those processors prefer to work with more profitable imported meat. In the long term, one cannot be optimistic as regards the prospects for the meat sector especially for beef but partly for pig meat. Regarding the pig meat, thanks to favourable structure with a concentration of the production on to large swine farms, integrated with up and downstream entities, this production may survive in the years ahead, and be able to substitute the local input for some of the imported meat. The same assumptions can be applied to the poultry sector too, as alluded to Slavova (2005), “the poultry meat produced in industrial poultry farms, accompanied by the production of home produced feed, is competitive in the domestic market. Meanwhile, the Bulgarian poultry meat is associated with good quality and is preferred by local customers”. That is why, although the imports of poultry meat continue to form a significant percentage of national usage, the local production also will grow and will reduce imports, and export will become more competitive. Only for sheep meat is the situation positive in terms of production and trade due to the availability of markets (mainly in the EU). In the EU zone, consumption is expected to vary around 1.28 million tonnes, with self-sufficiency about 80 per cent resulting in demand of approximately 250,000 tonnes of lamb, which can be imported (Kinsella, Connolly, 2004). Bulgarian producers will struggle to maintain a significant positive balance in trade with lamb and sheep meat, as there are problems attributed chiefly to the state of sheep production and reduction of sheep flock, which may automatically reduce the production and export of lamb and mutton.

7 Conclusion

The meat sector in Bulgaria has been subject to significant changes and intensive transformation, and in last 4-5 years there have been radical reductions of meat production and processing enterprises and considerable progress, especially in the introduction of EU requirements. According to Regulations (853/2004) and different EU Decisions, all enterprises have to adopt HACCP and a system for traceability, including health and identification marks, which will be a serious challenge for dozens of meat processors as a result Commission Decision of 22nd of December, 2006. This Decision relates to the identification of those meat enterprises, which will be permitted to export meat and meat products to other EU countries. To date, 15 red meat and 11 poultry meat enterprises comply with all the requirements of this Decision and can operate in EU markets. Meanwhile, 1 year transition period was agreed to allow other enterprises to comply with these common standards. Along with these 26 enterprises, and as a result of FVO monitoring carried out during January 2007 a further 82 enterprises processing the meat of domestic ungulates, 42 enterprises for poultry and 220 plants producing meat products, minced meat and mechanically separated meat are entitled to operate in the national market.

Regardless of significant criticisms and obvious omissions and problems, the meat sector has in this very short time displayed unequivocal progress regarding control of production processes, increasing merchandise quality, improvement of hygiene conditions, advances in marketing (new products, better product mixes, and creation of brands). Therefore, it can be concluded that in future meat processors will become more competitive, will direct their efforts to continued modernisation of their plants and will dedicate some energy to improving the resource base, which represents the main constraint to their prospective development. According to all specialists, the raw material constitutes the main problem for the development of the meat industry since it directly relates to EU requirements for traceability of production and strongly impacts the price of the products. The source of supply is badly affected by the fragmentation of the national livestock production industry in which the share of small farms is predominant accounting for the rearing of 45% of the sheep, 23% of the pigs and 28% of the cattle herds. All of these farms are characterised as self-subsistence households that do not have the capacity or the interest to supply meat to the market, which accounts for input limitations and insufficiency of supply felt by processors. It is illustrated by bovine meat, where recently the import of beef amounted up to 65 485 tonnes in 2005, while the national production ranged around 30 023 tonnes, but only 5 272 tonnes (18%) of this beef and veal was delivered to the official slaughterhouses. Bovine meat production and processing features as the sub-sector which is least prepared for joining the EU, and most vulnerable to pressure from imports, as the problem of inadequate animal production base is seriously deficient. The problems are due to traditional dietary habits of Bulgarians involving limited consumption of beef, the lack of specialised beef meat breeds and so production of beef and veal is predominantly from dairy breeds thereby which all lead to lack of market competitiveness.

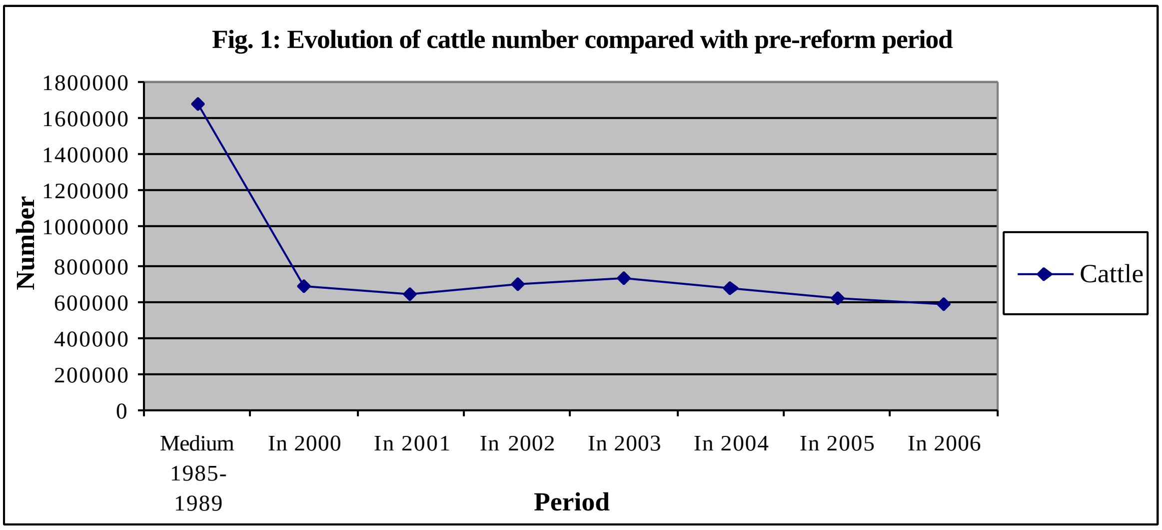
The situation in other staple sub-sectors (pig and poultry) is a bit more optimistic due to better production pattern and the availability of a quite number of large pig and poultry farms. The risky area, especially for the pig sub-sector is the termination of vaccination against Classical Swine Fever (CSF) which started January 1, 2006. Bulgaria has had 3 officially announced CSF outbreaks, which have not led to any dramatic drop in swine numbers or pork production but has raised many issues related to correct implementation of the CSF eradication program, which may impair the stabilisation of this production and reduction of import growth. Poultry represents the largest meat sub-sector in Bulgaria, accounting for 59% of total meat delivered from the slaughterhouses in 2005. The number of poultry has gradually risen up to 20 006 151 in 2006, as compared with 2000 when their number had fallen to 14 963 142. As for the sheep meat, it is the sub-sector with the best prospects in terms of market competitiveness, the only one, where the domestic production is not threatened by imports, and in which the country can boast a positive trade balance. The risks in sheep production are not to be found in the market prospects for lamb and mutton but rather the problems occur in the demand of sheep milk, which is very much in decline leading farmers to withdraw from production. Generally, in 2007, the livestock and meat industries will continue with further restructuring related to investment in improved breeds; better meat quality, adoption of stringent hygiene practices, implementation of food safety standards and development of new marketing strategies. The most likely consequences by 2007/2008 will be fewer farms, stabilised livestock numbers, and improved efficiency and competitiveness of commercial operations.

Annex 1: Country profile for beef and veal

Table 1: Industrial production of beef and veal in slaughterhouses

Year	Number of operational slaughterhouses	Number of slaughtered animals	Proportion carcass (live weight)	Total live weight of bovine (tonnes)	Total beef and veal in carcass (tonnes)
2000	247	78 192	0,45	29 996	13 531
2001	174	49 600	0,47	18 542	8 634
2002	154	45 800	0,47	16 690	7 922
2003	131	52 100	0,48	18 983	9 036
2004	122	45 000	0,49	15 634	7 624
2005	100	29 800	0,47	11 182	5 272
2006*	n.a.	26 400	0,46	9 795	4 506

Source: Agrostatistics Department, MAF



Source: National Statistical Institute and Agrostatistics Department, MAF

Table 2: Domestic consumption of beef and veal with trade balance

Year	Industrial production carcass (tonnes)	Consumption on the farms (tonnes)	Imports of beef and veal (tonnes)	Exports of beef and veal (tonnes)	Total domestic consumption (tonnes)
2000	13 531	n.a.	9 917	59	n.a.
2001	8 634	12 816	18 964	138	40 286
2002	7 922	15 881	29 003	3 229	49 577
2003	9 036	19 690	29 244	3 657	54 294
2004	7 624	23 262	43 380	152	74 115
2005	5 272	24 751	65 485	211	95 928
2006*	4 506	18 510	63 567	216	86 367

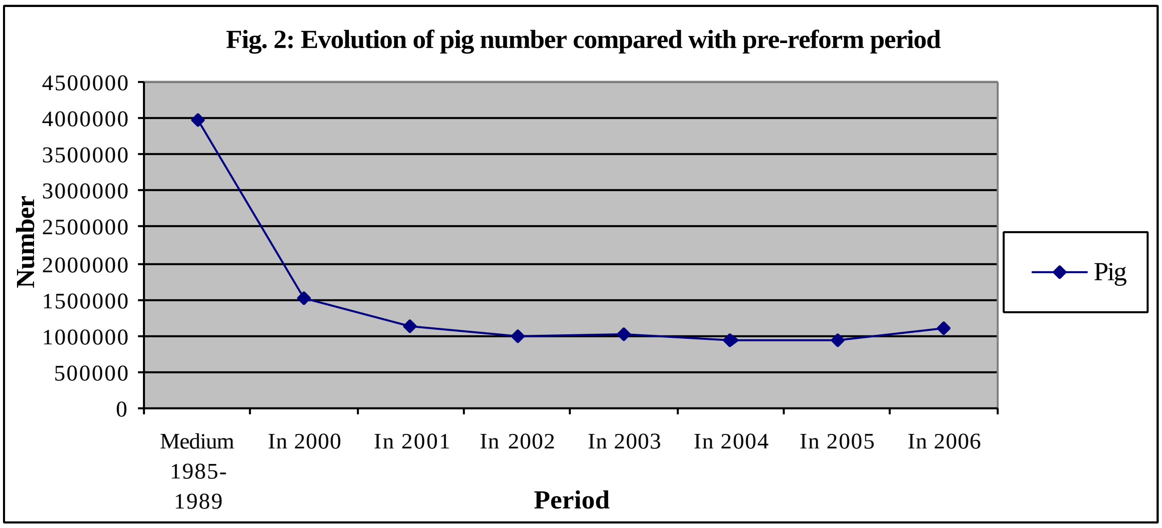
Source: Agrostatistics Department, MAF; “Customs” Agency

Annex 2: Country profile for pigmeat

Table 3: Industrial production of pork in slaughterhouses

Year	Number of operational slaughterhouses	Number of slaughtered animals	Proportion carcass (live weight)	Total live weight of pigs (tonnes)	Total pork in carcass (tonnes)
2000	262	624 781	0,72	67 333	48 753
2001	198	536 000	0,64	49 939	31 850
2002	192	562 200	0,71	57 613	41 029
2003	191	744 900	0,69	74 492	51 705
2004	168	621 300	0,73	62 121	45 347
2005	149	533 800	0,69	55 722	38 511
2006*	n.a.	514 300	0,68	54 008	36 726

Source: Agrostatistics Department, MAF



Source: National Statistical Institute and Agrostatistics Department, MAF

Table 4: Domestic consumption of pork with trade balance

Year	Industrial production carcass (tonnes)	Consumption on the farms (tonnes)	Imports of pork (tonnes)	Exports of pork (tonnes0	Total domestic consumption (tonnes)
2000	48 753	n.a.	7 415	23	n.a.
2001	31 850	18 360	14 966	185	64 991
2002	41 029	20 754	36 829	304	98 308
2003	51 705	18 937	34 011	351	104 303
2004	45 347	32 972	43 065	281	121 103
2005	38 511	36 020	41 126	333	115 324
2006*	36 726	38 285	37 694	113	112 592

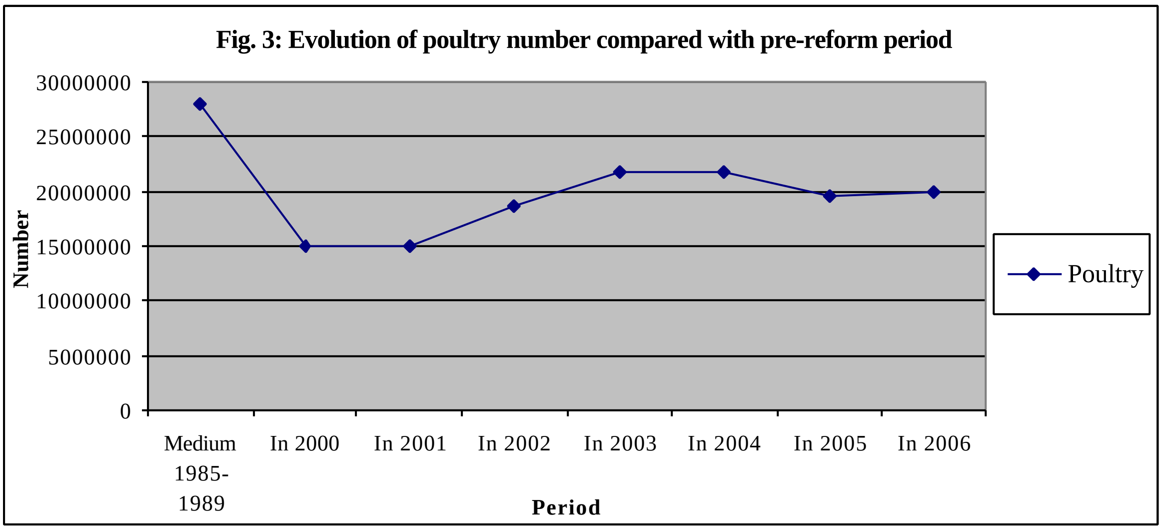
Source: Agrostatistics Department, MAF; “Customs” Agency

Annex 3: Country profile for poultrymeat

Table 5: Industrial production of poultry and offal in slaughterhouses

Year	Number of operational slaughterhouses	Number of slaughtered animals	Proportion carcass (live weight)	Total live weight of poultry (tonnes)	Total poultry in carcass (tonnes)	Total offal (including liver) from poultry (tonnes)
2000	n.a.	27 472	0,65	57 692	37 500	n.a.
2001	n.a	27 439	0.64	56 250	36 000	n.a.
2002	57	49 859	0,66	96 340	63 705	6 374
2003	34	34 833	0,67	70 764	47 392	5 069
2004	33	38 731	0,70	85 395	59 993	6 826
2005	34	51 204	0,66	113 051	76 725	9 474
2006*	n.a.	52 856	0,69	118 927	82 600	9 600

Source: Agrostatistics Department, MAF; Union of Poultry Producers



Source: National Statistical Institute and Agrostatistics Department, MAF

Table 6: Domestic consumption of poultry with trade balance

Year	Industrial production carcass (tonnes)	Consumption on the farms (tonnes)	Imports of poultry (tonnes)	Exports of poultry (tonnes)	Total domestic consumption (tonnes)
2000	n.a.	67 500	20 989	4 936	n.a.
2001	n.a.	68 000	24 081	5 514	n.a.
2002	70 079	39 021	32 000	3 600	137 500
2003	52 461	62 539	28 000	4 500	138 500
2004	66 819	17 853	52 534	9 464	127 742
2005	86 199	12 232	38 728	8 652	128 507
2006*	92 200	11 800	42 109	8 054	138 055

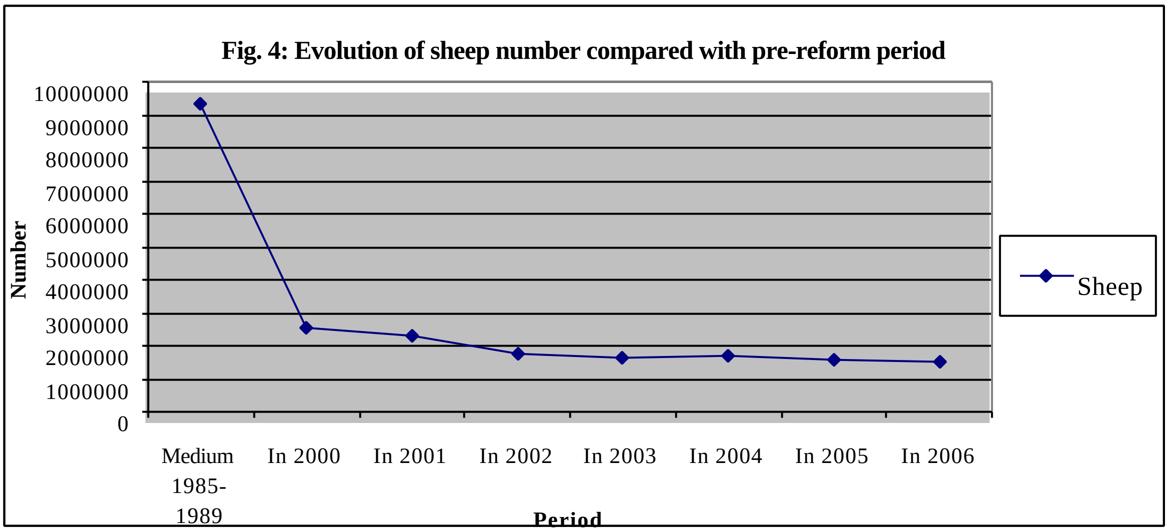
Source: Agrostatistics, MAF; Union of Poultry Producers; “Customs” Agency

Annex 4: Country profile for sheepmeat and goatmeat

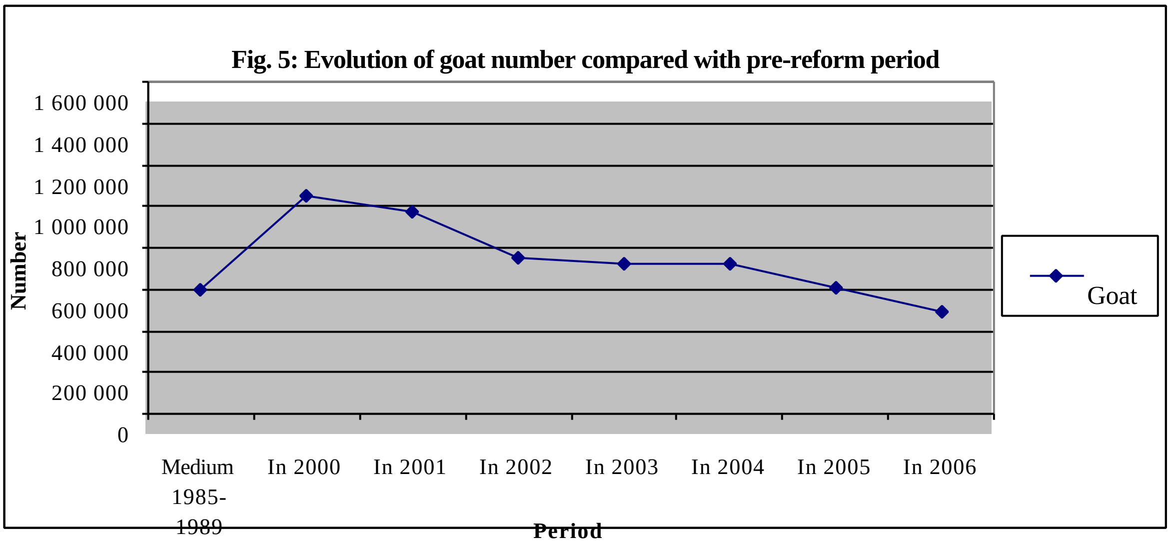
Table 7: Industrial production of sheep and goat meat in slaughterhouses

Year	Number of operational slaughterhouses	Number of slaughtered animals	Proportion carcass (live weight)	Total live weight of sheep and goats (tonnes)	Total sheep and goat meat in carcass (tonnes)
2000	141	570 625	0,47	13 779	6 507
2001	107	628 200	0,49	14 720	7 263
2002	117	683 300	0,50	15 026	7 464
2003	101	837 500	0,45	20 070	9 071
2004	102	768 100	0,48	18 659	8 974
2005	93	902 000	0,47	20 275	9 377
2006*	n.a.	902 926	0,47	18 510	8 700

Source: Agrostatistics Department, MAF



Source: National Statistical Institute and Agrostatistics Department, MAF



Source: National Statistical Institute and Agrostatistics Department, MAF

Table 8: Domestic consumption of sheep and goat meat with trade balance

Year	Industrial production carcass (tonnes)	Consumption on the farms (tonnes)	Imports of sheep & goat meat (tonnes)	Exports of sheep & goat meat (tonnes)	Total domestic consumption (tonnes)
2000	6 507	n.a.	48	6 508	n.a.
2001	7 263	13 072	46	6 893	13 488
2002	7 464	12 156	40	6 889	12 771
2003	9 071	10 295	77	7 592	11 851
2004	8 974	11 493	26	7 435	13 058
2005	9 377	15 050	135	8 265	16 298
2006*	8 700	14 860	24	8 186	15 398

Source: Agrostatistics Department, MAF; "Customs" Agency

* - Figures for 2006 are preliminary and they are marked by asterisk

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