



MARKETING ASPECTS IN DETERMINING MEAT QUALITY

Roumen Otouzbirov*, George Zhelyazkov, Nadka Kostadinova, Todorka Atanasova

Department of Management, Agriculture Faculty, Trakia University, Stara Zagora

ABSTRACT

Carcass trade in the EU is more and more based on the use of the “SEUROP System” in classifying pig and ruminant animal carcasses. Clear systems for determining prices by means of comparative quotations and differentiated values are introduced with reference to standard specifications regardless of commercial interests. The implementation of the EU classification system in Bulgaria at the purchasing stage will give a stimulus to producers of young beef cattle and will lead to getting more and high-quality products. Marketing their products at foreign markets producers of young bulls will get a 20% higher profit per 100 kg of live weight on the Hungarian market and 60% more on the Austrian market. Even greater would be the profit from selling slaughter weight – 200 – 220 %. Marketing carcass of well-finished young bulls on the West European markets could not only cover production expenses, but also it will provide some profit that can be invested for improvement of the breed and the forage basis of beef cattle breeding in Bulgaria.

Key words: Carcass, young bulls, “SEUROP System”, market

INTRODUCTION

In the chain from producers to consumers slaughterhouses are the places where real assessment and objective information is obtained about the quantitative and qualitative parameters of the product “carcass”. The producer of meat animals not only gets the expression in value of his work, but he can also receive a well-grounded assessment about a certain price. The merchant (or manufacturer) chooses from the different variants of the product “carcass meat” according to the desire of the end consumer and at the same time he can tell the producer his requirements in conformity with the market tendencies (1).

In some countries, including our country, the greatest number of meat animals is purchased by live weight, both in the past and at present. The experience gained reveals a number of disadvantages in that system which makes it unacceptable. As early as in 1977 Nestorov N. et al. (2) stated that first of all it doesn't promote the reproduction and breeding of animals with good meat qualities providing sufficient profit to their producers.

The objective of the present paper is to prove the necessity of introducing a unified system for quality assessment of the products, which is a prerequisite both for the free movement of goods and for their controlling (3).

At present in some countries or regions in the world various systems for assignment of categories, respectively purchasing beef cattle are used. The majority of them are based on the quantity and quality of the gained meat. Bozo S. et al. (4) point out that the system for purchasing beef cattle in Hungary is based on slaughter yield. The authors state that for the good production interaction of all farmers, meat processors and market it is extremely important to develop and implement in the country a system for slaughter assessment and relevant prices. As a suitable system of that kind the authors suggest the “EUROP” system, applied in the EU. In the analysis of carcasses they consider that the optimum interrelation among the different carcass tissues is the most reliable basis for assessment and payment. Such a system will guarantee a high-quality carcass composition. In the classification of farm animal carcasses by quality the assessment of carcass composition plays a decisive role. In assessing the quality of pigs for slaughter instruments for determining the muscle tissue contents in the carcass are used in the EU

*Correspondence to: Roumen Otouzbirov,
Department of Management, Agriculture
Faculty, Trakia University, Stara Zagora,
Bulgaria

countries. Similar studies are performed with cattle and sheep by means of different technical devices, such as sonography, computer tomography, etc. (5, 6) In the USA Williams C. and G. Bennett (7) developed a computer model for predicting the economically optimum moment for slaughtering fattened beef cattle depending on their breed, method of fattening and slaughter qualities. They point out that when and economic assessment is made on the basis of carcass price depending on the yield class, greater profit is made, though the overall weight of the carcass is smaller and the meat itself is less fat compared to the system based on the price per quality class.

In the European Union unified systems for classifying the carcasses of slaughtered meat animals have been adopted – SEUROP. Initially such a system had been approved and introduced (01 Jan 1989) for purchasing pigs for slaughter. The various classes represent the percentage of lean meat in the carcass. Since 1 January 1992 the classification system has been adopted in purchasing sheep for slaughter. The categorization and quality assignment for cattle and sheep is made primarily on the basis of the requirements of the classification system for assessment of carcasses by their conformation class and fat class. There are six classes according to muscle formation and five according to fats. According to Jasiorowski H. et al. (8) the application of this methodology makes possible a sufficiently objective estimation of the different quality classes, respectively for payment of slaughter carcasses, too.

De Boer H. and W. Sybesma (1) state that in the West European countries price differences per kilogram of carcass meat between the different categories in the “S EUROP” system are significant. In each quality class the price is the same but the recorded quality parameters show certain variation. This creates difficulties in conducting business transactions. Some countries (England, Ireland) suggest introducing also subgroups to the various qualities, respectively pricing categories. Their combination, however, requires great accuracy in the classification procedure.

The introduction of the system for classification of carcasses according to the “SEUROP” system and the relevant payment, lead to an ambition in producers to finished beef cattle up to a certain quality, but not only to high live weight. That is the decisive parameter for the efficiency of the fattening

process. Wood J., (9) point out that the result from introducing this system of purchasing carcasses in 1989 in England has contributed for carcass meat with excellent conformation to get the highest price. The highest percentage of carcasses fall within the most widely spread class in the trade chain - R4L. This class combines fairly good quality of meat at a fairly low price.

RESULTS AND DISCUSSION

The transition to a purchasing system on the basis of slaughter carcass quality, similar to the one applied in the EU countries will contribute to the production of well-fattened animals and an increase in the share of meat breeds in Bulgaria. All that will have a positive influence both on the quantity and quality of produced meat and the efficiency of the meat processing industry. Winning recognition for such a purchasing system will result in an increase of the opportunities of our producers to participate on the world market.

At present the European market experiences some difficulties in the supply of fresh beef and veal because fewer and fewer countries are touched by the “mad cow” disease. This is good chance for Bulgaria to export carcass meat, but it presupposes that the meat will comply totally with the S EUROP system requirements.

Table 1 presents the current prices for the 21-st week (May) of the year 2002 in Bulgaria and in 5 other European countries from data provided by IMDA – ZMP, 2002 (calculated in Euro).

The above price per 100 kg of carcass weight is an average value of the prices for all classes (SEUROP) and in most countries it is close to the price for class “R3”. It is noticeable that the prices in the former Eastern block countries – the Czech and the Slovak Republic are close to the ones currently in effect in Bulgaria, but in Germany and especially in Austria they are considerably higher. This difference is more significant for prices per 100 kg of slaughter weight, which shows that the “S EUROP -System” is an approved mechanism that stimulates the production of high-quality beef and veal and ensures adequate payment for that production. In previous studies of ours (10) we have found similarity between some meat parameters of triple-bred bullock crossbreds and Hereford bullocks, which are close to the requirements of class “O” of the EU

classification system. The result has been achieved by a partially intensive fattening method, typical for the area of the Strandzha Mountain and without necessarily requiring observation of the EUROP system criteria. That presupposes that with a better finishing system bullocks would develop their biological potentials to a maximum and the carcass meat obtained from them would meet

at least the requirements for class "R₃". By achieving the prices stated in table 1 better profit shall be received – 20,07 Euro per 100 kg of live weight at the Hungarian market and 55,86 Euro more at the expensive Austrian market. Greater will be the profit from selling slaughter weight – by 74,00 Euro at the German market and by 92,00 Euro in Austria.

Parameters	Per 100 kg of live weight	Per 100 kg of carcass weight, class S ÷ P
1. Bulgaria	87,72	165,00
2. Austria difference 1-2	143,58 - 55,86	257,00 - 92,00
3. Germany difference 1-3	136,57 - 48,85	239,00 - 74,00
4. Slovak Republic difference 1-4		196,00 - 31,00
5. Czech Republic difference 1-5	130,95 - 43,23	
6. Hungary difference 1-6	107,79 20,07	

Table 1. Producer prices of young bulls (in Euro).

CONCLUSIONS

According to data from SAMI* for 2001, the costs in the production of beef cattle in Bulgaria had been between 70 – 160 Euro per 100 kg of live weight but when pasture is used – 81 Euro on the average for the country (11). Very often beef cattle owners have sold them at a loss. Marketing carcass meat of well-finishing young bulls on the West European markets could not only cover production expenses, but it will also provide some profit that can be invested for improvement of the breed and the forage basis of beef cattle breeding in Bulgaria. The implementation of the EU classification system in Bulgaria at the purchasing stage will give a stimulus to producers of beef cattle and will lead to getting more and high-quality products that will be marketed on the domestic and still more successfully on the foreign markets.

*SAMI – system for agro marketing information in Bulgaria

REFERENCES

1. De Boer H. and W. Sybesma, Carcass and meat quality in market situations, meat

consumption patterns. ECCEAMST. Utrecht. Netherlands. 35-72. 1995.

2. Nestorov N., L. Ivanov, I. Karaivanova, P. Velinov, H. Tsachev, D. Katsarov, Problems in purchasing animals according to meat quantity and quality. National Center for Scientific and Technical Information in Agriculture, Food Industry and Forestry. Sofia, 79-87. 1977.

3. Kostov D., Quality management. Pensoft, Sofia, 1999.

4. Bozo S., J. Sardi, N. Kollar and J. Volgyi Csik, Effect of sexq type and quality of bony meat on carcass composition of slaughter cattle according to commercial dissection. 43rd Annual Meeting of the European Association for animal production. 14-17 September, Madrid. 1992.

5. Thompson J., B. Kinghorn and R. Banks, Application of non-invasive techniques for carcass evaluation in breeding. 47th Annual Meeting of the European Association for Animal Production, Lillehammer, Norway, 25-29 August, Abstract No. PS5.1. 1996.

6. Raycheva E., P. Marinova, Z. Shindarska, Use of sonography and the EUROP system for assessment of lambs in predicting their carcass composition. Animal sciences. 5-8; 127-129. 1995.

7. Williams C. and G. Bennett, Application of a computer model to predict optimum slaughter and points for different biological types of feeder cattle. *Journal Animal Science*. 73; 2903-2915. 1995.
8. Jasiorowski H., Z. Kijak, S. Poczynajlo, S. Wajda, Program rozwoju hodowli budla miesnego w Polsce. ROZWOJ SGGW, Warszawa. 1995.
9. Wood J., The influence of carcass composition on meat quality. *Quality and Grading of Carcasses of Meat Animals*. CRC Press, Research Center, Lacombe, Alberta, Canada, 131- 155. 1995.
10. Otouzburov R., Y. Tsvetanova, Results from the implementation of the European system for quality estimation and purchasing beef cattle. *Economics and management of agriculture*. 30-33. 2001.
11. Petrova V., D. Zhelyazkov, I. Nikolova. 2002. Situation and problems in meat animal breeding – SAMI. 1; 12-24 2000/2001

