

Opinion of the European Economic and Social Committee on the Disposal of animal carcasses and the use of animal by-products

(2006/C 318/18)

On 19 January 2006, the European Economic and Social Committee, acting under Rule 29(2) of its Rules of Procedure, decided to draw up on the *Disposal of animal carcasses and the use of animal by-products*.

The Section for Agriculture, Rural Development and the Environment, which was responsible for preparing the Committee's work on the subject, adopted its opinion on 11 July 2006. The rapporteur was Ms Santiago.

At its 429 plenary session, held on 13 and 14 September 2006 (meeting of 14 September 2006), the European Economic and Social Committee adopted the following opinion by 115 votes to 32 with 16 abstentions.

1. Conclusions

1.1 Information has a crucial role to play in society, and consumers have the right to accurate and timely information on the quality of the food that they eat. The EESC therefore considers that appropriate consumer information campaigns are needed. The EESC reaffirms that protecting public health and ensuring food safety in European production is one of its fundamental priorities.

1.2 The EESC suggests that the European Commission pursue and step up as swiftly as possible the studies currently under way which clearly show that the use of meat meal from non-ruminants can be used in pig and poultry feed without posing any danger to human health.

1.2.1 The way in which proteins are identified and the methods used to trace the meat meal in which they are found must give consumers a cast-iron guarantee that pigs are fed on meat meal obtained exclusively from the by-products of poultry, and that poultry is fed on meat meal obtained exclusively from the by-products of pigs.

1.2.1.1 As soon as the current studies have been completed, by-products from these (healthy) animals, which have been slaughtered in separate abattoirs, should be used in the production of meat meal, the protein in which is clearly identifiable and fully traceable.

1.3 Establishing research programmes to develop methods of destroying carcasses on-site is vital for preventing the possible spread of diseases when carcasses are being transported.

1.4 The EESC recommends promoting research into systems — if possible, energy-producing systems — for processing all farm by-products and waste, with a view to standardising production methods, whilst protecting the environment in the short and medium term, ensuring the economic balance of

farms and safeguarding the health safety of the livestock and the health of the farmers themselves.

2. Introduction

2.1 Six years after the BSE crisis, the Committee felt it would be timely to re-examine the issue of carcass disposal and the use of animal by-products, taking into account food safety, consumer health protection and the economic problems faced by producers.

2.1.1 Safety standards for food production are much higher in Europe than in third countries, but they do guarantee food safety for consumers, environmental protection and animal welfare. Maintaining these standards, with the higher production costs that they entail, will only be possible if production continues in Europe.

2.2 Before the BSE crisis, destroying animal carcasses on pig farms did not pose a problem for producers, because dead animals could be used in the production of meat meal, which would then be used in animal feed. Consequently, in various countries, producers of meat meal would collect carcasses free of charge.

2.3 As a result of the BSE crisis and in the wake of the European Parliament and Council Regulation 1774/2002 of 3 October, not only was the use of meat meal in animal feed banned, but animal carcasses were also considered to be category 2 risk material, requiring them to be collected and destroyed by incineration, and this only by undertakings licensed for this purpose.

2.4 As might be expected, this situation entailed further costs for producers and thus increased distortion of competition vis-à-vis third countries. This led producers to seek alternatives that were less damaging to the sector's economy but still effective in terms of biosafety and the environment.

2.5 The current trend in business is for an open global market, where the only law is that of supply and demand. We in Europe, however, have been the victims of a terrible distortion of competition, because various technical and scientific decisions have resulted in political stances that make our production costs significantly higher than in third countries.

2.6 One example of this is Council Decision 766/2000/EC of 4 December 2000, Article 2(1) of which prohibits the use of animal proteins in animal feed in all Member States. This decision applied to all animal species. European Parliament and Council Regulation 1774/2002 of 3 October 2002 (Article 22 (1)(a)) consolidates and broadens the scope of this ban.

2.7 The crisis unleashed by the emergence of BSE in cattle and its link with Transmissible Spongiform Encephalopathies understandably affected intensive production sectors (pig and poultry breeding) which receive no aid or production premium, operate on very narrow margins and face major barriers to their development due to legislation on the environment, animal welfare and health issues.

2.8 The ban on the use of meat meal dealt the sector a major blow, because it lost a major source of protein for feed and the price of vegetable protein shot up due to increased demand. Consequently, the price of feed rose sharply. Slaughterhouse by-products also went from being a source of additional profit to constituting a financial burden; this factor, combined with the higher price of meat meal, inevitably led to higher prices for the consumer.

3. General comments

3.1 *Legal aspects and technical and scientific contradictions relating to the disposal of pig carcasses*

3.1.1 Regulation 1774/2002, which made it compulsory for carcasses to be collected and destroyed by accredited undertakings and which prohibited the use of animal proteins, not only caused financial difficulties for producers in countries already implementing this system; it also led to much more serious problems in those countries that did not have this system in place, because they were then forced to implement it, incurring even higher costs. This situation caused producers in those countries to wonder whether the regulation was really intended to compensate by-product processors for the ban on selling meat meal.

3.1.2 The issue takes on even greater significance given that this regulation includes a derogation for remote areas with low animal population density, where traditional methods for

destroying animal carcasses are allowed to continue. The fact cannot be ignored that collection costs in these areas would be extremely high. Two further derogations are included:

- dead pet animals may be directly disposed of as waste by burial;
- animal by-products may be disposed of as waste by burning or burial on site in the event of an outbreak of a disease mentioned in List A of the International Office of Epizootic Diseases (OIE), if the competent authority considers that transporting the carcasses entails a risk of propagating disease or when the nearest processing plant does not have the necessary capacity.

3.1.3 Today there is a growing need to locate farms as far as possible from human settlements and also from one another, wherever this is feasible. Consequently, farmers increasingly seek out remote locations so as not to trouble neighbours and to protect the health of their stock.

3.1.4 As stated above, the process of collecting carcasses is extremely expensive, hence the attempts to find solutions that go further than the proposals contained in the regulation and which reflect the reality of the situation today. When considering these options, certain factors must always be borne in mind: human health and safety, animal health and welfare and environmental protection.

3.2 *Legal aspects and technical and scientific contradictions relating to the use of meat meal*

3.2.1 There is no scientific evidence that pigs and poultry are at any risk of contamination from BSE. Pigs and poultry in the United Kingdom have undeniably been exposed to the bovine spongiform encephalopathy (BSE) infectious agent (prions). Despite being fed the same animal protein that caused BSE in cattle, there has not been a single case of contamination in animals of either species. Studies of domestic chickens indicate that they are resistant to infection by both parenteral and oral challenge ⁽¹⁾.

3.2.2 On issues relating to consumer health protection and safety, the Commission is adopting risk-control measures based on the most recent test results available and on a solid scientific assessment such as that provided in the guidelines drawn up by the Scientific Steering Committee (SSC). The SSC itself is assisted by an Ad-Hoc Transmissible Spongiform/Bovine Spongiform Encephalopathy group, made up of scientists from across the EU.

⁽¹⁾ (D. Matthews and B. C. Cooke, *Rev. Sci. Technol. Int. Epit.* 2003, 22(1), 283 — 296). Another key study is: Poultry, pig and the risk of BSE following the feed ban in France — a spatial analysis. Abrial D, Calavas D, Jarrige N, Ducrot C; *Vet. Res.* 36 (2005) pp. 615-628.

3.2.3 The limitations of our understanding of TSE are revealed in the following work:

- A scientific study on ‘*Oral exposure of humans to the BSE agent: infective dose and species barrier*’, adopted by the SSC at its meeting of 13 and 14 April 2000.
- A scientific report on ‘*the safety of meat-and-bone meal derived from mammalian animals fed to non-ruminant food producing farm animals*’, SSC Meeting of 24-25 September 1998.

3.2.4 The issue of TSE in pigs was also the subject of an SSC study:

- A scientific study adopted by the SSC at its meeting of 24 and 25 June 1999 on ‘*fallen stock and dead animals*’.
- A scientific study on ‘*the risk born (sic) by recycling animal by-products as feed with regard to propagating TSE in non-ruminant farmed animals*’, SSC 17 September 1999.
- A scientific study on the use of animal proteins in feed for all animals, adopted by the SSC at its meeting of 27 and 28 November 2000.

3.2.5 In a nutshell, the conclusion that we can draw from all of these scientific studies is that no epidemiological proof exists for the theory that pigs, poultry or fish are susceptible to contracting BSE or that these species have been affected by BSE. To date, no scientific tests have demonstrated the development of TSE in pigs, poultry or fish.

3.3 Analysis of the problems and the possibility of processing by-products on farms

3.3.1 A global approach to processing waste from livestock farms must be adopted, incorporating food safety, health, animal welfare and due regard for the environment.

3.3.2 The EU produces more than 170 million tonnes of farm waste every year ⁽²⁾. Managing a modern livestock farm is an extremely complex task, and what to do with the waste is one aspect of this. With regard to processing carcasses, more efficient and cost-effective disposal methods must be found.

⁽²⁾ Table 1 — List of zootechnical waste (EU15) — Source EUROSTAT/MAPYA 2003.

3.3.3 The issue of disposing of animal carcasses is extremely complex because, whilst account must be taken of the environment, we must also consider the possibility of diseases being transmitted during transportation. There are also issues of hygiene, safety and public health ⁽³⁾.

3.3.4 With this work we hope to expand the range of options for producers, whilst upholding the principle of protecting public health and the environment. We therefore suggest hydrolysis, together with any method that meets the requirements set out above, which must also be considered ⁽⁴⁾.

3.3.5 Hydrolysis, as the primary method of processing animal carcasses, is biologically identical to the hydrolysis of other organic matter likely to degrade unaided under controlled conditions. The biochemical path followed by hydrolysis is determined by the substance’s capacity for autolysis. Basically, the proteins decompose, producing amino acids, with the carbohydrates producing sugars and the lipids producing fatty acids and alcohol. In the case of pork, esterification of the fatty matter results in the hydrolysed matter ultimately taking on a dense, viscous appearance with flow characteristics equivalent to viscous liquid, which is an additional advantage when it comes to processing it under controlled conditions and makes it easier to handle the resulting fluid. To make hydrolysis more effective, some factors must be controlled, such as particle size (which requires carcasses to have been ground down in advance), temperature, duration of processing and the oxygen content in the atmosphere surrounding the process, in order to prevent the release of unpleasant smells. The liquid produced by hydrolysis can then be processed with the farm’s slurry, with the added advantages of:

- biosafety (carcasses are processed on the farm itself under controlled conditions, thus reducing the possibility of diseases being transmitted to other farms);
- making the traditional slurry disposal process more efficient;
- eliminating pathogenic elements;
- improving farm management, because carcasses and slurry are processed on-site and in real time ⁽⁵⁾.

⁽³⁾ Table 2 — Quantifying waste and by-products from farm animals (Source EUROSTAT/MAPYA).

⁽⁴⁾ — Risk assessment: use of composting and biogas treatment to dispose of catering waste containing meat (Final report to the department for Environment, Food and Rural Affairs). Gale P. (2002). In <http://www.defra.gov.uk/animalh/by-prods/publicat/>
 — Informe final relativo a los resultados obtenidos en los proyectos de estudio de alternativas a sistemas de cadáveres [Final report on results obtained in research projects on alternatives to carcass-based systems]. Antonio Muñoz Luna, Guillermo Ramis Vidal, Francisco José Pallarés Martínez, Antonio Rouco Yáñez, Francisco Tristán Lozano, Jesús Martínez Almela, Jorge Barrera, Miriam Lorenzo Navarro, Juan José Quereda Torres. (2006).

⁽⁵⁾ Studies in this field:

- Informe final de resultados sobre la hidrolización de cadáveres animales no ruminantes: experiencia en ganado porcino. [Final report on the hydrolysis of non-ruminant animal carcasses: an experiment on pigs]. Lobera JB, González M, Sáez J, Montes A, Clemente P, Quiles A, Crespo F, Alonso F, Carrizosa JA, Andujar M, Martínez D, Gutiérrez C.
- *Parámetros Físico-químicos y bacteriológicos de la hidrolización de cadáveres de animales no ruminantes con bioactivadores [Physical and bacteriological parameters of the hydrolysis of non-ruminant animal carcasses with bioactivators]*. Gutiérrez C, Fernández F, Andujar M, Martín J, Clemente P, Lobera JB CARM-IMIDA. <http://wsiam.carm.es/imida/publicaciones%20pdf/Ganader%EDA/Gesti%F3n%20de%20Residuos%20Ganaderos/Hidrolizaci%F3n%20de%20Cad%20E1veres/Resultados%20del%20Estudio%20Preliminar.pdf>.

3.3.6 Producing energy by means of biogas is important and, to this end, interconnecting tanks can be used, preventing back-flow or contact with the atmosphere. Also of great interest, however, is studying simpler processes that are suitable for smaller farms and which also guarantee public health generally and on farms, and protect the environment.

4. Specific comments

4.1 Information plays a crucial role in society today. Consumers have the right to be fully and accurately informed, which rarely happens, because the media always prefer to report disasters and accidents whilst positive developments are given scant coverage. We must, therefore, work hard to inform consumers about all of the work being done in public health so that they can make informed choices about what they think is best.

4.2 Economic consequences of eliminating animal carcasses and waste

4.2.1 The disposal of carcasses is causing a number of logistical problems (in countries not previously implementing the collection system) and in some cases, collection is incompatible with good practice for health protection on farms.

4.2.2 The economic impact of the Community directive must be analysed in two specific cases:

4.2.2.1 In countries where there was previously no collection of carcasses, investment will be needed by farms (for building cold-storage units and establishing safe carcass collection plans), by transport companies, which will have to acquire lorries specially equipped for the task and by by-product processing plants, which will have to make changes in order to be able to process entire animals ⁽⁶⁾.

4.2.2.2 In countries that have already established carcass collection systems, there is no need for further investment, but where meat meal cannot be used, the costs of its collection and destruction must be covered ⁽⁷⁾.

⁽⁶⁾ Calculations have been made suggesting an increase in production costs of between EUR 0.36 and EUR 0.96 per animal produced, depending on the location and size of the farm, although it is certain that the smallest farms will always be the most heavily penalised.

⁽⁷⁾ The product consequently entails an additional cost varying between EUR 0.3 and EUR 0.5 per animal produced.

4.3 Economic impact on the use of animal by-products

Banning the use of animal protein in feedingstuffs for pigs, poultry and fish has led to significantly higher production costs in Europe and has consequently caused further problems of distortion of competition vis-à-vis other countries such as Brazil, Argentina and the USA, for example, where the use of animal protein is authorised. These higher costs have had consequences at various levels, with slaughterhouse by-products no longer being a benefit, because they now entail destruction costs, and with increased demand for vegetable protein leading to higher prices and consequently higher feed prices ⁽⁸⁾.

4.3.1 In real terms, EU production costs are higher than in third countries for:

Destruction of by-products: EUR 6 per 100 kg of pig carcasses ⁽⁹⁾

Non-use of animal meal: EUR 0.75 per 100 kg ⁽¹⁰⁾

Increase in soya price: EUR 1.5 per 100 kg ⁽¹¹⁾

When multiplied by the number of pigs produced annually, these figures represent a total Community-wide loss of EUR 173 million. To this increase in costs, we can add a set of production factors such as feed, energy, labour, animal welfare and environmental standards, which mean that one kg of pork carcass costs EUR 0.648 in Brazil ⁽¹²⁾, compared to EUR 1.25 in the EU ⁽¹³⁾.

4.3.2 This distortion of competition can never be openly discussed in WTO negotiations, because it would immediately be refuted, since no scientific evidence has been produced to support it. If this situation continues, we will have to compensate European producers or we will be threatening their survival.

⁽⁸⁾ Studies carried out by the University of Murcia working group, led by Prof. Dr. António Muñoz Luna, DMV, PhD, MBA.

⁽⁹⁾ Source: National Institute for Agricultural Research (INRA).

⁽¹⁰⁾ Calculated on the basis of the average price of raw materials before and after the ban, on an average diet for a fattening pig.

⁽¹¹⁾ Idem 10.

⁽¹²⁾ Production costs for a farm of 1200 pigs in a closed cycle with a productivity of 20.3 suckling pigs per sow per year in the state of Paraná.

⁽¹³⁾ A farm with 500 pigs in closed cycle with a productivity of 23 suckling pigs per sow per year in Portugal.

4.4 *Issues to take into account when considering the possibility of lifting the ban on the use of meat meal from non-ruminants in pig and poultry feed*

4.4.1 The main issue is to ensure that there is no cross-contamination in meat meal. A group of researchers from a range of Belgian bodies was therefore asked to study and implement various techniques that would make it possible to determine the presence of animal protein from ruminants in feed. This group satisfactorily completed its work in the first half of 2004, with DG SANCO issuing a final report dated 24 September 2004, entitled 'Determination of Processed Animal Proteins Including Meat and bone Meal in Feed', which sets out methods for ensuring that these proteins can be detected in feed. This could now help us to establish production systems for fully traceable non-ruminant meat meal (in other words, protein whose origin would be easy to determine) which is also monitored. This could enable us to establish an initial set of systems for producing and reincorporating these ingredients, with firm guarantees that these contain no meal from ruminants ⁽¹⁴⁾.

Brussels, 14 September 2006.

4.5 *The final obstacle to reincorporating non-ruminant meat meal into feed for pigs and poultry*

4.5.1 Currently, all that is needed is to develop techniques capable of distinguishing pork protein from poultry protein, to comply with another request from the European Parliament, namely to ensure that no cannibalism takes place. It is incorrect, in the context of meat meal, to talk about 'cannibalism'. Cannibalism refers to direct consumption and can only occur accidentally on some farms. Talking about cannibalism in relation to amino acids and fatty acids is, therefore, unacceptable.

4.5.2 In any event, regardless of the above comments, there is now a real opportunity to set up a mechanism to monitor systems exclusively supplying pork protein for poultry feed and vice versa, because:

- meat meal from pigs and meat meal from poultry can never be produced at the same slaughterhouse, because these species require different slaughtering facilities;
- since some plants produce only poultry feed and others only pig feed, the two can never be accidentally mixed;
- the same applies to plants that have separate production lines for different species.

The President
of the European Economic and Social Committee
Anne-Marie SIGMUND

⁽¹⁴⁾ Other studies addressing this matter:

- Effective PCR detection of animal species in highly processed animal by-products and compound feeds. Fumière O, Dubois M, Baeten V, von Holst C, Berben G. *Anal Bioanal Chem* (2006) 385: 1045-1054.
- Identification of Species-specific DNA in feedstuffs. Krcmar P, Rencova E.; *J. Agric. Food Chem.* 2003, 51, 7655-7658.
- Species-specific PCR for the identification of ovine, porcine and chicken species in meat and bone meal (MBM). Lahiff S, Glennon M, O'Brien L, Lyng J, Smith T, Maher M, Shilton N. *Molecular and Cellular Probes* (2001) 15, 27-35.