Protected product specificity and supply chain performance: the case of three PGI lambs

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OVERVIEW OF THE THREE PRODUCTS AND THE SUPPLY CHAINS

Main characteristics of the three PGI lambs

The three products - Quercy Lamb (QL), *Ternasco de Aragon* (TA) and Scotch Lamb (SL) - are very different.

These differences relate to the number of lambs produced, rearing conditions and carcass characteristics (Table 1).

Table 1 : Summary of the main characteristics of the lambs under study (1998)

	Quercy Lamb (QL)	*Ternasco de Aragon* (TA)	Scotch Lamb (SL)
Type of lamb	• *Caussenarde du Lot* (local hardy breed) • Breed improvement • Some crossbreeding	• 3 breeds : *Rasa Aragonesa* (majority), *Roya Bilbilitana, Ojinegra de Teruel* • No crossbreeding	• Any • Breed improvement • Systematic crossbreeding
Rearing	• Born and bred in area • Fold raised • Maternal milk • Fed cereal based supplement to offset ewes' natural fall.	• Born and bred indoors • Housed lamb • Maternal milk • Fed straw and milk supplement to offset ewes' natural fall.	• Must stay minimum 60 days in Scotland (1) • Extensively reared • Grass fed and mothers milk
Approxi-mate weight/age at slaughter	• 70-180 days • 15-20 kg dead weight Conformation URO • Must be slaughtered in the production area	• 70-90 days • 8.5-11.5 dead-weight (18-24 kg live-weight) • Must be slaughtered in the production area	• 8-15 months • 16-30 kg dead weight • Conformation URO • Must be slaughtered in Scotland
Final charac-teristics	• Pink • Very tender • Light in colour • Good quality fresh meat	• Light carcass weight • Good quality • White external fat • Rosy pink fresh meat • Tender	• Heavier carcass • Good quality • Fresh meat • Depends on breed/condi-tions to characteristics

(1) born, reared and slaughtered in Scotland probably by 2000.

Source : Authors (1998)

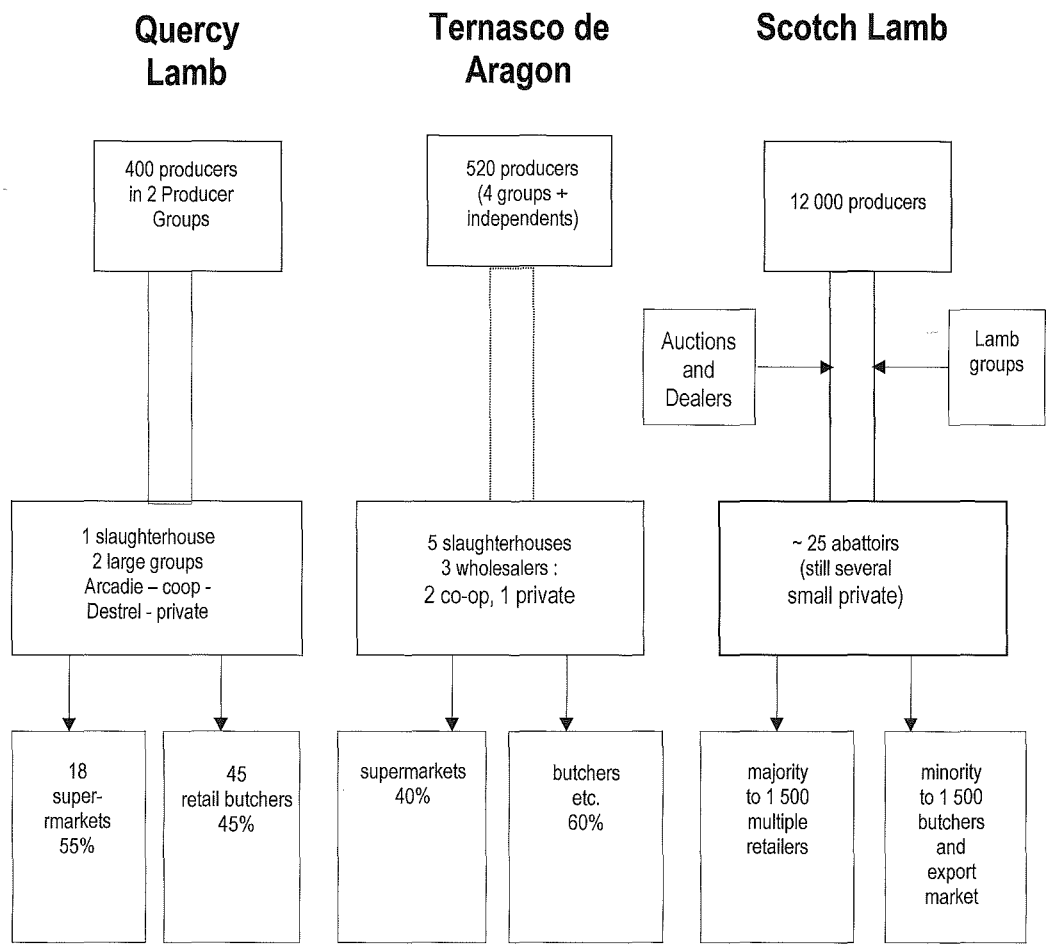
QL and TA are fold-reared lambs while SL is a grass-reared lamb. TA is bred for light carcasses from young animals. There is therefore little genetic improvement and no cross-breeding with rams to improve carcass conformation. By contrast, carcass characteristics of QL and SL (weight, conformation, fattening) are similar despite very different farming systems. Genetic improvement and cross-breeding is systematically undertaken to improve what is often inadequate carcass quality in these two areas.

Compliance with product characteristics set out in the specifications (weight, fattening, conformation, colour, etc.) is ensured by sorting by the slaughterer (QL) or by the inspection organisation (TA). In the period 1995-1998 one out of four TA carcasses presented at the slaughterer's was not awarded the label (25% rejection rate). The rejection rate for QL is 40%. This sorting operation is intended primarily to ensure the product is correctly differentiated downline. Sorting is a formalised process for QL and TA and is currently being introduced for SL.

Structure of the supply chains

Figure 1 shows no major differences in the three supply chains. SL does involve a large number of operators, though, (especially upline) because of the quantities produced and the persistence of auction sales.

Figure 1 : the structure of the supply chains : number of firms and importance in the market



Source : (Authors)

Contracts are used in all three cases. These are often quite loose because of the long-standing relationship between the various firms. In the case of QL and TA, these are between the producers and the slaughterers : both QL and TA producers forge long standing relationships with their groups. In the case of the SL, these are between the meat companies and the retailers, though closer relationships further down stream are beginning to occur. For SL, co-ordination is now increasingly less spontaneous (i.e. spot market) but spot market prices still often apply (farmers may search round for the best deal but generally go the abattoir they know best). Very few farmers have written or verbal agreements, unless they are tied into retailer producer groups, or into lamb groups with other farmers (Table 2).

Table 2 : Contracts in the supply chains

	QL	TA	SL
Sample contracts	• Contracts relating to quality • Volume & price contract or co-operation • Long-standing relationships	• Contracts (Co-ops) • Long standing relationships (private wholesaler)	• Usually verbal agreements, or loosely written contract. • Price, quality and service vital • Little spot market • Farm assurance becoming vital

Source : Authors (1998)

MARKET ATTRACTIVENESS AND CONSUMER DEMAND

All three types of lamb are aimed at the premium quality sector :

- QL and TA are located on a small market segment of meat identified by quality labels. The 11 French *Label Rouge* and certified brands made up 2% of retail sales of fresh lamb in 1997. Only six specific designations (three for beef, two for lamb and one for poultry) exist in Spain. They account for less than 2% of sales of products (including wines) identified by Spanish quality labels (which sales came to only 9% of food sales in 1997).
- SL is included in the comparison by default in that all lamb in the UK is considered a 'luxury'.

The characteristics of these lambs reflect the types of meat sought by consumers in their national markets. A recent study (Sañudo et al., 1998) compared the assessment of commercial lamb meat quality by trained British and Spanish panels : the study confirmed that cultural background or sensory habit (sensorial adaptation to specific colours, textures, flavours...) and previous knowledge of product could influence acceptability.

The main problem for all three lambs is how to differentiate the product from a close substitutes, i.e. unregulated *Ternasco* produced in the same region with the same breed (but without controlled regulation) for TA, or other high quality lamb for QL (e.g. *Pays d'Oc Label Rouge* Lamb or *Baronet du Limousin*).

CO-ORDINATION BETWEEN ECONOMIC AGENTS AND LOCAL INSTITUTIONS

Similar motivations for protection were found in each case : developing and maintaining production quality ; differentiating the product and prohibiting use elsewhere ; achieving recognition of a quality product as a means of ensuring customer loyalty.

Outside institutions have substantial influence on the supply chain for all three products. This has less to do with pricing arrangements, or enforcement of particular hygiene and health regulations (except those general to the country, i.e. EU or particular ISO standards) but more to do with enforcement of PDO-PGI regulations, Research and financial support (Table 3). With regard to this final point, European aid is preponderant in sustaining and developing the three types of farming. European aid accounts for 70%-100% of gross sheep margin of Scottish Highland sheep farms (GEB, 1999).

Table 3 : Organisations involved in the PGI procedure and in the supply chain management

	Quercy Lamb	*Ternasco de Aragon*	Scotch Lamb
Date of registration	• French Label Rouge : 1982 • PGI : 1996	• Spanish Specific Designation : July 1989 (regional level) and 1992 (national level) • PGI : 1996	• 1995 (Scotch Quality Beef and Lamb Association) • PGI : 1996
Motivation behind the registration	• To develop and maintain quality of production in Lot. The PGI differentiates the product and prohibits the use of the value enhancing image of Quercy for lambs born and reared elsewhere. • Means of ensuring customer loyalty	• A logical continuation of the Spanish protection. European protection not absolutely necessary, but will be a help in protection and marketing.	• Initiated 'on the back' of the Scotch Beef protection. A marketing selling point. • Recognition of a quality product. • About differentiating Scottish produce from English • It is not necessary for survival but will be a help in protection and
Institutional organisations involved in the PGI	• Association des éleveurs d'Agneau Fermier du Lot (professional federation) • CAPEL producer grouping • Lot Chamber of Agriculture • The Certifying Organisation (Qualisud) • DGAL (Direction General de l'Alimentation) • OFIVAL (National Board for Meat and Poultry)	• Agriculture and Environment Department of the Regional Government (i.e. Diputacion General de Aragon = DGA) • Regulating Council (RC) - decen-tralised administration part of the DGA • Ministry of Agriculture and Fisheries (MAPA)	• SQBLA (Scotch Quality Beef and Lamb Association) • Ministry of Agriculture, Fisheries and Food
Roles of the external organisations (private and public)	• Promotion and communication • Lobbying • Research • Close control : ewe breed, birth notification, feeding, housing, transport, slaughtering	• Promotion and communication • Lobbying • Research • Close control : traceability, control of all the chain, control of the final product i.e. grading	• Promotion and communication • Lobbying • Research • Loose control attempted as yet. SQBLA working hard on Farm Assurance

Source : Authors (1998)

CONCLUSION

Despite their differences, these three types of production are very comparable instances of farming being maintained in areas that are not amenable to agriculture (Quercy Causses, Scottish Highlands, Aragon Plateaux). The legal protection conferred by PGIs can be a useful instrument for supporting these initiatives in such contexts.

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