

Salers PDO cheese: the diversity and paradox of local knowledge

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Abstract: *In protecting the geographical indications (GI), local knowledge is a main component to consider for justifying the link to origin. Drawing up the code of practices reveals the local stakes. Local know-how is embedded within a social group with its own common codes and norms. These local skills participate in the economic negotiations and struggling around the GI.*

Salers cheese producers decided in 1961 to leave the cantal cheese PDO (Protected designation of origin) and create their own PDO in order to preserve a higher level of typicality. Doing so, this supply chain, based on seasonal products decided to keep the “gerle” – the traditional wooden vat – in the cheese making process. The first step of processing raw milk takes place in this “gerle” which affects the cheese specificity. As a mandatory element of the PDO, the “gerle” was recently questioned in the hygien regulation enforcement. The induced public controversy jeopardized for a while the whole supply chain and destabilized the cheese making methods. The influence of the ripeners is increasing in such situation and the difference between salers and cantal cheeses is reduced. Behind the tensions around the “gerle”, difficulties emerge to build a collective concern as the high investment in time and work strengthen individualism. Too heterogenous or conflicting elements coexist : from Salers to Holstein breeds ; from 250 to 1500 litres wooden vats ; summer high pasture land and plain cheese makers... These elements are embedded in growing market situation.

The research programme Proddig (Promoting sustainable development through geographical indications) explores the links between GIs and sustainable development. In this framework, a multidisciplinary group has shared their expertise during the campaigns 2006 and 2007. At first, we conducted an in-depth analysis showing how several options of the producers may influence the evolution of local knowledge inside the supply chain.

While certification bodies know crucial reforms, Salers producers collectively question the place of their own skills facing the evolution of their production tool. Managed first by the cantal defence syndicate, salers supply chain has recently set up its own governance board, first step towards a collective apprenticeship. Today, salers supply chain is still weakened by the recent discord between supporters and detractors of the “gerle”. The issue of this conflict (“gerle” confirmed as mandatory) may bring to the group under reconstruction some new bases for the future.

Keywords: *salers, geographical indication, local knowledge, dairy farming systems, cheese supply chain.*

Introduction

The concept of Geographical Indication (GI) is designed to protect a product name based on particular qualities that are derived from that product's geographical origin. The two main pillars of this initiative are the identification of the geographical area that is entitled to use a particular name, and the specification of production methods. Particular knowledge and skills are essential factors in establishing the link with origin (Bérard et Marchenay, 2004). This setting up of the rules of production raises multiple questions in a range of areas. The choice of techniques covered by specifications, and the way those specifications are applied and used by the different players in question, are all expressions of local balances of power or misunderstandings and misappropriations that may be seen as defects by the authors of those specifications. Equally however, they also express the dynamism, vitality and even resistance of a local community that is challenged by developments in the outside world. Decisions made by the geographical indication may therefore be seen as a powerful marker of the pressures, issues and paradoxes that are present in all local production sectors. Because, here more than anywhere else, the skills associated with the recognition of a GI belong within a community that has its own codes.

The building of a geographical indication implies a pooling of skills and collective action, in defence of a shared asset. Situations vary considerably from one GI to another but it is both the strength and weakness of legislation that it leaves considerable room for local free play through the decisive roles of the different players in question.

Salers cheese is a prime example of the difficulties faced by producers in asserting the need for a specific feature. Formerly part of the Cantal (Protected denomination of origin, PDO), Salers became a PDO in its own right in 1961 in a bid to protect and preserve a system of free-range production that relies on traditionally rooted skills. These are upheld as such in the process of differentiating from a GI that is seen as overly generic. Bearing the name of the region where the fame of the Cantal cheese had reached its peak, the Salers production specifications therefore picked up on some of the cheese's most distinctive production characteristics, emphasizing that production is exclusively 'free-range', meaning that the milk used comes from the producer's own herds and contains no additives whatsoever. In addition, cheese production is entirely seasonal, based on the pattern of pasturing. One of the cheese's most original features is that the raw milk must be curdled in a wooden tub, known as a 'gerle', which is seen as playing a key role in the local cheese culture (Didienne *et al.*, 2008).

The Salers sector was recently at the centre of a row that threatened to put a stop to Salers production for good. New hygiene precautions pointed out the potential dangers of combining raw milk with a wooden container. Today, the divisions between those for and against the 'gerle' have left the entire sector seriously weakened at a time when it must unite to confront and resolve its internal collective contradictions within a production context where the investment in time and labour reinforces individualism.

The French research programme, Proddig (Promotion of Sustainable Development by means of Geographical Indications) aims to explore the link between GIs and sustainable development. It provides a framework for a multidisciplinary approach combining researchers in anthropology, cognitive ergonomics, microbiology and livestock science. Co-ordinated by INRA, ENITA and the CNRS, the research methods included ethnological and film research, strategic analysis, a study of livestock practices and microbiological evaluation. Researchers pooled their methods throughout the 2006 and 2007 seasons in a bid to analyse the Salers supply chain and understand its main trends¹. Our choice of methodology was based on gaining access to information by focusing on local skills in terms of their status (individual or collective), their development and their transmission.

The first part of this article discusses the need to look more closely at the direction taken by this free-range production sector in terms of its complex relationships with the industrial sector that exists alongside. It continues by analysing the effects of producers' technical, economic and cultural choices on the perpetuation and/or evolution of knowledge, within a sector that allows the coexistence of a wide range of factors. From there, it goes on to explore the collective difficulties faced by producers in forming a separate official entity.

The Salers PDO: a paradoxical trajectory

A local industry out of step with productivity

The local production of Salers cheese stands in contrast to the powerful industrial sector that grew up around traditional Cantal-type cheese production in the late 1960s. Intensified production was based on the direct implementation of technologies first introduced to improve output in the milk-producing area of the Massif Central. The result was a selection process that ruled out many local cheese-making traditions, alienating numbers of producers who set up the independent Salers PDO.

Without revisiting those negotiations in detail, it is worth noting a few major issues that remain relevant today. The established Cantal PDO should have put forward free-range production. Instead of creating a new PDO, it is not the choice which has been done by Salers producers. Seasonal free-range production is a key feature of the Salers specifications. Salers cheese is based on the raw milk of a single dairy herd, processed twice a day following each milking, in a wooden container called a 'gerle'. The cattle are essentially pasture-fed, each herder being required by law to declare his or her period

¹As part of this process, interviews were conducted with 17 producers, 4 cheese ripeners, 2 technicians, one gerle-maker, and officials from the CIF (Comité Interprofessionnel des Fromages du Cantal) and the regional INAO centre (Institut National de la Qualité et de l'Origine).

of turnout to pasture. The regulations state that cheese made exclusively from the milk of Salers cattle breed must be labelled 'Tradition Salers'.

Production is a complex process, using renneted milk left to curdle in the 'gerle' at a temperature of 30-34°C. The curds are then sliced, reformed and sliced again, before pressing several times into a special cheese press. This is left to acidify and mature for 8-12 hours prior to grinding, salting and stirring by hand. After a second, shorter ripening stage, the ground and salted tomme is hand-fed into cylinder-shaped moulds where it is pressed for 48 hours, turning several times. The decree of 14 March 2000 enforced compulsory use of the 'gerle', with a dispensation valid until 2003 for producers using stainless-steel tanks.

Ripening continues for at least three months starting from the day of moulding, the cheese being turned and wiped at regular intervals. Ripening is always carried out by third-party ripeners who like the producers themselves come in many different forms. An increasing number are integrated within the supply chain.

Throughout its 40-year existence, the Salers sector has thus maintained traditions that its powerful neighbour has discarded. The two sides went their separate ways, Cantal production evolving while Salers production remained more or less unchanged. There are striking contrasts between the two: Cantal pursuing productivity-based, large-volume output and low milk pricing; Salers devoted to low-volume, small-scale production, linked to an image of authenticity and specific character. Salers cheese, until the late 1990s, served to demonstrate how far Cantal production was departing from local traditions.

The great 'gerle' controversy

A major row erupted in 2005 over the use of the 'gerle' wooden container – and remaining faithful to this tradition is costing Salers producers dear indeed. Used in the first stage of production when the curds are formed, the gerle is key to the development of the specific character of Salers cheese, thanks to the microbial flora present in the wood. The gerle is integral to product specifications and represents an essential feature of the Salers PDO production methods. Suddenly its future hung in the balance after a Salers producer challenged use of the gerle in the context of sanitary regulations. There followed a public uproar that for a moment threatened to put an end to Salers production altogether.

Producers split into two fiercely opposed camps, represented by two separate associations, for and against the gerle. The main bone of contention was the use of a wooden container to curdle raw milk, a combination seen as a potential threat to public health. Opinion in the first instance branded the gerle as a breach of food safety regulations. The controversy then died down thanks to local producers who crystallized the issues at stake, with input from local research and training centres studying the role of wood (Pradel et Montel, 2003; Defargues *et al.*, 2007). Following a variety of legal proceedings brought by the authorities, the French authority (AFSSA) finally agreed to withdraw its opposition to the gerle. Every Salers producer who submits a 'déclaration d'aptitude' (proficiency statement) is now required to pass a series of product-safety tests prior to authorisation.

The health issue has led to greater confusion and disrupted production methods, raising doubts and forcing an unnecessarily detailed exploration of the management of microbial ecosystems. Gerle maintenance, for instance – rinsing with whey, scrubbing after use, priming at the start of the season – is a case in point. How should maintenance be carried out to produce a flourishing population of friendly microbial flora while safeguarding standards of hygiene (Didienne *et al.*, 2008)?

The practices entailed here are difficult for producers to justify since they find themselves in unfamiliar territory, calling in question the status of their habitual expertise. As tensions mount, some producers try to avoid the risk of sanctions by adapting their working methods. New security rules appear that make no sense to the producers themselves, particularly those requiring excessive cleaning of the gerle (with boiling water and detergent) and the often needless addition of fermenting agents. Their use is often suggested and sometimes enforced by ripeners, who acquire undue influence on the finished product. The rind and external appearance of the cheese become standardisation issues and the traditional rind with its variable, non-reproducible character comes to look like a flaw. This trend generally helps to make Salers more like Cantal, to the benefit of some ripeners who market both products and want to present them as a single range.

Salers and Cantal: a case of image reversal?

In the same period, the Cantal sector underwent significant development with careful consideration being given to its quality objectives. A rapid succession of committee meetings pushed for change to address weaknesses that were actually the product of previous developments. It was accordingly decided to stop production of the smaller version, 'Petit Cantal' cheese; redefine the distinctions between young, medium-age and mature cheese ('jeune', 'entre-deux' and 'vieux'); relaunch the 'slow' ripening process by prolonging maturation of the finished 'tome'; specify the conditions (relocation of premises) and duration of ripening. The area of production was also redefined, as was the provenance and composition of the basic cattle diet. In this way, Cantal cheese gradually returned to rules of production that repositioned it in the PDO product market. On the other hand, free-range production, which was already very weak, largely disappeared.

True, the starting point was low and external imperatives were a decisive factor. But the progress made by Cantal was nonetheless real and did help to re-energize the entire sector. It was then that the gerle controversy reached fever pitch, focusing attention on the sanitary status of the livestock required for Salers production. Despite a favourable outcome for the gerle, now confirmed as compulsory, the INAO still expects producers to do more work in the area of milk quality and the hygiene of tools and premises. In a move to support Salers producers, the INAO also recommends tightening the specification of the gerle in terms of capacity, shape, type of wood, etc.

Reinforcing quality initiatives within the context of an industrialised sector naturally created a new and dynamic image for the Cantal cheese industry. Paradoxically the Salers supply chain was meanwhile made to look ignorant² due to the suspicion surrounding its traditional, free-range practices, based on raw milk and wooden tools. This comparison was made all the more striking by the absence of a structure specific to each PDO – a particular problem for the Salers sector, with low production volumes and relatively few producers, and therefore no great resources at its disposal.

An ambiguous set of rules

The gerle is the centerpiece of all the pressure and controversy, but behind it lays a more general difficulty to do with building a sense of collectivity around co-existent differences that are hard to reconcile. The Salers and Holstein breeds of cattle, for instance; gerles ranging in capacity from 400 to 1000 litres; and cheeses made from herds grazed in lush summer pastures or in the plain.

In practice, product specifications are open to interpretation in this respect. The result is a wide variety of farming methods and the coexistence of different, sometimes conflicting models within a growing business sector that is subject to strong hygiene pressures. These two factors have a disruptive influence on the supply chain as a whole. Given the context, it is not easy to see how collective action might be organized for the protection and development of Salers cheese production.

The starting point: a tradition of free-range cheese production

The Salers production sector covers some hundred producers and a wide range of farming practices. This must be seen in relation to the region's economic history, which as previously explained is closely linked to that of the Cantal PDO. The late 1960s brought a decline in demand for free-range cheese that gradually led producers to concentrate on milk production. The same period saw the development of the cooperatives and industrial cheese plants. Some herders remained faithful to the Salers breed but most turned towards more productive, less demanding breeds such as Hostein and Montbéliarde cattle (Ricard, 1994; Delfosse, 1992).

Two decades later, 'cheese making' was back in fashion and Salers cheese became a profitable business once again – helped by milk quota restrictions, falling milk prices and growing consumer interest (particularly in the free-range production process described in the specifications). Many young cowherders started making cheese, supported by bank loans from the Credit Agricole that were sometimes conditional on an undertaking to abandon the Salers breed.

² Interestingly, however, research increasingly indicates the benefits of wood (Mariani et al., 2007) and raw milk (Michel et al., 2008).

This brief summary of recent economic history helps to explain the way things stand today, surprising as they may seem. That coexistence of unrelated production systems is the legacy of cultural mores and standards that have been handed down through the generations. A handful of purists and enthusiasts remain devoted to traditional patterns of production and continue to move their herds to summer pastures where they make cheese in a 'buron' (shepherd's hut). The milk used is exclusively produced by nursing Salers cattle, open-air milking being particularly difficult due to the presence of the calf. The number of such producers grows smaller every year but they enjoy a firmly established status. Others also make cheese from herds grazed in mountain pastures, but from the milk of Montbéliarde cattle. The vast majority, meanwhile, make cheese on the farm from the milk of Holstein, Montbéliarde, Abondance or, much more rarely, Salers cattle. The size of herds ranges from 40-100 or even 150 head on large farms. Some producers have turned towards tourism and sell part of their output direct to the consumer, also making free-range Cantal in the winter so as to satisfy demand. Others sell milk to cooperatives and commercial dairies. The production of fresh free-range Cantal cheese (in its unrefined state) has all but disappeared, because of the very low price given by the ripeners to the farmers for the fresh cheese. Salers cheese took thus effectively the place of authentic, free-range Cantal which is now rarely available at local level.

This heterogeneity is compounded by a relatively large production area that extends across three distinct regions: the Aurillac Basin (plain); the Monts du Cantal, cradle of the appellation; and the Cézallier plateau which includes the Saint-Flour and Planèze plateaus. The latter are characterized by more clustered farm settlements (Durand, 1946; Fel, 1962) that may be some distance from the grazing meadows, forcing herders to use a mobile milking unit and transport the milk back to the farm for making into cheese.

The organization of work is another factor to bear in mind. Some farmers employ a professional cheese-maker. In this case, herd management and milk processing are the responsibility of two people of different status. Many farms however are entirely run by the husband and wife who divide the tasks between them depending on their skills and inclinations. Whatever the case, the workload is considerable, at a time when the cost and shortage of labour make it increasingly difficult to maintain a traditional, labour-intensive farming system (Bordessoule, 2006).

Technical choices of a very different kind

What does it mean to own a herd of Salers, Holstein or Montbéliarde cattle? What criteria determine that choice and what are its implications for the overall organization of the appellation?

For centuries, the Salers breed, lynchpin of the traditional Cantal farming system, has imprinted its rhythm on local society. The maternal character of the cow – her devotion to her calf, often mentioned by herders – has a very real effect on milking. Today as ever, she will only produce milk if her calf is close by. The calf triggers letdown and is allowed to suckle following milking, 'one udder quarter' (one teat) being reserved for the calf at the start of the milking process. The intimate relationship between the herder and the cow is evident from a variety of factors: the use of salt to reinforce the bond between mother and offspring; the naming of the calf; the way the herder calls it to its mother's side then ties it to the mother's leg to prevent it from suckling during milking.

Average milk output from a herd of Salers cattle is approximately 3,500 litres per year, and the animals are almost exclusively fed on grass. Milk composition is particularly well suited to cheese making³. By suckling at the end of milking, the calf takes the milk that is richest in fat, modifying the composition of the milk that is used to make cheese. Local herders liken the mother cow to a milk-skimming machine; in triggering letdown, the calf also cleans the teats with his tongue. Small-scale ripeners who work alongside Salers herders all agree that only Salers cheese made from Salers milk can withstand the prolonged ripening required for the full development of the aromas. As some ripeners say, the difference is evident within 5-6 months of ripening and can become quite remarkable after 24 months. This type of husbandry goes hand in hand with the use of gerles of a capacity never greater than 300 litres, and methods of production that require no fermenting agents. The cheese based on these principles has the most characteristic taste and appearance, especially in terms of the rind. In the end, the choice of breed cannot be considered in isolation. It forms part of an integrated, harmonious approach to production. This is particularly true of the Salers breed that serves as a model for a production system based on seasonal calving and pasturing systems. The number of

³ 2006 mean milk production levels for Salers cattle: fat content, FC = 33.7 g/kg, protein content, PC = 32.6 g/kg (fat/protein ratio FC/PC = 1.03); Holstein: FC = 40.1, PC = 31.9 g/kg (FC/PC = 1.26); Montbéliarde: FC = 39.2, PC = 32.7 g/kg (FC/PC = 1.20).

herders is however decreasing every year: In 2007, less than ten herders were known to make cheese from high-pasture Salers milk.

The situation as regards the rest is so mixed that detecting the principal trends would require detailed analysis. The fact is that methods of animal husbandry are not so much distinguished by breed of cattle as by the intensity of production practices that tend to depend on the location of farm premises (Brunschwig, 2000). The 'Holstein system' described by one breeder in defining his particular livestock practices – 80 cows, pasture rotation with concentrated feed supplements, free stalls and milking room – might equally apply to numbers of Montbéliarde breeders. Some Montbéliarde breeders also tend to have the largest gerles (more than 1,000 litre capacities) and the largest milking units and are nearly twice as numerous as all the other Salers producers combined: 44 Montbéliarde herders compared with 14 Holstein, barely ten Salers and an indeterminate number of herders with crossbred cattle.

Therefore, the choice of cattle breed does not necessarily imply very different patterns of livestock breeding. As a matter of fact, all the produced milks have not the same effect on cheese production. According to some ripeners, Salers cheese made from milk with high fat content seems to have a shorter aging period. Some producers get around the problem by partially skimming the milk⁴. Others curdle the milk in a different way. Rather than leaving it to curdle slowly as required by the traditional method (so as to retain the maximum amount of solids), they swirl it around quickly in order to separate and 'lose' the fat content.

Naturally, not all Montbéliarde cattle breeding are intensive. Most of the herds range from 40 to 60 head and some breeders continue to use the methods they applied when they were Salers farmers. 'Our Montbéliarde cattle know just where to stand, always in the same place, just like we teach them, train them like we trained our Salers cattle. Hard work minds you.' 'Montbéliarde cattle are the closest thing to Salers'.

In winter, when herders are no longer allowed to produce Salers cheese, a few continue to make small quantities of free-range Cantal, curdling the milk in stainless-steel tanks (not in gerles). But most simply sell their milk to commercial Cantal cheese plants. The cattle diet is modified accordingly, with particular emphasis on output since until very recently Cantal production specifications contained few restrictions on cattle feeding. The most productive systems therefore are also the most profitable, supported by a technical monitoring programme that aims to develop very hygienic practices.

The Salers cheese specifications that were originally drawn up to distinguish it from Cantal leave too much room for varied and sometimes contradictory technical choices. A diversity of products is derived from production systems that revolve around various breeds, with safeguards to make production consistent. Differences are amplified by diverse length of supply chains that range from direct farm sales (with relatively low prices for local customers) to ripeners who sell to specialized retailers in large distant towns (at much higher prices). Such diversity becomes a weakness in the supply chain itself. There are too many diverging interests, and the players involved have too few reasons to find common ground.

A collective faced with difficulties

This being a critical moment in the reform of certification and inspection authorities, it seems timely to ask questions about the role of local knowledge here, in relation to collective action. The Salers cheese sector was traditionally managed by the same 'Syndicat de Defense' as the Cantal sector. Now that it has its own governing body, it is learning how to function as a collective.

A generation question

Many of the difficulties currently experienced arise from the fact that Salers cheese was abandoned by the previous generation and then revived in recent times. The continuity maintained by some producers exists alongside innovations introduced by others, and that reinforces the characteristic heterogeneity of the sector – a sector nonetheless founded on the stricter observance of authenticity. The initial break came in a period marked by major agricultural upheaval: changes in herd composition and new feeding methods that included the introduction of silage. The return to traditional production methods occurred under very different conditions and this may be the problem – there is just 'too much

⁴ A practice forbidden from 2010 onwards (Salers decree of 14 March 2000).

room for free play'. The limits of that free play might have been better defined if product specifications had focused more thoroughly on the pressure points, and done so sooner.

For instance, Salers specifications did not originally include the compulsory use of the gerle. As a result, several newcomers learned to make the cheese in stainless steel tanks, particularly in regions where the model was less culturally rooted, such as the Aurillac Basin and the Cézallier plateau. Note incidentally that use of the gerle was made compulsory by the very last decree, representing a major victory for those in favor of more traditional methods. For the time being however, there are no regulations covering either the capacity of the gerle or the choice of cattle breed (which is left to the discretion of individual herders). In practical terms, it is plainly as important to regulate these two factors as it is to regulate seasonality or free-range production. Such gaps in regulation otherwise encourage a drift that creates problems for the general consistency of the sector and its capacity to form a collective (Casabianca *et al.*, 1993).

The discrepancy in this area underscores the affinity that exists between the most intensive producers and industrial cheese makers. They share the same mentality and account for a large part of the Salers sector in terms of quantity. The cheese they make is very similar to Cantal and based on much the same principles. They receive advice from the big dairy Cantal firms. The fermenting agents are the same; the oversized gerles serve little or no practical purpose, their use being in any case hotly contested by industrial cheese producers. Advocates of the traditional wooden gerle were outraged when someone suggested 'wrapping' a stainless steel tank in wood. Nevertheless, Salers cheese is good business and industrialists would love to steer production in a more homogeneous direction. Their influence, however, is disruptive to the identity of Salers and fosters the rifts within the sector.

How to deal with heritage?

The specifications do retain certain strong points and economic conditions remain favourable. The gerle itself has particular significance in terms of the producers' general perception of things and the production problems associated with the use of a wooden container; and also in terms of what may be shared, by 'authentic', 'opportunist' and 'new' producers alike – although they are all, in a sense, 'newcomers'. This sharing is remaining implicit doing a lot to explain the weak response to administrative injunctions at the time of the row over hygiene.

The Salers breed plays a key part in positioning the whole sector. Referring as well to the name of their cheese, the fact that this cattle breed became marginal makes producers feel nostalgic for this animal and sad to give it up, but there is also a clear, often first-hand awareness of the difficulties entailed. A handful of producers, reducing every year, remain passionate about the lifestyles associated with the breed, however harsh.

The heritage dimension of the Salers breed, as illustrated in many fine books, is proving particularly difficult to manage. The omnipresent, powerful imagery of the Salers cow – from its touchingly maternal behaviour to the cheese-making methods and places for which it stands – tends to backfire in a disruptive, uncontrollable fashion. 'There's a huge festival in Allanches in celebration of the herd's movement to summer pasture; but it's misleading because Salers cattle now play only a marginal role in the production of Salers cheese.' One can well imagine how embarrassing this is for the producers concerned.

The Salers section: a learning process

Until now Cantal and Salers cheese production shared a common syndicate, with a marked imbalance in financial contributions to their joint trade association, the Comité Interprofessionnel des Fromages (CIF). What can we expect to happen following the INAO reform currently underway?

The rifts resulting from the handling of the crisis run deep and threaten to re-open. Added to this is the sheer workload entailed in twice-daily cheese production, each fresh 'tome' taking at least three hours to process. Producers are also very isolated from each other, being relatively scattered across the zone. All of this helps to explain why there is so little collective feeling, in terms of the points of view expressed and the behaviour patterns observed.

The new legislative reform of the ODGs (organisations for the defence and management) has led to a big change in the existing structure by creating a Salers section within the CIF. This first step towards self-organisation represents a golden opportunity to build much-needed cohesion within the collective.

Producers or their representatives can come to terms with principles of collective responsibility that have so far largely eluded them.

In the end, the weight of tradition symbolised by the Salers breed – summer milking and cheese-making in a 'buron' – puts too great a mental and psychological load on many of the present-generation Salers producers. Will they have what it takes to move the rules forward, towards production systems that are more practical and viable in economic terms, and dispel tensions arising from models that are no longer socially acceptable today? Authorities such as the newly formed Salers section do plainly provide the conditions for producers to move in this direction, and reduce the seemingly excessive diversity of current practices.

Conclusion

The present analysis was conducted by an interdisciplinary research group with specific expertise in herd management and the effect of wood on production – fields directly related to Salers production efficiency. The decision to focus on local skills proved well founded, providing opportunities to assess the consistency of the different systems used by the producers we interviewed.

Local practices are considered here for what they are and what they represent to those who use them, without preconceived value judgments. They have not been modified or improved in any way, and our comments imply no criticism whatsoever. All of these practices relate to characteristic product features created by the producers involved. This perspective is essential to understand the resources that must be reinforced for the sake of the production system in question, and the rules that must be tightened. Those resources relate to a variety of factors that have an impact on the special nature of Salers cheese – particularly the capacity of the gerle, the size of herds, the choice of breed and use of fermenting agents. The newly created section could provide a forum for discussion and debate of collective rules and their development.

Given the context, the now-compulsory status of the gerle may be seen as a decisive victory for the future of the cheese and those who make it – a well-earned reward for the effort expended on obtaining approvals and surviving despite the disturbing proximity of the mighty Cantal industry. The introduction of new hygiene rules led to some serious soul-searching at every level, forcing administrators and veterinary services alike to justify the criteria on which they granted or refused approvals. Seen in this light, the gerle outcome is an example for all special production systems that like the Salers sector find themselves in conflict with hygiene restrictions that challenge traditional practices. Salers producers must now come to appreciate the full significance of this gerle issue, and so rebuild their confidence and project themselves as a group.

Is such issue a new base to help the group emerge and acquire a revisited understanding of tradition and of their socio-cultural heritage? Finally, what seems to bind these different players together is their passion – sometimes a passion for the Salers breed, but mainly a shared passion for making cheese. Time and again we were told 'you have to love this job'. In terms of local dynamics, we think it essential to define local knowledge as the resource that reinforces the relationship among producers and promises to cement the entire sector.

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