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Governance of sustainability standards in new farmers collective's brands: the case of Occitania dairy sector

Farmers' brands and sustainability standards



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Abstract

This paper questions the implementation of sustainability standards in five brands established by farmers collectives located in Occitania, France. It analyses the content of the standards and their governance. It is based on a qualitative approach using semi-structured interviews and an analysis of documents regarding each brand' standards. It uses a framework based on the literature about the governance of international sustainability standards in agriculture. Our results highlight the variety of the standards adopted and their hybrid public-private governance. These new brands not only display the image of a local product but also integrate environmental claims, using both predefined general standards and tailor-made ones.

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Introduction

Farmers collective' brands are emerging in the French dairy sector, where collectives of farmers are being structured in such a way as to cope with global changes. With the end of the quotas, the dairy sector has lost an important regulation tool to manage competition between farmers, processors and territories at European and national level (Dervillé and Allaire, 2014). On the one hand, this change in scale of regulation questions the economic viability of the dairy production in certain areas because they are less competitive, or because collecting and processing become more expensive as the density of farms and the volumes of milk produced drops. On the other hand, it generates new models of development and competition based on different innovation strategies (Barde et al., 2020). Some farmers collectives face the situation by innovating through the creation of their own brands, which have been little studied to date.

They can help maintain farming in some places (Swagemakers et al., 2021) by generating added value through product differentiation, in

particular by promoting the image of a more traditional product and/or of a product linked to a specific geographical area (Deselnicu et al., 2013). Consumers may also associate them with social virtues, in particular a fairer distribution of income for farmers (Grashuis, 2021; Grashuis and Su, 2023). They also promote the image of a more environmentally friendly agriculture that corresponds to a growing demand for eco-friendly products “perceived by most consumers to be low-processed, naturally grown, and healthier than conventional food products” (Ricci et al., 2018). By promoting reconnection between producers and consumers, assimilated to a reconnection between food and agriculture, they may also be seen as a vehicle for more sustainable agri-food systems (Lamine, 2015), with sustainability referring to the consideration of the economic, social and environmental impacts of the production and consumption for the stakeholders of the agri-food systems and the territories in which they are located.

However, there is a growing demand from consumers for guarantees about the social, economic and environmental conditions of production (Plank and Teichmann, 2018, Reinecke et al., 2012). And farmers brands or origin-based products don't seem to be escaping the trend (Gashuis, 2021; Deselnicu, 2013). But there are still very few studies on the adoption of sustainability standards in farmers brands in Northern countries. The objective of this study is thus to analyse if and how sustainability standards are adopted and implemented by emerging dairy farmers collectives' brands in France. The main hypothesis of this study is that the emergence of brands comes with the implementation of sustainability standards. Because of the changes on the regulation regime due to the end of the dairy quotas and a growing consumer demand for transparency regarding sustainability. These are defined here as voluntary set of predefined rules about procedures and methods of production, and as means of assessing, measuring, auditing, and/or informing about social and environmental practices (Gilbert et al., 2011).

We analyse, through case studies, (i) the content of the brands specifications and the dimensions of sustainability to which they refer (social, environmental, economic); (ii) how sustainability standards are defined and adopted, as well as the procedures implemented to ensure standard compliance by all members of each collective, which is defined as governance by the literature on sustainability standards (Henson and Humphrey, 2010; De Bakker et al., 2019). In the first section, we propose the conceptual and analytical framework for analysing the case of farmers collectives' brands in the dairy sector in the Occitania region, France. The material and method are then described in detail (second section). We present the results in section

three, discuss them in the section four before closing the paper with a conclusion.

1 Conceptual and Analytical framework

1.1 The growing heterogeneity and importance of sustainability standards in agri-food industry

According to Reinecke et al., (2012), social movements create standards, which in turn, give rise to new sustainable markets. As these sustainable product markets evolve and mature, they become increasingly fragmented. New operators then enter the market with their own sustainability standards. Sustainability standards serve to reduce risk and/or to develop product differentiation, as well as to promote product safety (Henson and Humphrey, 2009). Describing and comparing the standards helps to analyse the challenges that an organisation seeks to address by adopting them (Bager and Lambin, 2020). It is also essential for understanding how sustainability is addressed by farmers' brands and it reflects the vision of sustainability of the stakeholders (Swagemakers et al., 2021).

The agricultural sector is particularly impacted by the development of standards for characterizing products (Ponte and Cheyns, 2013). Among these standards, sustainability standards became, since few years, important components of the production, marketing, and consumption of agri-food products (Ponte and Cheyns, 2013). Previously based on national regulations or agreements reached at an international level, they are increasingly being developed as part of private initiatives conducted by different types of actors and at more local levels (De Bakker et al., 2019; Ricci et al., 2018; Reinecke et al., 2012).

Public standards such as Organic Agriculture (OA) and Protected Designation of Origin (PDO) are implemented and guaranteed by the State, with the stated aim of helping consumers to identify the quality and origin of food products at European or national level (DGCCRF, 2019). However, with the exception of OA, public standards take little account of aspects related to environmental sustainability (Ansaloni and Fouilleux, 2008; Marescotti et al., 2020). Meanwhile, private standards are being introduced (De Bakker et al., 2019). They are developed by associations or firms and have different functional and geographical scopes. International standards (such as GlobalGAP®), national standards (such as OA or Bleu-Blanc-Cœur®) and individual firms' standards such as Filières Qualité Carrefour coexist and indicate that there is much dynamism in this field. They are generally not territorially confined and are based on global sustainability criteria that pay little attention to local contexts and specificities (Jablonski et al.,

2020).

The literature about sustainability standards in farmers brands is very scarce. But the brands developed by the producers may be at the intersection of these two systems of standards: public standards, in which little attention seems to be paid to environmental sustainability (Ansaloni and Fouilleux, 2008; Marescotti et al., 2020), on the one hand, and private sustainability standards that seems to poorly consider local specificities. We can wonder in what measure the standards adopted by these brands reflect the trends observed elsewhere. In the whole agri-food industry, there is a growing heterogeneity of sustainability standards due to a research of more “place-based” standards more suited to the characteristics and specificities of local territories (Jablonski et al., 2020; Schouten and Bitzer, 2015). The environmental dimension often is the main focus of global sustainability standards (Meenken et al., 2021). Some agricultural cooperatives (Grashuis, 2017), seek to differentiate their products by promoting an image of local tradition and by adopting standards also centred on environmental sustainability. The collective brands draw consumers’ attention to the quality of their products (Fishman et al., 2018) by adopting standards that provide guarantees about production conditions. Based on these trends, one can assume an emphasis on the environmental dimension of sustainability in new farmers-owned brands and that sustainability is a concern for farmers brands, as exposed by Hayes et al. (2004) who shows that farmers collectives, especially those that have developed their own brand, are related to more sustainable forms of agriculture.

1.2 Governance of Sustainability Standards: An Analytical Framework

A large body of literature is focused on the governance of sustainability standards in international food chains and brands. These analyses focus on the identification of the standards used, as well as who proposes them, and more specifically the respective roles of public and private actors in their development (Henson and Humphrey, 2009; 2010; Reinecke et al., 2012). They also look at how the standards are implemented in the sub-sectors and organizations. Most of those studies focus on international standards applied to globalized commodity agriculture and to the coffee, cotton, or palm oil supply chains in which farmers adopt standards more or less voluntarily (Busch, 2011).

Henson and Humphrey (2009) propose a governance analysis grid that refines the distinction between public and private standards. To this end, they identify five functions that characterize standards’

governance: (1) standard-setting, i.e., definition of the standard through the formulation of rules and procedures; (2) adoption refers to who decides to adopt the standard, bearing in mind that the entity that adopts the standard may or may not be the one that defined it; (3) implementation, refers to the type of entity the standard applies to; (4) conformity assessment, refers to who verifies that the standard is complied with; and lastly; (5) enforcement, which refers to who prescribes penalties in cases of noncompliance with the standard. This analytical framework synthesizes multiple elements scattered throughout the literature on the governance of standards. The question of who defines a standard and validates its creation appears to be fundamental and gives indications on which public or private actors really prescribe the rules to be followed (Reinecke et al., 2012). In addition, studying the adoption and implementation of standards enables us to determine whether the entities that apply them choose to use an internal or external strategy of definition and labelling of their products (Bager and Lambin, 2020). It also reflects who the “target” of the standard is (Reinecke et al., 2012). Finally, the involvement of third parties in verifying compliance and enforcing sanctions in case of non-compliance is considered an indicator of the stringency of the standard and the extent to which it acts as a law (Reinecke et al., 2012).

Although the characterization proposed by Henson and Humphrey (2009, 2010) enables one to clearly characterise who governs the standard, it leaves out in part the question of how the standard is governed. In the literature about standards, the “how” refers to what is put in place to guarantee compliance with adopted standards. This guaranteed compliance process includes the verification criteria and methods implemented (Gilbert et al., 2011). It also requires considering the mechanisms - above all economic - for encouraging compliance with the standard (Schouten and Bitzer, 2015) and the nature of the sanctions applied in case of non-compliance (Busch, 2011).

Our goal is to characterize the governance of sustainability standards implemented by the farmers collectives that have created their own brands. The use of Henson and Humphrey (2009, 2010) framework completed by additional items on how the standards are governed (Reinecke et al., 2012; Ponte and Cheyns, 2013) will enable us to conduct an in-depth analysis of the normative character of standards governance (Ponte and Cheyns, 2013). Moreover, it will help us to better understand the extent to which these standards are based on general sustainability references and compliance methods (Reinecke et al., 2012) or on specific ones.

2 Methodology

2.1 Context and scope of the study

Occitania, a region of southern France, is experiencing a strong decline in dairy farming, with a 37% drop in the number of milk producers between 2011 and 2018 (Chambres d'agriculture d'Occitanie and Cerfrance, 2020). The number of dairy farms in Occitania dropped from 4038 in 2011 to 2536 in 2018 (Chambres d'agriculture d'Occitanie and Cerfrance, 2020). This regional phenomenon mirrors the national trending this sector; a trend from which only a few high-output areas in Northwest France escape. Changes on regulation regimes with the end of the quota challenged less competitive territories and farmers accelerating the reduction in the number of the dairy farms and the decline of dairy production in many territories. In this context, the ability of producers to develop individual or collective innovation strategies to maintain their activity is therefore a highly important issue. In Occitania region, emerging farmers' collectives are developing their own brands as a strategy to face these new challenges.

Barbe et al., (2020) notice the emergence of differentiation strategies in the French dairy sector from 2010, with a strong acceleration since 2017. They have identified 59 innovation strategies, classified in 7 different types: (1) breeders who do not own a processing tool; (2) breeders who own a processing tool; (3) distribution; (4) cooperatives; (5) large private groups; (6) non-processing private groups (7) small private craftsmen groups (less than 5 employees) and their non-industrial processing methods. Our study is mainly interested in the innovations associated with the types 1, 2 and 4, i.e. those carried by brands placed upstream of the sector. The brands we have studied were identified and selected on the basis of bibliographical searches of the farming press and the internet. We have selected brands owned by dairy producers organized collectively, operating in and whose head office is located in Occitania. Finally, the producers in question had to sell to the end consumer under this brand. Wishing to concentrate on recently created organizations, emerging in the context of change in the regulation regime, we only selected brands created since 2003 - i.e., year when the abolition of milk quotas was first announced. We then conducted an exhaustive analysis of the five brands that met all these criteria. The results are presented anonymously.

As shown in Table 1, the brands started emerging from 2010 onwards and have different legal statuses. They involve small groups of 5 to 43 farmers, with the exception of A, which comprises over 400 farmers, but who only supply a small part of their production to the brand. Those products are processed in the collectives' own units or in dairies

(subcontracting). The products marketed generally have different attributes that contribute to creating an image of quality associated with the territory and are marketed regionally or nationally.

We shall refer to these brands as brands owned by a collective of farmers. Indeed, according to the French National Industrial Property Institute, the function of collective brands is “to identify the origin of goods and services emanating from a group of actors (association, group of manufacturers, producers or traders, legal person under public law) authorized to use it by virtue of a regulation of use” (Faure, 2020).

Table 1: The main characteristics of the brands studied.

Case study	Legal status	Year of creation	N. of farms	Milk processed (millions of litres)	Own manufacturing unit	Main market	Products	Main attributes/ image
A	Association	2010	420	9	No	regional national	diversified	mountain (better quality) socially committed
B	Economic Interest Group	2010	43	13	Yes	regional national	cheeses	quality (authentic flavour) territory group of farmers
C	Cooperative	2010	30	10	Yes	regional national	diversified (mainly fluid milk)	healthier products territory cooperative biodiversity
D	Simplified Joint Stock company	2018	17	0.85	No	regional	fluid milk	farmers' brand fair solidarity territory/ local responsible
E	Cooperative	2016	5	1	Yes	regional	yogurt	freshness territory small cooperative

2.2 A multiple-case study approach

We have chosen to conduct a multiple-case analysis, as it is well suited to the exploratory study of a particular contemporary subject on which there is little data (Yin, 2018). A case study makes it possible to discover and investigate a phenomenon, an event, a group, or a set of individuals, selected non-randomly in order to produce a concrete description that may be interpreted differently from context to context (Alexandre, 2013; Yin, 2018). This is particularly suitable when there is little or no control over behavioural events (Yin, 2018). This approach allows for an analysis of socially complex phenomena from a holistic perspective (Gagnon, 2008). Finally, the case study approach seems well suited for analysing how sustainability standards are defined, adopted, and controlled, in the case of emerging farmers collectives' brands. Furthermore, there are little to no statistics on this new type of brand and on the progressive process of adoption of sustainability

standards.

The selection of cases makes it possible to analyse components that are not strictly representative but are characteristic of the population investigated (Van Campenhoudt et al., 2011). Our analysis, based on five cases, is in line with Gagnon's (2008) recommendations of selecting four to ten cases in a multiple case study. Using four to ten cases makes it possible to provide a rich description of the context and to perform an in-depth analysis of the behaviours observed in the cases studied (Gagnon, 2008).

We use three different data sources per case study:

- The first data set consists of the brands' specifications ("cahiers de charge"), when such specifications existed. The latter were communicated to us by the managers or were found on the internet. This allow us to identify the nature of the standards and the criteria of environmental sustainability mainly concerning the breeding practices at farm level.
- The second source of data are semi-structured interviews of approximately one and a half hours with brand managers. The five interviews focus on the history, the characteristics of the brands and their functioning. It provided extra information about the standards adopted, their implementation and governance and the brand's overall governance.
- The third set of data was collected through semi structured interviews with three breeders of each brand, i.e., fifteen interviews in total. The name of each breeder we interviewed was provided by the coordinator of each brand. The interviews were carried out in two stages: remote 2-hour long interviews conducted between May and July 2020 and a visit to each farm between June and July (lasting an average of 3.5 hours). Our goal, in this stage, was, among other things, to analyse the farm's sustainability trajectory, how it interacted with the brand, and how the farmers implemented the sustainability standards in practice. This allowed us to complete the information on how sustainability standards are defined and implemented within the brand and at the farm level.

The three sets of data collected for each case were then triangulated (Kohn and Christiaens, 2014) i.e. we confronted the results of the specifications and the interview reports manually and produced summary sheets for each brand. It enabled us to verify the information obtained about the content of the sustainability standard adopted by each brand, how it was defined, implemented, and governed. This triangulation process enabled us to reach information saturation (Fusch and Ness, 2015).

3 Results

3.1 A variety of sustainability standards based mainly on environmental criteria

The characterization of brands sustainability standards shows first that all of them consider environmental criteria on their standards (Table 2). The environmental criteria mainly concern breeding practices. Although they may vary from brand to brand, the measures most used by the five brands pertain to the implementation of a GMO-free diet, the introduction or development of grazing practices and the maximized use of local resources. Some brands also adopt standards involving measures concerning all stages from production on the farm to processing. This is the case of B, A and E via the Organic Agriculture (OA) and Protected Designation of Origin (PDO) specifications for the former and Mountain Product specifications for the other two.

Table 2: Nature of the standards and criteria of environmental sustainability used by the farmers' brands.

Name	Sustainability standards	Year of adoption	Main standard's sustainability criteria
A	Mountain produce	2010	Origin of the raw materials and livestock feed All processing must take place within the mountain zone concerned
	Own specifications	2021	Share of grassland in the total farm area Breeding conditions Livestock's diet (compulsory grazing)
B	Specifications Organic agriculture	2018	Input management Livestock diet (compulsory grazing and GMOs' free) Breeds admitted. Livestock's health
	Specifications PDO	2018	Origin of the animals Origin of the livestock feed Livestock diet (compulsory grazing and GMOs' free) Breeding conditions
C	Specifications <i>Bleu-Blanc-Cœur</i>	2010	Origin of the livestock feed Livestock diet (compulsory grazing; GMOs' free and limited soy intake)
D	Own specifications	2018	Breeding conditions Livestock's health Origin of the livestock feed Livestock diet (no use of GMOs or palm oil)
E	Mountain Product	2016	Origin of the raw materials and livestock feed Processing to take place within the mountain zone
	Labelled «food derived from animals fed a GMO-free diet 0,1%»	2018	Livestock diet: Feed exclusively manufactured with raw materials containing a maximum of 0,1% of GMOs.

More than environmental criteria, brands A and D have also developed and implemented their own “social criteria” in the sustainability standards. Farmers' collective D, for example, has limited to sixty-five the number of cows in production per human work unit to promote a “human scale farm (interview with the manager of Brand D)” based on smallholder/family farm model of production. Farmers collective E, for example, requires that the milk to be produced and processed within a

30 km radius of the mountain area concerned.

3.2 Voluntary standards under hybrid public and private governance

Based on the framework developed by Henson and Humphrey (2009, 2010), we first examine the construction of the rules to be followed (Table 3). This construction is specific to each brand with, however, two distinct trends. The first concerns the majority of the brands studied (A, B, C, and E) and consists of adopting specifications that have not been developed specifically for or by them (e.g., OA, PDO, Mountain product, GMO-free label, Bleu-blanc-cœur®). In the cases of A and E, for instance, the Association for Cooperation and Development of Mountain Areas (Euromontana) developed the Mountain product charter. Complying with this charter - validated through EU Regulation number 1151/2012 of the European Parliament and Council of November 21, 2012 (Article 31) - allows producers to use specific labelling. The second, more marginal, trend is that of brands developing their own specifications (A and D). In this case, the standard results from a dialogue between the stakeholders (producers, coordinators, employees), facilitated by external organizations, as illustrated by the excerpt from the interview with the manager of Brand D “This kind of project [involves] a lot of networking, personal relationships with people who believe in the project”!

When brands develop their own standards, they often work with institutional actors, including from public administration (the State and local administrations) and non-profit institutions (unions, associations, etc.). In the case of brand D, for example, it was following a market survey conducted by the Chamber of Agriculture, that the farmers became aware of consumers’ expectations. They then opted for the introduction of the notion of “grass feeding” in the standard’ specifications and therefore for the inclusion of grass in the animals’ feed ration, although some of the farmers had not used it until then. Regarding brand A, it was following a study on how consumers understand the word “Mountain” - conducted in partnership with INRAE (French National Research Institute for Agriculture, Food and Environment) - that the necessity to include the notion of “grass feeding” in the specifications became apparent to promote to consumers the image of a product originating from a particular territory (the mountains) and respecting its supposed agricultural heritage and amenities.

The study of the different brands shows that they are collective constructions. Decisions are made during meetings between the stakeholders of the brand (coordinators, farmers, and possible

employees of the structure). Meetings are held frequently - at least once a month and even every week for some brands such as brand C. However, there is a decision-making hierarchy within certain brands. This is the case for B, C, and D, where a steering committee meets more regularly than the rest of the group in order to plan, reflect and discuss projects or rules to be presented to all producers in a subsequent meeting.

Table 3: Conditions of definition of a standard

Brand	Standard	Standard writing	Adoption	Implementation	Ceremonial assessment	Control procedures	Enforcement	Standard type
A	Milkmaid Product	Standard developed by the Association of Milkmaid before being institutionally validated through Regulation EU 1113/2012	European Union	Mandatory signature of the farmer by the producer	DOCCRF**	The farmer must provide evidence that the farm is located in a mountain area. The DOCCRF is responsible for ensuring the requirements are complied with and that the label is not used in such a way as to deceive or mislead the consumer.	DOCCRF**	Regulation
	Own specifications (in development)	Farmers + INRAE + Chamber of Agriculture	Brand's farmers	Subsidiary Project in pre-development phase. Will be implemented in 2023	Certifying body (not yet chosen)	In pre-development phase	By the brand	Voluntary private standard
B	Pastoral Organization of High-Cantal	Brand's Steering Committee of Cantal Cheeses	DOAP*	Mandatory commitment of the producer	Internal control Certifying body accredited by DOAP (non professional cheese companies)	Documentary control (sanitary booklet of each animal, invoice for purchase of drugs, drug inventory, invoice for purchase of feed, feeding cards, feeding plan, grazing records, summer spreading records, proof of impaction of milking facilities)	DOAP*	Legally mandated private standard
	Organic Product	Ministry of Food, agriculture, and forestry	Ministry of Food, agriculture, and forestry	Mandatory commitment of the producer Notification to the INRAE agency	Certifying body accredited by DOAP (minimum once/year)	Documentary control: Breeding records (feed book, feeding plan, veterinary care records prescriptions)	DOAP*	Public voluntary standard
C	Blue-Bleue-Cœur®	Association Blue-Bleue-Cœur	Association Blue-Bleue-Cœur	Mandatory Commitment of producer toward the brand Blue-Bleue-Cœur	Private certification Body	Verification of compliance with requirements of main 3 milk herd, CAP (for feed), documentary control/invoice for purchase of feed, feeding records Verification of compliance with obligations of results: validation of the digestibility and metabolic activities of the cheese 3 months in laboratory, automatic submission of traceability records, and of an assessment of the farm's carbon footprint.	Association Blue-Bleue-Cœur	Voluntary private standard
D	Own specifications	D-Spices' Chamber of Agriculture	D-Farmers	Mandatory Commitment of producer toward the D brand	Internal audit	Visit of the farm, Monitoring of milk yields Documentary control: at least for 3 years (sanitary booklet of each animal, production figures, veterinary records, sanitary booklet of each animal, feeding plan, forage purchases, PNC, crop rotation, invoice for purchase of feed, feeding cards)	By the brand	Voluntary private standard
E	Milkmaid product	Regulation EU 1113/2012 of the European Parliament and Council, of November 27, 2012, Article 31	European Union	Mandatory signature of the farmer by the producer	DOCCRF**	The farmer must provide evidence that the farm is located in a mountain area. The DOCCRF is responsible for ensuring the requirements are complied with and that the label is not used in such a way as to deceive or mislead the consumer.	DOCCRF**	Regulation
	Labelled official national cheese animals for a GOSB-Blue-dot G.P.A.®	French State (cheese label 2013-126)	French State	Subsidiary Commitment of the producer towards the State	The crop that comes with it (beet)	Documentary control (invoices for purchase of feed, Feeding cards)	French State	Regulation

Governance also involves adopting and implementing rules. Although the adoption of pre-existing sustainability standards is voluntary, compliance with the standards becomes mandatory for all producers who join the brands. Regarding standard compliance, the rules are slightly different for B's farmers, who can choose between producing under the PDO or the OA scheme; but they must choose at least one of these quality labels to be a member of the brand. The deployment of the rules requires the producers' signature of the brand's specifications, or their commitment to comply with them (A and D) and/or towards the organization that applies the pre-existing specifications (A, B, C and E).

To facilitate the application of these rules, some brands have developed training programs to familiarize the producers with the practices involved in the implementation of the standards. This is the case for C and D, which have solicited external consultants to guide farmers in putting into practice the rules outlined by the chosen specifications. In the same way, the institutional organizations (Chambers of Agriculture, an inter-professional committee) have assisted the farmers of B during their conversion to OA or PDO.

Table 3 also provides details on the means of control used by the brands to ensure the farmers' compliance with the requirements and manage noncompliance. All brands have a compliance verification

system to ensure that the standards are applied. Controls can be conducted internally (by the brand itself) and the brands' producers collectively ensure compliance. However, this is only the case for D, as all the others either use third parties or combine internal and external control. In this case, the organizations are private (e.g., Ecocert, Bureau Veritas, etc.) and approved by the State which is typical of legally mandated private standards as defined by Henson and Humphrey (2010) and that can be seen as an example of the Tripartite Standards Regime defined by Busch (2011b).

Regarding the public regulations, for instance, the label "Mountain product," controls are conducted directly by the public actor, i.e., in this case, the General Directorate for Competition Policy, Consumer Affairs and Fraud Control (DGCCFR) which is responsible for ensuring that the label is not used in such a way as to deceive or mislead the consumer. The brands that use this standard must provide the evidence necessary for the administrative services conducting an inspection to verify compliance with the requirements for using the term "Mountain product."

Documentary controls seem to be the means of verification most used by the brands, whatever the standard. It is therefore up to the producers themselves to ensure that they systematically keep records of their activities throughout the year in order to be able to submit them to the verification authority in due time. To ensure that procedures are properly followed, different aspects are verified depending on the brand. The most common method is the verification of the means of production. Thus, verification can concern the types of feed given to the animals or the quantity of inputs used (GMO-free, OA, Bleu-Blanc-Coeur®, PDO) - which can be determined by checking the purchase invoices; the producers' CAP declarations of surfaces are also verified. The amount of grass in the animals' diet can also be verified by checking fodder inventories. The specific geographical origin of the farm's products can also be controlled (PDO and Mountain product). The veterinary certificates and the sanitary booklet of each animal can also be verified to check the veterinary products used (this is the case of OA, for example). In some cases, the milking facilities and equipment are inspected (PDO Cantal). Verification through performance audits seldom occurs, except in the case of C, for which verification of compliance with the standard Bleu-Blanc-Coeur® involves analyses of milk samples, to verify that the milk contains sufficient omega 3 fatty acids. Thus, verification of compliance with the standards is based above all on the verification of compliance with the requirements regarding the means of production.

In addition to inspections, economic incentives also seem to be

important factors in encouraging standards implementation. “You know how it is, you have to use the carrot method to get things going,” said one farmer of Brand A. One farmer of Brand C added “I’m prepared to switch to 100% grass feeding. If the price of milk is right, we can do anything, but it’s got to be profitable.” Different forms of economic incentives exist. In the case of brand C, economic incentives are linked to the Omega 3 content in the milk, as stated in the Bleu Blanc Coeur® specification. In the cases of A and D, the producers are paid directly by the dairy companies for their milk and receive a supplement paid by the brand. Others can be paid following a payment schedule established by the CNIEL (Centre National Interprofessionnel de l’Economie Laitiere) and which considers criteria related to the fat and protein contents as well as the somatic cell count in the milk.

Non-compliance with the standards is directly sanctioned. Sanctions vary from brand to brand but in most cases a warning letter is sent to the producer, followed by increasingly strict sanctions if he persists in not complying with the standards. This can range from the suspension or withdrawal of the right to sell under the brand name to exclusion from the collective. In the case of C, which operates according to the Bleu-Blanc-Coeur® specifications, if complementary milk analyses reveal insufficient omega 3 levels, milk collection from the farm in question is temporarily suspended. If, over the course of one year, the majority of the milk analyses conducted reveal that the omega 3 content is insufficient, the producer loses his Bleu-Blanc-Coeur® license and his/her farm is declared “off target”.

4 Discussion

Our study shows that sustainability standards appear as self-evident components of the farmers collective’ brands studied. They all adopt environmental criteria, which confirm the result of Hayes et al. (2004). The environmental dimension of sustainability is the most addressed by the standards, as in global ones (Meenken et al., 2021). They focus primarily on breeding practices, which seem to be important to consumers (Barbe et al., 2020; Fishman et al., 2018; Swagemakers, 2021). Moreover, the brands use environmental criteria that are implicitly or explicitly associated to the ecological virtues and historical heritage of the territory in which milk is produced. Social criteria are also formally present on the sustainability standards of few brands. Our results, in line with Swagemakers et al., (2021), show that combining breeding criteria (e.g. grassland based, animal welfare) with bonded territorial characteristics (e.g., local breed, local feed, historical heritage) is an important brand strategy to communicate about the sustainability of the animal sector in the European context. The brands

we studied, by focusing on certain sustainability criteria such as cows fed without GMOs and grazing animals, also follows the main trends regarding innovative strategies in the French dairy sector (Barbe et al., 2020). By implementing measures for ensuring the environmental sustainability of production, as well as effective communication regarding those measures, they adopt what is recognized as a key strategy for improving the reputation of dairy sector brands (Sudré et al., (2021).

Results also show that the choice of sustainability standards is made collectively (in general assemblies), but it is not the result of a strictly internal process. In line with Hirczak et al., (2008), our results highlight that interactions between various actors of the agricultural world such as professional organizations (Chambers of Agriculture) before and during the brand's creation process have some influence on their choice and on the implementation process. The combination of standards differs from one brand to another, but most brands adopt standards predefined by third-party organizations (OA, Bleu-Blanc-Coeur®, PDO, Mountain product, etc.). Other, less widespread, standards are established by brands that try to produce their own benchmarks, and the two types can be combined. The brands therefore combine internal and external standards (Bager and Lambin, 2020). In line with the literature on the governance of sustainability standards (Henson and Humphrey, 2010; De Bakker et al., 2019), our analysis shows the effective presence of private sustainability standards as defined by Henson and Humphrey (2009; 2010). However, it also shows that public actors and frames of reference are far from absent from the governance of these standards. Only three of the seven standards identified are strictly private with specifications established by the brand or an association. This finding tends to counter the discourse on the dominance of private governance in terms of sustainability standards. This hybridization between the private and public sectors for the development of standards and the knowledge necessary for this development is also found in other studies about European (Swagemakers et al., 2021) and global value chains (Ponte and Cheyns, 2013).

Regarding the control systems, brands tend to choose systems based on mutual trust and rely on self-declarations of compliance or on inspections conducted by an employee of the brand. This is particularly the case of brands with a small number of members. Others, such as brands that have adopted pre-existing sustainability standards, rely on external control mechanisms involving a third-party organization (private or public). Nevertheless, a brand that develops its own standard can also use the services of an external auditor to establish the legitimacy of its standard. The control mechanisms focus almost

exclusively on compliance with the rules relative to the means of production and not on the results. They are accompanied by sanctions in case of non-compliance with the rules; sanctions, the rigidity of which varies from standard to standard. A farmer producing milk under a brand can sell his milk at a higher price than s/he would otherwise, which is another indirect incentive to comply with the brand' standards.

Our results indicate that what happens in farmers brands seem to reflect two changes in standards. Firstly, as highlighted by Jablonski et al., (2020) or Schouten and Bitzer (2015) the development of sustainability standards that are less generic and more suited to the characteristics of local territories (for example here mountain and piedmont areas). Secondly, the development and implementation of green standards as a means of differentiating products. The fact that quality certification labels such as PDO and Protected Geographical Indication (PGI) do not fully guarantee the environmental sustainability of production methods and practices (Ansaloni and Fouilleux, 2008; Deselnicu et al., 2013; Marescotti et al., 2020), seems to explain why only one of the brands we have examined has adopted those labels. This would tend to indicate that environmental sustainability is becoming a key dimension, which actors now seek to consider by developing more "hybrid" and place-based standards relating to both product quality and sustainability.

The perimeter of the standards and the way they are built seem to reflect a shift towards less intensive production practices more than a deep redesign of socio-technical systems (Swagemakers et al., 2021). However, the brands in which they are implemented support sustainability in agriculture and food and create positive spillover effects.

According to the interviewees, creating a local collective around a brand fosters economic sustainability in territories by helping to maintain a local milk production, milk collection and processing facilities, in areas where the number of producers had significantly dropped. Some farmers even reported that the creation of these new brands represented their only hope of being able to continue working in the farming/dairy business given the reorganisation of dairy sector due to the abolition of milk quotas (Dervillé and Allaire, 2014). These results confirm that local brands that combine an agricultural and place-based image can play an important role for maintaining local farming activity (Swagemakers et al., 2021). In line with the French case studies presented by Hirczak et al., (2009), the competitiveness of this initiatives is not based primarily on price but on an image of qualitative as well as sustainable local products.

These local brands also produce indirect social and environmental effects by creating new spaces for interactions that provides the farmers with opportunities to develop new skills and by reducing their isolation. Our results are in line with Siqueira et al., (2021) who also showed positive territorial spillovers of local brands, mainly in terms of development of farmer's new skills that foster the adoption of sustainable dairy practices. The development of these local brands also seems to help them develop closer relations with consumers, who show an increasing preference for locally produced goods (Lamine, 2015). The events organised by the brand's members at retail outlets such as supermarkets are the main way of establishing links with consumers and telling them about their work and constraints. Some farmers even testify that those activities contributed to their awareness of the importance of their work, which may contribute to deeper changes towards sustainability (Swagemakers et al., 2021).

Conclusion

Our study of five farmers collective' brands in Occitania (France) show that sustainability standards are adopted by all the brands. They consider mainly environmental criteria related to breeding practices but in some cases also social criteria related to the maintaining of a dairy production, employments and cultural heritage at the territorial level. These standards are implemented and characterized by hybrid, public and private governance. This implies that a variety of decision-making bodies and actors are involved in the processes of construction, selection, implementation, and monitoring of sustainability standards. This is also the case for control procedures that are conducted by the brand itself or by third party organizations. This reflects the producers' desire not to only implement governance principles suited to the brand's organization and characteristics, but also to provide consumers, through already established rules and third-party organizations, with guarantees regarding the standard's rigor.

The study allows us to figure out few insights from a managerial perspective to the new famers collectives' brands in the dairy sector. Firstly, it seems important for the future of these brands that they should be able to provide additional guarantees to consumers by strengthening their control mechanisms, to reinforce and protect their environmental image. Secondly, it also seems to us that in the framework of a differentiation strategy implemented by these brands, the latter would do well to regularly update those environmental sustainability standards. The integration of new sustainability criteria in line with demands from society (e.g. health and nutritional aspects of animal products, animal welfare, ethical aspects such as calf-mother

separation, etc.) could be a key differentiation strategy for these brands when compared to the standards of the established place-based labels (PDO, PGI, etc). Both insights seem to be essential to proposing a convincing answer to societal claims for a deeper transition to sustainability and reach farmer's brands goals in terms of economic viability and territorial development.

Considering that, to our knowledge, no study has been conducted on the subject and that few brands of this type have been identified, our study is primarily exploratory. However, it provides first insights about the emerging farmers collective' brands as a result of important changes on the regulation regime with the end of the dairy quotas. We also provide insights on the type of standards used and how they are governed in the dairy industry. As an avenue for future studies, it would be interesting to deepen the analysis of the territorial anchorage of these brands to better understand how they contribute to the building of sustainable baskets of goods in territories and which are the associated governance mechanisms (e.g. power relations, conflicts, interactions, issues and compromises between actors) (Mollard, 2001; Hirczak et al., 2008). It would also be interesting to provide a more detailed analysis of how the stakeholders of these brands and of the territorialized food chains (Levidow et al., 2023) they contribute to generate, coordinate and negotiate to produce new regulations that interact with the already existing ones to foster sustainability in the dairy sector. The framework provided by Le Velly et al., (2020) and the insights from study of Swagemakers et al., (2021) would be interesting for this purpose. Moreover, it would be interesting to make a comparative study of the governance of sustainability standards of farmers collective' brands in other regions and agricultural sectors to gain genericity in the results.

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