Introduction

The dairy market

Negative effects of liberalisation for french milk producers 12

Winning strategies exist

# **PANORAMA**

May 2015

# **End of european milk quotas:** a new era for the french dairy sector

COFACE ECONOMIC PUBLICATIONS

By Coface Group Economists



milk quotas in 1984, until their effective ending in 2015, milk production has Having regulated the competition. market for over 30 years, milk quotas disappeared on 1st April 2015.

The world of dairy is in turmoil, with some seeing the end of quotas as an

ince the introduction of opportunity to produce more, while others are anxious and concerned that potential European overproduction will lead to sharp price falls. And all undergone many reforms. this is taking place in a context of stiff

> In this panorama, we review the global and the European dairy market. We examine whether these fears and hopes are founded or not. Furthermore, as not

all countries in the European Union are in the same boat, we focus particularly on the case of France. Are its producers sufficiently robust and prepared for the end of quotas? What are the inherent risks and consequences of liberalising the dairy market? To what extent can the lifting of quotas be seen as beneficial for producers?



MAY 2015

# END OF EUROPEAN MILK QUOTAS: A NEW ERA FOR THE FRENCH DAIRY SECTOR

#### BY OUR ECONOMISTS



Paul RASO
Junior Economist



**Guillaume RIPPE-LASCOUT** Economist

« France, the eighth producer of milk in the world and the second in Europe, must adapt to the new situation that is created by the end of quotas.

Winning strategies exist so that businesses in this sector benefit from these conditions ».



Motivated by the growth in world consumption of dairy products and by a European will to liberalise the agricultural sector, the decision taken by the European Union to end milk quotas has been effective since 1st April 2015. France, the eighth largest milk producer in the world and second in Europe, must now adapt to this new situation. Considered by some as an opportunity to produce more, the lifting of quotas is for others a source of concern (possible European overproduction, increased price volatility and greater international competition).

It is within this context that we need to examine the strength of the French dairy industry. Is it sufficiently prepared for the ending of quotas? What are the risks and consequences of liberalising the milk market? In what way can the lifting of quotas be considered as beneficial for the industry?

To answer these questions we shall first provide a picture of the current state of the market for dairy products at the global, European and French levels. We shall also analyse the latest economic trends with, in particular, an assessment of the impact of the Russian embargo. In the second section, we shall explicitly identify the risks associated with the sector, particularly those related to the volatility of prices and costs. We will consider France's positioning with regard to its European competitors and focus on the impact of prices on business profitability. We will also find out why the progressive restructuring of dairy businesses in France has been slow to opt for specialisation and economies of scale. Finally we shall show that strategies exist not just for coping with the lifting of quotas but for taking advantage of it.



# 1 THE DAIRY MARKET

As a result of demographic and economic growth in the emerging countries and significant productivity gains, global milk production has grown strongly in the past 30 years (+56%). However, this overall trend masks marked regional differences. For example, production has declined generally in the European Union since the introduction of milk quotas in 1984. Moreover, there are significant differences between the member states. Although this region of the world is integrated, land management and employment structures differ from one country to another.

Chart n°1 Changes in the number of dairy cattle (millions of animals) between 1983 and 2013

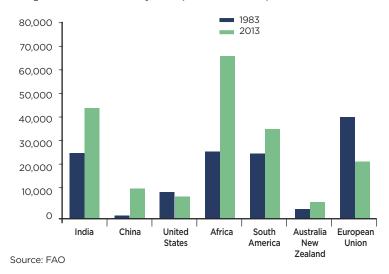
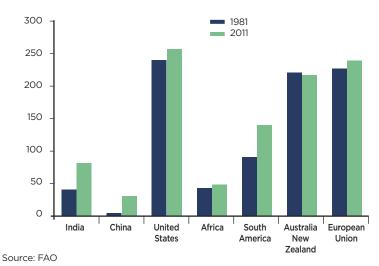


Chart n°2 Changes in milk availability (kg/year/person) between 1981 and 2011



## MAP OF THE WORLD AND THE EUROPEAN MARKET

#### **Main trends**

World milk production is dominated by cow's milk, which accounted for more than 80% of the amount produced in 2013 <sup>(1)</sup>. According to the FAO <sup>(2)</sup>, 150 million households across the globe are engaged in milk production (more than 2% of the world's population).

World milk production has increased by 56% over the last three decades, rising from 482 million tonnes in 1982 to 754 million in 2012, and this despite the introduction of milk quotas in the European Union in 1984. This increase shows the growing importance of developing countries in world milk production. All kinds of milk included (cow and buffalo milk), India is the world's largest producer (128 million tonnes in 2012 (3)). Taking only cow's milk into account, India is in second place (4), after the United States, which produces more than 51% (90.9 million tonnes in 2012). Though the United States has reported an average annual growth rate of 5.5% over five years, the most dynamic markets are Turkey (+42%), New Zealand (+32%), India (+20.7%), Brazil (+18.7%) and Argentina (+13.6%), Between 1983 and 2013. Indian and African dairy cattle grew respectively by 68% and 139%. As for China, numbers grew 12-fold in 30 years (see chart n° 1). While 40% of the world's dairy cattle are in Asia, there are big regional differences in yield since milk productivity in the European Union and the United States is respectively 4.5 and 7 times higher than that of India

As for consumption, while that of the developed countries (241 kg/year/person) remains far higher than in developing countries (71 kg/year/person), the gap has been tending to narrow for several years, especially due to improvement in incomes, household equipment and dietary habits in emerging countries.

<sup>(1)</sup> This study will mainly focus on this type of milk, leaving aside buffalo milk, goat milk and sheep milk (respectively 13%, 2.3% et 1.3% of the quantities produced)
(2) FAO: Food and Agriculture Organization of the United Nations

<sup>(3)</sup> Estimate on the basis of provisional figures in 2012 and estimated on the basis of buffalo milk production in 2012 (same % distribution as in 2013), CNIEL

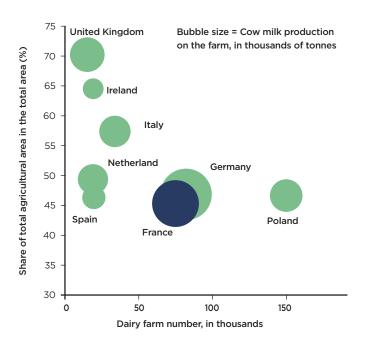
<sup>(4)</sup> Or in third place if one takes into account production across the whole of the European Union, 141 million tonnes, 2013

In China the rate of urban household refrigerator ownership rose from 66% in 1995 to 98.5% in 2012 <sup>(5)</sup> and milk consumption doubled between 2008 and 2013 <sup>(6)</sup>. Though Chinese consumption in litres per person remains low (16.8 litres per person in 2013 – the world average being 58 litres), the country ranks third among world consumers behind India and the United States (in volume). Indian consumers are by far the champions of consumption, since they consume 15 times more than the French and slightly more than the United States and China combined. Finally, New Zealand is also a strongly growing player: consumption and production increased by 30% between 2008 and 2013.

# Dominant position of the European Union, but with marked difference from one country to another

In France, as in most European countries, milk supply is determined by what is collected (milk collected by the dairy companies), with direct sales (share directly sold to consumers) of only marginal significance. France accounts for 17% of European collection, which makes it the European Union's second largest milk producer after Germany (22%), but ahead of the United Kingdom (10%), Poland (9%) (7), the Netherlands (8.6%) and Italy (7.9%) (8).

Chart n°3
Production, number of exploitations and land use (2012)



Sources: CNIEL from Eurostat and European Commission

- The growth in the production of cow's milk (+2% between 2008 and 2012 in the European Union) is driven by German production (+6.3%).
- The share of jobs involved is below 4% in the main producing countries of the European Union, except in Poland (12.6% in 2012) <sup>(9)</sup>. The economic and social importance of the dairy sector is greater in the countries which have most recently integrated into the European Union (Romania 30% Bulgaria 18.9%).

Similarly, though the share of total UAA (10) (utilised agricultural area) averages 53% for the six main producing countries, that of the United Kingdom (70% in 2012) illustrates the importance of land in agricultural development policy (see chart n° 3). From the perspective of output growth, the land available for dairy farming can be an asset. The cost of feeding cattle outdoors is lower and the milk can be of better quality. From this perspective land is a determining factor for the choice of economic models. However, in a context of major structural changes in the sector (decline in the number of producers and increase in their productivity), the number of dairy farms fell on average by 24.4% between 2010 and 2013 in the European Union of 27 members (11).

# Decline in European consumption offset by the strength of exports outside Europe

Consumption is also falling (-2% between 2008 and 2013) in the European Union, despite positive growth in the UK (+2%) and Ireland (+1%), which have the largest per capita milk consumption in the world with 138 litres/year in 2013 (13). This fall in consumption is partly offset by the dynamism of exports outside Europe. Even though milk is a fresh product and only 9% of output is traded on the world market, dry products are more suited to trade (butter, certain types of cheese, milk powder). Additionally, since 2010 foreign trade in dairy products has grown in the European Union (€9.3 billion in 2013). Its importance (in value) is very relative since it represents 8.4% of the region's total agrifood exports. Nevertheless, dairy products (with cereals and cereal-based preparations) contribute strongly to export growth (14). This illustrates the high added value derived from European dairy products sold abroad, the main customers for which are Russia (€1.16 billion), the United States (€0.72 billion), China (€0,47 billion) and Algeria (€0.44 billion euros) in 2012.

- (5) NBSC (National Bureau of Statistics of China)
- (6) Canadian Dairy Information center
- (7) In the European Union since 2004
- (8) Eurostat, 2012
- (9) Eurostat, 2012
- (10) UAA, or utilised agricultural area is standardised term used in European agricultural statistics. It means the total area taken up by arable land, permanent pasture and meadow, land used for permanent crops and kitchen gardens (vineyards, orchards...)
- (11) European Commission (2013) / CNIEL, "The dairy economy in figures" 2014 edition
- (12) Canadian Dairy Information center
- (13) CNIEL, "L'économie laitière en chiffres" (The dairy economy in figures), 2014 edition
- (14) Agreste, l'évolution des structures de production laitière en France (External agrifood trade), 2014

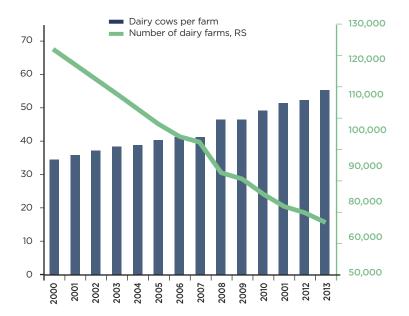
#### **FOCUS ON FRANCE**

# Better dairy productivity through a concentration of players

France was the world's eighth largest milk producer in 2014. Although there were 427,000 milk producers in 1983, there were six times fewer in 2014. However, average delivery of cow's milk per producer grew fivefold between 1983 and 2012. Moreover, though the number of dairy cows and farms fell respectively by 12% and 44% between 2000 and 2013 (see chart n° 4), the number of cows per farm increased by 57% over the same period. Farms producing more than 500,000 litres employed 23% of farm workers in 2013/2014 (against 3% in 2003/2004) and 43% of the national benchmark (15) (against 10% over the same period) (16).

Although French production was homogenously spread over the whole country 30 years ago, we now observe signs of concentration, particularly in the west of the country (70% of lowland production). Farms in the Loire region, Brittany and Basse-Normandie together employ nearly a third of the French dairy industry's workforce and contribute up to 40% of total cow's milk production in France (17). At European Union level,

Chart n°4 Change in the number of farms and dairy cows (2000-2013) in France



Sources: Agreste, FAO, Coface

- the dairy production of the west of France accounted for 6.8% of total European production in 2013, ahead of Spain, Ireland and Denmark.
- In 2013/2014, the share of individual farms (EIRL) amounted to 36.8%, against 60.2% 10 years earlier. This reduction has benefited EARL-status agricultural businesses (30.1%) (18) and co-operative farming groups (GAEC) (19) (29.2%), which hold 74% of the national production benchmark (against 56% ten years ago). This trend reinforces the idea that the sector is becoming concentrated and that it is changing from family managed farms to agricultural businesses. This change is also evidence of concentration at the stockbreeder level with the aim of sharing risk.

Since then with a turnover of €27.2 billion generated in 2013, the dairy industry occupies the second place (16%) in the French agrifood industry. In 2013, the dairy sector accounted for 67,000 farms in 2013, generating 150,000 jobs on farms and 56,000 in the industry. Although, in 2012, 2.8% of workers were engaged in the agricultural sector in France <sup>(20)</sup>, the dairy sector accounts for 2.8% of the production value of the sector as a whole <sup>(21)</sup>.

## Fragmented supply and concentrated direct demand

In France direct sales by producers are in constant decline. They accounted for 3% of total collection in 2011 (22) (against 13% in 1983). In the European Union as a whole, milk supply is fairly fragmented despite the recent trend towards concentration. Direct demand, for its part, is highly concentrated (260 dairy co-operatives (23) and about a hundred-private collectors (24)) while final demand is very scattered (characterised by millions of consumers). Overall, there are 5 cooperatives and collectors for 1,000 farms.

#### Increasing value by processing

In France 10.4% of production was consumed as liquid milk in 2013 <sup>(25)</sup>, the remainder being processed (butter, milk powder, cream, cheese, dairy products...). This illustrates the economic challenges of the processing of the raw material and the role of processors in adding value. Between 2005 and 2014, observed ex-factory prices were 57% above production prices. Moreover, though 14% of food spending in France relates to dairy products, 60% of consumption comes from domestic production <sup>(26)</sup> and 99% of the milk processed on French soil comes from France <sup>(27)</sup>.

- (15) Each member state benefits from a national production benchmarking system for producers. If it is exceeded, they must pay a dairy penalty of €0.34 per litre of surplus milk (less after the June 2003 Luxembourg agreements)
- (16) FranceAgrimer, l'évolution des structures de production laitière en France (Changes in dairy production structures in France), 2015
- (17) Eurostat, 2013
- (18) Non-trading agricultural company; minimum no. of employees, 1, maximum 10
- (19) Minimum number of employees 2, maximum 10. N° spouse/civil partner alone. Obligation on all partners to work.
- (20) Eurostat, 2012

- (21) INSEE (2012) / CNIEL, "L'économie laitière en chiffres" (The dairy industry in figures). 2014 edition
- (22) FranceAgriMer "Evolutions des structures de production laitière en France" (Changes in milk production structures in France) cow's milk
- (23) FNCL Fédération nationale des coopératives laitières (National Federation of dairy cooperatives)
- (24) FNIL Fédération nationale des industries laitières (National Federation of Dairy Industries)
- (25) CNIEL, from FranceAgriMer
- (26) Eurostat, 2012
- (27) Eurostat, 2012

## ADVERSE ECONOMIC CONDITIONS SINCE 2014

At world level, the FAO <sup>(28)</sup> Dairy Price Index (measuring movements in average price indices of whole- and skimmed milk powder, butter, cheeses and dairy products) grew by 87% between 2000 and 2015. The economic situation seems to have been less favourable since 2014, the index falling by 32% between April 2014 and April 2015. This is linked to the abolition of the milk quotas system, to the uncertainties of Chinese purchases and to the maintenance of import restrictions imposed by the Russian Federation.

The trend in France is similar. According to INSEE, the impending ending of milk quotas encouraged French dairy farmers to produce more in 2014. The projected 2014 accounts for the dairy sector underline both the rise in volumes (5.2% over the first nine months of the 2014/2015 (29) campaign compared with the first nine months of the 2013/2014 marketing year) and the reduction in production costs (see chart n° 5) which were more favourable than in the previous year. Indeed, the Ipampa (30) index is 1.5% below (as an annual average) its 2013 value, thanks in particular to

abundant harvests of fodder cereals and good grass quality. Nevertheless, the results of the April 2015 monthly survey  $^{(31)}$  show a reduction in collection of 2.4% in February 2015 compared with February 2014. Moreover, standard milk prices are 20% down compared with February 2014, and are at €309/1,000 litres.

# Relatively weak direct impact of the Russian embargo

The effect of the Russian embargo on prices has to mitigated as the European Union is France's main export market (75% of dairy products exported in 2014). In France the main products concerned by the Russian embargo decreed on 6 August 2014 are dairy products (40%) (32). The share of exports of dairy products to Russia is actually relatively small: butter (11.4% in 2014). cheese (3.4%), skimmed milk powder (0.8%) and whey powder (2.9%) (33). Moreover, the direct effect of the embargo on the French dairy industry has been limited by the adaptability of its players, who have managed to get round it (see box 1 and chart  $n^{\circ}$  6): exports of such products to countries not hit by this embargo have increased strongly in order to re-export afterward to Russia.

Chart n° 5 Monthly change in farmers' agricultural business costs (goods and services) and milk prices at real production rates

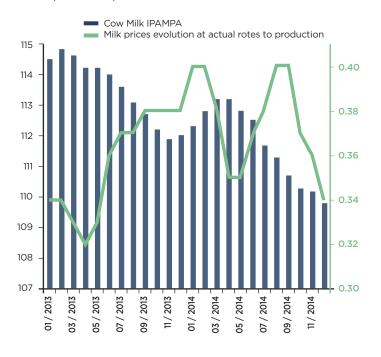
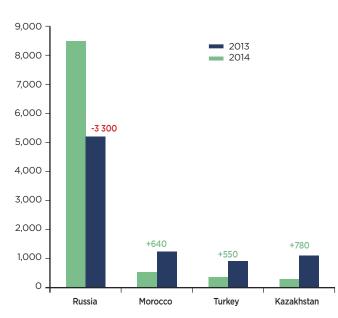


Chart n° 6 French exports of dairy products in tons (transport by sea)



Sources: FranceAgriMer, SSP, INSEE, Kantar Worlpanel, livestock Institute

Source: Eurostat

- (28) The FAO food price index measures the monthly change in international prices of a basket of food commodities
- (29) FranceAgrimer. "Les filières animales terrestres et aquatiques. Bilan 2014 et perspectives 2015" (The terrestrial and aquatic animal sectors. 2014 Report and Outlook for 2015)
- (30) Ipampa Index: agricultural means of production purchasing price which tracks trends in the prices of goods and services used by farmers for their farm operations
- (31) Agreste, Ministry of agriculture, agrifood and forestry
- (32) Customs, 2015
- (33) Milk Market Observatory, European Commission, (March 2015)

Finally, there are indirect effects (whose impact is difficult to measure at present), embodied in the offloading of the surplus dairy produce of other European Union producers to Russia. This is the case of Germany and Poland, the share of whose exports that is subject to the embargo is at least twice as big as that of France. But this effect must also be seen in context: European exports of agricultural products to France fell by 4% in volume between January 2013 and January 2015.

The French productive system has been restructured over the last thirty years. The players have become more concentrated and the legal structures have changed. However, the end of milk quotas is expected to increase uncertainty for players in the sector because, over recent months, production and prices have been falling. Moreover, though the lack of visibility has lessened with the standardisation of world prices, some players have restructured more quickly and seem therefore to have a greater capacity to withstand a likely fall in prices.

Box 1

#### Interview with Fabrice Rocchi,

Agro-distribution sector risk manager, Coface

#### How healthy is the dairy sector in France?

The dairy sector is undergoing great changes. The price of milk is relatively low and the end of quotas will drive it down further. In France, domestic sales volumes will remain stable because the market is saturated. It is therefore now necessary to turn to exporting. The industrial operators are the best placed since they have the capacity to do this. The cooperatives have a much more uncertain future because they could be hit by their lack of export experience. Moreover, some milk would have to come from Germany, Europe's largest producer (31 million tonnes against 24 in France).

## What are the consequences of the Russian embargo?

The Russian embargo has not led to an increase in payment failures recorded by Coface for this sector. Ultimately, French firms have, on the face of it, managed to get round the embargo, by penetrating the market via Kazakhstan, Morocco, Azerbaijan or Turkey in order to meet Russian demand for dairy by-products (cheese, yoghurt), which is relatively high despite the fall in the rouble and the rise in costs linked to transport difficulties.

# France will suffer from German competition, but could the opposite happen?

The structure of the German dairy industry enables operators to cover short distances. France, though, has numerous advantages for

exporting internationally, among them possessing major industrial groups (Danone, Lactalis, Bongrain, Bel,..). Though the Germans produce more than the French, they are totally invisible over long distances. Moreover, they do not re-process the product and do not have the same quality of milk. Like German businesses as a whole, the German dairy industry is composed of medium-sized enterprises and large SMEs. They are strong and will find their place in neighbouring countries and therefore in France. Non-specialised French producers could be hit by this competition. They are smaller than the German ones in terms of livestock numbers and do not have the logistic capacity to turn to exporting, even to nearby markets.

#### Comment évoluent les relations entre acteurs du marché des produits laitiers ?

Statistics show that the biggest margins are made not by industrial businesses but by distributors. While the price of milk for consumption is trending downwards, the price the processor pays to the producer has slightly increased in return for a pledge of consistent quality. They agree in effect on an increasing emphasis on the recognised quality of French products. Thus industrial businesses do not have to buy foreign milk. In China today, the purchase of foreign milk is imperative. The Fonterra (a New Zealand dairy manufacturer) baby milk scandal had a considerable impact on the Chinese mentality.

## **NEGATIVE EFFECTS OF LIBERALISATION** FOR FRENCH MILK PRODUCERS

Quotas have ended in a context where the volatility of prices and production costs constitutes a structural threat to a dairy farmer's business. At the same time, the tapering of European Union subsidies is worrying operators in the French dairy sector. Finally prices are expected to fall across the whole sector because of the opening up of supply. However, in view of the major restructuring of the sector in recent years, are these fears justified? Are businesses in the sector more fragile than French businesses as a whole? Are all players affected?

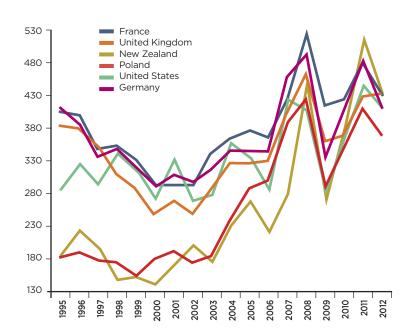
#### LIBERALISATION OF PRODUCTION PRICES AND EXPOSURE TO **VOLATILITY**

Until the end of the 1990s, the organisation of the dairy sector in the European Union was defined by a "common market organisation" (CMO milk) based both on management of the supply and on controlled prices. Since then subsidised agriculture has kept prices artificially high and has led to price gaps with the other

regions of the world (see chart n° 7). In 1995, the price of milk at production in France was 42% higher than in the United States (34). Moreover, new producers have arrived at world level, such as New Zealand and Poland. The number of farms fell by 34% in France between 2000 and 2010. The CAP (35) reforms in 2009 had the effect of partially liberalising the price of milk (36). We can observe a convergence of world prices over this period. Although restructuring of the sector is occurring in France, it is taking place later and more slowly than in its main competitors. This restructuring is in the framework of voluntary production control for managing the quotas (France ended its marketing year with an underusage of two billion litres out of 8.5 billion litres of European under-usage in 2009). With price levels determined by supply levels, the limitation of production naturally led to higher prices for French producers. In 2008 France had one of the highest producer prices in the European Union (\$524.6/tonne) (see chart nº 7).

Though prices are exposed to volatility in the sector, the same applies to production costs.

Chart nº 7 Annual production price changes in USD/tonne



Source: FAO

# Businesses exposed to the volatility of production costs and structurally more fragile

Businesses in the agricultural sector are facing strong price volatility for commodities (fuel, cereals, soya...) and fertilizers. Although the Ipampa index calculated for cow's milk (France) is down slightly by 1.5% (annual average between 2013 and 2014), it nonetheless remains structurally very volatile (see chart n° 8). The International Farm Comparison Network states that the dairy sector is one of the most volatile in the world.

Managing a dairy herd inevitably involves exposure to the volatility of production prices and costs. Prices generally vary according to supply (and its quality), while this in turn depends on the productivity of the farmers. In addition to being uncertain, management of the costs of a herd is intrinsically "rigid". A cow must be milked once or twice a day with no flexibility. Unless a solution is found for part-time milking of cows, the management of supply (and of the costs related to this supply) remains structurally inflexible. And insofar as it is difficult to regulate the supply, the prices seem destined to be volatile (see chart n° 9). It is for these reasons that the market has been controlled in the European Union by the common agricultural policy (CAP). Finally, though producer prices have declined in France since 2012, those in Germany have remained lower. The consequences of this on prices could result from different production models between German and French dairy producers.

#### HORIZONTAL INTEGRATION OF PRODUCTION IS NOT THE REMEDY FOR THE FINANCIAL PROBLEMS OF FRENCH DAIRY BUSINESSES

# Different production model linked to cultural heritage

The restructuring of dairy production in France is slower, because of its link to a cultural heritage. "Ploughing and grading are the two breasts that nurture France," said Sully, the minister of King Henry IV. In 2013, according to a report of the Livestock Breeders Institute (38), about 25% of dairy cows are in mixed crop-livestock farms (39). This figure is stable and contrasts with the decline posted by the majority of other big European producers, who have seen this value halved since the 1990s (Germany 16%, Italy 8%, United Kingdom 5% and Denmark 4%), the rest being given over to specialisation (economy of scale). The mixed crop-livestock mode of production is based on realising economies of scope (40). These can be of great environmental and economic interest in terms of labour productivity

Chart n° 8
Performance of the IPAMPA index (agricultural means of production purchase price production) base 100 in January 2010 – the most volatile indices

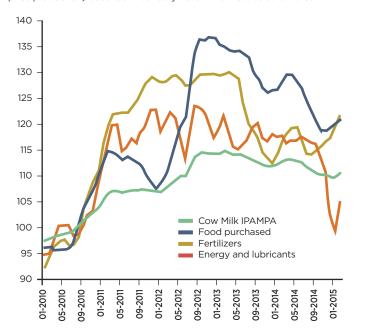
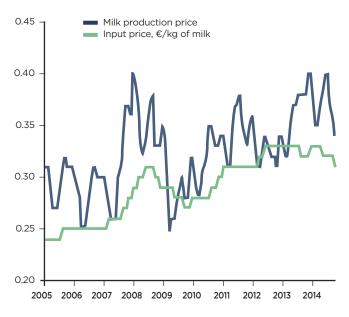


Chart n° 9
Disconnection between milk producer price and production costs



Source: Livestock Institute

Sources: FranceAgriMer, INSEE, Kantar Worldpanel

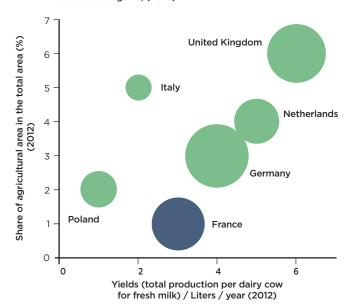
- (37) International Farm Comparison Network: Body in particular responsible for measuring milk production costs at world level.
- (38) Économies d'échelle et économies de gamme en élevage bovin laitier. (Economies of scale and scope in dairy farming), Institut de l'élevage, November 2011
- (39) The use of mixed crop-livestock farming represents a model which brings together in one farm, several cultures and one or several types of livestock. It is a diversified, not very specialised system

<sup>(40)</sup> Unlike economies of scale (gradual amortisation of unit production costs as production increases) economies of scope are based on gains from joint production. One refers to an economy of scope, when a single firm produces given quantities of at least two goods more efficiently than two separate companies each producing one of these goods

(management of plants and animals), cost savings (mechanisation) and farm autonomy (lower inputs particularly). But a study based on figures from the FADN <sup>(41)</sup> (2008) shows that the costs related to animal feed and fertilizer in mixed farms are higher than in specialised farms. These structures are also more exposed to the volatility of sale prices (milk and cereals). This mode of production partly explains the production gaps with Germany, in particular, as well as the slower transition of French farms towards an economy of specialisation. With 75% of French dairy farms having opted for this mode of production in 2013, how is France positioned among the other major European Union producers?

#### Chart n° 10 Comparison of the productive systems of the main European Union producers

Bubbles size = Share of agricultural land whose management is certified organic, (2010)



Sources: CNIEL from Eurostat, FAO, OECD

Table  $n^{\circ}$  1 Difference between income and production costs for cow's milk by system of production (in € for 1,000 litres of milk)

Revenue less expenses	Specialized milk from plain 2013   2014 (*)		Mix farming 2013   2014 (*)		Montain milk (East excluded) 2013   2014 (*)	
Milk sales price	-105 €	-44 €	-106 €	-42 €	-231€	-144 €
Milk sales price + accompanying products	-41€	11 €	-52 €	6€	-159 €	-83 €
Milk sales price + accompanying products + aids	-17 €	63 €	-10 €	42 €	-39 €	32 €

Source: FranceAgriMer

# Positioning of France among the leading European Union producers

We have positioned the main European Union producers according to their production model, established on a proxy basis:

- share of agricultural surface area of which the management is certified as organic (size of the bubbles) – shows the qualitative aspect;
- the yield (abscissa) specialised farms;
- the agricultural area used on the vertical axis.

Figure 10 shows a theoretical positioning of the productive systems of the main producers in the European Union and allows us to draw several lessons. Though the French are placed behind Germany in terms of yields, they have much unused agricultural land, evidence of the possibilities offered by the land. Moreover, though the quality of French milk is recognised, the label can still be improved by increasing the size of plots certified as organic. France therefore has an average rating. Does the added value of the French model not, in the long-term, reside in the absence of a single model? What is the impact of prices on the profitability of the different models?

## French dairy farmers do not seem ready to face a further fall in prices

Analysis of the results of French dairy farmers shows three models of dairy farming in France: lowland farms (specialised, mixed farming and mountain farms) <sup>(42)</sup>. The first two models showed cost levels about 25% below those of mountain structures in 2014 for a practically identical milk selling price.

Analysis of the sample (43) (see table n° 1) shows that the most resilient model is the one based on specialised agriculture (achievement of economies of scale). Nevertheless, if we only take the selling price into account, financial balance is not attained in any of the models. Though the sale of combined products (particularly cattle and agricultural produce) does not enable mountain farms to achieve profitability, it is achieved by the other two models with a relatively narrow margin. Finally, the availability of subsidies was indispensable for the attainment of profitability by these three models in 2014. We also observe that they did not allow losses to be covered in 2013 for mixed farming and mountain models (exept East).

\* Provisional

<sup>(41)</sup> FADN: Farming Accountancy Data Network. Annual survey conducted in all Member States of the European Union according to shared rules and principles. European Commission

<sup>(42)</sup> The 20 farms in this sample are situated in mountain areas (apart from the EAST) The dairy farms in the Eastern mountain areas (Franche-Comté and Savoie) are very different in the extent to which they add value to their milk from those of the Massif Centrale (very little processing). This is why they were not used in the sample

<sup>(43)</sup> FranceAgriMer, Observatoire de la formation des prix et des marges des produits alimentaires (Observatory on setting of prices and margins on food products)



In a context of reduced subsidies and uncertainties over prices, the questions of dairy producers on their future seem legitimate. However, the sector's strategic character means that the European Union's subsidies are not going to disappear. These reductions are being made in a context of large-scale restructurings leading to a fall in the number of farmers. However, we understand that the restructuring of dairy farms in France is falling behind relative to some of its European competitors. Unlike French milk producers, German structures have regularly exceeded their production quotas in recent years. This shows their more viable financial situations as they have the means to pay the taxes for exceeding their quotas.

# STUDY OF BUSINESS FAILURES IN THE SECTOR

## Observation of dairy business failures in France

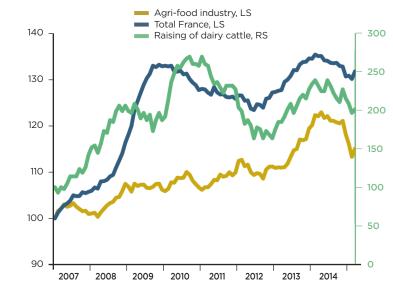
To observe the evolution of dairy business failures (NACE code 141 (44)) in France, we analyse the period following the financial crisis (2006 to the present). The limits of this study are set by the size of our population, which numbers 758 failing businesses during the period from 1st January 2006 to 1st March 2015 (against a total of about 541,000 business failures overall and 38,000 failures of businesses belonging to the agrifood sector over the same period). The data also exclude all dairy businesses in the form of individual enterprises with limited liability (EIRL), which do not involve the creation of a company (45). In fact, while businesses in the dairy sector numbered 67,000 in France in 2013, the study of business failures covers 24,521 businesses in 2014, or 36% of total businesses in the sector. This section includes GAECs and EARLs, the most dynamic legal structures in the sector in volume terms (see section 1).

First of all, variations in the number of failures are greater than those across all sectors: the fall in failures of 27.8% as an annual average between 2011 and 2012 was followed by an increase of 38.6% in 2013. In general, the average increase in failures for businesses in the dairy sector was much higher (+100%) than for businesses as a whole and for businesses in the agrifood sector (+15%) between 2007 and 2014 (see chart n° 11).

Faster restructuring of French milk producers is evident in the sample observed. The average number of business failures remained higher over the period 2011-2014 (89 p.a.) than over the pre-crisis period. This trend is also confirmed in chart n° 12: substantially more dairy cattle breeders became insolvent than other types of stockbreeders. On the basis of nearly similar populations (in number) we note that the crisis significantly affected failures of dairy farms (+162% between 2006 and 2010) and that the level

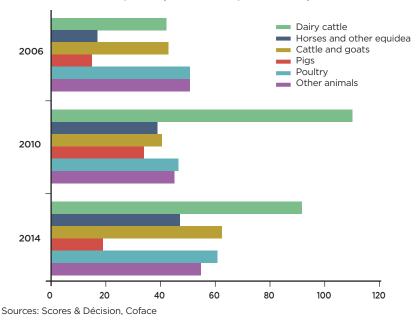
remains high today (119% between 2006 and 2010). Only horse breeding underwent a greater increase in failure levels between 2006 and 2014.

Chart n° 11 Number of business failures in France, base 100 in 2007



Sources: Scores & Décision, Coface

Chart n° 12 Number of business failures, France (number in 2006, 2010 and 2014)



Finally, the population studied reflects the effects of restructuring on the geographic concentration of producers (see section one). 57% of failures were concentrated in the Brittany, Basse Normandie and Pays de la Loire regions at end March 2015 (over the last 12 months).

<sup>(44)</sup> NACE - 141: Classification of economic activities in the European Community-- Dairy cattle rearing

<sup>(45)</sup> The individual farmer can allocate business assets to his business activity which is separate from his personal wealth without creating a company. These assets comprise every type of asset (land and buildings, equipment, contracts...) of which he is the owner and which are necessary to his business activity. The farmer can choose between income tax and corporation tax. This falls under by the self-employment rules of the Mutualité Sociale Agricole

## Low failure rates of dairy cattle breeders in France

The total number of failures must be put into perspective with the total number of businesses in the sector. In 2014, out of the 24,521 businesses in our study, we note 92 failures – i.e. a failure rate of 0.38%. This rate is below the overall average of French failures, which was 2.54% between 2008 and 2012 <sup>(46)</sup>. This must be seen in relation to the number of businesses which receive subsidies in the sector.

Finally, even though these businesses seem less exposed to claims, they remain very weak because of their exposure to the volatility of prices and costs. The gradual reduction of CAP subsidies and gradual market liberalisation have led to significant restructuring in the sector. However, not all businesses will be able to cope with the fall in the prices expected when milk quotas end. Current prices are already preventing them from being profitable. However, we shall see in section three that strategies exist for returning to profitability.

# WINNING STRATEGIES EXIST

Anticipating the underlying risks on the ending of milk quotas (price volatility, restructuring of the sector) some producers have lost no time in questioning their business models by establishing new strategies in order to make their businesses sustainable. What is true is that the existing or future safety nets, whether public (47) or private (48) in nature, are unlikely to be capable alone of keeping dairy farms afloat. Beyond the dairy sector restructuring that allowed costs to

be reduced while increasing volumes and productivity (section 2), three, non-exclusive, strategies could prove highly valuable:

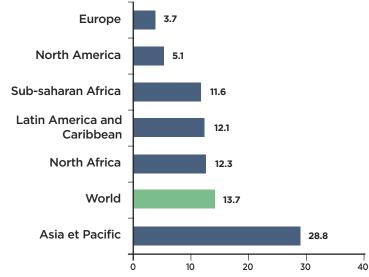
- the conquest of new markets;
- a vertical integration scheme;
- the bet of quality.

#### **NEW MARKETS TO CONQUER**

The long-term prospects for the global dairy sector are very favourable. In addition to a dynamic population growth suggesting additional opportunities (56% increase in world population between 2000 and 2050 according to the United Nations), consumer preferences are evolving in favour of increasing consumption of dairy products.

This change has been made possible in particular by the relative reduction of the income gap between the developed countries and some developing countries, itself leading to the spread of the developed countries' dietary habits across the world. This is all the more the case since, as products with high income elasticity (i.e. where a slight increase in income leads to a big increase in demand), dairy products, are likely to be consumed more than meat or fish as per capita incomes grow in developing countries (49).

Chart n° 13 Growth in per capita consumption of the main dairy products between 2011-2013 (average) and 2023, percentage



Sources: OECD, FAO

<sup>(46)</sup> Score & décisions, Coface

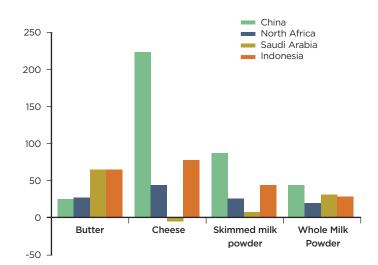
<sup>(47)</sup> Rural aid programme for mountain cattle, implemented under the "milk package" scheme, a creation of the European Milk Marketing Observatory, etc.

<sup>(48)</sup> Introduction of long-term contracts and options by Euronext in force since April 2015. The aim of these contracts is to guard against price volatility

<sup>(49)</sup> FAO "Milk and dairy products in human nutrition", 2013

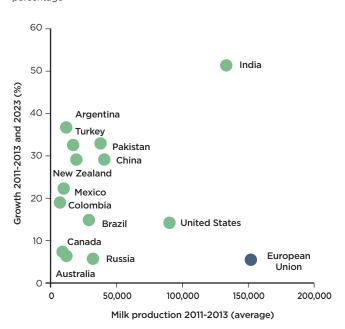
However, the evolution of the size of markets is expected to vary according to the geographic region (see chart n° 13 page 12). Somewhat moderate in Europe (3.7%) and North America (5.1%), the expected growth of global per capita consumption of dairy products between 2011-2013 (average) and 2023 will be above 13%. There is a strong differential in consumption growth between the mature markets of developed countries and those of Asian, African and Latin American countries because of the emergence of the middle classes.

Chart n° 14 Growth by country of dairy product imports between 2011-2013 (average) and 2023, percentage



Sources: OECD, FAO

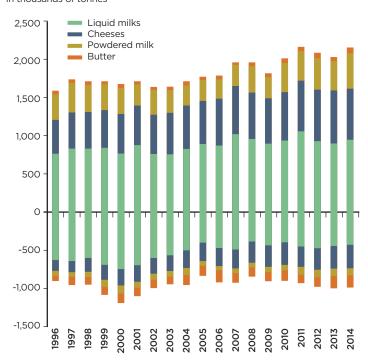
Chart n° 15 Growth of milk production between 2011-2013 (average) and 2013, percentage



Besides representing a real pool of consumers, the emerging countries are expected to increase their per capita consumption by more than 11%, even reaching 29% in Asia. As a consequence of this increase in demand, these countries will be led both to import more dairy products from the big producing countries (see chart n° 14), but also to increase their domestic production (see chart n° 15) where the climate or level of food safety and resources allow it.

In this context, European, and especially, French milk producers seem to have an ideal opportunity - that of being able to export more to these rapidly expanding markets. French potential is shown by French export sales of dairy products, which are increasing twice as rapidly (+5% annually on average over the last ten years) as exports as a whole (+2.4%) And, though this growth is less sustained than that of world exports of dairy products (which have been growing by an average of 10% over ten years, sustained by Brazil, Russia, India and China) the dairy products balance of trade is in surplus (see chart n° 16). In 2014 it was ranked 4th among exporters of dairy products behind Germany, New Zealand and the Netherlands.

Chart n° 16
Annual changes in the French trade balance in dairy products (1996-2014), in thousands of tonnes



Sources: OECD, FAO Source: DGDDI (Customs)

So, after increasing by 25% between 2009 and 2015, European dairy product exports could grow by about 30% between 2015 and 2024 (mainly driven by cheese and powdered milk). While geographic proximity and consumer purchasing power favour trade in high value-added products (cheeses, fresh products) within Europe, the emerging markets will be more attracted by more easily transported dry and manufactured (50) products (cheeses, milk powders and whey) (51).

#### France and the international market

Benefitting from its expertise, its image, its strict food safety standards (manufacture of raw milk products) but also and especially from its international experience (four out of ten litres are exported, 31% to destinations outside Europe (52), the French dairy industry has considerable advantages. In 2014, France was the leading European exporter of butter (24%) (53), powdered skimmed milk (23%), milk powder (32%) and second behind the Netherlands for cheese (14.5%). So, by freeing themselves from milk quotas, French producers could strengthen their export position by adjusting their production levels to the new outlets that they expect abroad. In this regard, the existence of large French groups and their subsidiaries abroad (54). accounting for more than 60% of dairy exports and 52% of all products, should facilitate the distribution of French products to the expanding markets. Conscious of the importance of forming partnerships with local businesses, Danone took a 25% stake (€437 million) in the capital of Yashili, a Chinese baby milk company, in 2014.

For example, following a series of health scandals which dented consumer confidence in domestic products (adulterated milk, melamine contamination), Chinese consumer demand for imported milk exploded to the point of creating shortages. Moreover, in anticipation of the growth of dairy consumption in China, Chinese investors have now invested in French production in order to ensure sufficient supply. Between 2011-2013 and 2023, the OECD predicts an increase of 225% in Chinese imports of cheese, of 87% in those of skimmed milk powder and of 44% for powdered whole milk (see chart n° 15). With growing background demand several companies have come to look to France for a quality product, for recognised food industry expertise and reliable food safety standards. This is reinforced by a productivity differential favourable to France, evidenced by differentials in the whole cow's milk prices paid to producers (differentials linked to production cost differences, especially for cattle feed): \$175 in 2004, \$190 in 2005, \$193 in 2006, \$280 in 2007, \$179 in 2012 (in dollars per tonne) (55). In this framework, the Chinese group, Synutra has built in Brittany (Carhaix) the first factory in France specialising in baby milk for the Chinese market. This is the biggest Chinese foreign investment in the dairy industry for a sum of more than €90 million. Likewise, the Chinese company, Biostime, has begun construction of a powdered milk production facility in Calvados (Isigny-Sainte-Mère) for a sum of €50 million. Moreover, the growth of the Chinese market has also encouraged further investments, such as the modernisation of the Even group's milking facilities at Ploudaniel (Finistere) or that of the construction of a drying tower by the Sill Enterprises dairy group at Plouvien (Finistere). These investments are further promising signs for the future of dairy businesses in France, though considerable uncertainties persist over the long-term as to the prices paid to producers and as to the sustainability of these productions.

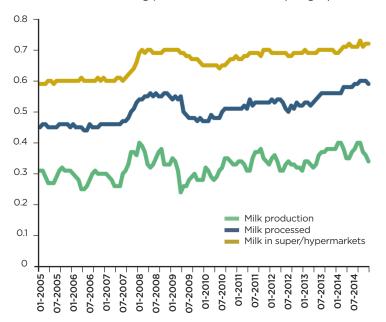
#### VERTICAL INTEGRATION, A SOURCE OF PROFITABILITY AND A BULWARK AGAINST PRICE FLUCTUATIONS

As in the case of the Charente dairy farmers who have begun transforming their industry under the brand *En direct des éleveurs* <sup>(56)</sup>, vertical integration could be a particularly effective strategy for maintaining producers' margins. This would also make it possible to put an end to the volatility of producer prices.

By moving higher up the value chain through the transformation of milk into finished products, farmers make the income from their businesses less sensitive to price variations since ex-factory and final prices are distinctly less volatile than production prices (see chart n° 17). We see in fact that farmers are more exposed to price variations than processors and distributors. The combination of variable costs (cattle fodder, energy), the seasonality of milk production (higher after calving) and the dependence of farmers on the fluctuation of the prices paid to them (prices paid to producers) can lead to very marked fluctuations in gross margins (57). For example, the fall in milk prices between 2007 and 2009 led (by itself alone) to an average contraction of 45% in farm margins (58) since there is a disconnection between the price of milk paid to producers and changes in the cost of inputs (see chart n° 9, page 9).

- (50) Representing a quarter of The French dairy sector's exports, of which 52% are outside the EU (General Directorate of Customs and Excise)
- (51) Whey is obtained through coagulation of milk. With little fat it is essentially composed of water, sugar and proteins)
- (52) Franceagroalimentaire (france food)
- (53) First exporter in terms of export quantities (European Milk Market Observatory, Eurostat data)
- (54) Among them: Lactalis, Danone, Sodiaal, Bongrain, Bel
- (55) FAO
- $(56) \ \ \text{By the end of 2015 it must be sold in a 100\% recyclable bag in the shops in the Grand-Ouest Region of France}$
- (57) Gross margin: difference between dairy incomes and operating costs (intermediate consumption and raw material)
- (58) Agricultural Economics Brief, no.°5, April 2014, European Commission

Chart nº 17 Price changes at different stages in the milk sector; UHT semi-skimmed milk (domestic brands - distributor brands average) between 2005 and 2014 in € per Kg of products



Sources: FranceAgriMer, SSP, INSEE, Kantar Worldpanel

Moreover, a growing number of producers is seeking to maintain the added value on their farms by themselves transforming milk into more processed products, since this stage involves specific expertise (cheeses, yoghurt, ice creams) and, therefore, higher margins. This is, for example, the choice of the Chapolard brothers who in 2010 embarked on dairy farming and who themselves transform their products into dairy products (see box 2). On the other hand, the move from practising farmer to processor, or even seller of finished products, is a complex step. Besides requiring specific entrepreneurial skills and qualities (commercial and marketing strategy and management), it needs a lot of investment in equipment (a processing workshop, cold room, cheese aging room, etc.). Therefore, the tax allowance for additional depreciation announced by the government in April 2015 will provide support for farmers wanting to invest in their production facilities. In fact, thanks to this measure, businesses which invest in equipments between April 2015 and April 2016 will be able to write off bigger amounts and thus reduce their corporation tax (up to 13% of the value of the investment).

Box 2

#### Interview with the Chapolard brothers,

Milk producers in Lot et Garonne - GAEC des flots blancs (Dairy collective)

#### Is the ending of milk quotas an opportunity or a threat for French dairy farms?

In general, the ending of quotas is a threat for small French dairy farms except for those that manage to find an alternative way of producing so as to avoid bankruptcy. However, it is a real opportunity for bigger farms able to produce more, such as some other European producers. Nevertheless, if there are no limits to production and the price of milk is the world price, there is a risk that dairy farming will be even less profitable than it is now. On the other hand the end of quotas should be a good opportunity for French dairy companies which would be able to make use of this world price to bring down that at the dairy and obtain their supply where the price is lowest.

When you established your dairy herd in 2010, wasn't this going against the tide, knowing that so many farms had disappeared?

One could say that this new venture was going against the tide, if the idea had been to develop a conventional business: "I produce milk, therefore I sell to the dairy business". But as we were confacturing technique.

ours could not survive only from producing milk, we turned to processing and direct selling. The dairy served to get rid of our surplus of unprocessed milk and secure some extra income at the end of the month. At first, the small local producers (who don't produce enough to live on) strongly advised us against getting involved in this business, especially as we were starting out from scratch. This is why setting up this herd was a gamble on the future.

What strategies you use to ensure the survival of your business (organic label, processing the milk, direct selling)? Do they work?

To ensure the survival of our business, we staked everything on the superior quality of our milk and of our processed products (taste, food safety, and high fat and protein content). Our processed products (yoghurts, white cheese, raw milk...) are of very high quality thanks to our Normandy cows (fed essentially in our meadows with grass and grain), to the choice of our other raw materials (such as, for example, infusion from organic vanilla instead of any cheap vival. vanilla extract) and a very strict manu-

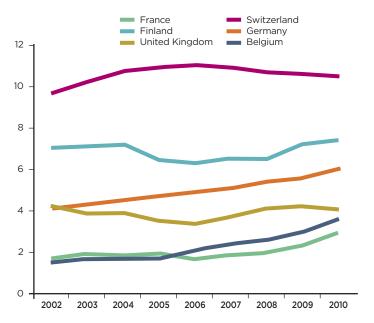
vinced from the outset that a farm like For economic and practical reasons, we also decided that we would, as far as possible, look after the herd ourselves (insemination, hoof trimming etc.). Moreover, fodder self-sufficiency (all the fodder for our cattle is produced on the farm, except of course for the minerals which ensure the balance of the micro and macro elements essential for our animals) is another crucial point for ensuring the survival of a farm, especially as we have decided to go totally organic. This move to all organic farming, which has lasted for three years, represented a significant investment in our environmental convictions and which we hope soon to make profitable.

> Though this strategy required an enormous initial investment, it enables us to obtain a product that we are completely satisfied with. So as not to mislead our customers, we have chosen sell a superior quality product and not only a label. And because our product is of the quality expected from a labelled product, we hope that everything we have put in place to produce it will enable us to ensure our farm's sur-

## BETTING ON QUALITY AND THE ORGANIC SECTOR

Unlike producers with their eyes fixed on foreign markets with strong sales opportunities, some others favour the domestic market and direct selling, seeing this as a way of selling their output at a higher price thanks to elimination of intermediaries (transport and distribution costs). In 2013-2014, 3.3% of dairy farms sold direct (55% of them exclusively). Although this rate was higher in the past (4.4% in 1995-1996), it could increase in the future since many French consumers seem sensitive to where their food comes from and to its quality. In fact, the market research firm, IRI, has emphasised that increases in the purchasing power of households (caused by lower energy costs and the price war between the major retailers, the manufacturers and the producers) have changed their food consumption. While they could have maintained their food consumption habits, they preferred to turn to consumption of higher quality goods, sometimes organic and local. Consequently more producers are able to go for product quality rather than volume. This approach is part of a philosophy of "sustainable agriculture" and of the development of short supply chains, by

Chart n° 18
Proportion of the area of agricultural land certified as organic, as a percentage



Source: OECD

bringing the upstream part of the milk industry (farmers and cooperatives) closer to the end consumers, whether these are individuals or institutional caterers (59). Benefitting from the enthusiasm for e-commerce, many farmers are grouping together to sell their products locally via the Internet in the form of boxes delivered to the home or to collection points. This, for example, is the case of La binée paysanne, the association of local organic producers of the Côtes d'Armor or of the Des Clics Fermiers site in Finistère.

From the consumption point of view, a study of the Agence BIO / CSA reveals the growing French enthusiasm for organic products: "In 2014 nearly 9 out of 10 French people occasionally (88% against 75% in 2013) and 6 out of 10 regularly, consumed at least one organic product at least once a month (62% against 49% in 2013)". A growing proportion of consumers is also ready to pay more for organic products (22% in 2006 and 28% in 2010) (60). This means organic agriculture could be a strategic niche market for French dairy producers, especially as 30% of organic products consumed are imported. As a reflection of the "Eating better" trend, the proportion of agricultural land used by farmers that is given over to organic farming nearly doubled between 2005 and 2012, going from 2% to 3.8% (see chart  $n^{\circ}$  18) (61). It remains, however, well under that of its European neighbours, which leaves French farmers a lot of room for expansion. The public authorities intend therefore to increase to 20% the amount of usable agricultural land used for organic farming by 2020 (62).

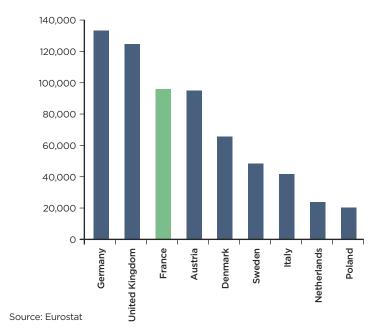
<sup>(59)</sup> At the end of 2014, the Ministry of Agriculture moreover published its guide "Favoriser l'approvisionnement local et de qualité en restauration collective" (Promoting local quality provision of collective catering business)

<sup>(60)</sup> Source: ADEME/IPSOS (2012), tendances à l'horizon 2017 (Trends up to 2017)

<sup>(61)</sup> Source: bio agency; Service of Statistics and Forecasting

<sup>(62)</sup> Law n° 2009-96 of 3 August 2009 on the timetable for the implementation of the Grenelle Round Table on the Environment

Chart n° 19 Number of certified organic dairy cows in 2012



In terms of livestock, France had 95,000 organically certified (63) dairy cows in 2012 (about 2% of the total), or 49,000 more than in 2001, but relatively far behind Germany and the United Kingdom (see chart n° 19).

Finally, while lowland farms can more easily increase their yields by intensifying production, mountain farms (about 20% of dairy farms (<sup>64</sup>)) are constrained by the hilly terrain and the geographic distance, which automatically increase their production costs. In this context, going for quality agriculture and direct selling seem to be solutions particularly appropriate to the mountain farm model since they will be able more easily to take advantage of a context of non-price competitiveness.



Effective since 1st April 2015 but announced from 2003, the end of quotas is a change of direction for which players in the sector have had time to prepare. The trend towards farm concentration combined with increased herd size is evidence of this preparation. However, by increasing international competition, the lifting of quotas is an additional risk for the weakest players. Though fewer businesses in the sector are failing than those in other sectors, some of this resilience is explained by the effect of subsidies. Moreover, the average increase in the number of failures was very high among dairy producers between 2007 and 2014 and is a sign of more intense restructuring, which should allow farms to reach a critical size in order to be competitive and achieve economies of scale. Little by little, the economic model of farms is moving towards intensification and product specialisation, to the detriment of mixed farming and cattle rearing. This change is also resulting in greater geographic specialisation to the advantage of the northwestern regions. Producers in the low mountain region (apart from Franche-Comté and Savoie) could thus be especially hard hit by the lifting of quotas. In the current context of difficult access to profitability, it is obvious that any drop in price constitutes a risk. Similarly, if milk prices converge

internationally, they will nevertheless remain volatile since they depend on weather conditions and input prices.

But the lifting of quotas also brings with it opportunities. These are highlighted by the particular advantages of French agricultural production on which players in the dairy sector can rely: expertise, image, and strict food safety standards. In this context it is not surprising that milk production generates a chronic trade surplus (€3.5 billion in 2014). We have identified three strategies likely to be employed by producers for reaffirming the viability of their economic model after the lifting of quotas. From now on, free to produce as they will, dairy producers can first choose to go international by associating themselves with the growth of the manufacturers and then profiting from access to strongly growing markets. Second, others can choose to concentrate on the domestic market, through discount outlets but also in line with their vision of agriculture, that it should be on a large scale and organic. Finally, though the qualitative aspect is an important advantage, the method of selling (direct sale) will also make it possible to restore the margins of milk producers.

# RESERVATION This document is a summary reflecting the opinions and views of participants as interpreted and noted by Coface on the date it was written and based on available information. It may be modified at any time. The information, analyses and opinions contained in the document have been compiled on the basis of our understanding and interpretation of the discussions. However Coface does not, under any circumstances, guarantee the accuracy, completeness or reality of the data contained in it. The information, analyses and opinions are provided for information purposes and are only a supplement to information the reader may find elsewhere. Coface has no results-based obligation, but an obligation of means and assumes no responsibility for any losses incurred by the reader arising from use of the information, analyses and opinions contained in the document. This document and the analyses and opinions expressed in it are the sole property of Coface. The reader is permitted to view or reproduce them for internal use only, subject to clearly stating Coface's name and not altering or modifying the data. Any use, extraction, reproduction for public or commercial use is prohibited without Coface's prior agreement. Please refer to the legal notice on Coface's site. Photo: © fotolia - Layout: Les éditions stratégiques

#### **COFACE SA**

1, place Costes et Bellonte 92270 Bois-Colombes France www.coface.com

