

# key issues

for the French  
agrifood sector

2010 edition



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**Photos on the cover :**

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# Foreword

Forming the largest industrial sector in France, agrifood enterprises generated sales revenue of €147 billion in 2008. Adding value to 70 % of France's agricultural production as it does, the agrifood sector contributes to the maintenance of an economic activity that provides large numbers of jobs (a little over 400,000 salaried employees) at the most local level in France's regions in more than 10,000 businesses, of which over 90% are small to medium-sized enterprises. Registering a €3.7 billion trade surplus in 2009, it is also a sector that makes a highly positive contribution to our national balance of trade. Along with our farming industry, it constitutes a strategic asset for France and for Europe as a whole.

However, its performance has declined significantly in recent years. Exports fell for example in 2009 for the first time in 20 years. Similarly, France, for many years the world's leading exporter of agricultural and agrifood products, has been in fourth place since 2008, lagging behind the United States, the Netherlands and Germany.

In a context marked by increasing competition and globalisation, French agrifood companies need to meet major challenges if they are to remain competitive. Manufacturers must therefore endeavour constantly to adapt, to enhance value-added, to win market share. And to achieve this, innovation and the pooling of resources are sources of effective leverage.

In July 2009, the EU High Level Group on the Competitiveness of the Agro-Food Industry adopted a detailed roadmap translating thirty recommendations into actions. The EU's work is still continuing, moving forward within the framework of a forum on the supply chain and a dedicated expert platform.

In France, the agrifood sector is the focus of close attention from the Ministry of food, agriculture and fisheries. The agrifood consultation process, the "assises" organised in the first quarter of 2009 brought together over 2,000 people in every region of France. The general conference on industry, which reached its conclusion in March 2010, identified the agrifood sector as one of ten strategically important industrial sectors at national level. An observatory to monitor the economics of the agrifood industries and agro-industry and a strategic committee on agrifood and agro-industry will be up and running as early as the autumn of 2010 to ensure the continued mobilisation of all actors for the promotion of the sector's competitiveness.

A strengthening of agrifood industries' effort to innovate is a priority, especially for the small to medium-sized enterprises that ensure the maintenance of proper economic balances and employment across France. In this regard, competitiveness clusters are a major policy component for the Ministry in its support for the agrifood industries. Along with technical centres, research bodies and training establishments, competitiveness clusters and enterprises must play a fundamental role in the application of Grand Loan funds to investment for the future in order to build France's key assets for the tomorrow.

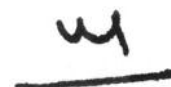
Where jobs are concerned, support from the public authorities has been reinforced by the implementation in September 2009 of the National Charter for cooperation on the support and assistance of production and processing enterprises in the agrifood sector and their employees. Improvements in the image of agrifood firms, and especially their attractiveness for young people, are an essential way forward for progress.

The French food model is part of the major social and cultural institutions that shape and characterise society. The question of the market offering in food is a substantive issue at a time when consumers increasingly see a linkage between what they eat, their wellbeing and their health. The law on the modernisation of agriculture and fisheries of 27 July 2010 defines the underlying principles of public policy on food, which aims to assure the public of access, on economic terms acceptable to all, of high-quality food produced in conditions protective of the environment. I am convinced that the sector's enterprises will be able to find the right approaches to meet these challenges to offer tomorrow's consumers food that is safe, healthy and full of taste.

This panoramic overview of the agrifood industries, published every two years in connection with the Global Food Marketplace, the SIAL show, offers the reader an overview of where the French agrifood sector stands today. You will find expressed here all the energy and diversity of a sector essential to our national economy and our national regions.

I wish you pleasant reading.

**Bruno Le Maire**  
Minister of Food, Agriculture and Fisheries





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# Key statistics

## An industrial sector whose importance is often unappreciated

The food and agriculture industries, whose essential function is to process products derived from agriculture, livestock farming and fisheries to make food, feed and beverages for human beings and livestock, generate a little over 13% of the value-added of French industry as a whole. In their broadest definition, which includes tobacco and self-employed retailers of prepared meat and bakery products, in 2008 they provided jobs for a workforce of nearly 557,000 (salaried and non-salaried) and generated value-added of €31.7 billion. These figures place the French agrifood industry in the leading group of three countries, alongside Germany and the United Kingdom. Seen in these terms, the agrifood sector in France is more important than high-profile industrial activities such as car manufacture. It contributes 1.7% to French gross domestic product and 7.1% to French exports. In 2008, despite the slowdown in global trade in the second half of the year, agrifood generated an annual surplus of €6 billion, making a positive contribution to the French trade deficit.

## ... and which has a wide diversity of actors and industries

Using a more restrictive definition that excludes the tobacco industry, self-employed retailers of prepared meat and bakery products and enterprises whose main activity is unrelated to agrifood, the production of food products and beverages involves just over twelve thousand enterprises. Of these, 10,300 are actively in business and employ a little over 400,000 people, generate annual sales assessed at €145 billion and create value-added in the region of €28 billion. The particular feature that sets the French agrifood sector apart from its European neighbours is the importance of the processing of products from livestock farming. Involving 31% of all enterprises, the first and secondary processing of meat and milk accounted for 42% of all agrifood employment in 2007 and a little less than one third of value-added and direct exports. The beverages industry, wines and spirits included, and the many secondary processing activities classed as "Other food industries" (industrial bakery products, biscuit and cracker manufacturers, sugar producers, chocolate and confectionery manufacturers, and so on) represent the other major clusters of activity, accounting when both are taken together for 39% of enterprises, 28% of the salaried workforce, 33% of total sales revenue and a little over 40% of total value-added. The other sectors (fish, fruit and vegetables, fats and oils, milling and the manufacture of starch products, along with livestock feed production) are comparatively less important. However, despite this, they are governed by their own highly specific economic parameters and must therefore be considered quite separately.

## A sector underpinned by a little over 3,000 entities

Despite this multiplicity of actors, approximately 95% of total sales revenue and value-added in the agrifood sector is currently generated by 3,000 firms with 20 or more salaried employees or annual sales of over €5 million. A quarter of these larger enterprises, when questioned in 2008 in the new ESANE survey (Élaboration de la Statistique Annuelle d'Entreprise / Production of annual enterprise statistics) are found to have meat processing as their main business. They are the source of nearly 20% of the value added by the largest enterprises. The manufacture of other food products and beverages each account for 15% of entities and 21% of value-added. If the dairy industry and the industrial production of bakery products, biscuits and crackers are added, five sectors comprising 2,431 of the biggest companies in the sector total a little over 80% of all value-added.

Organisations of cooperative type (12% of all entities active in the agrifood sector) have an especially strong presence in the winegrowing industry and to a lesser extent in the livestock feed and dairy sectors. Cooperatives employ approximately 7% of the total workforce and generate 9% of the annual sales revenue of the entities concerned. Driven by the development of large cooperative groups and the creation of private-sector subsidiaries, the cooperative sector is expanding at the present time and accounts for approximately 20% of both salaried employment and the total sales revenue of the entities considered here.

### The agrifood industries in 2008

Source : French National Institute for Statistics and Economic Studies (INSEE) – Statistics and Foresight Department (SSP) (ESANE enterprise survey 2008)

	Number of enterprises	Annual sales exc. VAT (€ millions)	Value-added (€ millions)	EBIT (€ millions)	Net profit or loss (€M)
10.1 Meat processing	811	31,457	4 901	652	105
10.2 Fish processing	106	2,945	547	127	41
10.3 Processing of fruit and vegetables	185	7,794	1,440	403	114
10.4 Manufacture of fats and oils	30	3,528	349	167	90
10.5 Manufacture of dairy products	305	25,668	3,343	888	202
10.6 Grain milling, starch products	109	6,443	1,190	438	98
10.7 Manufacture of bakery products and pasta	358	10,174	2,326	647	248
10.8 Manufacture of other food products	483	25,548	5,471	2,092	983
10.9 Manufacture of livestock feed	215	11,530	1,402	462	238
<b>10 Food industry products</b>	<b>2,602</b>	<b>125,088</b>	<b>20,969</b>	<b>5,876</b>	<b>2,120</b>
11 Beverage industry	474	22,362	5,460	2,599	1,339
<b>All agrifood industries</b>	<b>3,076</b>	<b>147,450</b>	<b>26,430</b>	<b>8,475</b>	<b>3,459</b>



## Trends

In 2008<sup>1</sup>, agrifood production fell by 2.1% by year-on-year average. This decline was linked to that of household consumption and a regression in external demand at the end of the year. Following two years of clear improvement, the trade surplus deteriorated (-16%), affected by falling demand from our main customers and rising imports. Despite a more sustained rise in prices than in the preceding year, agrifood sales progressed less strongly in 2008 (+5.5%) than in 2007 (over 7%). This progression was nevertheless firmer than in the rest of manufacturing (+1% compared with +6% in 2007). Salaried employment declined at the same rate as in 2007 (-0.6%) whereas for the rest of manufacturing salaried employment shrank twice as much as in 2007 (-3.1%).

In 2009<sup>2</sup>, activity in agrifood industries was virtually unchanged from 2008 (-0.2%). After falling sharply at the end of 2008 and in the first half of 2009, it recovered during the second half. Early in 2009, production was affected by a decline in external and domestic demand, which improved later. This meant that the trade surplus deteriorated (-30%) as consequence of falling prices (-6%) and weak demand from our main foreign customers early in the year. Agrifood sales shrank significantly (-7%), also affected by lower prices. However, this decline in sales revenue and prices looks to be a return to normal after the strong growth seen in 2008. Salaried employment in the agrifood industry was stable at the end of 2009, whereas in the rest of manufacturing industry it declined at twice the 2008 rate (-5%).

Company managers perceived a recovery in business at the end of 2009, and this was confirmed by the first half of 2010. The trend in production indicators is upward.

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### Useful links

[www.agreste.agriculture.gouv.fr](http://www.agreste.agriculture.gouv.fr)

### Publications :

- Annual Agrifood Survey – Final Statistics for 2007 – Agrifood Statistics and Data no. 163 [in French] – February 2009
- Agricultural and Food Industries – Annual enterprise survey and tax sources – Sector and regional figures 2007 – Agrifood Statistics and Data no. 166 [in French] – July 2009
- Milk and dairy products in 2007 – Agrifood Statistics and Data no. 162 [in French] – November 2008
- “2,500 agrifood cooperatives” – Agreste Primeur, no. 220 [in French] – January 2009
- “Continuing development for cooperatives” – Agreste Primeur, no. 235 [in French] – December 2009
- Agricultural cooperatives – Cooperative organisations with 10 or more salaried employees – Annual Enterprise Survey – Main Statistics 2007 – no. 167 [in French] – August 2009
- Agreste Conjoncture – Overviews – “Agrifood 2008: a decline in activity” – no. 71 [in French] – April 2009
- Agreste Conjoncture – Overviews – “Agrifood 2009: a firmer second half to the year” – no. 112 [in French] – April 2010

<sup>(1)</sup> French National Institute for Statistics and Economic Studies (INSEE) economic activity nomenclature 2003 revision 1: <http://www.insee.fr/fr/methodes/default.asp?page=nomenclatures/naf2003/naf2003.htm>

<sup>(2)</sup> French National Institute for Statistics and Economic Studies (INSEE) economic activity nomenclature 2008 revision 2: <http://www.insee.fr/fr/methodes/default.asp?page=nomenclatures/naf2008/naf2008.htm>



# The development of agrifood enterprises

## The trend towards concentration in the French corporate sector

France holds third place in the European agrifood sector and has the fourth biggest agrifood industry in the world after the Netherlands, Germany and the United States.

The agrifood industry, France's most important industrial sector, generated annual sales revenue (excluding wholesale trading) of € 151 billion in 2008 (+ 5.0%) (SSP statistics); 3,080 of its enterprises have more than 20 employees and generate annual turnover of more than €5 million.

Of the 100 leading agrifood companies worldwide, the French leaders continue to be Danone, Lactalis, Pernod-Ricard, Bongrain, Terrena and In Vivo.

The main agrifood sectors are meat (24.3% of total annual sales), milk and dairy products (17.8%), beverages (15.5%) and a diverse range of other industries (pastries, sugar, confectionery, chocolate-based products, and so on, accounting together for 21%). The fruit and vegetable industry represents 5.3% of total annual sales.

The agrifood market is mature in Europe (where the relative share of food expenditure has been steadily declining up to and including 2007). Prospects for growth other than through innovation are dependent on acquisition of existing market share.

For this reason, continued concentration is inevitable in the sector, especially as the prospects for real growth are to be found in the emerging economies, in the direction of which the internationalisation of the agrifood sector is accelerating. However, this internationalisation of French agrifood companies, necessary as it is to their development, does require them to reach a critical size. Few market operators have in fact reached this size threshold due to the sector's fragmentation.

The agrifood sector in France, as in Europe, is essentially made up of SMEs, many of which are family firms.

In 2008, the industrial fabric in the agrifood sector comprised 10,500 enterprises, of which 3,080 had more than 20 employees. Despite the large number of firms, sales revenue is concentrated in just 30% of them.

The limited average size of firms in the sector is a source of opportunities for take-overs and corporate concentration within powerful groups. The average level of value-added (19.2% of annual sales in 2007) is still lower than in other consumer industries (29.9% of annual sales in pharmacy, perfumery and household products; 27.8% in clothing and leather) (source: SESSI – 2007 data).

Consolidation is essential in the French cooperative sector.

Cooperatives play a key role in the agrifood sector, especially where wine is concerned, although their share of the agrifood sector as a whole fails to reflect this importance (8% (2007) of annual manufacturing sales is generated by organisations of cooperative type). Their profitability is inferior to sector averages because cooperatives frequently specialise in first processing and suffer from insufficient resources to carry out the concentration that is so essential. Nevertheless, cooperative organisations in the agricultural sector have made substantial progress in adapting to conditions in more vulnerable first processing sectors found unattractive by financial investors, where their role is crucial in marketing and adding value to agricultural production. Some of the major cooperatives should be mentioned here: Terrena, Sodiaal, Tereos, Cooperl, Cristal Union, among others.

## The development prospects of French agrifood enterprises

The accelerating concentration in the agrifood industry in Europe and France is driven by the major corporate groups.

The restructuring of business portfolios is primarily focused on return on capital, to the detriment of industrial logic (i.e. complementary relationships between trades or between products). It is driven by two types of reasoning: on the one hand, there is the shift of demand to emerging economies with an accompanying strategy based on mass consumer products (commodities), in which downward pressure on the cost of labour and raw materials is seen as crucial; and on the other, there is the development of policy focused on high-quality, high-end products intended for a European customer base with high purchasing power.

For this reason, access to sources of finance is an issue of most relevance to family SMEs and agricultural processing cooperatives. This is so because investors are held back by insufficient corporate size, limited development prospects, the legal constraints upon cooperatives and the frequently inadequate operating margins.

Returns on investment and the absence of significant growth discourage financial investors. The sectors suffering from this lack of investor interest are precisely those involved in first processing, and particularly meat products, dairy products and fruit and vegetables, where the addition of value by the agrifood sector is vital for the future of agricultural production.

New forms of partnership are currently emerging between economic operators in the sector seeking to add value to their production, and the financial world, which has the resources to permit such enterprises to develop their businesses.

#### **AGRO INVEST: THE FSI-FRANCE INVESTISSEMENT INVESTMENT VEHICLE FOR THE AGRIFOOD SECTOR**

The following are shareholders in AGRO INVEST: Agrica, CDC Entreprises (20%), Crédit Agricole Centre Loire, Crédit Agricole Centre Ouest, Crédit Agricole Ile de France, Crédit Agricole Nord Est, Crédit Agricole Touraine Poitou, Crédit Agricole Val de France, Natixis, Prédica, Sobrepar and Sofiprotéol.

With funds to date of €98 million, €20m of which has been provided by CDC, the objective of AGRO INVEST is to assist and bring on “champions” in a small number of agrifood and agro-industrial sectors. Three investments may be cited: ATM (dry pet foods), Entremont Alliance (dairy products) and SILL (dairy products /deep-frozen products/milk powder for chocolate).

It aims to invest somewhere in the region of €15m in each investment operation in enterprises with annual sales in the range €30m to €500m. The target operations involve the development, transfer of ownership or merger of firms in order to consolidate the SME population, given the excessive fragmentation of these companies across their market segments. The fund should continue to exist over the next five or six years.

#### **Useful links**

- Caisse des dépôts : [www.caissedesdepots.fr](http://www.caissedesdepots.fr)
- CDC Entreprises : [www.cdcentreprises.fr](http://www.cdcentreprises.fr)
- SOFIPROTEOL : [www.sofiproteol.com](http://www.sofiproteol.com)
- UNIGRAINS : [www.unigrains.fr](http://www.unigrains.fr)
- Crédit agricole : [www.credit-agricole.fr](http://www.credit-agricole.fr)
- FSI-France Investissement : [www.france-investissement.fr](http://www.france-investissement.fr)

## **Public-sector assistance for financing SMEs**

### **Action by the Caisse des Dépôts-Entreprises**

In 2009, the FSI (Fonds Stratégique d' Investissement / Strategic investment fund) took over the past and future commitments of the Caisse des Dépôts (CDC), most notably those connected with France Investissement. The CDC entrusts an annual envelope of €50m to CDC Entreprises under an own-account investment programme relating to commitments not included in the FSI investment strategy.

### **Action by the OSEO group**

The OSEO group is charged with the public-interest mission of assisting SMEs in their creation, innovation, development and transfer of ownership. This core task targets needs that are difficult to satisfy on the market and a demand for leverage. The financial instruments are conventional (repayable fund advances, loans, bank guarantees) in areas relevant to support for innovation, financial assistance (OSEO financement) and bank guarantees (OSEO innovation).

### **The fund of funds for SMEs: FSI-France Investissement**

The FSI-France Investissement Programme is a public-interest scheme aimed at SMEs identified as having development potential, in order to provide more financial resources to capitalise or assist them.

The programme takes the form of a partnership between the FSI – which has taken over the prior commitments of the Caisse des Dépôts – and institutional investors, usually from the private sector. The Caisse des Dépôts, followed by the FSI, will thus have injected €2.2 billion euros into the programme over the period 2006-2012. These funds have over €8.5bn under their management in 2010. They provide finance to approximately 2,500 SMEs. They represent one-third of total seed capital in France and 1/5th of all venture and development capital. The funds are invested in over 170 regional and national investment capital vehicles. The latter invest themselves in high-technology enterprises and traditional industry.

The programme is managed and driven on behalf of FSI by CDC Entreprises, a subsidiary of the Caisse des Dépôts. The assistance provided by CDC Entreprises is on market terms, with efforts to ensure levels of efficiency, liquidity and profitability capable of generating a pump-priming effect with regard to private investors, especially in market segments with little coverage.

# Employment

## Internationally, jobs are evolving towards higher levels of qualification

Agrifood companies employ some 22 million people around the world<sup>1</sup>, a not insignificant percentage of them being in seasonal, part-time or fixed-term jobs.

Increased consumption of food has had an impact on agrifood employment in recent years.

Many global processing companies are reorganising their businesses to move closer to where production is conducted, and this is leading to a new geographical pattern in labour requirements. However, actual relocation of operations is rare for agrifood companies.

Innovation, automation of production, accelerating rates of work and intensified competition between manufacturers, along with changes in regulatory controls for food safety and the distribution chain (supermarkets and fast food outlets): all these are factors which have both quantitative and qualitative effects on employment. This means that new skills are being demanded of employees, qualification levels are changing and new types of organisation, such as team working, are emerging in the sector.

These important changes are leading to a decline in unqualified labour and an increase in demand for more highly qualified employees, leading in some cases to difficulties in labour supply. Vocational training is becoming a major issue for companies and for employees. This is so because the sector needs qualified personnel capable of adjusting to on-going changes and enhanced employability for its workers.

Social dialogue is a key factor in this context for all sector stakeholders.

At the European level<sup>2</sup>, 4.4 million employees were working in the agrifood sector in 2008, compared with 4.3 million in the preceding year, an increase of 2.3%.

In 95.5% of companies the workforce is less than 50 strong. Such firms employ 37.9% of the sector's workers and generate 21.7% of total agrifood sales revenue. Only 0.9% of the sector's enterprises have a workforce of over 250. These employ 37% of the sector's registered labour and generate 51.3% its sales revenue.

Comparing the years 2007 and 2008, it can be seen that the presence of micro-enterprises (single-person firms) in the sector grew by 0.7%, attracting 1.8% of employees compared with the wider agrifood sector. Alongside this, the number of small enterprises shrank by 3.5%, losing 1.8% of employees compared with the wider agrifood sector.

## Issues for France: confirmation of the trends toward employment shrinkage and change

The numerous sites based in rural areas are highly important in ensuring good national coverage and balance between the regions. In 2008, approximately 557,000 people were employed in the agrifood sector in salaried and non-salaried jobs<sup>3</sup>, making it the second largest industrial employer in France.

In 2007 nearly 87% of companies had fewer than 50 employees. These firms employ 20% of the sector's workers and generate a little over 17% of its sales revenue.

The agrifood industry has 3,076 enterprises with workforces more than twenty strong, and they employed approximately 400,000 people in 2008<sup>4</sup>. In the sector, 3% of all companies have workforces of over 250. These employ 53% of those in work in the industry and generate 59% of its total sales revenue<sup>5</sup>.

As in other the areas of industry in France, the number of jobs in agrifood is declining, but to a lesser degree.

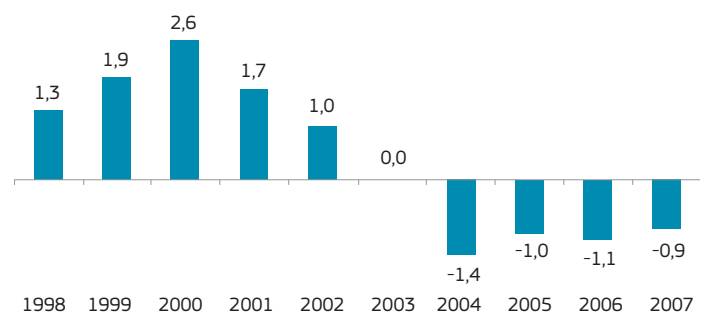
Where changes in employment patterns are concerned, as in previous years 2007 saw a decline in the number of salaried employees: down 0.9% from 2006.

2007 was the fourth consecutive year of decline: - 1.4% in 2004, - 1% in 2005, - 1.1% in 2006, whereas over the period from 1998 to 2002 the salaried workforce grew steadily (*cf. graph below*).

The highest rates of decline are to be seen in the livestock feed industry (-3.1%), beverage manufacture (-2.9%) and fruit and vegetables (-2.6%). In the poultry slaughter and meat preparation sector, the workforce has also shrunk (-0.8%) but by much less than in 2006 (-3%). As for the dairy industry (cheese and milk), this registered a 1.6% fall in employment as its restructuring continued. Alongside this, the use of temporary labour is increasing, especially in sectors experiencing strong growth in activity.

### Changes in salaried workforce (%)

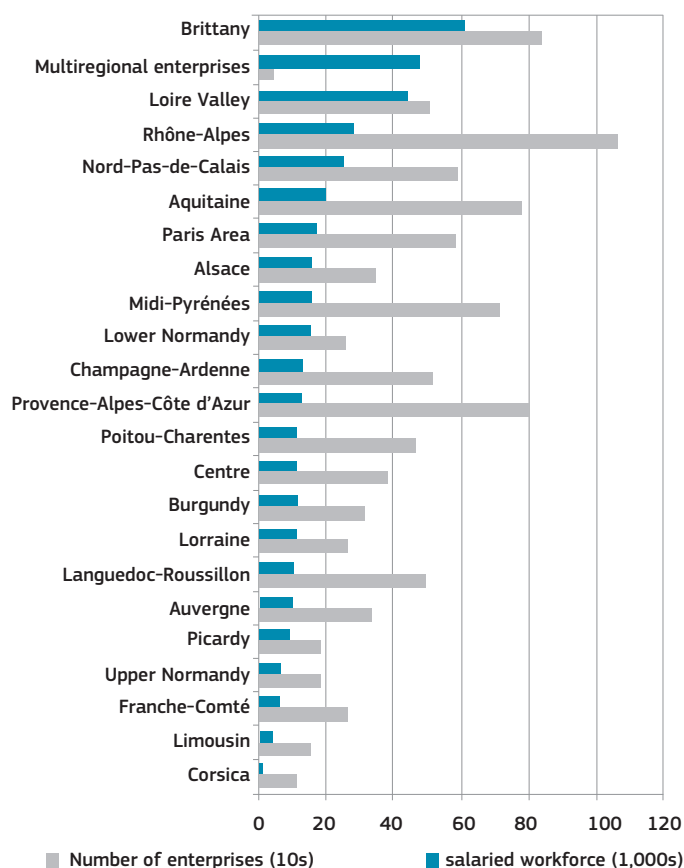
Source : Office for employment and activity development, based on Agreste data



<sup>(1)</sup> International Labour Office / <sup>(2)</sup> CIAA, Data and trends / <sup>(3)</sup> Source: INSEE, national accounts / <sup>(4)</sup> Source: Agreste annual company survey, average salaried workforce, Agricultural and Food Industries - Enterprises with 20 or more salaried employees or a turnover of more than €5m - Sectoral and Regional Results (in French) / <sup>(5)</sup> Agricultural and Food Industries - Sectoral and Regional Results - Agreste no.166, July 2009 [in French]

## Breakdown of employment by national region

EAE and BIC 2007 (Agreste) based on the region with the strongest activity



Brittany and the Loire valley are the two regions with the largest numbers of salaried employees in agrifood.

In addition to corporate restructuring, which has a quantitative impact on employment, different modes of production can lead to qualitative changes in requirements. As a processing industry, the French agrifood sector is faced with a twin challenges:

- ▶ Recruiting and retaining qualified employees capable of adjusting to the on-going changes caused by new manufacturing processes and food safety regulations,
- ▶ Coping with the large number of employees entering retirement in the near future, leading to difficulties in replacing workers and management staff.

In this connection, it is worth noting that in the INSEE 2010 study into how firms anticipate future labour needs, 21% of all agrifood establishments stated that they had plans for recruitment (defined by the hiring of personnel rather than in terms of posts since a number of the jobs concerned are either temporary or seasonal), with a total approximate number of projects of 42,800.

## Enhancing the attractiveness of the agrifood industry and anticipating change

Enhancement of corporate and labour relations is among the keys to successful adaptation to changing markets and economic climate.

The regional agrifood conferences of 2009 and the industry's general conference in 2010 highlighted the fact that the agrifood industry is suffering from a downgraded public image. This does not encourage those in work to seek jobs in the sector, despite the wide range of employment it offers.

The cooperation agreement signed between ANIA (Association Nationale des Industries Alimentaires / National agrifood industry association) and the agriculture and education ministries was extended in 2007 for another five years. This document empowers ANIA to collect the apprenticeship tax, thus making it possible to fund an information campaign on agrifood careers. A multiyear communication plan for 2008-2011 to get across a national message common to all agrifood actors has been put in place to promote the sector, specifically targeting children in their fourth year of secondary school. Programmes funded under the agreement for the promotion of agrifood careers are regularly implemented for a young audience.

Trade monitoring bodies: the industry has set up two trade monitoring bodies, one dedicated to the cooperative sector, currently being developed by Coop de France, and the other directed at the private sector, driven by ANIA. These bodies will be key to anticipating demand for skills, managing human resources, organising work, defining training and career pathways, and pinning down the problem with the attractiveness of agrifood careers.

Corporate recruitment: as actors in employment, the French general employment agency, APEC (Association Pour l'Emploi des Cadres / Executive staff employment agency) and UNEDIC (Union Nationale pour l'Emploi Dans l'Industrie et le Commerce / National union for employment in industry and commerce), in conjunction of course with APECITA (Association Pour l'Emploi des Cadres, Ingénieurs et Techniciens de l'Agriculture et de l'agroalimentaire / Association for the employment of agriculture and agrifood executive staff, engineers and technicians), have been mobilised under a national agreement for sector recruitment of school-leavers and jobseekers. The purpose of this agreement, signed in 2006 between the government, ANIA and Coop de France, is to evaluate labour requirements and analyse employment, while filling the jobs on offer and ensuring that employees can be retained, as well as assisting, qualifying and integrating recruited workers.

A guide was developed in Brittany in 2008 to provide answers to recruitment difficulties. The target readership comprises those involved in public employment services, to enable them to familiarise themselves with the sector, in addition to workers and jobseekers wanting to work in agrifood. It was produced with professional input and singles out the skills required. It is the first sector-specific recruitment guide.

A concise summary of information on jobs, trades and required skills in the agrifood sector was also produced by APECITA in 2007. This is intended for school leavers and jobseekers, along with those in work but wanting a career change.

To conclude, resources have been rolled out such as simulated recruitment exercises to identify the skills required for a given post and vocational platforms for the recruitment of young people. Innovative job-sharing programmes have also been initiated with the involvement of agricultural producers and agrifood firms, thus enabling workers to remain in full-time employment throughout the year.

### Training

Establishments providing training for agricultural careers find it difficult to attract young people, who tend to go into other sectors, into marketing or sales jobs for example.

The overhaul of diploma courses such as the higher agricultural technical diploma (BTSA) with a “food science and technology” major, in addition to new training pathways leading to engineer-grade qualifications, are making it possible to provide the best possible response to the expectations of food industry professionals.

Higher education establishments in agriculture are also developing a series of initiatives to promote a wide social mix, among which is the “Cordées de la réussite” [helping hand to success] programme for partnership between major higher educational institutions and high schools in priority neighbourhoods. The Ministry of food, agriculture and fisheries has sought to make it possible for agricultural training establishments to be stakeholders in this, encouraging the creation of a “green” version of the programme: five higher education establishments in agriculture have already been granted the label.

In addition, a protocol has been signed between the Interministerial delegation for the agrifood industries and agro-industry, the Ministry of food, agriculture and fisheries, ANIA and Coop de France for the organisation of “Open Day” exercises in companies and educational training establishments. Open Days take place every year in October during the traditional “Food Taste Week”.

### Improved terms of employment and working conditions

Particularly close attention is being paid to improving working conditions and putting human resources management systems in place in small and medium-sized enterprises.

An action plan to improve workplace safety and working conditions in the farming, forestry and agrifood industries was adopted in June 2008 by the CSO (*Conseil supérieur de coordination et d'orientation de l'économie agricole et agroalimentaire* / High council for the coordination and orientation of the agricultural and agrifood economy) at the Ministry of food, agriculture and fisheries. In the case of agrifood companies, this relates particularly to repetitive strain injuries (RSI).

## NATIONAL COOPERATION CHARTER FOR THE SUPPORT AND ASSISTANCE OF PRODUCTION AND PROCESSING ENTERPRISES AND THEIR EMPLOYEES IN THE AGRIFOOD SECTOR

Signed on 17 September 2009 between the social partners and government (represented by the Minister of food, agriculture and fisheries and the Secretary of State for Employment), the goal of the Charter is to encourage and to support enterprises in the agrifood sector in sustaining a dynamic for the creation and retention of high-quality jobs, adapting skills and careers as necessary for their further strengthening and development. It has three main focuses:

**Focus 1:** Developing skills, qualifications and employment

**Focus 2:** Improving working conditions and safety in the workplace

**Focus 3:** Implementing and assisting change

Over the two and a half years of its existence, that is until the end of 2011, 15,000 individuals should benefit from actions conducted under the Charter, which provides funding of €41 million, including €15m from government (€5 million for the Ministry of food, agriculture and fisheries).

A national steering committee made up of Charter signatories has been set up to drive, guide, lead and steer all actions undertaken as part of the above focuses.

In the regions, regional plans are being drawn up by OPCAs (Organismes Paritaires de Collecte Agréés / Joint industry bodies approved for revenue collection), following consultations with the social partners and in conjunction with the representatives of central government in the regions (DIRECCTE, DRAAF) by whom the plans must be validated. The plans are then reviewed by the national steering committee which then takes decisions on the funding of the programmes concerned.

### Useful links

- Ministry of the economy, industry and employment : [www.economie.gouv.fr](http://www.economie.gouv.fr)
- Ministry of work, social relations and civil service : [www.travail-solidarite.gouv.fr](http://www.travail-solidarite.gouv.fr)
- Ministry of food, agriculture and fisheries : [agriculture.gouv.fr/emploi-social](http://agriculture.gouv.fr/emploi-social)

### Recruitment

- APECITA : [www.apecita.com](http://www.apecita.com)  
(free subscription to the newsletter available at [www.apecita.fr/inscription-news.asp](http://www.apecita.fr/inscription-news.asp))
- Pole Emploi : [www.pole-emploi.fr](http://www.pole-emploi.fr)
- APEC : [www.apec.fr](http://www.apec.fr)

### Sector professionals

- ANIA : [www.ania.net](http://www.ania.net)
- COOP de FRANCE : [www.coopdefrance.coop](http://www.coopdefrance.coop)

### Vocational training

- AGEFAFORIA : [www.agefaforia.com](http://www.agefaforia.com)
- OPCA 2 : [www.opca2.com](http://www.opca2.com)

### Careers information

[www.metiers-industries-alimentaires.com](http://www.metiers-industries-alimentaires.com)

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# Competitive performance and innovation

Over the last few years, against a backdrop of intensifying competition for the European Union from third countries, the agrifood sector in developed countries has been faced with mediocre prospects for growth and growing challenges in domains as diverse as commodity supply, productivity, the attractiveness of industry sectors and environmental issues.

The agrifood industries might appear to be relatively well protected from the effects of globalisation given that they are more difficult to relocate geographically than some other activities, at least in the cases of industries engaged in processing bulky agricultural produce (primarily first processing activities). However, increased competition and the exceptional economic context, contributing to volatility in agricultural commodity prices, may imperil some industrial sectors.

Among the factors holding back the sustainable development and competitiveness of the food industries, it is possible to point to the small size and slim profit margins of enterprises, the low percentage of management-level posts and the lack of attractiveness of this sector, along with quality demands, difficulties in accessing the market and in satisfying increasingly numerous and changeable consumer expectations, and an imbalance in negotiating power in dealings with the large retail chains.

Despite the fact that they are a source of threats, globalisation and the environmental question can nevertheless be seen as opportunities to be grasped by efficient, competitive industries.

## At EU level : an EU High Level Group and a platform on the competitiveness of Europe's agrifood industries

A High Level Group (HLG) on the competitiveness of the agrifood industries was set up in April 2008. Input for the work of this group came from experts and working groups, leading to the production of a report in March 2009 accompanied by 30 recommendations. On 6 July 2009, the HLG adopted a roadmap translating those recommendations into operational measures. Below are some examples of the focuses for action :

- ▶ Promotion of energy efficiency in European agrifood industries
- ▶ Harmonisation of the interpretation and implementation of European agrifood legislation
- ▶ Better assistance for SMEs
- ▶ Easier access to finance
- ▶ Simpler access to funds dedicated to research programmes
- ▶ Improved attractiveness for European agrifood industries
- ▶ Restoration of social dialogue in agrifood enterprises
- ▶ Encouragement for research and innovation efforts
- ▶ Encouragement for the use of ICTs in the agrifood industries
- ▶ Better promotion of standards in international trade

In order to take the work of the EU High Level Group further, the European Commission is currently setting up a forum that will include a number of thematic platforms, of which one will focus on the competitive performance of the agrifood industries. This think-tank will comprise the whole range of representatives of the food supply chain, representatives of the Member States and the concerned directorates-general in the European Commission (enterprise, agriculture, internal market, health and consumers).

## Agrifood innovation : a key factor for competitiveness

Growth and competitiveness in agrifood enterprises depend on their ability to differentiate themselves from their competitors, which equates in most cases to their capacity to innovate. Innovation can spring most notably both from the application of the fruits of research and development to the production of new products and from changes in manufacturing processes or corporate organisation.

Markets play a driving role in the innovation process. The risk of failure is high in the design, manufacture or launch of a new product, and for this reason agrifood companies prefer incremental innovation based on the modification, transposition or improvement of existing products and processes. Radical technological innovations are infrequent in the agrifood domain. Enterprises innovate above all to satisfy demand from consumers.

The innovation survey conducted in 2006 established that approximately 63% of all agrifood enterprises with 20 or more employees innovated over the period 2004-2006 (cf. Agreste Primeur no. 225, June 2009). The rate of innovation in agrifood enterprises remained generally stable in the years 2002-2004, with some differences however between domains. When broadened to include supply chain or quality management, organisational innovation is taking on greater importance, although it remains at a lower level than in other industries. Changes in terms of marketing are still developing, with 35% of companies innovating in this field during the years 2004 to 2006, compared with 32% between 2002 and 2004. Such changes may be limited to packaging or design modifications, but they may also relate to selling methods. They are particularly high in the agrifood sector, where annual advertising costs stand at €10 billion, or 8% of total sales revenue. Innovation effort focused on agrifood products or processes slackened marginally during the period 2004-2006. A quarter of all agrifood firms innovating in the area of products or processes develop "genuine" novelties. These are in the main large companies, which are more able to come up with substantial amounts of investment. The impact on sales nevertheless remains limited. For half of all businesses, such investment equated to no more than 10% of annual sales revenue. And it allowed only one firm in ten to generate a third or more of its sales.

## Agrifood competitiveness clusters : a key advantage for France

Competitiveness clusters are an essential plank in the policy of the French Ministry of food, agriculture and fisheries in favour of the agrifood industries.

The policy on competitiveness clusters was established in 2004-2005 and is rooted in the promotion of research and development and the development of enhanced cooperation on collaborative projects between companies and research and training facilities. Phase I of the policy covered the years 2005-2008. This phase enabled a network of businesses, training facilities and research bodies to be built up.

Following the evaluation conducted in 2008, Phase II of the national competitiveness cluster policy (2009-2012) is embodied in practical action based on the signing of performance contracts between central government, regional authorities and the clusters themselves. In 2012, a further assessment of all the competitiveness clusters and the relevant policy will be undertaken.

Of the 71 clusters already in existence, 14 are directly concerned by thematic focuses falling within the remit of the Ministry of agriculture.

## Enterprise clusters

The implementation of a policy for the support of enterprise clusters in 2010 will be conducive to enhanced corporate competitiveness. Following the initial call for proposals, five cluster projects were selected on agricultural and agrifood themes and seven on topics related to ecotechnology, bioresources and the management of water and forests.

An enterprise cluster is a network of firms – essentially SMEs and micro-enterprises – embedded in their local context, in many cases engaged in the same type of production and often in the same sector of industry, focused on a common strategy and the implementation of concrete, pooled services and actions. The logic of this approach involves complementary and cooperative relationships with competitiveness clusters.

### Competitiveness clusters with focuses relating to agriculture, agrifood, forestry or fisheries

Name of cluster	Regions concerned	Main thematic focuses
Agrimip Innovation	Midi-Pyrénées	Agro – chains
Aquimer	Nord – Pas-de-Calais	Fisheries-aquaculture: Production, processing and adding value to aquatic products
Céréales Vallée	Auvergne	Cereal crops
Industrie & Agro-Ressources	Champagne-Ardenne, Picardy	Exploitation of biomass, plant-based chemistry, biorefining
Nutrition santé Longévité [nutrition, health, longevity]	Nord – Pas-de-Calais	Nutrition, health, biotechnologies, metabolic, cardiovascular and age-related diseases
Pôle Européen Innovation Fruits et Légumes (PEIFL)	Provence – Alpes – Côte d'Azur, Languedoc-Roussillon et Rhône-Alpes	Fruit and vegetables (European fruit and vegetables innovation cluster)
Q@LI-MEDiterrannée	Languedoc-Roussillon	Fruit and vegetables, grapes and wine, cereals and Mediterranean crops
Qualitropic	Reunion Island	Tropical products
Valorial	Brittany, the Loire valley and Lower Normandy	Future foods, the dairy, meat and egg-based products sector, agrifood technologies and nutrition
Végépolys	Loire valley	Variety selection, horticulture, market gardening, specialist plants, landscape
Vitagora	Burgundy, Franche-Comté	Taste, nutrition, health
Xylofutur	Aquitaine	Wood industry, forest resource exploitation and value-added
PASS	Provence – Alpes – Côte d'Azur, Rhône-Alpes	Production of perfume and aromatic plants, aromas, perfumery, cosmetics and chemicals
Equine sector	Lower Normandy	Equine sector, harness and saddle racing, equestrian sports



## Official financial assistance to foster competitive performance and innovation

### **The PDRH (*Programme de développement rural hexagonal / French national rural development programme*)**

The French national rural development programme (PDRH 2007-2013) enables SMEs/ micro-enterprises in the agrifood sector to be assisted through a measure specifically intended for “investment in the agrifood industries”<sup>1</sup>. This primarily targets enterprises engaged in marketing and processing farm products located in rural areas or sourcing supply directly in organised farm production.

The support provided can assist projects that have a structural impact, are innovative, likely to develop new and more profitable markets, giving due consideration to the various components needed for their execution. Aid can also be extended to projects that foster the economic development of a geographical area (e.g. new commercial outlets for agriculture or outlets offering higher value-added, job creation) or promote technical approaches more protective of the environment or capable of exceeding regulatory requirements. The scheme can be adjusted to suit regional requirements in terms of goals and issues defined at local level.

Over the seven years of the programme (2007-2013) official aid at EU, national and regional levels under measure 123A totals €440m.

### **FISIAA (*Fonds d'intervention stratégique des industries agroalimentaires / Fund for strategic intervention in the agrifood industries*)**

The purpose of the FISIAA set up by the Ministry of agriculture and fisheries in 2007 is to encourage the emergence of corporate projects aimed at enhancing competitiveness and developing collective economic synergy.

The Fund supports projects capable of integrating tangible and intangible investments and selected on the basis of annual calls for proposals.

The 2010 call for proposals particularly encouraged investment projects that:

- ▶ offer a strong structural impact in the relevant sector, reflected in positive economic spin-off that extends beyond a single enterprise,
- ▶ are innovative or exemplary in terms of improvement of the nutritional quality of the market offering in food or protection of the environment,
- ▶ further the development of processing and marketing of organic farming products.

The first three calls for proposals (2007, 2008, 2009) led to the provision of support for 47 projects at an eligible cost of € 180m and total aid of €22.5m.

### **The FUI (*Fonds Unique Interministériel / Unified Interministerial Fund*)**

The FUI finances the collaborative research and development projects of competitiveness clusters. Its core task is to support applied research projects directed at the development of products and services likely to be brought to market in the short or medium term.

Suitable projects for funding are selected following calls for proposals (twice yearly).

The Fund has €600m available for the years 2009-2011, of which €495m is to go to R&D projects and € 105m to innovation platforms. The R&D projects submitted to the FUI in domains of particular interest to the Ministry of food, agriculture and fisheries concern, in descending order of priority, non-food uses (biofuels, plant-based chemistry, etc.), agrifood products and technologies, agriculture (e.g. reduction and replacement of chemical inputs by more natural solutions), animal health and the fisheries-aquaculture sector.

### **OSEO support**

OSEO is a public entity answering to the Ministry of the economy, industry and employment and to the Ministry of higher education and research.

“OSEO innovation” (a combination of the former ANVAR and All) has as its core task the promotion and support of industrial development and growth driven by innovation, especially technological, and contributing to technology transfer. It provides project promoters with its expertise and support for the management of innovative programmes and a financial instrument allowing risk to be shared, aid for innovation (in the form of subsidies and zero-interest fund advances that are partially reimbursable according to the degree of a programme’s technical and commercial success).

“OSEO financement et garantie” (financing and guarantees) (formerly BDPME, Sofaris) provides banks and companies with its know-how and expertise in the area of finance and cover for risk.

In 2009, OSEO assisted nearly 4,000 innovative projects which benefited from:

- ▶ over €400 million in reimbursable fund advances or subsidies under the “Aid for Innovation” programme for collaborative or single-partner projects driven by companies with up to 2,000 employees;
- ▶ € 150 million in reimbursable fund advances or subsidies under the “Strategic Industrial Innovation” programme for collaborative, ambitious projects driven by companies with up to 5,000 employees.

<sup>(1)</sup> PDRH measure 123, Scheme A, under Article 28 of the EU Rural Development Regulation (Council Regulation (EC) 1698/2005).

In the agrifood sector in 2009 OSEO assisted 450 innovative projects for a total amount of aid of €31m. One third of this total was granted for projects originating in agrifood competitiveness clusters. The projects supported were most numerous in the Nord-Pas-de-Calais and Languedoc-Roussillon regions of France. For that same year, the intermediate food product field led in terms of funding, followed by beverages and equipment. The main trends in innovation are health & nutrition, convenience and sustainable development.

In July 2010 OSEO Innovation and the Ministry of food, agriculture and fisheries signed their fourth annual cooperation agreement aimed at enhancing the support provided for innovation in the agrifood industries. Since the beginning of this collaboration, 100 small and medium enterprises (SMEs) in the agrifood sector have received feasibility and partnership aid in the form of subsidies.

### **The French Grand National Loan for investment in the future**

Following the submission in November 2009 by Messrs Juppé and Rocard of the proposals for investments in the future defined by the commission they chaired and as a result of the choices made by the President of the Republic in December 2009, the Amending Finance Law of 9 March 2010 implemented a €35-billion programme for investment in the future.

The purpose of this programme is to prepare France for the challenges of tomorrow by investing in higher education and vocational training, research, industry and SMEs, sustainable development and digital technology. All in all, taking into account the leverage provided by other sources of finance, joint funding by the private sector in particular, investments are expected to total around €60 billion.

Specifically, the Grand National Loan supplements existing instruments for the support of research and development, notably:

- ▶ collaborative research and development projects and projects for pooled innovation platforms created by competitiveness clusters,
- ▶ the building and monitoring of large patient/consumer cohorts to give greater objective visibility to the linkage between diet and health,
- ▶ scientific facilities and laboratories of excellence,
- ▶ institutes for technological research and institutes of excellence in the area of carbon-free energy,
- ▶ projects for research and development and demonstration programmes in the fields of plant-based chemistry, biotechnology, food and agronomics,
- ▶ green loans on especially favourable terms, aid for reindustrialisation and projects with structural impacts on industries in the regions.

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#### *Useful links*

- Competitiveness clusters : [www.competitivite.gouv.fr](http://www.competitivite.gouv.fr)
- OSEO : [www.oseo.fr](http://www.oseo.fr)
- Enterprise clusters : [www.datar.gouv.fr/grappes](http://www.datar.gouv.fr/grappes)
- ANR (calls for Grand National Loan project proposals) : [www.agence-nationale-recherche.fr/investissementsdavenir/Appels-a-projets](http://www.agence-nationale-recherche.fr/investissementsdavenir/Appels-a-projets)

↳ *See also the “Research and Development” information summary in the Key Issues for Agrifood Sector*

# Food, consumption and nutrition

The relationship between consumers and what they eat and drink is complex, constantly changing and involves an interaction between structural factors (purchasing power, demographics, etc.), lifestyle considerations (living and working environment, etc.) and values (cultural, social, etc.). The role played by food is simultaneously nutritional, emotional and social.

## Changing patterns of food consumption

France, in addition to its renowned culinary and gastronomic heritage, is a country characterised by food consumption patterns that are highly structured around main meals associated with conviviality and sharing with others. This model is however changing, as is shown by the survey “Food-related behaviour and consumption in France” conducted in 2007 by CREDOC (Centre de recherche pour l'étude et l'observation des conditions de vie / Research centre for the analysis and observation of living conditions). A sharp reduction in the time spent cooking has for example been observed in recent years, along with a significant shortening of the duration of midday and evening meals, the growing importance of television viewing at mealtimes, and an increase in ready meals and the frequency with which meals are skipped.

## Consumer expectations increasingly focused on health considerations

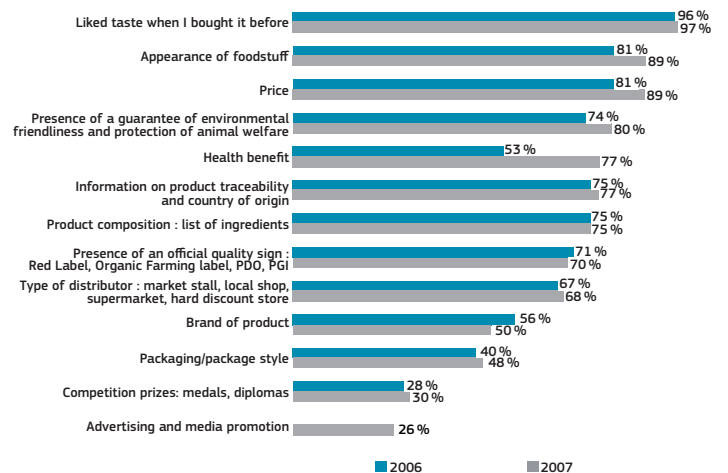
Recent years have been marked by a trend towards an intensification of consumers' expectations with regard to the health-related and nutritional aspects of the food they eat. The barometer for public perceptions of food set up by the Ministry of food, agriculture and fisheries in 2006 has for example shown that French consumers pay increasing attention to the link between food and health. In 2009, 80.4% of the French public considered that health benefits were an important criterion in their definition of how good a foodstuff was, whereas the equivalent figure in 2006 was 53%.

### THE BAROMETER OF PUBLIC FOOD PERCEPTIONS, 2009

This survey was carried out in 2009 by CREDOC at the request of the French Ministry of food, agriculture and fisheries, and was based on a national sample of 1,000 individuals representative of the French population over 18 years of age. This survey was the barometer's fourth survey wave, the first having been conducted in April 2006.

**For you personally, how important is each of the following criteria – “very important”, “somewhat important”, “not really important” or “not important at all” – in determining your view of the quality of a food product? Sum of the responses “very important” and “somewhat important”**

Source: Barometer of public food perceptions 2007 – French Ministry of Agriculture and Fisheries, CREDOC



These new expectations are reflected in significant increases in the consumption of products for which health benefits are claimed. For example, in the “Health through Food” survey conducted in 2006 by CREDOC 44% of the French public said that they consumed low-fat products more than once a month, 38% low-sugar products, 39% functional food products<sup>1</sup>, 22% vitamin- or mineral-enriched foodstuffs, 17% dietary foods, 10% plant-based health products and 9% food supplements. Given this, it is hardly surprising that manufacturers' strategies are increasingly focused on nutritional issues. This survey, when updated in 2009, did however show a downward trend in the consumption of the above products due to the present economic crisis.

## Genuine public health issues

The development of chronic medical conditions linked to diet, among other causes, is a new issue actors in the field of food quality now need to take into account. In 2009, ObEpi-Roche research revealed that 14.5% of the adult population (nearly 6.5 million individuals) suffered from obesity, compared with 8.5% in 1997, while the percentage of the overweight remained relatively stable at 31.9%.

In response to this, the authorities have put a range of initiatives in place at the international level (the Global Strategy of the World Health Organisation (WHO) defined in 2005), across the Community (EU

<sup>(1)</sup> Foodstuffs that provide, in addition to their basic nutritional role, specific and scientifically proven physiological benefits due, for example, to their higher content of a given ingredient than conventional foodstuffs.

Platform for Action on Diet, Physical Activity and Health, the High Level Group on Nutrition and Physical Activity) and at French national level (the National Nutrition and Health Programme – PNNS – and the National Food Programme – PNA). These initiatives, the aim of which is to influence both food-related behaviour (by providing information on nutrition to consumers, among other things) and product composition, therefore have a dual impact on the market offering of food products.

## At the French national level, a partnership-based dynamic for improving the market offering in food

In order to respond more effectively to the new consumer expectations and the new public health issues, while at the same time adding value to sustainable, high-quality modes of production, the Ministry of food, agriculture and fisheries is conducting a holistic food policy aimed at fostering a market offering in food that is safe, diversified, good in taste terms, responsive to nutritional requirements and derived from environmentally friendly modes of production.

Specifically in the domain of nutrition, the approach that has been adopted (and made part of the French national nutrition and health programme 2006-2010) involves acting in concert with market actors and especially the agrifood industries in order to avoid the need to apply coercive measures (regulations or taxation). Market operators are in this way invited to take voluntary, and preferably collective, action to take forward the market offering in food by reformulating products, reducing portion sizes, improving consumer information and reducing marketing and advertising pressure. These commitments are formalised in charters validated and signed by the authorities.

Since 2005 in this connection the Ministry of food, agriculture and fisheries has been leading several working groups (an initial group on carbohydrates and fibre in 2005 and, since 2007, a second on fats and oils, and another in 2010 on the reduction of salt content in foods). Their purpose is to assist market operators in defining formal commitments by objectively establishing the progress that is realistically achievable given the efforts already made, the technological and regulatory constraints imposed on manufacturers, and foreseeable impacts on consumer behaviour (acceptability, transfers of consumption, etc.).

In addition, in February 2008 the Ministries with responsibility for agriculture, health and the economy jointly set up a food quality monitoring body in conjunction with industry professionals. This is charged with monitoring changes in the market offering of food (in terms of both its nutritional and socio-economic aspects), thus providing an objective measurement of the progress actually achieved.

## A new regulatory framework for nutritional information

The regulatory system imposed upon manufacturers at both national and Community levels is currently in a state of flux, changing to offer the best possible safeguards for consumer health and honest information on products offered for sale.

At French national level, since February 2007 the advertising of

manufactured food products and beverages with added sugar, salt or artificial flavouring must (unless a tax is paid) carry consumer health messages.

At EU level, the regulation on nutritional or health claims, which has been in force since 1 July 2007, now imposes on manufacturers a strict framework governing their use of statements in advertising and labelling on the nutritional characteristics or properties of their products. This framework is to be strengthened by the adoption in the near future of nutritional profile criteria laying down conditions governing the permissibility of such claims: in the absence of authorised derogations, only products whose nutritional profile complies with the characteristics defined by the regulations will be able to make use of such statements.

And lastly, a major consumer information programme began in 2008 and will continue in 2010. This involves the revision of European regulations on general and nutritional labelling in order to remedy the weaknesses and inadequacies of the current system, and to respond more effectively to issues relating to nutritional information and consumer expectations.

## Development of innovation and knowledge transfer

In order to foster the development of nutritionally more beneficial products, it is essential to continue to encourage innovation by agrifood companies and transfers of knowledge between public-sector research bodies (most notably INRA, the French national institute for agricultural research), and entities upstream in agriculture and downstream in manufacturing industry, by setting up scientific interest groups (SIGs), for example. The work done in competitiveness clusters also contributes to achieving this.

Additionally, the revision currently in progress of European regulations on new foodstuffs placed on the market should make it easier for agrifood companies to conduct research and development strategies by making official evaluation and authorisation procedures clearer and more straightforward.

### Useful website addresses

- The section devoted to “Food / Food & Nutrition” on the website of the French Ministry of food, agriculture and fisheries : [alimentation.gouv.fr](http://alimentation.gouv.fr)  
[agriculture.gouv.fr/sections/thematiques/alimentation/alimentation-nutrition](http://agriculture.gouv.fr/sections/thematiques/alimentation/alimentation-nutrition)
- The French National Nutrition and Health Programme (*Programme National Nutrition Santé* – PNNS) : [www.mangerbouger.fr](http://www.mangerbouger.fr)
- Voluntary charter for progress on nutrition [agriculture.gouv.fr](http://agriculture.gouv.fr) (thématique “alimentation”)
- European Commission (General Directorate for Health and Consumer Protection) : [ec.europa.eu/food/food/labellingnutrition/index\\_fr.htm](http://ec.europa.eu/food/food/labellingnutrition/index_fr.htm)
- French national food council (*Conseil National de l’Alimentation* - CNA) : [cna-alimentation.fr](http://cna-alimentation.fr)
- CREDOC (*Centre de recherche pour l’étude et l’observation des conditions de vie* / Research centre for the analysis and observation of living conditions) : [www.credoc.fr](http://www.credoc.fr)
- Food section of the website of INRA (*Institut national de la recherche agronomique* / French national institute for agricultural research) : [www.inra.fr](http://www.inra.fr) (thématique “alimentation”)
- French Agency for food, environmental and occupational health safety (*Agence nationale de sécurité sanitaire de l’alimentation, de l’environnement et du travail*) : [www.afssa.fr](http://www.afssa.fr)



# International : Enhancement of competitiveness to consolidate a leading position

## Despite the crisis, France continues to be a major actor in global agrifood trade.

The financial and economic crisis had a strong damping effect on global trade in 2009 and agrifood products were no exception. France did not escape the general rule: following three years of healthy growth and a record figure of €50 billion in 2008, French agricultural and agrifood exports slumped in 2009, for the first time in 20 years, falling to €44.2 billion, 11.5% down on 2008. Sales of agrifood products alone shrank by 9.2% to €32.7 billion.

The fall in agrifood imports in 2009 was less marked than for exports: 5.7% down to €38.8bn, including a decline of -5.4% to €29bn for processed products.

The sector still generated one of the main surpluses in the overall French trade balance but at a substantially reduced level in 2009: €5.4bn, or €3.4bn less than in 2008. In the case of agrifood industry products, the surplus stood at €3.7bn, €1.7bn down.

Compared to the other sectors of the economy, agrifood stood up well overall in 2009: the decline stood at -17% for French goods exports generally and -18% for imports. Only transport equipment other than cars and pharmaceuticals fared better than agrifood, unlike capital goods and other consumer goods – cars especially.

## French trade in agricultural and agrifood products over the last ten years

(Source: Customs ; Treatment: Ministry of food, agriculture and fisheries)

	Exports (€ billions)	Exports: Change year on year (%)	Imports (€ billions)	Imports: Change year on year (%)	Balance (€ billions)
1999	36,8	+ 1,3 %	27,3	+ 0,5 %	+ 9,5
2000	38,1	+ 3,6 %	28,6	+ 4,9 %	+ 9,5
2001	37,5	- 1,4 %	30,2	+ 5,5 %	+ 7,4
2002	39,4	+ 5,0 %	30,9	+ 2,5 %	+ 8,5
2003	39,6	+ 0,6 %	31,2	+ 0,8 %	+ 8,5
2004	39,8	+ 0,3 %	31,8	+ 1,9 %	+ 8,0
2005	40,4	+ 1,8 %	32,8	+ 3,0 %	+ 7,7
2006	43,3	+ 6,9 %	34,6	+ 5,6 %	+ 8,7
2007	46,4	+ 7,3 %	37,6	+ 8,6 %	+ 8,9
2008	49,9	+ 7,4 %	41,1	+ 9,4 %	+ 8,8
2009	44,2	- 11,5 %	38,8	- 5,7 %	+ 5,4

France's share of the global agrifood export market is not far off 6%, and despite the slump in sales in 2009, this has allowed it to retain its position among the world's leading exporters. France still ranks below the United States and the Netherlands, but also now below Germany, which has pushed France back from third into fourth place, with Brazil coming fifth. Taking processed products alone, France, for many years number one, is now in fourth place behind the same three leaders, but in a different order: Netherlands and Germany followed by the United States, with France once again ranked higher than Brazil.

Since the beginning of 2010, agrifood exports have bounced back from their level in the previous year, which seems to mark the end of the crisis in demand. The euro's slide against the dollar has encouraged this development. Nevertheless, this improvement over the last year is still modest and there has been no return to 2008 levels. It relates above all to third countries due the recovery of sales of wines and spirits going to those destinations, but the upturn is still limited in European markets.

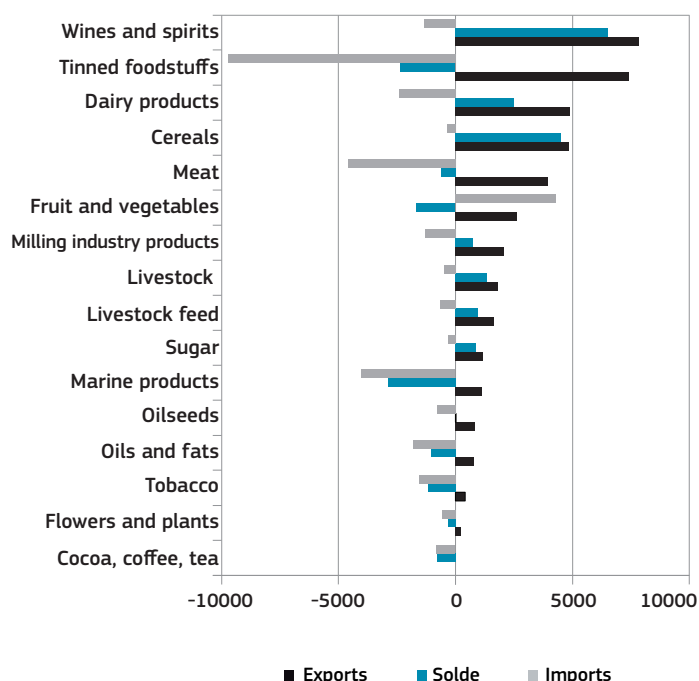
## Mixed sector figures

Wines and spirits continue to be the leading category, generating the biggest agrifood export balance, but sales slumped in 2009 to just €7.9bn from €9.5bn the preceding year, giving a net balance of €6.5bn, a figure down by €1.6 billion. The decline is quite appreciable for wine, - 19%, but a little less severe for spirits: - 12%. Champagne, Bordeaux wines and AOC wines generally were the hardest hit by the shrinkage in sales to our biggest customers, especially the United Kingdom, the United States, Belgium, Japan and the Netherlands. Conversely, exports to China and Hong Kong continued to expand, boosted for the latter of these two destinations by a decision to cut customs duty in 2008. Where this sector is concerned, the overall crisis in demand cannot explain alone the mediocre performance in 2009, and the continued erosion of French market share.

The second largest agrifood export category, tinned and packaged foods and ready-prepared foods, had a lacklustre year in 2009 but was generally less affected by the decline in sales, falling by 0.9% to €7.4bn. Most sectors were affected by this movement: bread and pastries, chocolate-based products, prepared and tinned cereals,

## Exports, imports and trade balances in 2009 sector by sector (€ millions)

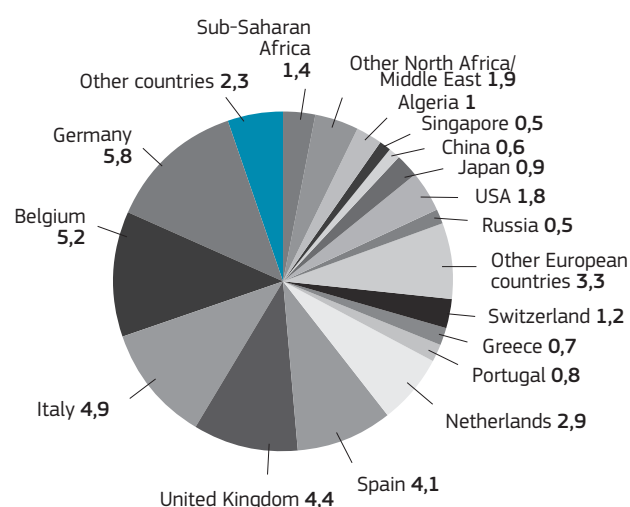
(Source: Customs; Treatment: Ministry of food, agriculture and fisheries)



## France's main agrifood customers in 2009 (€ billions)

Total agrifood exports : €44.2 billion

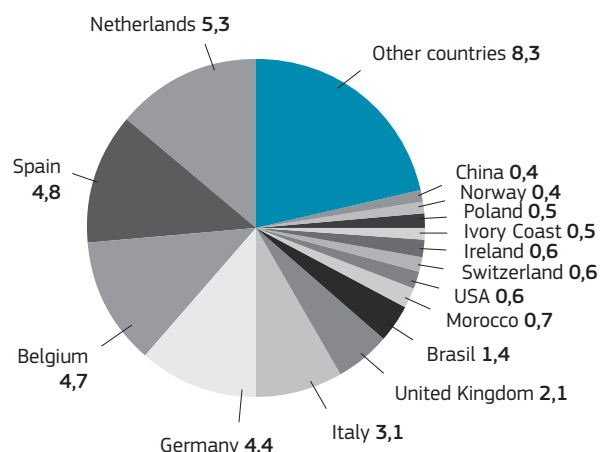
(Source Customs; Treatment: Ministry of food, agriculture and fisheries)



## France's main agrifood suppliers in 2009 (€ billions)

Total agrifood imports : €38.8 billion

(Source Customs; Treatment: Ministry of food, agriculture and fisheries)



meat, fish, vegetables and fruit goods, in addition to sauces and condiments, ready-prepared dishes, and so on. Nevertheless, the sector's overall balance was negative, by more than -€ 2bn.

Dairy products are the third most important export category for the agro-industries, generating €4.9 billion in 2009. However, the 11% slump in sales cancelled out their impressive rise in the preceding year. This sector still turned in a surplus of €2.5bn (compared with €3bn in 2008).

For the last several years, the meat sector generally has turned in negative balances, showing a deficit of €600 million in 2009, due to performance for bovine meat (-€200m) and sheep meat (-€500m), a situation made worse by the consequences of the bluetongue crisis, despite the surplus on poultry meat (+€200m). All species were affected in 2009 by falling sales, with a total of €4 billion for all meats generally, a figure 8% down on 2008.

Exports of flour, malt and semolina also suffered from this decline in demand, shrinking by 13% to €2.1bn. Conversely, sales of livestock feed remained stable at €1.6bn, and sugar showed a rare upturns at +5% or €1.2bn. Exports of oils still lagged far behind purchases at €0.8bn, against imports of €1.8bn. The same was true of tobacco, for which the negative trade balance stood at €1.2bn in 2009.

## Trade continues to be centred on Europe

The vast majority of French sales continue to go to the European Union, which is also the main source of France's own purchases: respectively 72% and 71% of the total, figures which are as high as 75% with Switzerland, Norway and other close non-EU neighbours. Germany, Belgium, the United Kingdom, Italy, Spain and the

Netherlands continue to be by far France's best customers, accounting for 62% of sales of a diversified range of products. Conversely, the next four customers in order of importance are third countries, one of which is in Europe: the United States, Switzerland, Algeria and Japan. Switzerland is a customer for a varied range of goods, as are France's EU neighbours. However, the other two wealthy nations are above all purchasers of wines and spirits, and Algeria buys grain. Portugal and Greece remain in the next two places in the ranking. Next comes China, now ahead of Russia, Singapore and Canada, rising to 13<sup>th</sup> place among client countries in 2009, up from 23<sup>rd</sup> in 2004, its purchases from France having trebled in the space of 5 years. Including Algeria, North Africa, the Middle East and Sub-Saharan Africa taken together represent a share equal to that of the United Kingdom or Spain.

The same six European countries are also France's leading agrifood suppliers, but in this case the Netherlands and Spain head the list. Brazil and Morocco, now above the United States, come next on the supplier ranking, followed by Switzerland, Ireland, Côte d'Ivoire, Poland, Norway and China.

## France and the prospects for global markets

For several decades now, agrifood exports have been an engine of growth in the agrifood industries. This is so because France's domestic food market has largely reached maximum capacity in terms of volume where many products are concerned. Potential gains in this market are to be found essentially in the development of quality of supply: more sophisticated products, diversification and segmentation, innovative products, and so on.

The situation is generally comparable in all Western European markets but differences exist for specific products, one example being wine, a market far from its maximum capacity where our main European customers are concerned. There are promising prospects for growth in the new Member States as they catch up with the levels of consumption of their western neighbours.

However, the biggest reservoir of potential growth is to be found in the quantitative and qualitative expansion of consumption in the emerging economies, both the demographic giants, China and India, and other less populous nations, especially in Asia and Latin America, with Brazil. In addition, one should not forget the major third-country markets being developed outside Europe – the United States, Canada, Japan, South Korea – whose rates of growth, although lower than those of the emerging economies, are nevertheless promising compared to European markets. Lastly, our neighbours in eastern and southern Europe are geographically close and growing markets of which we must take advantage: Russia, Ukraine, the countries across the Mediterranean and in Sub-Saharan Africa, many of which suffer from structural food shortages, and whose very proximity and historical ties with France make them natural trading partners. However, it is obviously more difficult to gain access to and operate on a long-term basis in all these third-country markets than it is in the countries that are France's nearest neighbours.

In addition to the cyclical factors underlying periods of crisis, the structural trend towards imbalance between supply and demand in the world's agrifood markets is likely to continue for many years to come until the agricultural sectors of developing countries can progress sufficiently to meet the needs both of population growth and the shift in demand for quality towards higher value-added products as the standard of living of their populations rises. Although this imbalance mainly concerns the most basic products and the poorest population groups, it also affects agricultural commodities and may go on to have long-term effects on processed products. These fundamental trends raise the issue of the sustainability of agricultural production as well as questions regarding product processing, where an ability to innovate can generate solutions, on condition that they are socially acceptable.

Given these markets showing long-term structural demand, France has real advantages in sectors where European competitiveness can be safeguarded through the forthcoming changes to the Common Agricultural Policy. The high levels of uncertainty still surrounding the long-awaited results of the Doha Round of WTO negotiations lead to unsatisfactory forward visibility on possible future developments. In any event, it is necessary for private enterprise to be able to respond to global demand that is more diversified than their traditional markets – in France, Europe and developed third countries – in order to retain market share despite the increasing number of competitor nations and the competitiveness of their agrifood industries.

The world agrifood market has been expanding since 2000 at an average annual rate of 5%, expressed in euros (8% in USD). Over the same period, growth in French exports has been at half that level and France's share of global markets has fallen by around two points. France has kept its overall position in the nineteen biggest world markets and the decline is therefore greater in the other markets. It is more marked in the big European markets (down 1.4%) than in the main third countries, where its position has generally remained firm over the period 2000-2008.

The agrifood industry's capacity for innovation, continual adjustment of the fit between supply and demand and efforts to seek or develop new markets outside the EU, plus the defence of market share inside Europe, in sectors capable of sustaining competitive positions, are all absolutely essential if agrifood exports are to recover their driving role.



## France's changing market share between 2000 and 2006 in the 19 biggest world markets for agrifood imports (exc. France)

(Source: Customs; Treatment: UbiFrance, Ministry of food, agriculture and fisheries)

	Total agrifood imports	Average annual growth	French market share	French market share	Gain (+) or loss (-) in market share
	2008 € billions	2008/ 2000 %	2000 %	2008 %	2008-2000 %
Germany	58,9	4,9	12,0	10,2	-1,8
United Kingdom	42,3	5,0	12,5	11,4	-1,1
Netherlands	35,9	5,3	8,7	9,0	+0,3
Italy	32,6	5,1	18,4	15,5	-2,9
Belgium	26,9	7,4	24,6	24,9	+0,3
Spain	25,9	7,9	17,1	15,6	-1,5
Denmark	10,2	7,1	7,2	4,5	-2,7
Sweden	9,7	11,8	4,1	4,2	+0,1
Poland	9,7	22,1	3,5	4,5	+1,0
Austria	9,1	11,7	5,3	3,6	-1,6
<b>Total for the 10 biggest EU markets</b>	<b>262,9</b>	<b>6,5</b>	<b>13,4</b>	<b>12,0</b>	<b>-1,4</b>
United States	68,3	3,3	3,8	4,0	+0,2
Japan	46,2	-1,9	2,5	2,7	+0,2
China	34,3	28,7	2,8	2,4	-0,4
Russia	22,8	25,0	3,7	3,4	-0,3
Canada	18,6	4,6	2,8	2,8	=
Mexico	15,5	7,3	0,9	0,7	-0,2
South Korea	13,7	7,0	1,5	1,6	+0,1
Hong Kong	12,6	2,5	2,2	2,1	-0,1
Switzerland	7,7	5,0	18,7	16,4	-2,3
<b>Total for the 9 biggest third-country markets</b>	<b>239,7</b>	<b>4,6</b>	<b>3,3</b>	<b>3,3</b>	<b>=</b>
<b>Total for the 19 biggest markets</b>	<b>502,6</b>	<b>5,5</b>	<b>8,3</b>	<b>7,9</b>	<b>-1,4</b>

THIS INFORMATION SUMMARY HAS BEEN PRODUCED BY THE TRADE AND PROMOTION OFFICE OF THE GENERAL DIRECTORATE FOR AGRICULTURAL, AGRIFOOD AND REGIONAL POLICIES.

# Food safety

## Background

The European Union has adopted a very strict regulatory framework – the “Hygiene Package” – in order to arrive at a high level of safety for health in its agrifood production. Taken as a whole, the system helps ensure a high level of protection for the consumer while at the same time taking our gastronomic heritage into account. The numerous checks carried out on each of the links of the food supply chain enable potential dangers to be detected and to manage alerts. Given the priority importance of the issue of public health, France has for many years applied a proactive approach to health safety policy, to which it devotes major resources.

The core of this regulatory framework is the “Hygiene Package”, with the following focuses :

- ▶ Farmers and growers ;
- ▶ Manufacturers of livestock feedstuffs (farm animals and pets) ;
- ▶ Agrifood companies ;
- ▶ Storage companies ;
- ▶ Transport companies ;
- ▶ Self-employed tradespeople ;
- ▶ Distributors ;
- ▶ Food-related trades ;
- ▶ Institutional catering ;
- ▶ Importers and exporters ;
- ▶ Wholesale traders ; ...

The implementation of the “Hygiene Package” has involved changes in the checks carried out in the field by the officials of the Ministry of food, agriculture and fisheries. They must assess the fit between the means used by industry professionals to control production and the risks generated by that production. In order to harmonise inspections and ensure their reliability, detailed instructions are formalised in inspection procedure documents (inspection guides, handbooks and report templates). In 2009, a scheduling system for inspections based on risk analysis was put in place for certain categories of premises.

Some 2,820 officials from the Ministry of food, agriculture and fisheries in 103 DD(CS)PPs (directorates for the protection of the public in the French territorial départements) have the task of verifying the safety of food products for health. Added to this are checks carried out at the 33 border inspection posts that process imports from non-EU countries. All these verifications are conducted on the basis not only of inspections but also laboratory tests carried out under surveillance and control plans or action taken following incidents (cases of food poisoning, management of national health alerts, etc.) or crises.

Some 72,000 food safety checks of this kind were carried out in 2008.

## Key issues

In the face of the many crises that have affected the agrifood sector (“Mad Cow Disease”, dioxin, and others), the European Union has completed its harmonisation of a set of regulations – the so-called “Hygiene Package” – with the aim of assuring the safety of human food and animal feed. The goal is to arrive at a high level of consumer protection while at the same time taking into account the economic (free movement of products) and cultural issues. The origin of this system is the White Paper issued by the Commission on food safety. All of its provisions have been applicable since January 2006 to all Member States and to any third country wishing to export to the European Union.

Every operator in the food supply chain is involved in achieving the goal of maintaining control over each of the links in that chain “from farm to plate” or “from stable to table”.

Every establishment must be registered with the competent official department or agency, the aim being to improve knowledge of premises and inspection scheduling. For example, the relevant body for an establishment handling products of animal origin would be the directorate for the protection of the public in the French territorial département.

In addition, certain activities are subject to prior Community approval: these relate to establishments placing products of animal origin on the market. Such approval confers an entitlement to market the products throughout the territory of the European Union.

All sector professionals are accountable for the products they place on the market. The new regulations embody a duty to achieve defined outcomes in addition to the “best efforts” obligations already incumbent on professional operators.

Professionals must therefore select and apply suitable measures to make wholesome, safe products, and they are answerable for what they produce.

Where products are not compliant, the operator must take rapid steps to halt the marketing (= withdrawal), or even the consumption (= recall) of the products to avoid any crisis arising.

The direct corollary of this is that these regulations enable adjustment to match all types of production in accordance with the volume involved, the traditional or industrial nature of the manufacturing and the relevant sales channel. The concept here is one of “flexibility”. This point is fundamentally important for the preservation of our culinary heritage, our cultural diversity and specialised craft production.

Official departments and agencies also have obligations in connection with their assigned surveillance and inspection tasks relating to agrifood operators. European regulations provide official departments and agencies, represented by the DGAL (Direction

générale de l'alimentation / General Food Directorate), the DGCCRF (Direction générale de la concurrence, de la consommation et de la répression des fraudes / General Directorate for Competition Policy, Consumer Affairs and Fraud Control) and the DGS (Direction générale de la santé / General Health Directorate), with a detailed framework for scheduling inspections according to the nature of the activities of the professionals involved. The intensity of official checks and tests is proportionate to the risks generated by individual types of production, and the degree to which a given establishment's premises are hygienic and its processes under control. The regulations also help harmonise inspection methods and reports, with a view to ensuring that they are clearer and fairer for those subject to them.

## Tools

The tools are of two kinds – either imposed by regulation or voluntary. EU regulatory controls in force since 1 January 2006 comprise six core regulations and two directives (one for the abrogation of the older directives, the other laying down health control rules). These Community provisions have moved on from national frameworks (official decrees and orders derived from the transposition of European directives into domestic law) toward direct enforcement of European regulations (without transposition into French domestic law).

These texts are supplemented by:

- ▶ Implementing regulations specifying the practical arrangements for the application of certain measures, and in particular a regulation laying down microbiological criteria;
- ▶ Interpretative documents clarifying certain points (e.g. risk analysis, critical points for hazard control– HACCP; cf. glossary);
- ▶ National provisions in certain specific cases.

The European regulatory measures in the “Hygiene Package” specify the organisational means industry professionals must put in place to ensure the safety of the products they offer for sale: good hygiene practices, HACCP (a working method based on an analysis of the risks and enabling health hazards to be kept under control), traceability and procedures for the management of product withdrawal or recall. Some of these procedures are laid down in national implementing documents (e.g. the French Code of Rural Law, official orders). Those working in the industry can rely on guides to good hygiene practice (GGHP) setting out detailed risk control measures appropriate for the sector concerned. In any event, they are bound to train their staff to comply with good hygiene practice and specifically in the application of HACCP principles.

Industry standards such as ISO international standards make it possible to achieve overall coherence in the health protection system by improving food safety management. All of these approaches are part of the broader context of the development of quality assurance in the private sector.

## Glossary

**Health safety** : this concept covers the need to supply food that presents no risk to human health, aiming to provide an assurance that food will cause no harm to the consumer when prepared and/or consumed as intended.

**Hazard Analysis** : an approach involving the collection and assessment of data regarding risks and the conditions leading to their presence. This enables hazards to be defined which are of significant importance with regard to food safety and which need to be taken into account in the HACCP plan.

**Guide to Good Hygiene Practice (GGHP)** : a reference document for voluntary application drawn up by the professionals in a given branch of the industry and validated by the relevant official authorities (at national or EU level as appropriate). These documents are particularly useful for SMEs in that they enable market operators to pool their efforts for the initial stages of a HACCP-based approach, developing concrete means for risk control suited to their own corporate structure. Such documents bring together recommendations specific to the food industry sector to which they relate.

**Health Control Plan** : this sets out the steps taken by a facility to assure hygiene and safety for health in its production with regard to biological, physical and chemical hazards. It provides for all the measures needed to implement the plan and proof of the due implementation of :

- Good hygiene practice and prerequisites ;
- The HACCP plan based on the seven principles set out in Regulation (EC) 852/2004 ;
- Management procedures for non-compliant products (withdrawal/recall procedures) ;
- Procedures for the implementation of a traceability system.

**Good Hygiene Practice (GHP)** : GHP documents cover the whole range of operations designed to ensure proper hygiene, that is to say the safety and wholesomeness of foodstuffs. They include operations whose consequences for the finished product are not always measurable.

**HACCP (Hazard Analysis Critical Control Point)** : a system aimed at controlling significant risks relating to the safety of foodstuffs. It is based on the fact that risk control measures have measurable effects on the finished product. Its deployment is based on seven principles, the first of which is an analysis of the hazards.

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## Useful links

- **Risk assessment organisations :**
  - > **at EU level :** the website of the European Food Safety Authority : [www.efsa.europa.eu](http://www.efsa.europa.eu)
  - > **at national level :** French Agency for food, environmental and occupational health safety : [www.afssa.fr](http://www.afssa.fr)
- **Risk management organisations :**
  - > **at EU level :** The General Directorate for Health and Consumer Protection : [ec.europa.eu](http://ec.europa.eu)
  - > **at national level :** the French General Food Directorate : [agriculture.gouv.fr](http://agriculture.gouv.fr)
  - > for further information, please contact your DD(CS)PP (departmental directorate for the protection of the public) : [agriculture.gouv.fr/services-deconcentres](http://agriculture.gouv.fr/services-deconcentres)
- The French General Directorate for Competition Policy, Consumer Affairs and Fraud Control : [www.dgccrf.bercy.gouv.fr](http://www.dgccrf.bercy.gouv.fr)
- The French General Health Directorate : [www.sante-sports.gouv.fr](http://www.sante-sports.gouv.fr)
- Website area devoted to the Hygiene Package : [agriculture.gouv.fr/le-paquet-hygiene](http://agriculture.gouv.fr/le-paquet-hygiene)
- Website devoted to the French system for food health protection, intended for those in the industry wishing to export or import French products : [securitealiments.agriculture.gouv.fr](http://securitealiments.agriculture.gouv.fr)
- Reports and opinions issued by the French National Food Council : [agriculture.gouv.fr](http://agriculture.gouv.fr)
- COPEIAA study of global food security to 2020-2030 (in French) : [agriculture.gouv.fr](http://agriculture.gouv.fr)
- A website containing the texts of instructions given to government departments and agencies : [www.circulaires.gouv.fr](http://www.circulaires.gouv.fr)

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## Relevant regulations

- **Regulation (EC) 178/2002 of the European Parliament and of the Council of 28 January 2002** laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety (OJEC 01/02/2002).
- **Regulation (EC) 852/2004 of the European Parliament and of the Council of 29 April 2004** on the hygiene of foodstuffs (OJEU 30/04/2004).
- **Regulation (EC) 853/2004 of the European Parliament and of the Council of 29 April 2004** laying down specific hygiene rules for food of animal origin (OJEU 30/04/2004).
- **Regulation (EC) 854/2004 of the European Parliament and of the Council of 29 April 2004** laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption (OJEU 30/04/2004).
- **Regulation (EC) 882/2004 of the European Parliament and of the Council of 29 April 2004** on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules. Corrigendum of 28 May 2004 (OJEU 28/05/2004).
- **The official order of 18 December 2009** concerning health rules applicable to products of animal origin and foodstuffs containing such products (Official Journal of the French Republic 29/12/2009).
- **The official order of 21 December 2009** concerning health rules applicable to activities for the retail sale, storage and transportation of products of animal origin and foodstuffs containing such products (Official Journal of the French Republic 31/12/2009).

# Retail distribution

## Reform of commercial relations between suppliers and distributors: the time has come for an assessment of the results achieved by the new law for the modernisation of the French economy

The retail food sector is still dominated by supermarkets and hypermarkets, which hold nearly 70% of this market. They have withstood effectively the inroads of hard discount stores.

In 2007, according to INSEE, the French national statistics office, households made 67.5% of their food-related purchases in hypermarkets (stores with floor areas exceeding 2,500 sq. m.) or supermarkets (over 400 sq. m.). So-called “hard discount” stores are not listed as such, but they may have sales areas of less than 400 sq. m. The market share for “hard discount” was estimated at 13.7% in 2008 (source: *Distripédie, TNSworldpanel*); it is dominated by six chains.

Consumer purchases in stores mainly selling food total € 171 billion, or € 100 billion for foodstuffs alone (excluding consumer spending in

### The food product market (exc. tobacco) in %

Source: retail trade accounts, INSEE

	2005	2006	2007
Large grocery stores	67,4	67,1	67,5
dont : supermarkets	33,3	32,8	33,1
hypermarkets	33	32,8	33
Specialist stores and self-employed specialist retailers	17,1	16,8	16,7
Small grocery stores	8,5	8,6	8,3

commercial and institutional catering outlets).

Super- and hypermarkets' share of food sales, after a period of steady expansion, has now stabilised. The existing stock of such stores has remained the same overall, but the number of hypermarkets predominantly selling food began to rise again in 2008 (up by 27), and stands at 1,459 stores offering 8,274 sq. m. of sales area (source: Ministry of the Economy; DGCIIS). Expansion of hard discount stores is currently at a standstill (-0.2% in 2009).

In 2008, small and medium enterprises (SMEs) accounted for 22% of sales revenue in retail chains, 93% of suppliers and 28% of product references, whereas corporate groups represented 50% of total sales revenue, 15% of suppliers 48% of listed products (source: RIA).

Distributor own brands (DOBs) generated 28% of retail sales. Whereas 90% of all DOBs were manufactured in 1999 by SMEs with fewer than 500 employees (by numbers of listed products), of which 70% were French firms, this percentage declined to 80% in 2008, of which 57% were French. This trend reflects the expansion of the market share of corporate groups as suppliers of DOB products. Also, the average number of listed DOB products is steadily rising.

### Market shares of some major food retail chains as of end December 2009

Source: *Les Echos*

Leclerc	16,9%	(+ 0,7%)
Carrefour	13%	(- 0,1%)
Intermarché	12%	(+ 0,2%)
Système U	9,1%	(+ 0,4%)
Auchan	8,6%	(=)
Champion	8,4%	(+ 0,4%)
Hard Discount	14,1%	(- 0,2%)

## The liberalisation of commercial relations and the reduction of listing fees

Relations between agrifood firms and the major retail chains are characterised by recurrent periods of tension, with the authorities intervening periodically to restore a fair balance between the contracting parties.

The Galland law of 1 July 1996 clarified the control of practices involving loss-leader sales by defining the permitted scope of the “retailer’s mark-up”<sup>1</sup>. “Commercial cooperation” services<sup>2</sup> then developed. “Listing fees” relating to such “commercial cooperation” increased. Until 2005, listing fees could not be passed on in the price charged to the consumer.

“Listing fees” continued to grow, doubling over the period 1996-2004. In the retail food sector they stood at an average of over 33% of the price paid by the consumer.

The expansion of “listing fees” helped fuel a rise in the prices charged to consumers and the rapid development of “hard discount”, as well as intensifying the competition on range-entry products between super- and hypermarket chains.

<sup>(1)</sup> Mark-up : the margin determined by business negotiations between supplier and retailer concerning the sale of products on the basis of the general terms of sale. The effective purchase price is the price invoiced.

<sup>(2)</sup> Listing fees and commercial cooperation services : remuneration under contracts providing for specific services to be rendered by the retailer (e.g. promotional operations, catalogues, aisle-end displays). It is only recently that the terms of such “commercial cooperation” contracts could be legally passed on in the selling price.

## The results to date of the law to modernise the French economy of June 2010

An overall assessment of the implementation of the modernisation law was tabled in the Senate at the end of 2009 and in the National Assembly early in 2010.

### Efforts to reduce prices by liberalising price terms

The law has made a substantial portion of the listing fees part of the unit price for a product. As a direct consequence, store prices for branded products, on which listing fees are highest, have been reduced for consumers.

The law also makes the general terms of sale negotiable, thus allowing price-based discrimination between retailer customers in the context of an overall negotiation with each commercial partner, the aim being to encourage competition between retailers and lower prices for consumers.

Payment times have been reduced to 60 days end of month except for perishable foodstuffs, which are already subject to a more favourable legal regime (20 or 30 days).

In addition, the law for the modernisation of the French economy provides for the facilitation of development of competition downstream in the distribution sector, by customer catchment area, on the basis of a reform of the criteria applied by the CDECs (*Commissions départementales d'équipement commercial* / Departmental boards for retail infrastructure) responsible for the issuance of permits for supermarkets and hypermarkets.

The Minister of State for Commerce, Craft Trades, Small and Medium-sized Enterprises, Tourism and Services also published in June 2010 a general assessment of the results of commercial negotiations in the retail chain sector in 2010. This overview highlights the undeniable achievement of the objective of a reduction of the listing fees charged: these fell from an average of 32% in 2008 to 11% in 2010 (provisional figure).

However, the impact on prices of this reduction is difficult to evaluate.

The shortening of payment times is also positive, with an average reduction of 11 days in customer credit. Nevertheless, this reduction had less impact in the agrifood sector due to the prevalence of payment times regulated by the terms applicable to perishable foodstuffs, for which payment has been due at 30 days since 1992. Similarly, one of the objectives of the modernisation law was to stimulate competition between retailers in order to lower prices, by liberalising the town planning rules applicable to retail outlets, and so far this has not generated any substantive effect given the delay in reforming the commercial property planning rules and the renewal of the rules for the liberalisation of the siting of new retail outlets.

The observations of the modernisation law inspection force set up in the DGCCRF (*Direction générale de la concurrence, de la consommation et de la répression des fraudes* / General Directorate for Competition Policy, Consumer Affairs and Fraud Control) in June 2009 point to a number of business practices of debatable acceptability. Note has thus been taken of several practices on which a watch is to be kept, such as the unwarranted delisting of products, margin guarantees and practices linked to new promotional schemes.

Lastly, the work of the committee for the examination of commercial practices has made it possible, on the basis of a shared expert evaluation, to define a consensus between market operators for the clarification and enforcement of rules of good conduct in retail business.

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#### Useful links

- [www.pme.gouv.fr](http://www.pme.gouv.fr)
- [www.ilec.asso.fr](http://www.ilec.asso.fr)
- [www.fcd.asso.fr](http://www.fcd.asso.fr)
- [www.pratiques-commerciales.minefi.gouv.fr](http://www.pratiques-commerciales.minefi.gouv.fr)
- [www.modernisationeconomie.fr](http://www.modernisationeconomie.fr)



# Environmental Issues

## Background: taking sustainable development into account in France and Europe

Sustainable development, as defined in 1987 in the Brundtland Report<sup>1</sup> is development that is economically viable, ecologically sustainable, socially fair, and which meets present needs without compromising the ability of future generations to meet theirs.

In June 2001, at the European Council meeting in Gothenburg, the European Union adopted a European strategy on sustainable development to supplement the strategy for economic and social renewal adopted the previous year in Lisbon, adding a third dimension: the environment.

On 3 June 2003, France made a firm decision to go down this road, publishing the first national strategy on sustainable development. In 2004 and 2005, under the aegis of the French national planning commission (*Commissariat au Plan*) and DATAR (*Délégation à l'aménagement du territoire et à l'action régionale* / Delegation for regional development and action), the government clarified the broad lines of sustainable development by identifying a range of goals and issues connected with the three “pillars” (economic, social and environmental) of sustainable development and highlighting the interactions between them. Civil society was associated with this effort via the CNDD (*Conseil National du Développement Durable* / National council for sustainable development), a body set up in January 2003. On 1 March 2005, in the Charter for the Environment (Article 6), France made sustainable development a goal enshrined in the country's Constitution.

In June 2006, the European Council revised the European Union's Sustainable Development Strategy (EU SDS), organising it around seven key challenges: climate change and clean energy; sustainable transport; sustainable consumption and production; conservation and management of natural resources; public health; social inclusion, demography and migration; global poverty and sustainable development challenges.

In October 2007, the Grenelle consultation process on the environment gathered together, at the invitation of the President of the Republic, representatives from central and local government, NGOs and economic actors (employees and employers). This helped give France a ground-breaking role in protection of the environment and sustainable development.

In the wake of the Grenelle consultation process, over the last two years a number of action plans have been set in train with potential impacts on the agrifood sector. The following can be cited as examples :

<sup>(1)</sup> BRUNDTLAND G.H. et al. (1987). *Notre Avenir à tous [Our Common Future]*. United Nations Environment and Development Commission (UNEDC), published in France by the Editions du Fleuve.

- ▶ The “Ecophyto 2018 plan” for a 50% reduction in the use of plant protection products by 2018, if possible,
- ▶ The “Organic Farming – Horizon 2012” plan aimed at trebling the land area farmed organically by 2012 and reaching 20% by 2020,
- ▶ The farm energy performance plan, targeting a figure of 30% low-energy dependence holdings by 2013,
- ▶ The environmental farm certification scheme, which should include half of all agricultural holdings by 2012.

In addition to this, the CNDDGE (*Comité National du Développement Durable et du Grenelle Environnement* / National committee for sustainable development and the Grenelle consultation process on the environment) has been set up as the successor to the monitoring committee, of which it takes over the core structure based around five colleges: central government, elected representatives, representatives of private enterprise, trade unions, associations and foundations for the protection of the environment.

The purpose of this committee, following the adoption of the law embodying the national commitment to the environment<sup>2</sup> (the so-called “Grenelle 2” statute), is to establish milestones in the implementation of the Grenelle process undertakings and to define new priorities.

Secretarial services for CNDDGE are provided by the Department of the Commissioner-General for Sustainable Development.

## Key issues

The agrifood sector's contribution to the implementation of sustainable modes of production will be crucial. Moreover, apart from its direct contribution to sustainable development, the sector can also exert influence :

- ▶ downstream, by promoting sustainable modes of consumption, insofar as food takes up approximately 12% to 17% of the budget of France's households ;
- ▶ upstream, by promoting sustainable farming practices through the highlighting of existing methods for adding value (such as organic farming): this is so because most agricultural products are processed by agrifood companies before they reach the market.

Against this backdrop, the agrifood sector faces very many challenges, among which the following can be singled out :

- ▶ contributing to global food balances ;
- ▶ ensuring the safety for health and the quality of the foodstuffs it produces ;
- ▶ economical use of energy at all points in production ;
- ▶ combating climate change and limiting GHG emissions ;
- ▶ managing product life cycles as a whole (putting by-products to use, recycling, prevention of waste at source, etc.) ;

<sup>(2)</sup> French law 2010-788 of 12 July 2010



- ▶ preventing pollution caused by the sector itself and, upstream, by farming practices ;
- ▶ contributing to the marketing of intermediate bio-based chemicals, these being renewable resources ;
- ▶ contributing to the production of renewable energy.

To address these issues, the agrifood sector will need to be innovative, adapt its production technology and reach out to new customers in downstream industries. Those challenges, which are often seen as additional constraints, can be transformed into opportunities for the industry. The aim must be to switch from a purely regulatory approach to the mobilisation and empowerment of all actors. France's so-called "LRE" law on environmental liability<sup>3</sup> is the best example of this dynamic.

Added to regulatory controls, economic instruments can guide markets towards due consideration of environmental issues in making production choices. In the end, what is needed is to change behaviour: sustainable consumption is a powerful engine for the promotion of sustainable modes of production. If they are to claim recognition of sustainable methods of production by the market, manufacturers must necessarily opt for high levels of transparency: traceability, environmental product labelling, adherence to standards (ISO 14001, NF EN 16001, EMAS, environmental certification for agricultural holdings), communication on the undertakings given by companies on environmental protection and the results achieved, life cycle analyses, and so on.

## Means

This section describes in greater detail the various means – regulatory and economic – applied by France in addressing the issues described above.

### Regulatory instruments :

#### > FRENCH REGULATIONS FOR ENVIRONMENTALLY CLASSIFIED INDUSTRIAL FACILITIES (ICPE)

Industrial production processes still account for a large percentage of overall pollution levels in Europe (in the case of pollutants such as greenhouse gases, acid-causing discharges, volatile organic compounds and waste) and it is essential to continue to reduce the volumes of these.

The European Union has laid down a series of common rules for the granting of operating permits for industrial installations. These rules are set out in the IPPC directive, no. 96-61, 1996. ("IPPC" stands for Integrated Pollution Prevention and Control; an equivalent French acronym exists - "PRIP" which stands for *Prévention et Réduction Intégrées de la Pollution* / Integrated pollution prevention and reduction). The aim of this directive, which came into force in October 2007, is to reduce the various sources of pollution caused by human activities in the European Union. Above a defined level of capacity, all industrial facilities covered by Annex I of the directive, including treatment and processing installations for the manufacture of food products using animal or vegetable raw materials, must obtain a permit from the authorities of the Member State in which they are located. Issuance of this permit is a condition for the start-

up of operations. Permits are granted on the basis of proven adherence to BATs, "Best Available Techniques", which guarantee an installation's environmental performance, particularly with regard to discharges into air, water and soil, waste generation, utilisation of raw materials, energy efficiency and noise, in addition to accident prevention and risk management.

This directive has been transposed into French law in the "ICPE" regulations (ICPE = *Installations Classées pour la Protection de l'Environnement* / Installations subject to environmental protection classification) which lay down conditions to be met for the authorisation of such installations or their declaration, according to their productive capacity, along with technical requirements applicable to each type of activity. Particular attention is paid to slaughterhouses, dairies, facilities for the preparation and conservation of food products of animal or plant origin, those using animal by-products and, lastly, distilleries, sugar plants and starch mills.

Ordinance 2009-663 of 11 June 2009 on registration of certain ICPE facilities is intended to provide a half-way house between the current authorisation and declaration regimes. The registration regime is intended to shorten by half the periods required for permit issuance and to simplify the application dossiers to be submitted by companies. By reducing the administrative burden, this ordinance ensures improved protection of the environment by allowing the efforts of manufacturing companies and government to be focused on preventing the most important sources of pollution and risk. The resources for inspection of ICPE installations made available by this ordinance serve to enhance on-site checks and public information. The registration regime applies only to simple, standardised installations not located in environmentally sensitive areas. The definition of standardised requirements makes it possible to ensure that the environment is protected in such cases.

This new regime has already been put in place in several other European countries and covers approximately a quarter of all installations currently requiring prefectural approval. Local government and the public are consulted using modern methods based on information technology. After reviewing an application, the Prefect still has the option of refusing to accept registration, and may stipulate additional requirements, if local considerations make this necessary, or request the holding of a public enquiry if there are particular environmental concerns.

#### > THE REACH DIRECTIVE

On 18 December 2006, the European Parliament and the Council adopted regulation 1907/2006 on the registration, evaluation and authorisation of chemicals, and restrictions applicable to them, and setting up a European chemicals agency. Since 1 June 2007, the date

<sup>(3)</sup> French law 2008-757 of 1 August 2008, which is a transposition of Directive 2004/35/EC on environmental liability

of entry into force of this regulation, the so-called REACH (Registration, Evaluation and Authorisation of CHemicals) system has been rationalising and improving the European Union's former framework for regulating chemicals

The main aims of REACH are to provide better protection for human health and the environment against possible risks from chemicals, to promote alternative testing methods, to allow free movement of chemicals throughout the internal market and to strengthen competitiveness and innovation.

REACH makes industry responsible for assessing and managing the risks associated with chemicals and for providing satisfactory safety information to users. Alongside this, the European Union may take further steps with respect to extremely hazardous substances when additional measures at EU level are seen to be required.

Firms making or importing more than one metric tonne of a chemical yearly are bound to register with the European Chemicals Agency (ECHA). This system of permits for chemicals is intended to ensure that their effects are controlled and that hazardous materials will be gradually replaced by alternative substances or technologies where this is technically and economically viable.

Member States can also impose restrictions on the manufacture, use and marketing of substances that present unacceptable risks for human health or the environment. Agrifood industries that use chemicals are covered by this regulation and are therefore subject to the requirement to register and to evaluate substances produced or imported.

In the context of REACH, the production of bio-based chemicals is identified as one of the methods for bringing to market new substances that offer less environmental risk.

Since "A Lead Market Initiative For Europe" (2007), the Commission has pursued and expanded its action in this domain, publishing a further communication entitled "EU Strategy for Smart, Sustainable and Inclusive Growth". This document, which is likely to be adopted by the European Council in the second half of 2010, will propose, under the Flagship Initiative "Innovation Union", the building of a genuine bio-economy by 2020.

Alongside this, the Commission memorandum for a bio-sourced economy put forward by the Netherlands, Germany and France was tabled in Brussels on 12 May 2010.

Taken as a whole, these actions demonstrate the importance of bio-based chemicals, a field in which the agrifood industries already have high levels of expertise – especially where fats and oils and chemical processes involving sugar are concerned.

#### > ONGOING CHANGES IN REFRIGERANT REGULATIONS

In many industrial processes refrigeration is a key function and a major energy and cost item. The agrifood sector is the leading consumer of refrigeration. Every technology and every degree of cooling is used throughout the cold chain, involving temperatures ranging from very low (down to  $-40^{\circ}\text{C}$ ) to above-zero ( $+8^{\circ}\text{C}$ )

A refrigerant is a fluid with the capacity to absorb heat when it changes phase from liquid to gas and to transfer it in the circuits of refrigeration, air conditioning and heat pump systems. Refrigerants based on chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs) and hydrofluorocarbons (HFCs) are among the most frequently used. There are also so-called "natural" refrigerants such as hydrocarbons (HC), carbon dioxide ( $\text{CO}_2$ ) and ammonia ( $\text{NH}_3$ ).

CFCs, HCFCs and HFCs are stable, relatively long-lived compounds. When released into the atmosphere they are highly effective contributors to the greenhouse effect and therefore to climate change. In addition, CFCs and HCFCs destroy the ozone layer. Faced with these risks for the planetary environment, the international community came together to produce the Montreal Protocol on Substances That Deplete the Ozone Layer (1987) the aim of which was to make a gradual reduction in the quantities of CFCs and HCFCs produced and ultimately to phase them out completely. The Kyoto Protocol (1997) imposes limits on emissions of HFCs but no timetable for their elimination.

The measures required under these two protocols are implemented by European Regulation 2037/2000 on Substances that Deplete the Ozone Layer and Regulation 842/2006 on Certain Fluorinated Greenhouse Gases. Articles R.543-75 et seq. of the French code of environmental law set out the regulatory scheme controlling the distribution and recovery of refrigerants in compliance with the EU requirements contained in these two regulations.

The use of CFC-based refrigerants was banned in the European Union as long ago as 2000. Since 1 January 2010, it is also forbidden to produce, store or sell newly produced HCFCs (including R22). Only recycled HCFC refrigerants continue to be authorised until 2015, when their use will be subject to a total ban. In total, this concerns half of all refrigeration systems in use in France's food industries.

A number of alternative solutions are possible (e.g. HFCs,  $\text{CO}_2$ ,  $\text{NH}_3$ , hydrocarbons), but changes in refrigerant typically involve major logistical effort: modifications in systems, compressors, piping, and so on. When upgrading is envisaged, each installation therefore needs to be analysed on a case-by-case basis in terms of the technical demands (processes, flow rates and desired cooling temperatures) and economic constraints (acquisition and maintenance costs, energy bills), plus regulatory requirements.

## Incentives, economic tools :

### > FRENCH NAP FOR GREENHOUSE GAS ALLOWANCES (PNAQ)

The agrifood sector is a participant in the combat against climate change through the European Trading Scheme (ETS) in greenhouse gas allowances. This is aimed initially at CO<sub>2</sub> emissions in the industries that are the biggest GHG emitters (paper, glass, cement, energy and refining) along with classified combustion plants with an equivalent capacity greater than 20MW. This covers some 10,000 installations in the European Union of 25, and between 45% and 50% of all industrial CO<sub>2</sub> emissions. In France, 142 agrifood facilities are involved. These are in five main agrifood sub-sectors: sugar, yeast, biofuels, starch products and dairy products.

The way in which the scheme works is as follows: Member States set emissions reduction targets for a given period for each installation concerned, in a National Allocation Plan (NAP) for CO<sub>2</sub> emissions allowances<sup>4</sup> previously validated by the Commission. At the beginning of the period, they allocate a given quantity of allowances (each allowance corresponds to the emission of one tonne of carbon dioxide equivalent) to the operators of facilities on the basis of the emissions generated by the relevant activities using fossil fuels. At the end of each period, operators must return to the national government as many allowances as they have emitted. If they do not, they will be bound either to reduce their emissions or to purchase extra allowances. Conversely, if their efforts to control their emissions lead to their holding excess allowances, they can offer these for sale.

France submitted its Phase II NAP (2008-2012) to the Commission in December 2006. The overall envelope for the period totals 132.8 MtCO<sub>2</sub>/year of which 5.94 MtCO<sub>2</sub>/year relate to agroindustry. This represents a reduction of approximately 17% against the previous NAP (-1.21 MtCO<sub>2</sub>/year for the agrifood sector). The European Commission approved France's Phase II NAP on 27 March 2007. From 2013 on, the EU Trading System for GHG emission allowances is to be extended and the rules will become more restrictive, especially with respect to the terms for allocation of allowances.

The limit values defining "small facilities" not subject to the NAP have been revised upwards. In the current system, any installation exceeding 20MW (applicable to combustion plants) is covered by the ETS and therefore by the NAP. Directive 2009/29/EC amends this definition and imposes two concomitant conditions: a minimum emissions threshold of 25,000 tonnes of CO<sub>2</sub> equivalent per year and a rated thermal input below 35 MW, excluding emissions from biomass.

<sup>(4)</sup> A document submitted by Member States to the European Commission describing the method for the allocation of emissions allowances and the quantity allocated initially to each installation covered by the scheme for the periods 2005-2007 (Phase I NAP), and 2008-2012 (Phase II NAP).

In France, lucerne and beet pulp dehydrators were not covered by the NAP in the past, but due to the harmonisation of the definition of "combustion units" across the EU, these industrial activities will fall within the remit of the ETS from 2013, with the exception of those classed as small installations.

Currently, all sectors receive a free allocation of allowances defined in the NAP, which lists the relevant installations. This system will change in 2013. The aim is to move to auction-based allocation to enhance the scheme's efficiency, according to the Commission. However, in order to prevent risks of "carbon leakage"<sup>5</sup>, certain sectors will continue to receive free allocations on the basis of criteria that remain to be defined. Of the 164 sectors listed in Annex I of the Commission's decision of 24 December 2009, 14 relate to agrifood. The foreseeable loss of competitiveness against international competition fully justifies this classification. A clause provides for review every five years.

Following consultation of the relevant social partners, at the end of July 2010 the Commission presented a report accompanied by proposals to the European Parliament and the Council to assess whether, in light of the results of international negotiations and the scale of reductions in GHG emissions deriving therefrom, certain highly energy-intensive sectors or sub-sectors of industry are exposed to major risks of carbon leakage.

### > ENERGY SAVINGS AND TOOLS FOR SUPPORTING RENEWABLE ENERGY PRODUCTION

With 5.2 million toe (tonnes oil equivalent), the agrifood industries accounted in 2008 for over 12% of all energy consumption by industry.

A specific characteristic of the agrifood sector is that its particular array of energy sources is very largely dominated by natural gas (approximately 45%) and involves less consumption of fuel oil and coal. Apart from this, the share of electricity (approximately 30%) in its energy consumption is similar to the pattern generally seen in industry.

The various agrifood subsectors show energy consumption levels that vary widely between enterprises, from over 60,000 toe per site in starch production to 300 toe per site in the fish industry.

Every sector of the French economy is being called upon to contribute to the achievement of the targets set over the last several years in action plans directed at enhancing the EU's energy efficiency. In late 2008, the Climate & Energy Package laid down a threefold target for 2020: a 20% reduction in greenhouse gas emissions, a 20% reduction in energy consumption and 20% of energy production to be from renewable sources (23% in France).

The first focus of effort is the limitation of energy consumption. The scope of this is vast, because quite apart from enterprises as such, it covers all the energy that needs to be taken into account for it to obtain its supplies, distribute its products and manage its waste. Within each enterprise, choice of process, how processes are conducted and maintained, circulation of air and hot/cold fluids

<sup>(5)</sup> The expression "carbon leakage" embraces two separate notions :

- > An increased risk of relocation of European GHG-emitting productive investments to third countries and their replacement by imports in order to avoid the constraints entailed by measures to combat climate change in Europe, the Emissions Trading Scheme in particular.
- > Risks of loss of competitiveness in certain sectors exposed to international competition need also to be considered.

inside buildings, organisational choices and workforce behaviour all influence energy requirements and choice of appropriate energy source.

Before any action is taken it is necessary to evaluate expenditure headings (costs, variability), identify actions and rank them in accordance with the technical options and investment payback time. It is recommended that the services of skilled diagnostic experts be called upon, and it is desirable for the “energy” dimension to be made an integral part of a more holistic approach to the management of inputs/products/waste in order to optimise the various solutions.

In order to limit dependence on fossil fuels and reduce greenhouse gas emissions, agrifood industries have responded strongly to the invitation to submit projects under the “Heat Biomass Energy Fund” programme (BCIA 2009) launched by the French environment agency ADEME. Indeed, over half of the projects selected in 2009 came from the agrifood sector. ADEME has repeated the call for projects in 2010 and a further invitation is likely in 2011.

Other agrifood sectors have preferred to respond to the call for proposals relating to electricity production using biomass (the so-called “CRE” tender process). A fourth call is likely to be made at the end of 2010 by the Energy Minister. In this context, the manufacturing company chooses to sell electricity and in most cases uses the heat in its own factory premises. The same procedure can be employed for more modest installations thanks to the price at which biomass-produced electricity is purchased.

Additionally, agrifood companies can promote, or be asked to contribute to methanisation projects (aid from the Ministry of food, agriculture and fisheries and/or ADEME), insofar as their waste constitutes useful material for agricultural methanisation projects.

#### FRANCE'S “GRAND LOAN”

In order to enhance their skills and remain competitive in the production of bio-based chemicals, agrifood companies can take up the various calls for proposals made under the auspices of the national Grand Loan, the purpose of which is to support investment for the future, and specifically the “demonstration of renewable energy production and green chemistry” programme managed by ADEME and the “health and biotechnology” programme driven by the French national research agency, ANR.

#### Useful links

- European Commission : [ec.europa.eu/environment](http://ec.europa.eu/environment)  
IPPC Directive (Integrated Pollution Prevention and Control); a French acronym also exists: PRIP – Prévention et Réduction Intégrées de la Pollution / Integrated pollution prevention and reduction) :  
[eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1996L0061:20060224:FR:PDF](http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1996L0061:20060224:FR:PDF)
- Ministry of Ecology, Energy, Sustainable Development and the Sea :  
[www.developpement-durable.gouv.fr](http://www.developpement-durable.gouv.fr)
- Interministerial Mission on the Greenhouse Effect :  
[www.developpement-durable.gouv.fr/-Effet-de-serre-et-changement-.html](http://www.developpement-durable.gouv.fr/-Effet-de-serre-et-changement-.html)
- Ministry of the Economy, Industry and Employment : [www.economie.gouv.fr](http://www.economie.gouv.fr)
- AGRESTE: Ministry of Agriculture farming statistics :  
[www.agreste.agriculture.gouv.fr](http://www.agreste.agriculture.gouv.fr)
- Expenditure in 2008 in the agrifood domain for the protection of the environment :  
[agreste.agriculture.gouv.fr/enquetes/environnement/depenses-pour-protger-l/](http://agreste.agriculture.gouv.fr/enquetes/environnement/depenses-pour-protger-l/)
- Regulations applicable to environmentally classified facilities in the agrifood sector : [installationsclassees.ecologie.gouv.fr/-Agroalimentaire-boissons-.html](http://installationsclassees.ecologie.gouv.fr/-Agroalimentaire-boissons-.html)
- The French environment agency, ADEME : [www.ademe.fr/fondschaleur](http://www.ademe.fr/fondschaleur)

THIS INFORMATION SUMMARY HAS BEEN PRODUCED BY THE OFFICE FOR ENVIRONMENTAL STRATEGY AND CLIMATE CHANGE, THE OFFICE FOR BIOMASS AND ENERGY AND THE OFFICE FOR THE AGRIFOOD INDUSTRIES AT THE GENERAL DIRECTORATE OF AGRICULTURAL, AGRIFOOD AND REGIONAL POLICIES.



# Official signs for the identification of product quality and origin

Official signs for the identification of product quality and origin provide a “guarantee” for consumers of quality, expertise, origin and region and are highly effective commercial tool for market operators. A quality policy is a key resource for ensuring the long-term viability of the rural economic fabric through sustainable development of regions and infrastructures in rural areas.

In this connection, quality and origin signs and labels are increasingly successful with market operators in the agricultural and food industries (almost half of all French farmers have committed to an official quality and origin labelling scheme and in 2009, such labels represented total sales revenue of €19 billion).

Signs and marks identifying product quality and origin are part and parcel of a more general system to add value to agricultural and food products and their clarity has been enhanced by the agricultural reform law of January 2006. Official methods of adding value to agricultural and food products fall into three quite separate categories :

- ▶ Signs identifying quality and origin (*Label Rouge* (red label), *Appellation d'Origine Contrôlée* or Protected Designation of Origin, Protected Geographical Indication, Traditional Speciality Guaranteed and Organic Farming ;
- ▶ Value-added statements (“mountain product”, “farmhouse product”, “local product” for French overseas communities) ;
- ▶ Schemes for certifying product compliance with standards.

This system is overseen by the Ministry of food, agriculture and fisheries, which defines policy in the area of food quality.

INAO (*Institut National de l'Origine et de la qualité* / National institute for product origins and quality), a public-sector body, is responsible for considering applications for official recognition of *Appellations d'Origine Contrôlées* (AOC), PGI, TSG and Label Rouge, monitors the rules governing organic farming and supervises the whole range of checks required by such signs; the Agence BIO, a public body answering to the Ministry, is charged with the development and promotion of organic farming.

## Signs for the identification of product quality and origin: a guarantee

### For the consumer

Each official quality and origin sign is associated with clear messages capable of being stated using a small number of key terms that resonate with consumer expectations :

- ▶ Superior quality: Label Rouge ;
- ▶ Quality linked to origin (a distinct geographical area or terroir) : *Appellation d'Origine Contrôlée* (AOC) and its European equivalent “Protected Designation of Origin” (PDO), plus the “Protected Geographical Indication” (PGI) ;
- ▶ Quality linked to defined traditions : Traditional Speciality Guaranteed (TSG) ;
- ▶ Quality linked to the environment : organic farming (French : Agriculture Biologique or AB).

A wide variety of food products bearing these signs are available to the consumer. There are for example 49 AOCs for milk e.g. Saint Nectaire, Roquefort, Comté), 41 for agrifood products (e.g. Corsican olive oil, Bresse chickens) and approximately 320 for wine (e.g. Champagne, Chablis, Bordeaux), in addition to 94 agrifood PGIs (e.g. Camargue rice, Agen prunes, Dauphiné ravioli, Bayonne ham), 2 PGIs for cider and approximately 150 for wine (e.g. Pays d'Oc), 518 Labels Rouges (for chicken, delicatessen meats, smoked salmon and many other items) and numerous products produced organically.

### For the protection of the name

INAO is charged with defending the various product designations and maintains a surveillance programme to prevent their misuse both in France and internationally.

INAO thus keeps watch on the filing of brand names and takes action immediately it becomes aware of an application for filing that involves a designation specific to an AOC, a PDO or a PGI, dealing either with the competent intellectual property agency or the applicant directly.

It also intervenes in the event of illicit exploitation of an existing product reputation or a risk that a designation of origin might lose its special character through improper use either in France or in other countries.

In addition, in order to ensure effective protection for the whole range of its quality production, the Ministry of food, agriculture and fisheries, along with the European Union, is militating for the creation of a legally binding register of geographical “wines and spirits” indications: the objective is to put a list in place with the World Trade Organisation in which every country can register its geographical indications. The other members of the WTO will then be bound to prevent any misuse of those indications unless they can provide formal proof that its signification is simply generic. France and the European Union are working to enhance this protection by seeking an extension for all agricultural products (e.g. cheese, delicatessen meats).



## An invaluable commercial tool for market operators based on three principles

The system of quality and origin signs is based on a joint commitment by government and industry (i.e. farmers, processors, distributors, among others) to guarantee consumers food of high quality that meets their expectations and to make it possible for them to make enlightened choices.

That system is founded on three principles:

### **Voluntary commitments from the industry**

The system as a whole is founded on voluntary commitments from the industry to put in place and to monitor quality-driven programmes, either individually (organic farmers), or collectively (the other signs).

The quality of a product must be determined on the basis of a set of criteria drawn up by industry professionals and validated by the public authorities. These criteria stipulate what is specific about the product, the geographical area in which it is produced (in the case of AOC, PDO or PGI products), and the rules governing its production and processing.

Where organic farming is concerned, the mode of production is controlled by EU regulations. Sectors not covered by such regulations can be made the subject of sets of national criteria if the industry takes the initiative of drawing these up.

### **Les pouvoirs publics supervisent l'application du dispositif**

Against the backdrop of ever-increasing demand from consumers for clear, reliable information on the products they consume and the ever-larger numbers of private schemes involving use of the term "quality", government involvement provides consumers with assured reliability.

Government also ensures that official quality signs and labels are promoted for consumers in order to develop product recognition, market awareness and consumption.

As an example, a programme entitled "The Product Origin and Quality Month" is conducted by the Ministry of food, agriculture and fisheries and INAO, the French national institute for product origins and quality, along with notable partners such as the Federation of commercial and distribution enterprises, the interbranch meat industry body and the federation of cheese makers. This exercise is aimed at enhancing consumer awareness of these products.

### **.Regular checks by independent, impartial and competent bodies**

Third-party inspection bodies that are impartial and independent are charged with verifying compliance with the imposed product criteria, or the applicable regulations in the case of organic farming.

Those bodies must be accredited and approved by INAO, which also lays down general principles for the checks carried out and approves inspection programmes for compliance with the criteria applicable to products covered by quality signs.

## Quality and origin signs are a response to three fundamental issues

### **Adding value more effectively to products by producers and market operators**

Quality and origin signs are in fact sources of added value and help promote the diversity and typical regional character of products. Such signs are conducive to variety and diversification in production. They thus protect traditional production areas, add value to corporate expertise and allow producers to bring to market differentiated products with clearly identifiable specific characteristics.

Quality signs are in this way an excellent tool for enhancing market access, especially for enterprises of modest size. The products concerned, which are guaranteed to comply with a set of defined specifications, are thus easier to sell through the large retail chains and on export markets.

And lastly, the specification of mandatory criteria requires collective organisation by producers and their partners downstream in the supply chain, involving the actual definition of the product, its qualities and the processes for its production. Such capacity for collective effort allows balanced distribution of the value generated by the various links in the supply chain.

### **Easier choices for consumers**

Consumers are able, due to the guarantees provided, to choose foodstuffs that are of high quality, typical of a region or produced in an environmentally friendly manner.

They are the only signs guaranteed, recognised and verified by government.

In addition, national or EU logos make them easy to recognise.

### **Promotion of rural infrastructures and regional development**

Policy to promote quality signs makes it possible to maintain the diversity of agricultural production and by the same token biodiversity, landscape variety and natural resources, to protect jobs and to inject new energy into rural areas, most notably by bringing together local producers around shared projects and mobilising them in support of collective progress-driven programmes.

Quality and origin signs are in these ways essential tools not only for agricultural policy, but also for public policies for the benefit of the regions and the long-term viability of the rural social and economic fabric.

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### **Useful links**

- A complete list of products covered by official quality and origin signs can be found at : [www.inao.gouv.fr](http://www.inao.gouv.fr)
- The policy to add value to agricultural and food products and information on quality signs : [alimentation.gouv.fr](http://alimentation.gouv.fr)
- Promotion of organic farming and the structuring of industry sectors : [www.agencebio.org](http://www.agencebio.org)

THIS INFORMATION SUMMARY HAS BEEN PRODUCED BY THE OFFICE FOR THE MANAGEMENT OF QUALITY SIGNS AND ORGANIC FARMING AT THE GENERAL DIRECTORATE OF AGRICULTURAL, AGRIFOOD AND REGIONAL POLICES.

# Research and development

The French agrifood sector devotes 1% of its annual sales revenue to R&D, compared with 3% for French industry generally. Other than in exceptional circumstances, the food industry generates small profit margins (due to high labour costs, increases in the cost of base materials over the last year or more, in the cost of transport, etc.), of which the majority (3-5% of total net sales) is devoted to quality assurance, compliance with customer specifications and adaptations to changes in regulations (traceability, labelling, safety, product claims, etc.). This means that in the vast majority of cases, the financial position of SMEs does not allow them to hire executive level staff dedicated to research and development (R&D), and this acts as a major brake on R&D investment capacity, which is currently under 1% of annual sales revenue on average, despite increasing needs.

In March 2009 in the report concluding the agrifood conference (Assises de l'agroalimentaire) the Ministry of food, agriculture and fisheries defined ten priorities for research and development in the agrifood domain that were likely to add value to the processing of farm products and biomass. Focused strongly on markets, they are aimed at developing industrial projects and bringing to market innovative, wealth-creating products and services.

Based on the work done in 2009 by the project managers driving those priorities and in order to further strengthen the dynamic already in place, the priorities were structured around four main themes:

**Food** with the aim of innovating in :

- ▶ the conception of foodstuffs beneficial to health and wellbeing and responding to new consumer expectations ;
- ▶ the conception of innovative technologies and services in response to the requirements of safety for health, new forms of consumption and protection of the environment.

**Fisheries and aquaculture products :**

with the aim of deriving value from 100% of fisheries products and successfully meeting the industrial challenge posed by aquaculture in order to respond to consumer demand while at the same time preserving fisheries resources ;

**Agroecology and variety selection :**

The goal here is to meet the challenge posed by the achievement of sustainable, competitive agriculture through innovative farm products and production methods ;

**Plant chemistry and bioenergy :**

directed at replacing fossil carbon with renewable carbon for materials, chemicals and fuels with a view to sustainable development.

The above priorities are embodied in contractual targets for ITAIs (*Instituts Techniques Agro-Industrielles* / agroindustry technical institutes), ACTA (*Association de Coordination Technique Agricole* / association for technical coordination in agriculture), ACTIA (*Association de coordination technique pour l'industrie agroalimentaire* / association for technical coordination in the agrifood industry), research bodies, higher education institutions for agricultural training, competitiveness clusters and agronomic and veterinary consortia.

## **Agri-food research is conducted in partnership with numerous organisations and relies on high-level research in the public sector**

In higher education institutions for agricultural training, research on nutrition and agrifood processes involves 22% of teaching and research staff and 15% of research units, most of which are structured as UMRs (*Unités Mixtes de Recherche* / Combined research units) alongside INRA (*Institut national de la recherche agronomique* / National institute for agricultural research).

This Institute, the leading agricultural research organisation in Europe, will be conducting research programmes of more specific relevance to the agrifood sector as part of its new strategic focuses (2010-2020): "The development of healthy, sustainable food supply systems" and "Global food safety and global change".

In addition to INRA, work is also being done on food-related topics by CEMAGREF (*Institut de recherche en sciences et technologies pour l'environnement* / Institute for environmental science and technology) under the heading of "Agri-food, refrigeration and safety", ANSES (*Agence nationale de la sécurité sanitaire de l'alimentation, de l'environnement et du travail* / French Agency for food, environmental and occupational health safety), IFREMER (*Institut français de recherche pour l'exploitation de la mer* / French institute for the exploitation of the sea), CIRAD (*Centre de coopération internationale en recherche agronomique pour le développement* / Centre for international cooperation in agricultural research for development), IRD (*Institut de recherche pour le développement* / Development research institute), CNRS (*Centre National de la Recherche Scientifique* / National centre for scientific research), in addition to numerous universities and high-level schools.

This agrifood research ties in naturally with diversification of the uses to which agro-resources and their production are put (the upstream agricultural dimension).

## Schemes to foster links between research bodies and the private enterprise

The main interface between public-sector research and industry is provided by the agroindustry technical institutes, whose network is headed up by ACTIA (*Association de coordination technique pour l'industrie agroalimentaire* / Association for technical coordination in the agrifood industry).

Since 2007, it has been a shared goal of the French Ministry of food, agriculture and fisheries and the industry to strengthen and streamline the system of technical institutes by engaging in a programme for the qualification of those institutes, based most notably on their capacity to drive programmes for finalised research. A total of 18 agro-industrial technical institutes have been qualified in this way.

In addition, new forms of partnership between technical institutes, research bodies and higher-level agricultural training establishments have been recently put in place in the form of UMTs (*Unités Mixtes Technologiques* / Combined technology units<sup>1</sup>) and RMTs (*Réseaux Mixtes Technologiques* / Combined technology networks<sup>1</sup>), respectively in 2006 and 2007. Together, these two new resources form one of the planks of the scientific and technical partnership of the ACTIA Network, with the twin goals of improving knowledge and generating innovation on issues of strategic importance for sector professionals.

The primary goal of the UMTs is to bring together on the same physical site partners contributing their specific skills on a defined topic.

RMTs are primarily concerned with fostering cooperation between partners from different backgrounds with a view to the collective implementation of cross-category, multidisciplinary programmes. As of 2010, there are 15 UMTs and 10 RMTs in the agrifood sector (*cf. appended tables*).

Examples : in 2008, a UMT run by ADIV (*Association pour le Développement des Industries de la Viande* / Association for the development of the meat industries), a technical institute, focused on the mechanisation and automation of carcass cutting, was set up to solve the problems of competitiveness in French meat products, to make the work involved less arduous and improve safety in the workplace. Similarly, in 2009, a UMT led by ACTILAIT, another technical institute, was formed to improve knowledge of the functional and organoleptic qualities of pressed cheese products. Where RMTs are concerned, three additional networks of this kind were created in 2009: FLOREPRO, looking at protective flora for food conservation with a view to studying interactions within the microbial ecosystem, CHLEAN, studying process hygiene issues, and LISTRAL, focused on lipids and fats generally, most notably with a view to addressing issues of public health and the organoleptic properties of foodstuffs.

## Examples of national and EU funding for agrifood R&D

### At national level : the ANR (*Agence Nationale de la Recherche* / National research agency)

ANR, a public interest group set up on 7 February 2005, is a funding agency for research projects. Its objective is to increase the number of research projects proposed by all parts of the scientific community, which may then be financed following competitive bid procedures and peer review. The ANR target audience comprises both public-sector research bodies and private companies, and it has two core tasks: to generate new knowledge and to promote interactions between public-sector research institutes and corporate research departments through the development of partnerships. Selection of projects submitted in response to competitive calls for proposals is based on quality criteria where the science is concerned, plus their economic relevance for the corporate sector.

In 2008, the ANR launched a new programme of food-related research: ALIA (*Alimentation et Industries Alimentaires* / Food and the food industries). This is directed at the evaluation and promotion of systems producing food that offers high sensory rewards, is affordable for all, is produced in conditions more protective of ecosystems and offers consumers enhanced wellbeing and healthier ageing. To achieve these goals, the programme has three main planks: enhanced wellbeing and healthier ageing for the general population, a more dynamic food production economy and, lastly, a balanced society and sustainable development for food production. The ALIA programme is innovative in that it strengthens international cooperation. Specifically, in the case of the first of the areas cited, Franco-German projects have been put forward for joint funding by ANR and DFG (*Deutsche Forschungsgemeinschaft* / German research organisation). The French ALIA programme has placed twelve projects on its main list for 2010 and four on its supplementary list. The ALIA Franco-German collaborative programme has selected one project for its main list.

<sup>(1)</sup> Article 91 of the agricultural reform law of 2006

## The EU Framework Programme for Research and Development

The FPRD (Framework Programme for Research and Development) is an instrument set up by the European Union for financing research, technology development and demonstration programmes. It is a preferred tool for enhancing Europe's R&D and innovation potential in the face of global competition. The 6<sup>th</sup> FPRD (covering 2002-2006) allocated a budget of €742 million to the agrifood sector. In the 7<sup>th</sup> Framework Programme, the scope has been broadened to include agricultural science, fisheries, food and biotechnology, with a specific budget of €2 billion.

Lastly, other public funding is available to support R&D and innovation (see the information summary on "Competitiveness").

### THE EUROPEAN TECHNOLOGY PLATFORM "FOOD FOR LIFE"

In July 2005, at the instigation of the European Commission, a representative group of actors in the industry and R&D organisations set up the "Food for Life" platform coordinated by the CIAA (*Confédération des Industries Agro-alimentaires de l'Union européenne* / Confederation of European Union agrifood industries). Its purpose is to provide a channel for dialogue between manufacturers and researchers that can lead on to the definition of a forward-looking, strategic vision on food. Starting in 2006, and on the basis of an initial document ("The vision for 2020 and beyond"), this platform has defined a strategic research programme covering the whole range of measures for research, training, knowledge transfer, communication and dissemination required to achieve the goals laid down in a timetable for action.

These documents take into account on-going changes in consumer behaviour, the situation of the manufacturing sector and the future developments that need to be undertaken if the sector is to be made more competitive internationally and more closely aligned with society.

The proposals for research and development topics generated by the platform's agenda will provide focus for the calls for project submissions made under the 7<sup>th</sup> FPRD.

At the national level, a group called "Food for Life France" has also been set up by ANIA (*Association nationale des industries agroalimentaires* / National agrifood industry association). This group, which has set itself the task of providing input for the definition of a forward-looking, strategic vision on food at EU level, has also responded to the need to create a committee at national level with the task of defining and driving an agrifood R&D strategy. It has put forward a French research agenda whose guiding thread is innovation at the service of tradition. The programme has as its core principle the paramount need to preserve French food-related values if the competitiveness of the French food industry is to be maintained. Those values are based on the diversity of our agricultural commodities, our preparation methods, especially fermentation, which vastly expand the market offering, and our distribution methods, which range from market stalls to supermarkets.

The French "Food for Life" Platform has drafted a plan for the implementation of its strategic research programme and holds meetings in the regions on the programme's themes in order to raise its profile for industrial operators and encourage concerted actions to be undertaken. Meetings are also held with the platforms of other Member States.

## Approved RMTs (ACTIA network)

Title	Subject	Pilot institute	Lead	Other main partners	Year officially approved
ECOVAL : Eco-design and recycling	Research into the possibilities for recycling agrifood waste	ITERG, Institute for fats and oils, technical studies and research	Fabrice Bosque	ADIV, CTCPA, IFBM, INRA	2007
Sustainable management of fluids : energy, cold, water	Assistance for agrifood companies in characterising the costs and impacts of fluids	ADIV, Association for the development of the meat industries	Pierre-Henry Devillers	CTCPA, IFBM, ITERG, CEMAGREF, CETIAT	2007
Aérial : Expertise for the microbiological determination of the life duration of foodstuffs	Assistance for manufacturers in bringing to market products that are reliable where public health and economic performance are concerned	AERIAL technology resource centre	Valérie Stahl et Catherine Denis	ADIV, ADRIA Développement, AFSSA, ENVA	2007
Nutriprevius (formerly Nutrialis) : the nutritional quality of foodstuffs	A study of the impact of technology on the nutritional quality of foodstuffs	CRITT, Regional centre for innovation and technology transfert in Poitou-Charentes	Laurent Vedrenne	ADIV, ADRIA Développement, AFSSA, AgroParisTech	2007
Sensorialis : sensory evaluation	This research looks closely at consumers and the influence of the context on their food preferences	ITFF, French technical institute for cheese	Virginie Herbreteau	ADIV, ADRIA Normandie, INRA, UMR Sciences du goût	2007
Fermented and distilled products (PFD)	Research on fermentation (improvement of knowledge of the mechanisms involved in order to optimise productivity and quality), distillation (optimisation of the conditions for obtaining products of high quality in conjunction with energy-saving measures), safety (in terms of health and technology)	BNIC, National interbranch organisation for Cognac	Luc Lurton	ADRIA Normandie, BNIA, CTCS, IFBM, IFPC, IFV, UNGDA, AgroParisTech, INRA, EPLEFPA l'Oisellerie	2008
Propack Food	Aimed at extending knowledge in four areas: evaluation of the impacts of new technology, development of new methods of evaluation of packaging risk, development of new packaging solutions, further work on scientific eco-design	LNE, National metrology and test laboratory	Catherine Sauvageot-Loriot	ADRIA Développement, ADRIA Normandie, CASIMIR, CRITT 2ABI, CTCPA, AgroParisTech, ENITA Clermont, ENSBANA, INRA, INPL, Université Montpellier 2, ENILV Aurillac, EPLEFPA Amboise	2008
CHLEAN : hygienic production line and equipment design for improved cleanability	Presence and consequences of biofilm at the product/wall interface, specific roles of contact, materials, design of equipment to take account of functionality and choice of hygiene maintenance procedures	CTCPA, Technical centre for farm product conservation	Christophe Hermon	CTCPA, ADIV, ADRIA Développement, ADRIA Normandie, Casimir, CRITT-IAA-PACA, IFIP, ADRIANOR, INRA, AgroParisTech, ENITIAA, LRGIA, CETIM, IUT Laval	2009
FLOREPRO : protective flora for food conservation	Provision of elements for a response on bioprotection process control for improved management of product quality and health risks	ADIV, Association for agrifood development, research and innovation	Souad Christieans	Actilait, IFIP, Aérial, ADRIA Normandie, CEVPM, INRA, ENITIAA Nantes, IFREMER, Lycée agricole de Marmilhat, AgroParisTech	2009
LISTRAL : structured lipids of food origin	Knowledge and control of the composition and structure of food lipids for improved exploitation of their nutritional properties	Actilait, Technical Institute for milk and dairy products	Ketzia Raynal-Ljutovak	Actilait, ADIV, ITERG, CETIOM, IFREMER, INRA, ENSMIC, CNIEL, ONIDOL	2009



## ACTIA UMTs: Summary Table

Title	UMT host	Network linkage	Duration of partnership	Year approved by DGER	Involvement of INRA in partnership
Food and biochemical engineering for meat products	ADIV	ACTIA	3 years	2006	Yes
Micronutrients in processed plant products	CTCPA	ACTIA	3 years	2006	Yes
Cider production UMT	CTPC devenu IFPC	ACTIA	3 years	2006	Yes
Emerging mycotoxins in brewing barley from field to finished product and co-product	IFBM	ACTIA	3 years	2006	No
Lipid nutrition and cerebral ageing	ITERG	ACTIA	3 years	2006	No
QUALINNOV	ITV devenu IFV	ACTIA	3 years	2006	Yes (Pech Rouge experimental unit)
TERESA technology resource and transfer platform for expert evaluation of food safety risks	ITFF devenu ACTILAIT	ACTIA	3 years	2006	No
TREFL : The microbial ecology of cheese made with unpasteurised milk : food safety allied with preservation of taste quality	ARILAIT devenu ACTILAIT	ACTIA	3 years	2006	ARILAIT initially piloted this UMT (Presence of INRA cheese research unit in Aurillac)
Analytical and nutrient marker methods	AERIAL	ACTIA	3 years	2006	No CNRS yes
The sensory quality of dairy products and effects on health (dairy technology)	ITFF devenu ACTILAIT	ACTIA	3 years	2006	Yes
Polygreen : biopolymers – agri-resources	ITERG	ACTIA	3 years	2007	No (CNRS is involved)
Aquatic product freshness and quality	CEVPM	ACTIA	3 years	2008	No
Mechanisation, automation in the meat and meat-based product sector	ADIV	ACTIA	3 years	2008	No
Physi'Opt ((food processes and surface hygiene: the impact on bacterial physiology and behaviour for the optimisation and validation of treatments)	ADRIA Development	ACTIA	3 years	2008	No
CASEOLIS : biodiversity and synergy of proteases involved in the building of the functional and organoleptic quality of pressed cheeses (functional, biological and organoleptic characteristics)	Actilait	ACTIA	5 years	2009	Yes

## Research & development in agrifood enterprises

Source : Ministry of Research

	2001	2002	2003	2004	2005
R&D workforce in the agrifood sector (FTEs)	3868	4209	4571	4864	4627
of which: researchers and engineers (FTEs)	1648	925	2134	2351	2070
Internal expenditure on research & development (€ millions)	351	493	462	491	475
External expenditure on research & development (€ millions)	32	52	42	66	64

Research workforce : researchers, engineers, support staff (technicians, manual workers, administrative personnel) expressed in FTEs (Full Time Equivalent research posts).  
Internal expenditure relates to research organisations inside companies.  
External expenditure relates to research bodies outside companies.

### Liens utiles

- Statistical results for individual branches of research : [cisad.adc.education.fr/reperes/public/chiffres/france/ent.htm](http://cisad.adc.education.fr/reperes/public/chiffres/france/ent.htm)
- [www.agence-nationale-recherche.fr/AAP-165-ALIA.html](http://www.agence-nationale-recherche.fr/AAP-165-ALIA.html)
- French national institute for agricultural research : [www.inra.fr](http://www.inra.fr)
- Institute for environmental science and technology : [www.cemagref.fr](http://www.cemagref.fr)
- Agricultural research at the service of the countries of the South : [www.cirad.fr](http://www.cirad.fr)
- French Agency for food, environmental and occupational health safety : [www.afssa.fr](http://www.afssa.fr)
- Association for technical coordination in the agrifood industry : [www.actia-asso.eu](http://www.actia-asso.eu)
- National centre for scientific research : [www.cnrs.fr](http://www.cnrs.fr)
- French institute for the exploitation of the sea : [www.ifremer.fr](http://www.ifremer.fr)
- Development research institute : [www.ird.fr](http://www.ird.fr)
- Websites of teaching establishments attached to the Ministry of food, agriculture and fisheries : [agriculture.gouv.fr](http://agriculture.gouv.fr)

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# Goals and issues for agrifood standardisation

## Background

In a context featuring intensive global competition and the increasing power of China, Brazil and India, the agrifood sector is faced with rapid change driven in particular by demographics, climate change, technological innovation, public health concerns linked to food, competition between food and non-food commercial outlets and new consumer expectations.

It is worth noting that forecasts in this sector are made all the more problematic by the many uncertainties surrounding changes in the rules applicable to the agrifood sector, rules relating to products, how they are traded, how they are produced and their impact on the environment.

In all these areas, standards represent a consensus-based approach to the establishment of common rules in the context of globalisation. Today, in order to maintain fairness of competition in international trade, to differentiate supply of high quality, to ensure optimum safety for health of foodstuffs, while at the same time protecting the environment, demand from socio-economic partners regarding standards has three main focuses :

- ▶ The safety for health of foodstuffs is by far the main demand from consumers, who have vivid memories of the food-related crises of the 1990s and the alerts relating to products from Asia in 2007,
- ▶ The quality of foodstuffs (other than safety for health) and consumer satisfaction in terms of their organoleptic and gustatory characteristics, quality linked to expertise and defined (traditional) modes of production and, increasingly, nutritional value,
- ▶ Improvements in techniques and sustainable development throughout the food supply chain, adopting a systemic approach to quality management, as well as to control of the aspects affecting the environment and workplace safety.

## Standards to guarantee food safety

In a range of areas – food hygiene, safety for health, inspections and traceability in the food chain – standards offer support for, or in certain cases, an alternative to national, European and international regulations.

It is for this reason that at EU level the European Commission is increasingly reliant on the European Committee for Standardisation (CEN) for the establishment of methods for use in defining references relevant to the proper functioning of the single market.

In addition to standards for testing enabling harmonisation of the inspection of foodstuffs, standardisation efforts have focused in recent years on organisational standards aimed at helping private enterprise to address a growing number of requirements imposed both by official regulations (the Community Hygiene Package in particular) and business contracts. ISO standard 22000:2005, Food safety management systems continues to be the flagship instrument in this context; it has now been supplemented by technical specification ISO/TS 22003 (audits) and by ISO 22005 on traceability. It is noteworthy that these standards have been developed in line with the principles laid down by the Codex Alimentarius (an intergovernmental body created in 1963 by FAO and WHO to develop food standards, guidelines and other texts such as codes of practice under the Joint FAO/WHO Food Standards Programme).

Coordination of work on standards with the efforts of other bodies, foremost among them the Codex Alimentarius, is effectively of great importance for the sector and as such has been included in the action plan for ISO/TC 34, Food Products (the main ISO technical committee on food products).

## Standards to add value to high-quality products

The quality of foodstuffs and the market offering of food is, along with safety, another strong demand from consumers. Used along with product quality and origin signs, standards can provide a way of differentiating between different types of production. It can also provide support for national products that meet more stringent requirements. Some parts of the industry have already made use of this vector by setting out in industrial standards, often of national scope, specifications defining the mandatory characteristics of their products. Certain prepared meat products and seafoods provide examples of this.

Alongside standards that lay down technical specifications conducive to easing supplier/customer relations by defining mandatory characteristics for products, standardisation has generated a body of methods for testing and analysis that provide common, comparable and reliable techniques for the assessment of product quality, the reduction of barriers to trade and the mitigation of trade disputes.

This area, which covers not only food for human consumption but also livestock feed, is currently opening up to nutritional aspects targeted by numerous initiatives, for example by ISO (the International Organisation for Standardisation) with work on glycaemic index determination, and CEN.

## Standards to respond to sustainable development issues and to improve practices

The debate in the “Grenelle” Environment Conference in France highlighted society’s expectations for agriculture, and for the agrifood sector as a whole, with regard to the need to take sustainable development on board in their industrial practice.

It is therefore in the interests of industry professionals to meet such demands half way, demonstrating, on the basis of objective evidence and standardisation, that they have fully assimilated the issues surrounding sustainable development.

Since 2005, actors in the farming and agrifood sectors have progressed on the basis of projects conducted in partnership with the French national agency for standardisation (AFNOR). Actors upstream in the farming industry are particularly well advanced in this regard as is shown by the work done by the potato interbranch body (CNIPT). This dynamic is currently strengthened by numerous initiatives at regional level aimed at sharing specific practices in the agrifood sector, in Lower Normandy for example, under the auspices of the Normandy association of food-related enterprises (ANEA).

### THE ORGANISATION OF AGRIFOOD STANDARDISATION

In the agrifood sector, standardised reference criteria are developed by the International Organisation for Standardisation (ISO), the European Committee for Standardisation (CEN), and in France by AFNOR. AFNOR coordinates the activities of the national commissions for standardisation, most of which “mirror” European (CEN) and/or international (ISO) technical committees.

At the international level, ISO/TC 34 is the main technical committee for standardisation in the agrifood domain. Around a hundred countries contribute to its work. It is charged with standardisation in the field of food and feed products intended for human and animal consumption, covering the entire food supply chain from primary production to consumption, along with the means of animal and plant reproduction. ISO/TC34 also deals with terminology, sampling, test and analysis methods, product specifications, the management of the safety of food for human and animal health, the management of quality, and requirements applicable to packing, storage and transport.

France (AFNOR), in partnership with Brazil (the Brazilian association for standardisation - ABNT), chairs ISO/TC 34 with the support of the public authorities (the Ministry of food, agriculture and fisheries, the Ministry responsible for the Economy and Finance, the General Directorate for Competition Policy, Consumer Affairs and Fraud Control - DGCCRF) and industry partners (the French national association of agrifood industries - ANIA, Coop de France). When France took over the chair of this committee in 2006 this offered the possibility of providing French industry with competitive opportunities and advantages in terms of image and the building and driving of networks, as well as anticipation of and influence over the content of the committee’s work. By partnering with Brazil, AFNOR is also making the interests of developing countries an integral part of the debate, thus confirming their involvement – already major – in ISO/TC 34.

### ISO AND CODEX ALIMENTARIUS, A LONG-TERM PARTNERSHIP

The activities of Codex Alimentarius and ISO (the International Organisation for Standardisation) are mutually complementary. The Codex drafts documents aimed at facilitating the work of governments in the area of legislation and regulation, while ISO deals with the drafting of standards, notably relating to test methods, in order to assist the actors in the food supply chain in their responses to regulatory and consumer requirements.

Like the Codex in the deliberations of ISO/TC 34, ISO enjoys observer status in the Codex Alimentarius Commission (CAC) and has therefore the opportunity to coordinate the various issues linked to ISO standards adopted and used by the Codex.

According to the document *Recommended Methods of Analysis and Sampling, codex stan 234-1999*, there are approximately 310 methods that refer to ISO/TC 34 standards.

### STANDARDISATION AND INNOVATION

On 11 March 2008, the European Commission published a communication entitled “Towards an increased contribution from standardisation to innovation in Europe”. Reaffirming the key role played by standardisation as a vector for the dissemination of innovation, the Commission recommends a series of priority actions to drive the development of standardisation policy on innovation and to position Europe as a leader in new markets. The Commission thus intends to “increase the impact of Europe in global standardisation, to facilitate the inclusion of new knowledge in standards, to make effective the access to standardisation to all stakeholders, in particular to Small and Medium Sized Enterprises (SMEs), to accelerate the uptake of standards by users, and to reform the infrastructure and procedures of European standardisation in order to render it more supportive to innovation”.

Among the focuses defined are the following:

- Institution of sustainable industrial policy
- Promotion of the use of standards in public procurement
- Development of standards for global markets
- Integration of standardisation from the research stage
- Facilitation of access to standardisation for stakeholders.

### Useful contacts

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[www.afnor.org](http://www.afnor.org)

The agrifood domain in AFNOR :

[www.afnor.org](http://www.afnor.org) (profil : [agroalimentaire](http://www.afnor.org))

- Contact ISO/TC 34 – International technical committee for agrifood standardisation : Sandrine ESPEILLAC  
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The electronic version of this survey of the key issues facing the agrifood industries and their sectoral and regional aspects is available on the website of the French Ministry of Food, Agriculture and Fisheries : **[alimentation.gouv.fr/panorama-iaa](https://alimentation.gouv.fr/panorama-iaa)**