PART THREE
SOURCES OF INFORMATION

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As the different sectors are subject to particular marketing models, it is useful to describe each of them and look at the sources of information and statistical solutions used. We will consider several areas.

3.1. - Cereals

France produced 65 million tonnes of cereals in 2000, i.e. 19% more than in 1990. More than half was soft wheat that, with maize and barley, accounted for 93% of the tonnages. 60% of soft wheat and barley are harvested in the Paris Basin. Maize tends to be centred in the Midi-Pyrénées and the Atlantic coast (57%).

Table 7. Crop production (thousands of tonnes)

	1990	2000
Oats	838	459
Hard wheat	1 978	1 685
Soft wheat	31 362	35 668
Maize grain	9 382	16 018
Barley and winter barley	9 969	9 709
Rye	232	146
Hybrid sorghum	272	371
Triticale	624	1 262
Rice (paddy)	122	116
Other (inc. blends)	281	250
Total	55 060	65 684

Source : SCEES – Annual agricultural statistics

Small-grain cereals are harvested in July and August, maize and sorghum in October. In theory, grain is delivered throughout the marketing season. However, most is delivered to cooperatives in the following weeks. The latter store the grain and sell it on according to requirements that do not change significantly from one month to the next. The farmer receives an instalment on delivery, with price supplements until the final seasonal price is fixed, over a year after the end of the season. The measurement of cereal price variations has been through several stages.

In base year 1980, the cereals index was calculated using an ONIC survey returning prices on leaving the storage organisations. These prices were often themselves reconstituted in each département based on a market price from which ancillary expenses had been deducted. Insee had to estimate the total profits made by the storage organisations in order to arrive at a production stage price. This estimate was risky and the final profits were only known when the end of season statement came out ("flash" survey), more than a year after the end of the season, the date when a final index was calculated.

In 1988, ONIC began conducting a quarterly survey of cereal prices. In 1990, it set up the monthly survey of support prices. Insee was involved in the preparation stage of this survey, which shows the total instalments paid to farmers by the storage organisations, defined according to the requirements of the index. The difference between the total instalments and the final seasonal price depends on the ability of the cooperatives to forecast the marketing conditions at the time of harvest. If the conditions are uncertain, the instalments will be relatively low and deferred payments high.

The relationship between the monthly survey and the quarterly survey does not amount to the gradual inclusion of price supplements. The monthly survey records a price paid in each region in the middle of the month whilst the quarterly survey collects data thay can be recorded from the start of the season. Basing the index on the monthly survey alone would be to falsify the final result and, in particular, reduce the possibilities for comparing prices from one season to another. This is why the two sources of information were combined in base year 1990.

When the quarterly surveys were published, the level of each monthly price was adjusted so that the average prices, weighted over three, six, nine then twelve months of the season, corresponded to the prices in the quarterly survey. In other words, the seasonal price was paid on a monthly basis by allocating it an instalment pattern that was largely modelled on monthly increases paid to cereal farmers to pay for storage on the farm.

This system had the advantage that it strictly evaluated the sums received by farmers and was in step with the Audits. However, it had various drawbacks :

- It led to successive changes in the indices during a season, which were difficult to justify to users.
- It was unusable for cyclical analyses as it was not connected to the market in the short-term.
- Apart from estimated Audits, which take place at the start of the season before the results of the first quarterly survey, the Audits were made up directly from the quarterly survey or the flash survey.

This is why they reverted to the market prices in base year 1995. This decision is based on the finding that, as an annual average, these vary at the same time as seasonal prices do and that, as a result, the new method satisfies the specifications of the index. In order to cover both interior and exterior destinations, several types of price to which an equivalent weight is allocated, are combined :

- available ex-production area: this is a "July base" price, i.e. excluding monthly increases, collected from storage organisations
- delivered to port of embarkation: these are prices that are representative of large export volumes
- FOB ex-production area

Table 8. Quotations used for cereal price

	Ex-production area	Delivered to port of embarkation	FOB ex-production area
Soft wheat	Ex-Eure-et-Loire	Delivered to Rouen	
Milling barley	Ex-Eure-et-Loire	Delivered to Rouen	
Brewing barley			FOB Creil
Maize		Delivered to Bordeaux-Bayonne	
Hard wheat	Ex-Beauce and south west	Delivered to La nouvelle	
Rye	Ex- Marne-Aisne-Ardennes		
Triticale	Ex-Côte d'Or		
Sorghum	Ex-south west		
Black oats	Ex-Aube-Yonne		
	Ex-Marne-Aisne-Ardennes		

Insee has no control over the quality of this information in terms of the requirements for measuring price variations. The only criterion of relevance is its acceptance by people in the trade who normally use these indicators.

3.2. - Potatoes

French production increased considerably between 1990 and 2000, particularly production of potatoes for storage. Apart from early potatoes, which are produced throughout the country, most are produced in North and Picardy (61%), Ile-de-France, Centre, Champagne (19% in all) and the West (10%).

Table 9. Potato harvest – thousands of tonnes

	Production		% of production			
	1990	2000	West	Paris	North	Total
Certified plants and tops of plants	327	399	56	5	35	96
Potatoes for potato flour	1 057	1 324	1	34	66	100
Earlies and maincrop	428	461	20	5	27	51
Potatoes for storage	2 908	4 250	9	21	65	94
All potatoes	4 721	6 434	10	19	61	90

Source : SCEES – Annual agricultural statistics

West = Brittany and Upper Normandy
Paris = Ile-de-Fr,
Centre
Champagne-Ardenne s
North = North and Picardy

Potato plants

Certified plants are priced each week between October and March by the market news service for five varieties : Béa, Ostara, Sirtema, Bintje, BF15. The prices of small and medium sizes from North in class A are recorded. The prices are weighted on the basis of weighting statistics provided by the Federation of Potato Plant Producers (FPPPT).

Potatoes for potato flour

The National Potato Flour Federation calculates a price that is valid for a season running from September to August.

Early potatoes

Tubers that are sold before maturity are called early or new potatoes. The distinction between early and maincrop potatoes is a commercial one. In the decree of 31 October 1961, the name "early" or "new" is allowed for tubers harvested before full maturity whose skin can be easily removed by simply scraping (loose-skinned tubers) and are therefore unsuitable for long-term storage. Potatoes labelled early or new may be sold up to 31 July inclusive[1]. The term maincrop is applied to potatoes with the same characteristics sold after this date. Production is not as concentrated in northern France as it is for potatoes for storage, but is more widespread (27% in North-Picardy, 20% in the West, 17% in Aquitaine, 10% in the South-east). Quotations are recorded by the SNM in physical markets at the production stage. Washed potatoes apart from ratte [*variety of small yellow-skinned potato*][2], are used, with varieties grouped together and a distinction made between origins and culinary classification (see below).

Table 10. Early potatoes in the IPPAP

	Flesh	
	normal	firm
Lower Normandy	x	
Brittany	x	x
France	x	x
South-west	x	x
PACA*	x	x
Rhône-Alpes or South-east	x	x

**Provence-Alpes, Côte d'Azur*

Potatoes for storage

They are harvested at maturity and can be stored for several months, hence their name. The economics of potatoes has been undergoing profound changes for about twenty years. Until the eighties, it was a cheap, rather uniform product dominated by the variety Bintje. The trade has made efforts to adapt a product that has remained rustic to changes in distribution. This has resulted in an improvement in methods of cultivation and packaging and a great many varieties coming onto the market. At the same time, a powerful processing industry has grown up. Potatoes used in the manufacture of instant potato flakes, crisps, frozen chips, snacks etc. are classed as potatoes for storage even if they are harvested before maturity, which sometimes happens. They are usually grown by farmers under contract to a manufacturer and prices are fixed for a season or half a season. They are monitored on the farm by the North-Picardy agricultural statistics service.

Depending on their cooking properties and their culinary use, unprocessed potatoes are graded into :

- Varieties with normal flesh for puréeing and making chips,
- Varieties with firm flesh for sautéeing and use in salads.

Price monitoring poses a few thorny problems to do with the multiplicity and mobility of the industries. The prices recorded by the market news service at the production stage were used for base year 1995. However, these price sets have turned out to be fleeting and more robust information had to be found during the base year. The index is now based on summaries compiled by the SNM Centre in Lille, using prices recorded at the dispatch stage for Bintje (Spot), other varieties with normal flesh and varieties with firm flesh (France-Pomme de terre) :

Table 11. Bintje in the 'IPPAP

Price	Provenance	cat	size	packaging	
Spot	North-Picardy	I	40-70mm	10 kg sack	washed
Spot	North-Picardy	I	50-75mm	10 kg sack	washed

1. This applies to French potatoes. Consumers can find earlies from Morocco and Spain from early spring

2 not very common and priced very differently from the others

Table 12. Normal-fleshed potatoes, category I

Variety	Packaging
Agata	12.5kg box 5kg sack 10kg sack 25kg sack

Variety	Packaging
Monalisa	12.5kg box 5kg sack 10kg sack 25kg sack

Table 13. Firm-fleshed potatoes, category I

Variety	Origin	Packaging
Amandine	North-Picardy	12.5kg box 2.5kg net
Belle de Fontenay	Loiret	12.5kg box 2.5kg net
Nicola	Brittany	12.5kg box 2.5kg net
Roseval	Brittany	12.5kg box 2.5kg net
	Loiret	12.5kg box
Chérie	Loiret	12.5kg box 2.5kg net
	North-Picardy	12.5kg box 2.5kg net or sack

Variety	Origin	Packaging
Franceline	Brittany	12.5kg box 2.5kg net
	Loiret	12.5kg box 2.5kg net
	North-Picardy	12.5kg box 2.5kg net
Charlotte	Brittany	12.5kg box 2.5kg net
	Loiret	12.5kg box 2.5kg net
	North-Picardy	12.5kg box 2.5kg net

The fact that there are no production statistics broken down by variety has made calculating the weighting coefficients more complicated. Potato tonnages have been estimated based on the production statistics for certified plants, using technical coefficients.

Table 14. Share of categories and varieties in the IPPAP

Potatoes	100
Potatoes for potato flour	5
Early potatoes	7
Potatoes for storage	88
Potatoes for processing	16
Unprocessed potatoes for storage	72
Normal-fleshed varieties	24
Bintjes	3
Agata	15
Mona-Lisa	6
Firm-fleshed varieties	48
Roseval	1
Charlotte	27
Nicola	9
Belle de Fontenay	1
Franceline	3
Chérie	2
Amandine	5

Source : INSEE

3.3. - Wine

France, who produces 50 to 60 million hectolitres of wine each year, and Italy are the leaders in the global production of between 260 and 300 million hectolitres. Wine is classified into ordinary wine and quality wine. The latter represents 84% of the value of sales for a little less than half the quantities.

Quality wine from specific regions (VQPRD) consists of :

- Appellation d'origine contrôlée (AOC) defined by an area of production, cultivation methods, a maximum yield, unchanging stocks of wine, a minimum alcohol content, analytical criteria and sometimes even ageing conditions.
- Specific wine of superior quality (AO-VDQS) that is subject to less rigorous regulation.

Other wine is divided into
Wine suitable for distillation into Cognac and

Ordinary wine (VCC) split into :
- Local wine with restrictions on production area and some cultivation conditions.
- Table wine generally sold under a brand name.

All wine sold comes with a standard document drawn up by the wine-grower that is sent to the general tax office, and a section of which is sent to the interprofessional committee. The latter compiles statistics on volume and value of sales broken down by vintage. The most important appellations, about a hundred in total, have been selected in each production region[3].

Table 15. Number of sets broken down by wine-growing region and category of wine

	Sets		Sets
Bordeaux	22	Provence wine	3
Burgundy	15	Fitou, Corbières, Minervois	3
Alsace	8	Champagne	1
Côtes du Rhône	9	Natural sweet wine (VDN)	4
Pays Nantais	3	Specific wine of superior quality (VDQS)	3
Anjou et Saumur	9	Local wine	2
Gaillac	2	Table wine	2
Dordogne wine	10	Wine for Cognac	6

The summaries prepared by interprofessional organisations cover wine sold in bulk to the trade by the grower or the cooperative, apart from the wine that is bottled at the vineyard. When the statistical reports allow, sales in the current season are used, from the month when volume sales exceed those of the previous season i.e. usually at the start of the calendar year, a few months after the harvest. The elementary sets, whose numbers are shown above, generally correspond to appellations.

Champagne

Until 2003, the price of a kilogram of grapes used to make Champagne was fixed at the start of the season at a meeting chaired by the regional prefect. Wine-growers in Champagne are remunerated by the trade according to the reputation of the region. The best wine-growing areas are classified into 100% vintages (100% of the approximate price is paid for the grapes), others into 90% vintages and so on, with premiums added to this amount. The price of grapes is fixed in this way for the whole trading season, which is spread over twelve months. However, this approximate price system was no longer used after the 2004 harvest. Prices are recorded by brokers and disseminated through the agricultural statistics regional service.

Wine suitable for distillation into Cognac

Between October and March, wine-growers sell wine produced at the vineyard to distillers. The appellations used correspond to six geographic areas of descending quality. Prices are given in euros per hectolitre of pure alcohol. In order to ensure that the structure of the index as a whole is stable, the last price noted is carried over to the following months until the start of the new season. However, the annual index is calculated on sales only.

Ordinary wine

The prices of ordinary wine are disseminated by Onivins each month. Red, rosé and white table and local wine is included. Prices are given in euros per hectolitre of pure alcohol.

3.4. – Oilseeds

France produced 5.5 million tonnes of oilseeds in 2000 including 3.5 million tonnes of rape. Oilseeds are mainly grown in an area stretching from Lorraine, to Champagne-Ardenne, Burgundy, Central France, the Loire region, Poitou-Charentes and Midi-Pyrénées. Proteinaceous products are produced throughout the Paris Basin.

The prices of rape and sunflower are recorded by ONIOL from a sample of traders (dealers, brokers, grinders) at the time they leave the Central region. As with cereals, the price is "ex-storage organisation". As for soya, in view of the

3. The interprofessional union of Beaujolais wine stopped sending information in 1996.

small quantity produced in France and Europe and the importance of imports (80% of soya used), there are no quotations for France proper and the CAF Rotterdam quotation is used.

3.5. - Horticulture

Horticulture covers various sectors: cut flowers, container-grown and bedding plants, nursery stock, bulbs, cuttings and seedlings, hardy aromatic and aquatic plants, of which only the first three are included in the IPPAP.

3.5.1. – Cut flowers

Mainly located in Provence-Alpes-Côte d'Azur, flower cultivation declined during the nineties, particularly that of carnations, whose production is down by two-thirds. With the opening in the 1980’s of a database of records gathered by SNM, a considerable volume of quotations are available from base year 1990. The varieties have been selected and weighted on the basis of horticultural censuses from 1988/89 and 2001. An index has been calculated for anemones, chrysanthemums, dahlias, gerbera, gladioli, irises, lilies, antirrhinums, lily of the valley, carnations, ranunculus, roses, tulips and Christmas trees. The clearly defined seasonal nature of deliveries and the absence of some species for part of the year has led to a variable basket being used to calculate the index for flowers.

Each variety has particular features that can be examined by looking at the quotations. The links between the price and the characteristics of the merchandise must be analysed so that the variables determining the choice of price sets can be singled out. For example, for roses, we have primarily used the size (length of stem in cm), then category, origin and, to a lesser extent, variety. This does not mean that changes cannot be made in the ranking of criteria, in which case we will modify our method.

The method of calculating previous bases was based on the selection of clearly separate sets. For base year 2000, sets or sections where the quotations are irregular and off-centre have been avoided in order to concentrate on the core of the market.

Roses

Roses are subject to rapid varietal rotation, due to the commercial policy of the growers. Some varieties that predominated when the previous bases were compiled have disappeared or are in decline, supplanted by newcomers. In base year 1980, quotations for Baccara and Sonia were recorded. Taking advantage of the possibilities offered by the SNM base, monitoring was then extended to 14 varieties, covering 73% of consignments.

Pink roses : Anna, Candia, Harmonie, Omega, Sonia, Vivaldi representing 29% of consignments.

Red roses: Ariana, Dallas, Royal-red, Vega, 34% of consignments in total

Other colours : Cocktail, Simona, Texas and White-success covering 10% of consignments.

This sampling, used for base year 1995, had to be adapted. The purpose is both to monitor varieties that are found regularly on markets and to take account of new trends and their hidden potential. The index is now based on the monitoring of twenty varieties in just two markets, Nice-fleurs and Hyères, as the market at Ollioule closed in 1997 and there is not sufficient business at the auction in Nice or the Rungis market. As category I is not quoted on a regular basis, the Extra category was used. Finally, avoiding sizes 30 and 90, of which there are insufficient quantities, the focus was on 40 to 80 centimetre stems. The index is based on 24,500 annual records, i.e. a monthly average of over 2,000 observations.

Table 16. Average annual number of quotations per variety between 2000 and 2002

	Hyères	Nice	Total
Akito	341	606	947
Ambiance	1025	547	1572
Anna	819	595	1413
Bianca	978	494	1472
Byblos	840		840
Candia		647	647
Femma	565		565
First-red	1201	666	1868
Léonidas	873	482	1355
Magnum	648	531	1179
Maya	750	520	1270
Maya pink	685		685
Milva	952	592	1544
Noblesse	1043	192	1235
Red-France	777	645	1422
Royal-red	798	611	1409
Suéla	917	552	1468
Texas	1015	653	1668
Twingo	852		852
Virginia	590	572	1162
Total	15669	8902	24571

Source : Ministry of Agriculture, market news service

Anemones

New varieties have been appearing for ten years but the variety De Caen is still the dominant one. As with previous bases, quotations for categories I and Extra are used for the Nice and Hyères flower markets, excluding flowers from Midi-Pyrénées where the consignments are periodic and where the very off-centre price level might lead to structure effects.

Chrysanthemums

The auction at Nice, where consignments are irregular, is not used. Quotations for Spider and Alvéolé varieties in the Extra category are used and the index calculated on the basis of the overall average price.

Dahlias

Dahlia production is spread over a wider geographic area than that of other varieties. Large quantities are produced in Ile-de-France, in particular. Flowers of mixed colours and the varieties Cactus and Pompom from this region are used. Quotations in category II are excluded.

Gerbera

Quotations in the Extra categories in the two markets for white and mixed colour flowers have been kept, excluding bouquets and origins labelled "France".

Gladioli

The sample does not include quotations with no indication of variety. Therefore, all quotations in the Extra category are used.

Irises

The index is based on the prices in the Extra category of the varieties Professeur Blaauw and Hildegarde recorded at Hyères and Nice.

Lilies

Groups of the Asiatic and Oriental varieties are used, excluding the variety Casablanca and flowers measuring 70 cm in the Extra category.

Antirrhinums

Flowers with mixed colours in categories I and Extra are used.

Lilies of the valley

The market for lily of the valley operates differently from that for most other varieties. It is mainly produced in the Loire region, not Provence. The most regular quotations are obtained at Rungis, at the wholesale stage. Quotations in categories I or Extra are used.

Carnations

Prices are collected for the two uniflora and multiflora subspecies. Prices of categories I and Extra, mixed colours, are collected for each of them at Nice and Hyères.

Ranunculus

Prices of the variety *de France* in categories I and Extra, mixed colours, are monitored.

Table 17. Summary of quotations used in the index for cut flowers

Species	Varieties	Colour	Cat	Size	Markets	Origin
Anemone	de Caen		I, Extra		Nice-fl, Hyères	exc Midi-Pyr.
Chrysanthemum	Spider, Alvéolé		Extra		"	
Dahlia	Cactus, Pompon	Mixed	I, Extra			Ile-de-France
Gerbera		white+mixed	Extra		Nice-fl, Hyères	
Gladiolus	all specified varieties		"			
Iris	Prof Blaauw, Hildegard		"		Nice-fl, Hyères	
Lily	Asiatic, oriental except Casabianca		"	exc 70cm		
Antirrhinum		Mixed	I, Extra			
Lily of the valley			"		Rungis	Loire region
Carnation	uniflora and multiflora subspecies	mixed	"		Nice-fl, Hyères	
Ranunculus	de France	"	"			
Rose	see table 14		Extra	40-80 cm	Nice-fl, Hyères	
Tulip	except Maureen		I, Extra		"	
Christmas tree	Spruce	except decorat.		80-250cm	Rungis	France

Tulips

Quotations at Hyères and Nice of flowers taken from categories I and Extra are used, excluding the Maureen variety, for which consignments are irregular and the prices quite different.

Christmas trees

Christmas trees have been regrouped with cut flowers. Their prices are recorded at Rungis at the wholesale stage. The prices of Spruce are used, as Nordmann is still mainly imported. Sizes over 2.50 m and less than 0.80 m are excluded from the measurement, as well as imported products and decorated products.

3.5.2. – Container-grown plants and bedding plants

Container-grown plants are sold in terracotta pots usually for indoor use. Bedding plants are packed in plastic pots for planting out in a container or garden. The prices of various products are monitored by the SNM at several stages (production, dispatch, wholesale). As it is difficult to monitor the same sets for more than a few months, a large number of sets are used, each of them contributing to the variation in the index of the item, depending on its own variation.

3.5.3. – Nursery stock

These are ligneous plants planted out in gardens, public gardens, usually in towns, orchards and woods. Prices are recorded in September when the main nurseries publish their catalogues.

Eighty-eight of the most representative products were chosen after consulting people in the trade. They cover the following areas :

Table 18. Nursery stock: number of quotations used in the IPPAP

	Sets		Sets
Ornamental nursery	***43***	***Rosebushes***	***3***
Broad-leaved hedge	11		
Other broad-leaved trees	4	***Forest trees***	***38***
Hedge conifers	12	Spruce	5
Other conifers	2	Pine	12
Other (groundcover,climbing plants)	14	Fir	4
Fruit trees	***4***	Douglas fir	2
Apple trees	1	Other conifers	3
Pear trees	1	Oak	6
Plum trees	1	Beech	2
Peach trees	1	Poplar	4

The prices listed in the catalogues vary to a great extent, depending on the species, the size of the plant and the sales unit (descending price according to the quantity bought). This has a twin effect, affecting price monitoring and the type of index.

The parameters used in selling (size, sales unit) change frequently. Each year, linking is based on constant sets.

Nursery stock is a particular example of prices being very sensitive to commercial characteristics (these can range from one to thirty for the same species depending on the size, sales unit etc.) without knowing the make-up of turnover below the groups listed below (Horticultural census of 2001). The index allocated to a season for an item is the sum of the index of the previous season multiplied by the geometric mean of the price variations in its elementary sets.

3.6. - Other plant products

3.6.1. - Seeds and plants

Every autumn the national interprofessional group of seeds (GNIS) supplies the total multiplication premiums, which are added to the seasonal price of each small-grain cereal to be paid to seed producers.

It also indicates the seasonal price of fodder seeds: Italian rye grass, English rye grass, cocksfoot, high fescue grass, lucerne and purple clover.

The prices of potato plants are listed in the trade press. The varieties Bea, Ostara, Sirtema, Bintje and BF15 have been used, distinguishing between small and medium-sized.

The weighting coefficients are taken from the annual agricultural statistics for cereal seeds and fodder seeds and from the national federation of potato plant producers (FNPPPT) for potato plants.

3.6.2. - Beet

Beet production has changed little since 1990. The North, Champagne, Ile-de-France and particularly the Picardy region supply 82% of the tonnage.

There is a fixed quota on beet production. The Community's requirements are covered by quota A remunerated at the base price, whilst quota B is the quantity that the European Union subsidises for export. However, quota B is subject to higher taxes than quota A. The surplus (above the quota) is sold on the free market and remunerated at international market prices. On this basis, an average price is calculated according to the production volumes that are allocated to the various quotas. An average price is calculated, regardless of quota, as the latter corresponds neither to different qualities nor to distinct marketing channels but to a gradual decrease in payments that can affect each producer.

As from 2006, the system will be more like the one used in cereals, with prices closer to international market prices, supplemented by direct aid to farmers.

3.6.3. - Fodder

Aside from fodder grass, hay and mother's milk, livestock feed comes from the animal feed industry. It is made from powdered milk, cereals, proteinaceous cattle-cake as well as by-products of the oilseed, sugar and brewing industry (cattle-cake, molasses, crude cod-liver oil). Of fodder products, only the market for lucerne is monitored.

The fodder price index is therefore based on lucerne alone. The Association of Lucerne Dryers reports the prices paid to farmers in Champagne-Ardenne. The seasonal price is usually ascertained in successive stages along the marketing chain.

3.6.4. - Pulses

Production of beans and lentils (9,000 and 12,000 tonnes respectively) has been increasing since 1990. The purchase price of several types is collected from dealers every month :

Green lentils
Lentils from Le-Puy

Lentils from Berry region
Lingot du nord white beans
Lingot de Vendée white beans
Flageolet beans
Green peas

3.6.5. – Proteinaceous products

France produces 2.1 million tonnes of proteinaceous seeds including 1.9 million tonnes of peas. The price of protein peas is a *FOB Creil* price recorded in the daily newspaper every week (price ex-storage organisation).

3.6.6. - Tobacco

France produced 25,000 tonnes of tobacco in 2000, a 9% reduction compared to 1990, a fall that was particularly marked in the main areas of production, Aquitaine and Alsace.

At the start of the season, the national association of tobacco producers calculates estimated prices by variety and final prices for the previous season so that the earlier estimate can be corrected. Prices are given for three varieties.

Burley
Virginia
Mild black tobacco

3.6.7. - Flax

France produced 372,000 tonnes of retted flax (harvested after the gum which holds the fibres is destroyed by fermentation), a 2% increase compared to 1990. Flax is grown in coastal regions along the Channel.

The seasonal price of flax straw harvested annually in July is supplied by the interprofessional committee of flax producers (CIPALIN). The price is obtained at the production stage.

3.6.8. - Hops

French production of hops more than doubled to 1,700 tonnes between 1990 and 2000, 97% of which is produced in Alsace. The hops season stretches from October to September; growers deliver the hops to a cooperative that handles the processing. The general association of hop producers supplies an average seasonal price in successive stages.

3.7. - Fruit and vegetables

The section of the index devoted to fruit and vegetables is calculated by the central service of surveys and statistical studies of the Ministry of Agriculture (SCEES)[4]. The index of fruit and vegetables was first incorporated into the IPPAP in base year 1975 but there was still an experimental index in base year 1970.

In order to faithfully reflect price changes in spite of the very marked seasonal pattern of consignments, the set of weighting coefficients used to calculate groups changes every month[5]. This affects all items and groups except all fruit and vegetables whose weight in the general index is fixed. Until base year 1995, if the quotation for an elementary component was unexpectedly missing, the weighting for this component would be cancelled for the month in question, which would be passed on to the species. In base year 2000, the weighting coefficients used to calculate the group indices do not change beyond the missing component.

4. cf Agreste – Figures and data n°165 - February 2005.

5. see 1.3. for properties of the variable basket and the appendix for coefficients

Species are broken down into varieties and are themselves sometimes divided into subspecies relating to the periods of production (summer pears, etc.). The indices are calculated for regional components of species or varieties, 55 for fruit and 78 for vegetables. Finally, the calculation is based on 212 elementary sets instead of 600 in base year 1995.

This reduction is due to the gradual movement from production stage to dispatch stage, which is usually limited to the most representative set because there are no consignment statistics. Only 12% of components are monitored at the production stage (4 for fruit and 12 for vegetables) instead of 28% in base year 1995.

The main difficulty is the instability of the sets, a result of the constant changes in their various characteristics. Since base year 2000 was introduced, 385 changes have affected the 212 price sets, to the extent that SNM investigators had to be consulted.

The index concerns metropolitan fresh fruit and vegetables, excluding products for processing that follow special routes which are currently not monitored satisfactorily. This feature is the main gap in the IPPAP in view of the importance of processing in the sales of a large number of species and the difference in the way prices are set with marketing channels of unprocessed produce.

3.8. - Livestock

French livestock production is mainly located in the west and south-west. The eighties saw the disappearance of small local animal markets in favour of large physical regional markets. The latter have lost much of their appeal nowadays. The national quotations are calculated by the office of stock breeding[6] based on reports compiled by the regional quotation committees. Made up of representatives from the trade and administration, these committees work out *abattoir* prices exclusive of tax every week, based on a European animal price structure and records obtained by the office of stock breeding after surveying a sample of abattoir businesses.

The national quotation committees responsible for each species meet once a year to endorse the work and study ways of improving the system.

Tableau 19. French livestock. Numbers and location

millions of head	1990	2000	Main production regions
Cattle	21,4	20,3	
Dairy cattle	5,3	4,2	▫ Brittany, Loire region, Lower-Normandy, Auvergne, Rhône-Alpes
Suckling cows	3,7	4,3	▫ Midi-Pyrénées, Loire region, Aquitaine, Limousin, Burgundy,
Veal calves	0,8	0,7	▫ Brittany, Loire region, Midi-Pyrénées
Pigs	12,3	14,9	▫ Brittany, Loire region
Goats	1,2	1,2	▫ Poitou-Charentes, Rhône-Alpes, Centre, Loire region, Midi-Pyrénées
Sheep	12,3	14,6	▫ Midi-Pyrénées, Poitou-Charentes, PACA, Aquitaine, Auvergne
Horses	0,3	0,4	▫ Lower-Normandy, Loire region, Rhône-Alpes, Midi-Pyrénées, Aquitaine
Chickens	198,4	206,0	▫ Brittany, Loire region, Rhône-Alpes, Aquitaine
Rabbits	16,3	11,1	▫ Loire region, Brittany, Poitou-Charentes, Midi-Pyrénées
Ducks	16,7	24,5	▫ Loire region, Aquitaine, Brittany, Midi-Pyrénées
Turkey hens and cocks	27,8	38,5	▫ Brittany, Loire region, Centre, Rhône-Alpes
Geese	1,2	0,8	▫ Midi-Pyrénées, Loire region, Aquitaine, Brittany
Guineafowl	13,3	12,1	▫ Loire region, Brittany, Aquitaine, Poitou-Charentes, Rhône-Alpes

Source : Ministry of Agriculture, SCEES

In general, the numbers of large animals stabilised between 1990 and 2000, while there has been slight growth in poultry rearing. The production of hen eggs is stable at around 10.5 billion units.

3.8.1. – Large beef cattle

Quotations are drawn up by ten regional committees for different categories of animals that are classified according to their configuration in the European price structure (from E: excellent configuration to A: very poor configuration).

6. National interprofessional office of breeding and animal products, which since the end of 2005 has included the national interprofessional office of meat, breeding and poultry farming (OFIVAL) and the national interprofessional office of milk (ONILAIT).

The committees in the North, East, Burgundy Franche-Comté, Limousin Auvergne, Rhône South-east, South-West, Loire region, Brittany, Normandy and Centre quote different categories of animals for the E, U, R, O and P categories of configuration, the latter category being for cows only.

The price monitoring of large cattle has not changed from the method of base year 1995. National quotations are included in the following categories of configuration :

Table 20. Large beef cattle in the IPPAP

	E	U	R	O	P
Steers	x	x	x	x	
Heifers	x	x	x	x	
Cows		x	x	x	x
Bulls		x	x		
Young cattle	x	x	x	x	

3.8.2. - Large lean cattle

Breeders buy young animals from milk producers or professional breeders. Two categories of cattle are classed as lean animals: eight-day to three-week old calves (see below) and 6 to 24-month old animals.

The committees are located in Limoges, Clermont-Ferrand and Dijon. The national averages for the most representative categories are used in the index:

Table 21. Large lean cattle in the IPPAP

	E	U	R	O
Limousins, male	x	x		
Limousins, female	x	x		
Charolais, male	x	x	x	
Charolais, female	x	x	x	
Crossbreeds, male		x	x	
Crossbreeds, female		x	x	
Country breeds, male			x	x

3.8.3. – Veal calves

Based on quotations drawn up by the committees in the South-West, Centre, Centre-East, North-West and West for different categories of quotations and different presentations, the office of stock breeding calculates a national quotation on 100kg of light veal that is used for the IPPAP.

3.8.4. – Eight-day to three-week old calves

Small calves are bought from dairy farms or breeders of beef cattle. Fattening calves, usually of dairy breeds, are intended for veal production whilst breeding calves are directed towards large cattle production, possibly for stock. The weekly national averages, calculated from prices recorded by the office of stock breeding at the markets in Agen, Châteaugontier, Saint-Etienne, Le Cateau-Cambrésis, Lezay, Lyon-Corbas, Rabastens de Bigorre, Rethel and Sancoins are used for the following categories :

Table 22. Lean calves in the IPPAP

Breeds and configuration -->	Normands Montbéliards Frisons	Females all crosses	Males all crosses	Males 40 to 45 kg	Males 45 to 50 kg	Males 50 to 60 kg
Light breeding animals	x	x	x			
Heavy "	x	x	x			
Animals for fattening				x	x	x

3.8.5. - Pigs

The quotations for cooked pork products are recorded by the SNM and made official by the regional committees located at Rennes, Nantes, Metz, Lyon and Toulouse. The national quotation category E is used.

3.8.6. - Sheep

Sheep prices are recorded by four regional committees :
- South-east (Avignon),
- Centre-west (Limoges),
- South-west (Toulouse),
- West-North (Paris)

Lamb and ewe prices are recorded according to the level of fattening (lean, waxy, covered, fat, very fat), weight and category of configuration.

Table 23. Sheep in the IPPAP

	E	U	R	O
Limoges, waxy		x	x	x
covered	x	x	x	x
fat	x	x	x	
Midi-Pyrénées waxy		x	x	x
covered		x	x	x
fat		x	x	

3.8.7. - Horse

Based on quotations drawn up by the committees
- North and East,
- Great west,
- Great south-east,
- Great south-west,

prices in the following categories are used :

Colts, extra and good
Light breeds, extra and good
Heavy breeds, extra

3.9. - Poultry, eggs and rabbit

The French production of poultry is mainly localised in Brittany (37% of the Gallus species, 40% of turkeys, 11% of guinea fowls, 14% of ducks, 16% of rabbits) and Loire region (17% of the Gallus species, 25% of turkeys, 37% of guinea fowls, 38% of ducks, 31% of rabbits).

A great part of the production is integrated. The animal remains the property of the co-operative, the feed manufacturer or the abattoir which entrusts it to a stockbreeder to which it provides food, possibly the veterinary products and certain services. The stockbreeder thus does not perceive a price, but the remuneration of a service.

Table 24. Poultry. Départements or regions surveyed and weighting coefficients

	Eggs	Chicken			Guineafowl		Turkey	Duck		Rabbit
		label	standard	export	label	Other		roasting	fattened	
Ain			3					4		
Allier		3	5				1			
Gers	2	9								
Landes		18			23				98	
Loir et Cher			2				4			
Pas-de-Calais	3	2	5							5
Saône et Loire		7	2		11	8		4		
Somme	2									
Vienne										5
Brittany	82	11	57	100		43	70	21		33
Loire region	11	50	26		66	49	25	71	2	57
Total	100	100	100	100	100	100	100	100	100	100

Source : Ministry of Agriculture, SCEES

The prices recorded by the SCEES are generally those paid with the integrators by the slaughter-house in the principal departments and areas of production. They are usually fixed by contract for two or three years.

3.10. - Milk

France produces about 250 millions hectolitres of milk.

Table 25. Quantity produced (M hl)

	1990	2000
Ewe's milk	1.9	2.5
Goat's milk	4.4	4.8
Cow's milk	257.0	242.5

Source : Ministry of Agriculture, SCEES

The price of goat's milk has not been recorded to date.

3.10.1. – Cow's milk

Milk producers have organised themselves into cooperatives that collect milk from the farm, process it or sell it on to manufacturers. The cooperatives make a down payment on collection which they supplement as the processed products are marketed. Only the down payments are recorded by the survey. Franche-Comté, where the cooperative cheese dairies pay comparatively small down payments, was not included in the sample.

The price of milk is fixed according to a price list specific to each dairy and varies depending on the economic climate, and is based on the fat and protein content and the presence of microorganisms. The cooperatives also pay premiums as remuneration for certain features of farms.

The SCEES obtains two prices from the cooperatives :

- the price of *standard milk*, paid for milk of a consistent composition and quality, corresponding to a standard fixed at European level, a farm with a refrigerated milk tank that is a member of the dairy control system. This standard is set with reference to
  - milk quality : 49,000 bacteria and 249,000 cells per millilitre, 900 butyric spores per litre and a lipolytic index of 0.24.
  - its composition : 38 grams of fat and 32 grams of protein per litre of milk (sometimes 37x32 is given, referring to the content per kilogram of milk whose volume mass is approximately 1.03)
- the *average price of milk*, which is in fact paid according to the real content of the milk supplied.

The milk price is recorded in 48 départements representing 89% of the milk collected in 2000.

Table 26. Cow's milk collected in the départements surveyed (millions of litres)

	Collected		Collected		Collected
01-Ain	273	42-Loire	281	62-Pas-de-Calais	591
02-Aisne	340	43-Haute-Loire	194	63-Puy-de-Dôme	274
08-Ardennes	275	44-Loire-Atlantique	1 089	64-Pyrénées-Atlantiques	123
12-Aveyron	301	45-Loiret	110	67-Bas-Rhin	109
14-Calvados	736	46-Lot	96	68-Haut-Rhin	89
15-Cantal	427	49-Maine-et-Loire	210	71-Saône-et-Loire	176
16-Charente	162	50-Manche	1 118	72-Sarthe	574
17-Charente-Maritime	130	52-Haute-Marne	177	76-Seine-Maritime	628
22-Côtes-d Armor	987	53-Mayenne	1 193	79-Deux-Sèvres	317
24-Dordogne	120	54-Meurthe-et-Moselle	153	80-Somme	336
26-Drôme	12	55-Meuse	410	82-Tarn-et-Garonne	419
29-Finistère	1 242	56-Morbihan	730	85-Vendée	539
31-Haute-Garonne	311	57-Moselle	358	86-Vienne	260
32-Gers	130	59-Nord	595	87-Haute-Vienne	14
35-Ile-et-Vilaine	1 530	60-Oise	247	88-Vosges	546
38-Isère	359	61-Orne	670	89-Yonne	202

Source : Ministry of Agriculture, SCEES

The index is calculated based on the price of standard milk, with the average milk price providing a value index for the national audit.

3.10.2. – Ewe's milk

Ewe's milk is produced and collected in a few départements, primarily in Aveyron, Pyrénées-Atlantiques and the Tarn.

The seasonal price (September to August) is recorded by the DDAF in Aveyron from the general confederation of ewe's milk producers and Roquefort manufacturers.

The average price is calculated based on the price paid for different qualities :

Class I : Milk suitable for Roquefort production
Class II : Milk for making various products
Class III : Milk used in processed products: powder, except for the individual reference quota