

July/August 2009 - No. 169

FR *ui* TROP

English version

CLOSE-UP:
FRENCH BEANS

Customs duties and CMO
Banana: the curse

Vegetables from Morocco:
slight conjunctural slowing

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- Un réseau de 8 mûrisseries réparties sur toute la France certifiées ISO 9001 version 2000,
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- Une offre segmentée : origines Afrique, Antilles et Amérique Latine. Différents colisages.



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Why work alone when it can be done better together? *This is the simple and effective principle used by five research and training bodies in the Languedoc-Roussillon region who have just joined forces in the field of environmental appraisal and industrial ecology applied to agro-bioprocesses (www.ecotech-lr.org). The founder members are teams at Cemagref, CIRAD, INRA, École des Mines in Alès and Montpellier SupAgro. This research set-up is unique in France and focuses on environmental life cycle assessment (LCA). The main objective of the ELSA centre (Environmental Lifecycle & Sustainability Assessment) is to set up scientific synergy and critical mass to generate cutting-edge research on the tools of sustainable development for agri and bioprocesses. The methods, tools and competences of this multidisciplinary organisation are available to industry and disseminated via training and expert appraisals.*

The official inauguration in Montpellier on 10 June showed the scope of the actions of the organisation, with ongoing work as varied as 'LCA and new energy sources based on seaweed', 'LCA and the environmental appraisal of spreading machinery', 'Industrial ecology applied to the Fos-sur-Mer industrial and port zone' and 'LCA applied to horticultural systems'. As the sustainability of farming and distribution systems is not limited to environmental criteria alone, the platform showed its desire to extend its work to the social assessment of life cycles. A new challenge for this new organisation that is already much in demand in industry in France and abroad. We wish ELSA a long life!

Denis Loeillet

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Wholesale Market Prices in Europe

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EURO - 20 July 2009	
Currency	1 euro =
US dollar	1.4217
Japanese yen	134.44
Swiss franc	1.5198
Pound sterling	0.8601
Swedish krona	11.0023
Danish krone	7.4462
Norwegian krone	9.0085
Canadian dollar	1.5702
Australian dollar	1.751
New Zealand dollar	2.1714
Brazilian Real	2.7122
Czech koruna	25.838
Polish zloty	4.298
Chinese yuan renminbi	9.7118
Estonian kroon	15.6466
Mexican Peso	18.7878
Turkish lira	2.1476
South African rand	11.2989
South Korean won	1 772.41

Source: Central European Bank

Cover photo: Guy Bréhignier



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Customs duties and CMO Banana

The curse of the European banana market

In contrast with what one might think, the overall good behaviour of banana prices during recent years is a malediction for the European market. Indeed, superficial analysis of the physiognomy of the market since its partial liberalisation in January 2006 might make it seem that the level of duty (EUR176 per tonne or EUR3.22 per box levied on dollar bananas) is too high, causing the present strong increase in import and retail prices. Fingers are being wagged at the guilty party—customs duty. At the time of writing, we are awaiting the verdict and the punishment to be applied: an immediate massive reduction in customs duty.

But curiously, although we have the guilty party and the sentence, we are still looking for the victims. Because those vaguely indicated by partisans of a reduction in duty have not asked for anything and have not complained. The martyrs are said to be a mixed batch of growers who suffer from the levy in Europe, exporters and importers whose development is bridled and their returns pillaged, and European consumers who, to buy this so expensive fruit, have to part with ever more of the few euros left to them by the downturn.

But nevertheless it works

So let's have a look at the victims. The upstream part of

the sector has not suffered from the new regime, far from it. Growers in Ecuador and Costa Rica have seen a very significant increase in official minimum prices and, what is even better, the real prices for both Spot transactions and contract sales have rocketed. Exporters and importers have also benefited from the favourable trend. This has resulted in an increase in the Aldi price (+ 6% in 2008 to EUR13.4 euros/carton), proof of excellent market dynamics. It is true that intermediary operators have paid producers more for bananas, but many of them are producers themselves. Finally, consumers—described as being the mugs in the game—do not seem to be hostile to banana. Annual European consumption has increased considerably since 2006 and has gained 1.3 kg per person since 2005, that is to say an extra 1 000 000 tonnes! Retail prices have remained practically stable throughout Europe, as in Germany where prices at discount supermarkets increased from EUR0.99 to EUR1.01 per kg from 2007 to 2008. The situation is similar in France, where the average retail price has increased by 3.5% since

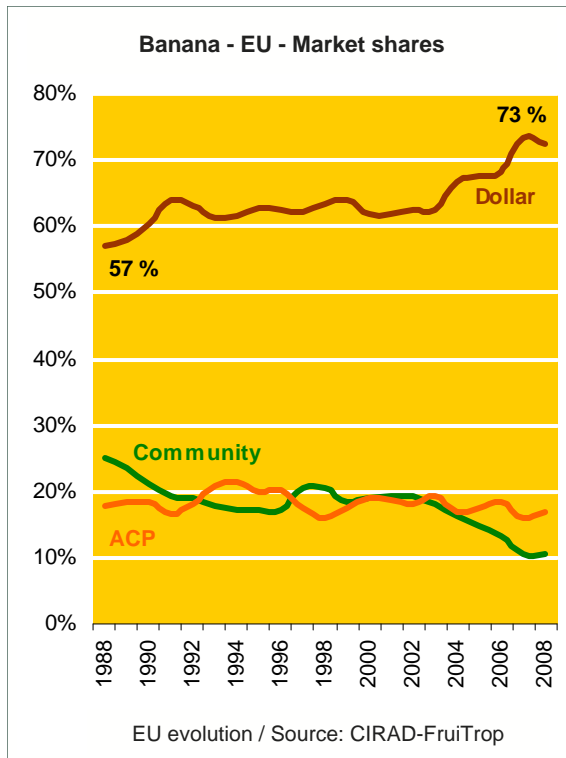
2006, while the retail price index for fresh fruits gained 8.4% during the same period! If these are fast-climbing prices, they are operating in slow motion.

However, criticism of the present regime does not stop there. Some pseudo-robbed victims still complain that 'it is true that everything is fine in the best banana market in the world except that some (dollar sources) suffer to the benefit of the others (EU producers and ACP sources)'. Unfortunately for the diehards of liberalisation, monitoring of the European banana market shows that no category of source (third country, ACP and dollar) has been excluded from growth. Dollar sources exported 974 000 tonnes more in 2008 than in 2005. During the same period, ACP exports increased by 155 000 tonnes. Shipments by European producers decreased strongly by 80 000 tonnes. Even though the EU gained two new member-countries during the period, it can be agreed that (1) the increase is impressive, (2) growth benefited extra-EU imports only, and (3) the dollar sources took the lion's share.

Why maintain a balanced and profitable banana market for all sector stakeholders? Why not lower customs duty and add to world market imbalances when the production sector has reached its full potential again? Why not destroy a little more value-added?



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Who benefits from deregulation?

So why upset such a virtuous market? Especially as world production and export potential has not been fully expressed since the opening of the European market. Indeed, all production regions have been hit by bad weather: gales in Africa, floods in Costa Rica, Colombia and Brazil, hurricanes in Central America, the Dominican Republic, Martinique, Guadeloupe and Jamaica, and very cold weather in Ecuador, etc. Supply pressure has thus been limited, with nature playing a regulatory role, helped by a context of strong demand in Europe, Russia, the Mediterranean and the Middle East. Some people have been quick to forget spring 2006. With their new right to ship unlimited quantities to the European Union, Latin American operators of all sizes finally had a taste of the European eldorado. We know

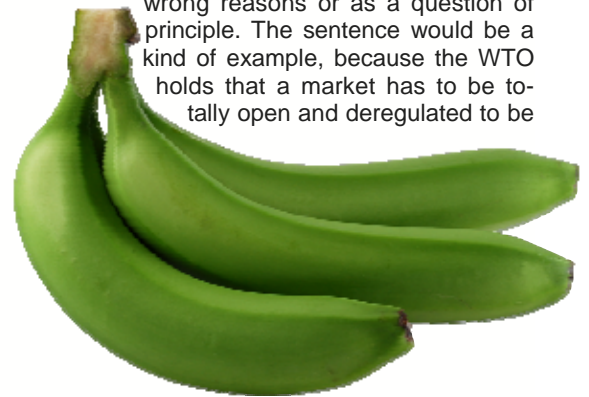


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that this caused a strong market dip. It is interesting to reread the analysis made by Eric Lambert, researcher at CIRAD and recognised as a leading specialist in these markets, who wrote as follows in **FruiTrop**: '... the dollar bananas available in limited quantities but at competitive prices played a destabilising role' (**FruiTrop 134** – Market report for March 2006) and then, in the following month '... although the quantities of dollar

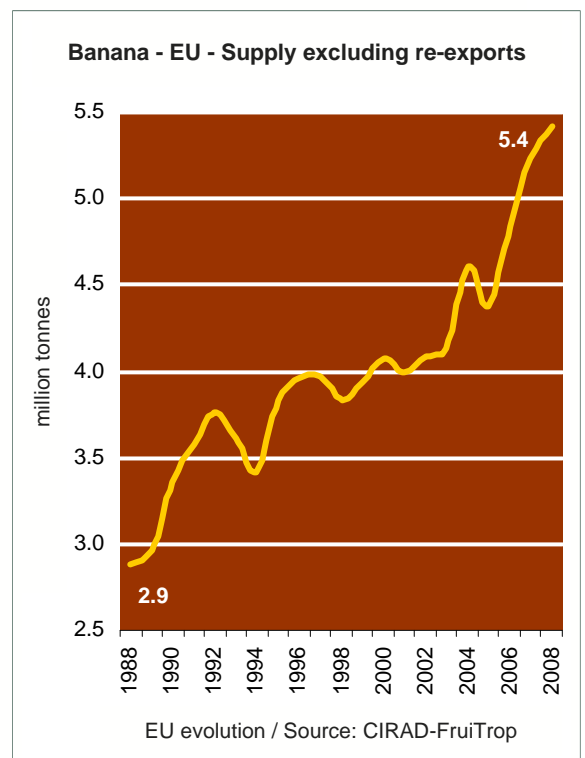
bananas were fairly moderate, these very dispersed supplies at sometimes very competitive prices succeeded in upsetting the situation in the sector...' (**FruiTrop 135** – Market report for April 2006).

If the market displays good dynamics, why disturb it? If its good behaviour is the result of world supply running at less than its potential, why take the risk of over-supply by opening the market a little more? Let's hope that we are not going to see the forced liberalisation of the market for the wrong reasons or as a question of principle. The sentence would be a kind of example, because the WTO holds that a market has to be totally open and deregulated to be



efficient. The sentence would be for reasons of honour—that of the Latin American leaders who succeeded in making the EU a pariah and who now want reparations that would destabilise a market where their growers earn a somewhat better living than they did before. And too bad if the day after victory these people, like Pyrrhus, say 'One more such victory and we are lost' ■

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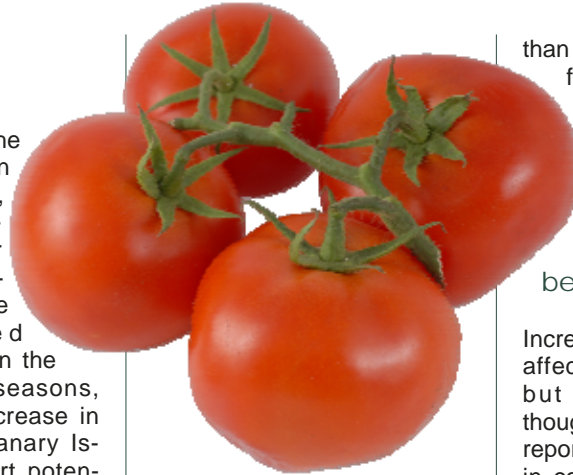
Vegetables from Morocco

Slight conjunctural slowing

Tomato still the leader

Tomatoes are still the leading Moroccan vegetable export, alone accounting for 48%. Exports have increased even more in the last three seasons, with the decrease in Spanish (Canary Islands) export potential and the development of shipments to the Eastern European countries and Russia. The 2008-09 season has been rich in events, starting with a bang in October when the duty-free quota started; this caused a fast and very strong decrease in prices and the application for eight days of the MTE (maximum tariff equivalent) on 29/10/2008. However, this period was followed by a market recovery until the end of December, with limited Spanish presence resulting from the staggering of crops to meet the requirements of integrated pest management. Prices on export markets were between EUR0.80 and EUR1.00 per kg, allowing entry of Moroccan tomatoes within the framework of GATT agreements and outside the overall quota

awarded to Morocco by the association agreement with the EU. In

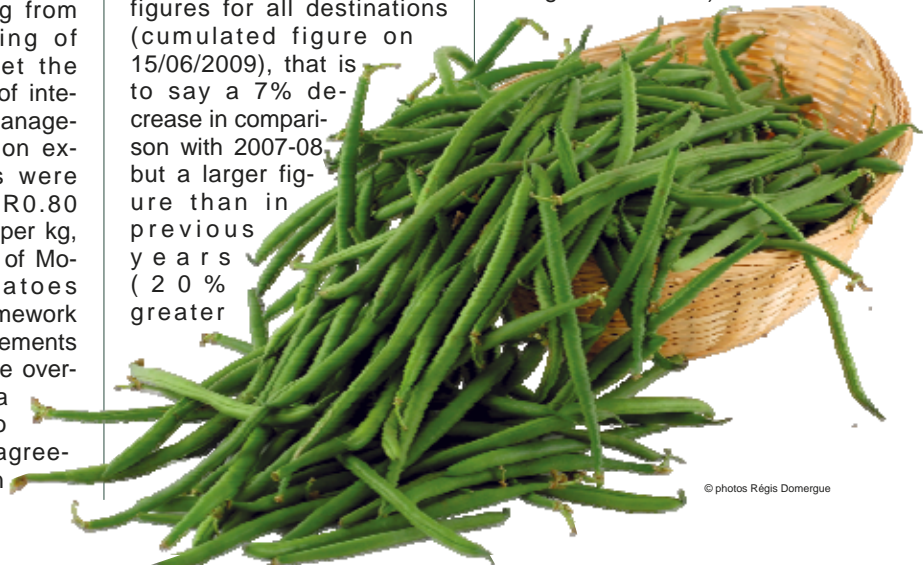


than the average for the last five years).

Slight conjunctural slowing for beans?

Increasing export demand is affecting not only tomatoes but all vegetables even though the 2008-09 season is reported to be down by 23% in comparison with 2007-08 (557 000 tonnes according to EACCE cumulated figures on 15/06/2009). Beans are among the vegetables that are much in demand on export markets. Indeed, flat and filet beans are exported just after tomatoes and trade has developed steadily for more than 10 years. In 1995 a total of 7 000 tonnes was exported from all regions. The figure exceeded 120 000 tonnes in the 2007-08 season. Morocco rapidly gained a position on the European market thanks to its proximity and low labour costs, enabling it to dominate from the beginning the present decade. Logistic constraints (two to three days of transport in refrigerated lorries) are less

contrast, the beginning of 2009 was distinctly more laborious as Spanish production got under way, even though it was 30% smaller than normal, as a result of very cold weather among other things. However, the market recovered again in March as European crops were late: winter had been hard and crops postponed to limit heating costs. But prices fluctuated strongly during this period because the quality of early produce was uneven at the end of the season. An increase in consumption and the points noted above made April a particularly buoyant month. A total of 320 000 tonnes of tomato was exported according to EACCE figures for all destinations (cumulated figure on 15/06/2009), that is to say a 7% decrease in comparison with 2007-08, but a larger figure than in previous years (20% greater



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Morocco is the leading extra-European supplier of vegetables ahead of Turkey and Israel. Development is continuous and varied. The European market is still by far the main outlet, accounting for 92% of exports, that is to say 665 000 tonnes of a potential 720 000 tonnes during the 2007-08 season. But this share is decreasing a little (it was still 95% in 2006-07) to the benefit in particular of the CCEE (including Russia), with these now forming 5% of trade (35 000 tonnes in 2007-08). Although the potential for the 2008-09 season is good, it has suffered from poor weather conditions that have also strongly affected Spanish crops.

Vegetables — Morocco — Exports to all destinations					
tonnes	2003-04	2004-05	2005-06	2006-07	2007-08
Tomato	220 598	236 879	239 422	296 349	343 681
Melon	28 181	43 942	46 119	47 552	55 584
Early potato	50 608	44 984	32 504	44 464	57 584
Helda beans (flat)	41 122	50 583	65 747	54 795	72 045
Courgette	35 127	29 278	39 031	44 587	49 266
Pepper	21 884	28 533	35 920	35 893	48 469
French beans	39 122	33 020	38 349	53 242	48 169
Other vegetables	25 812	30 487	40 773	48 088	45 026
Total	462 454	497 706	537 865	624 970	719 824

Source: EACCE

severe than those of its African competitors and supply is steady with several deliveries each week while the other sources have only weekly services. However, French imports in recent years have tended to stagnate at around 38 000 to 39 000 tonnes; the reasons include a return of operators to their core produce—especially tomato—with beans remaining a vegetable for specialists. But French imports consist essentially of filet beans whereas the growth of Moroccan exports is related above all to the very strong demand for flat beans on the Spanish market. Some experts affirm that growth should continue as demand is still increasing, especially as most of the produce is shipped by Spanish operators installed in Morocco or who have partnerships with local producers. But poor weather conditions have affected quality in 2008-09, causing a 17% dip in exports of French beans (40 000 tonnes) and an 11% dip in those of flat beans (64 000 tonnes) in comparison with 2007-08.

Pepped up by peppers!

Tomatoes and beans are not the only produce to have experienced rapid expansion. Exports of courgettes and peppers have also increased remarkably, with destinations including Spain where there are serious production problems: strong competition from building and problems of plant health, labour and water resources. Bell pepper exports are thus increasing steadily, especially as problems concerning Methamidophos in Spain affected demand and changed Spanish cultivation methods (integrated pest control and staggered crops). Moroccan exports thus increased from 36 000 tonnes in 2006-07 to 48 000 tonnes in 2007-08 and 51 000 tonnes this season, in spite of poor weather conditions. Most of the volumes have tended to go to the Spanish market so far (15 300 tonnes in 2007-08), but other destinations such as France (15 200 tonnes in 2007-08) and even Germany (10 000 tonnes in 2007-08) who used to have close links with Spanish suppliers are gradually stepping up their purchases. Courgette exports have also increased steadily since the early 1990s. They reached 49 000 tonnes in 2007-08 and the greater proportion was shipped to the French market (40 300 tonnes in 2007-08). They marked time somewhat in 2008-09 (44 000 tonnes, that is to say 11% less than in 2007-08), even though the good beginning of the season should be mentioned, and exports were strong in January and February as a result of the deficit in Spain and this nevertheless weighed on price levels.



© Photos Pierre Gerbaud

Potatoes in the doldrums

In contrast, exports of new potatoes find it difficult to hold their ground, except in 2007-08 when there was a marked deficit in European production, initially because of strong competition from Egypt but above all because of the marked increase in Israeli exports to the European market in recent years. But potato is still one of the main vegetable crops in Morocco. It is grown on about 60 000 hectares every year—23% of the total area under market garden crops—with annual production of 1.5 million tonnes. Total exports oscillate between 45 000 and 55 000 tonnes, but shipments to the main destination, the French market, are stagnating (23 000 to 38 000 tonnes in recent years). They have been particularly small this year, affected by bad



weather and a very competitive market, at only 8 700 tonnes to all destinations ■

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French

beans

Growth is continuing on the French bean market. European Union imports increased by 23% from 2005 to 2008, rising from over 160 000 tonnes to more than 197 000 tonnes. During this period, exports from Morocco and Kenya increased by 35% and 25% respectively. In contrast, Egyptian and Senegalese exports have dipped by 21% and 20%. The greatest growth has been in exports from Burkina Faso, with the volumes increasing from 514 tonnes to more than 1 100 tonnes, that is to say 120%. Only Morocco, Egypt and Kenya can ship beans almost all the year round. The other sources are only present on the market during the counter-season period.

A report by Thierry Paqui

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The EU market for counter-season French beans

Supply continuing to increase

In 2008, Morocco was still by far the leading extra-European supplier of green beans with a market share of more than 61%. With a 10% increase in exports, it increased its domination a little more in comparison with 2007, when it already accounted for 58% of European imports. This increase in market share seems to have been at the expense of Egyptian exports, which dropped 3% from 14% to only 11%. However, the situation remained unchanged for Kenya and Senegal with 19% and 3% respectively, in spite of a slight increase in Kenyan exports (2%) in comparison with 2007.

because of quality concerns, as was the case again this year.

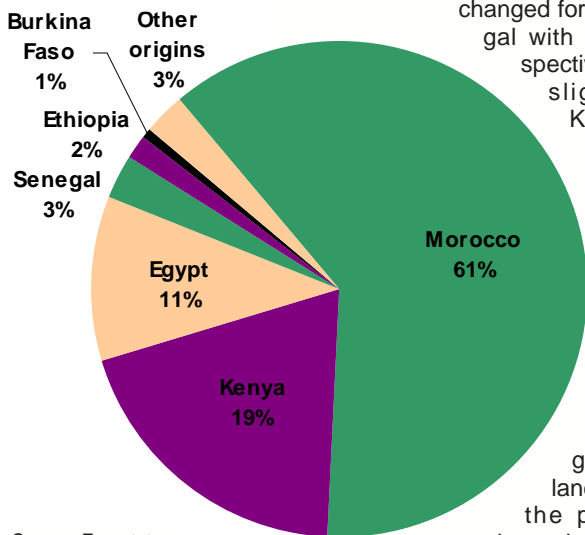
France

First and foremost, this market seeks high-quality filet beans for which operators are sometimes ready to pay a high price. In contrast, there is very little room for intermediate quality beans that are soon downgraded and considered as poor quality, especially when market conditions are difficult.

During the last season, the four sources Senegal, Burkina Faso, Kenya and Morocco shipped filet beans to the French market on a fairly regular basis.

The 2008-09 season was fairly mediocre overall. Several quality problems such as dry

French beans - Extra-EU imports in 2008



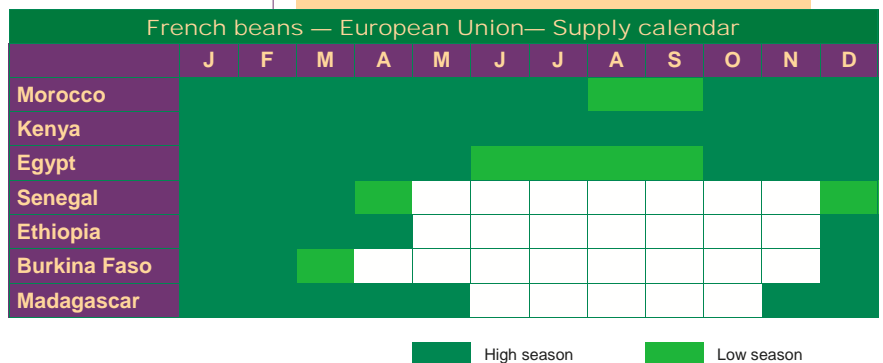
Progress of the season

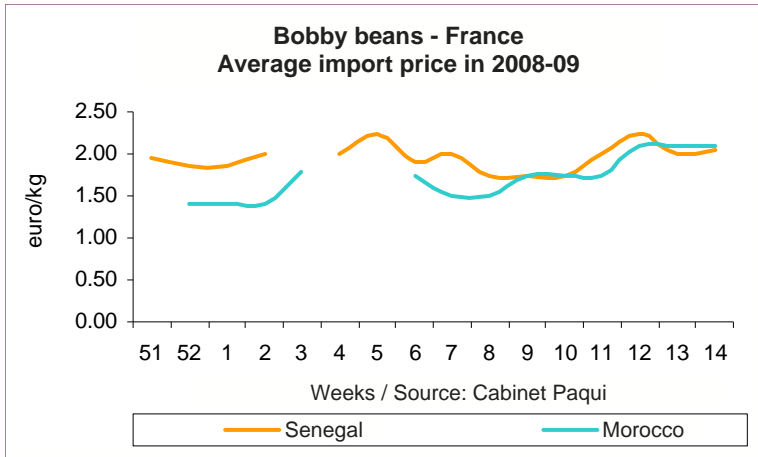
The four markets France, Belgium, the Netherlands and Italy show the pattern of flows throughout the counter-season for green beans. With the exception of France, where there is a market for filet (needle) beans and a market for Bobby beans, although this is small, appraisal of the counter-season can be summarised by comparing the position of Senegal with competing production sources.

When production—and hence export—periods are tending to lengthen for Maghreb sources, the export periods tend to be shorter for sub-Saharan sources, and in particular Senegal and Burkina Faso. Indeed, shipments are starting later and later and are often interrupted prematurely

European Union supply calendar

European production periods vary according to the country, running roughly from 15 June to 15 October. So-called counter-season supply from African countries runs from November to April. Kenya was the leading supplier of the European market until 2000 and ships regular batches throughout the year. Morocco is currently the European market's leading supplier and, together with Egypt, has succeeded in extending the production period by using greenhouses. Both suppliers also operate all the year round, but with smaller volumes during certain periods.





containers were not available until the third week of 2009.

Kenya is still the absolute reference on the market for very fine filet beans. Once again, the amounts shipped were not very large and quality problems were observed, and especially rust. But it is still the standard against which beans from all the other sources on the market are measured. The prices of Kenyan beans were fairly stable as usual, with the average fluctuating between EUR3.35 and 3.90 per kg according to period and availability.



batches lacking fresh silky texture disturbed supplies from all sources.

Remembering the results of preceding seasons, operators delayed the arrival of larger volumes of beans until after Christmas. The first

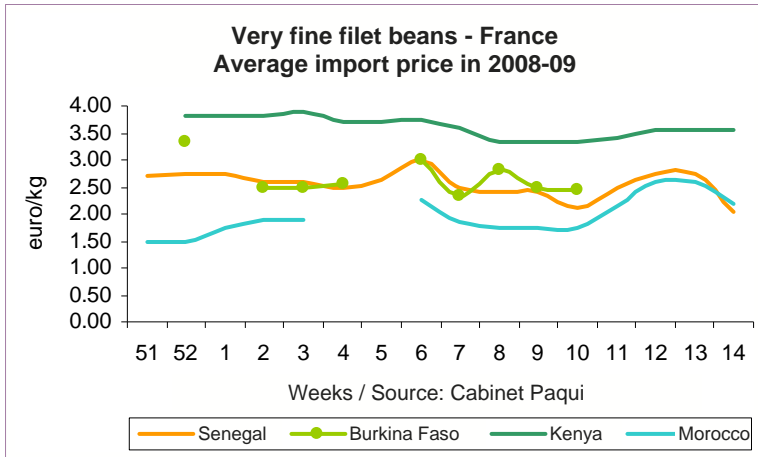
The withdrawal of some Senegalese operators—especially those trading filet beans—permitted the return of Burkina Faso. Unfortunately, the quality of the batches was very uneven throughout the season. Generally well traded and sorted, filet beans from Burkina Faso suffered a very rapid change in quality. The batches received were often unrecognisable only two days after being released on the market. With prices running at between



Photos © Régis Domergue

French beans — European Union — Monthly imports															
	Seasons (Oct. to Sept.)			2008											
	2005-06	2006-07	2007-08	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec
Intra EU, incl.	185 369	166 047	143 630	5 303	6 372	6 178	6 009	5 923	5 329	17 462	22 619	41 784	33 952	11 193	4 721
Spain	24 730	23 017	24 537	2 414	2 665	2 671	2 217	2 015	2 448	1 224	731	1 030	1 610	1 808	1 830
France	87 511	74 009	50 486	1 047	1 575	1 794	2 073	1 988	804	9 475	5 241	17 013	16 059	4 922	1 200
Netherlands	45 979	45 900	44 972	827	884	929	781	1 059	1 096	3 490	12 366	19 453	14 163	2 013	995
Germany	9 693	8 432	10 536	136	220	166	276	231	197	2 393	3 540	2 382	1 083	204	275
Italy	4 274	3 691	3 816	246	219	241	201	309	423	462	340	285	221	120	241
Belgium	10 182	8 190	5 394	249	444	67	120	117	68	134	119	1 400	645	2 002	113
United Kingdom	833	498	776	66	45	51	23	27	57	12	10	20	19	39	14
Poland	359	610	749	13	44	78	9	3	34	65	46	72	43	18	14
Extra EU, incl.	181 133	189 495	182 434	23 832	20 167	20 733	20 689	20 566	17 616	8 221	5 840	6 814	13 576	19 316	19 165
Morocco	102 631	109 058	110 092	15 243	12 781	12 361	12 311	13 375	12 443	4 767	2 768	3 441	9 084	12 765	10 956
Kenya	32 980	36 620	36 459	3 089	3 192	3 864	3 656	3 425	3 491	2 891	2 609	2 967	3 063	2 742	3 319
Egypt	27 007	27 765	22 054	2 693	1 367	1 634	3 245	3 069	1 307	257	74	62	1 086	3 140	3 306
Ethiopia	4 689	3 342	2 979	687	583	845	444	81	-	1	-	23	-	-	732
Senegal	7 040	6 424	5 385	1 476	1 424	1 364	554	220	23	16	-	-	28	9	334
Burkina Faso	660	841	1 221	259	442	288	20	-	-	-	-	-	-	-	139
Tanzania	1 055	520	580	59	53	48	43	40	58	51	56	59	45	46	51
Guatemala	363	379	287	51	29	37	31	36	27	16	11	2	29	43	34
China	32	320	51	1	2	-	-	0	1	23	1	-	-	1	23
Dominican Rep.	413	724	690	66	71	73	67	75	68	70	55	52	66	54	19
Turkey	790	638	710	3	2	22	122	116	84	51	122	140	33	69	15
Zambia	948	720	338	43	26	32	43	29	27	20	17	24	9	14	6
Jordan	229	172	75	34	12	17	5	1	0	0	0	0	-	0	3
Zimbabwe	1 295	730	182	16	13	13	36	26	16	1	-	0	3	-	0
Gambia	361	238	244	5	69	29	3	0	-	-	-	-	-	-	-
Peru	32	125	91	1	23	3	26	5	11	10	5	2	6	-	-

Source: Eurostat



EUR2.35 and 3.35 per kg depending on the period of the season, produce from Burkina Faso was not really able to profit from the small supplies from Kenya or the irregular shipments of filet beans from Senegal. Some operators had to reduce their imports during the season because the quality of the produce was too uneven. Very hot weather caused the season to come to a quick end for the batches from Burkina Faso that were increasingly rare from Week 10 onwards.

As in previous seasons, sales of filet beans from Senegal were a little disturbed by the availability on the market of batches of Senegalese beans imported by air and by sea, with no distinction made concerning the type of transport. Price differences could therefore range from EUR1.50 to 2.00 per kg! However, in the interest of the Senegalese bean sector, it seems necessary to set certain rules concerning cultural practices, especially for produce shipped by sea. Mention should also be made of the serious sorting problems that once again resulted in certain disappointments. Although it is true that batches of filet beans can be sold more profitably on the French market, the condition is that the quality is good and that above all the beans really are filet beans. On several occasions, certain operators believed that they could get a better price if they put Bobby beans in boxes of very fine beans. This strongly affected the legibility of Senegalese

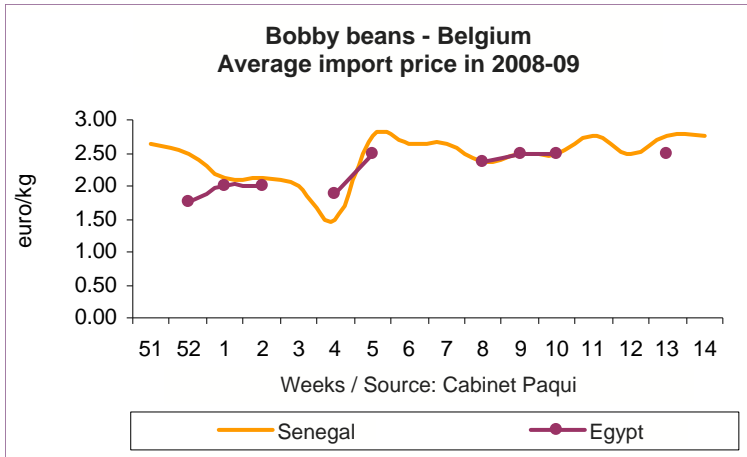


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French beans - France Import price		
euro/kg	Min	Max
Very fine		
Burkina Faso	2.35	3.35
Kenya	3.35	3.90
Morocco	1.50	2.60
Senegal	2.05	3.00
Bobby		
Morocco	1.40	2.10
Senegal	1.75	2.25

supply and harmed the image of this source once again.

Supply from Morocco was also very disturbed during the counter-season period. Heavy rainfall in the production zones affected the quality of the produce, which deteriorated rapidly after picking. Supply was halted for two weeks.

French market outlets for Bobby beans are smaller than those for filet beans. A fair proportion

of the volumes received is re-exported to other markets. Demand for Bobby was poor overall this year and it was not possible to sell large volumes.

Belgium

Although batches shipped by sea are also found on this market, we opted to monitor the movement of prices on the market for produce

shipped by air. Indeed, for two seasons now we have observed increased interest in and growth of a market for high-quality produce that fetches better prices than that shipped by sea. Here, Senegal's main competitor has been Egypt.

The quality of the first beans shipped from Senegal by air was not good. The batches that arrived during the first two weeks of the season were dry and lacked silky texture. Those from Egypt, grown under glass, displayed more regular quality and immediately gained a better position on the market.

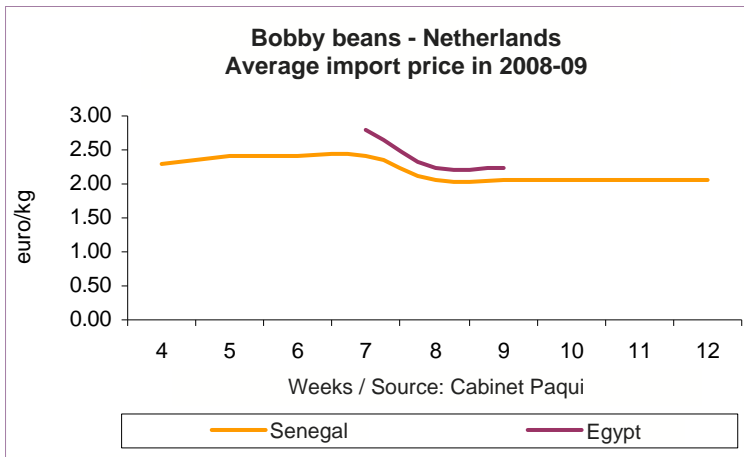
Cheaper and more attractive as regards quality, they found a clientele fairly quickly. The quality of the batches from Senegal remained hesitant until the end of Week 3. Smaller supplies and better quality sent prices upwards from Week 4 to Week 6. Sales were slow throughout the season even though the price remained fairly stable. In contrast with previous years, the start of the Senegalese season did not result in the end of Egyptian exports. These continued as they were better appreciated for their regularity by a proportion of consumers.

French beans - Belgium Import price		
euro/kg	Min	Max
Bobby		
Egypt	1.75	2.50
Senegal	1.50	2.75

The Netherlands

Holland has been the reference market for Bobby beans up to now as operators had successfully segmented the air market and the sea market. The situation was reversed in the last season. After taking practically all Senegalese Bobby bean production, the Dutch market slowed. Some people think that this was caused by the economic downturn and falling demand from other markets. However that may be, the slowing affected prices and Senegalese exports.





French beans - Netherlands Import price			
	euro/kg	Min	Max
Bobby			
Egypt		2.25	2.80
Senegal		2.05	2.40

The French bean season started in earnest with the arrival of the first containers. As re-export demand was smaller, Senegalese operators were frequently obliged to redirect their produce to other markets, going as far as packing Bobby in 'very fine' boxes. The market therefore took smaller volumes during the last season. This resulted in Senegalese exporters reappraising their market segmentation objectives. Several operators who had abandoned filet beans seem to have decided to focus on this again.

Italy

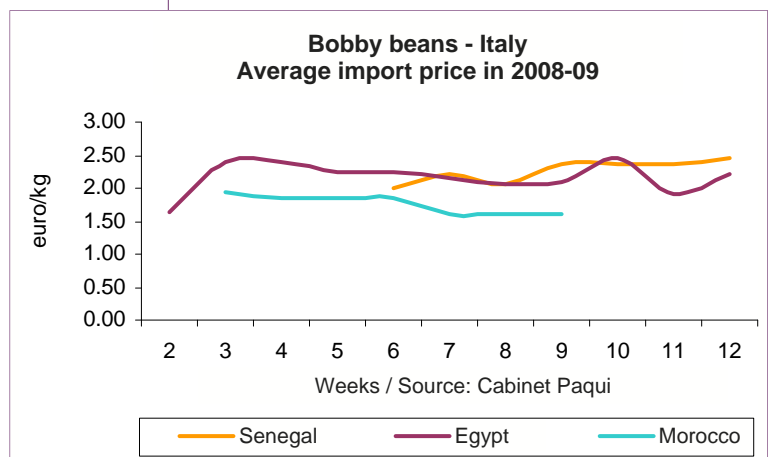
This market is mainly interested in Bobby beans. Senegal lost a significant market share, especially at the beginning of the season. Made cautious by the quality problems experienced in recent seasons, operators waited as long as possible before taking delivery of the first batches from Senegal. Thus, although this source is generally highly esteemed for the quality of the produce shipped, it came on to the market very late, at the end of the fifth week. The presence of poor quality Moroccan batches available at all prices and that of produce from Egypt meant that importing beans from Senegal was not of any interest. However, with the decrease in volumes from Morocco and the more pronounced deterioration of their quality, batches from Senegal arrived under better conditions. How-

French beans - Italy Import price			
	euro/kg	Min	Max
Bobby			
Egypt	1.65	2.45	
Morocco	1.60	1.95	
Senegal	2.00	2.45	



ever, in contrast with preceding seasons, their arrival did not block the other sources. Egypt, where quality has improved distinctly, was an alternative on several occasions. For reasons of concern about quality, batches of produce shipped by air from Senegal soon arrived to complement the goods arriving by sea. In spite of good price levels, the batches from Senegal did not really convince operators ■

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French beans: increasingly fine segmentation

With European imports approaching an annual 200 000 tonnes, French beans display strong growth. EU imports have increased threefold in a decade and are still on the up and up. The development of this market is of course the result of the emergence rocketing growth of Moroccan exports as these alone form nearly 60% of EU imports. The trend has also hit traditional exporting sources that have gradually found themselves marginalised for reasons of lack of competitiveness. However, beyond the question of the change in the supply sources for the European market, finer market segmentation is observed with a broadening of the range of produce available. Fine filet beans form most of market supply, followed by Bobby and then very fine filet. Trade is divided into two broad categories of produce—loose and pre-packed beans.

Most of the volume traded in Europe consists of loose beans. Segmentation is according to the types of packing used by the various shipping sources. Morocco ships fine and Bobby beans in wooden crates containing around 5 kg. Depending on the brands, the boxes are covered with synthetic netting stapled to the side or with a central cardboard separation for better alignment of the pods and thus more attractive presentation. The more distant export sources (Senegal, Burkina Faso, Egypt, etc.) favour cardboard packaging generally containing 4 kg of produce. These may be of the tray or telescopic type, with or without the parallel alignment of pods. Finally, Kenya, often used as the reference for green beans, uses telescopic boxes whose capacity varies according to the destination market. Capacities can be 2 or 2.2 kg for northern European markets (e.g. the Netherlands and Belgium) and 2.7 kg for the French market, the leading consumer. Fine filet and Bobby beans are generally in 4 or 5-kg packages whereas very fine filet beans are preferably delivered in smaller packs.

This already broad supply range applies only to produce picked and simply packed before shipment. French bean market segmentation is increasing considerably with a growing range of pre-packaged products responding to more compartmentalised demand resulting from the changing ways of life and purchasing of Europeans. Long reserved for the catering sector and retailers specialising in fruit and vegetables, pre-packaged beans are gradually gaining other distribution channels and especially supermarkets and superstores. Depending on the market, a broad range of products is available with differences not only in the packaging but also in the type of produce. Three categories can be noted: whole beans simply packaged, generally in bags, topped and topped and tailed beans in bags or punnets. Here again, Kenya has acquired an image of specialist in pre-packaged beans and the quantities exported have increased strongly for several years. The proportion of pre-packaged beans now exceeds that of all the loose beans shipped from Kenya. Senegal and Madagascar have also taken this direction but to a lesser degree.

While whole and topped beans are intended more for the British market, topped and tailed beans in punnets have resolutely conquered continental European markets. The types most commonly distributed are 250 and 500 g film-covered punnets. These are generally packed in boxes: 12 x 250 g and 6, 8 and 10 x 500 g. This is a trade base that can be broadened. Fine or very fine filet beans can be packaged in 150 and 200 g punnets (box of 8 to 24 punnets) for the northern European markets. In addition to these references, operators can supply special packaging as required by importers and distributors. Larger packaging for supermarket chains is not unusual, such as 45 x 150 g punnets. This flexibility has been gained gradually by export structures and enables them not only to remain present on the European market in the face of increasing competition but also to develop products with greater value-added.



Very fine French beans - Morocco
Wooden crate (5 kg) with central separation
and synthetic netting



Very fine French beans - Kenya - Topped
and tailed beans in punnets (250 g)



by Pierre Gerbaud



Very fine French beans - Kenya
Telescopic cardboard (2.7 kg)



Very fine French beans - Kenya
Telescopic cardboard (2.7 kg)

Mangetout peas: a growing business

Less known and less purchased than French beans, mangetout peas (snowpeas, edible-podded peas) are increasingly present on European market stalls. EU imports are still modest but have almost doubled in the last decade, reaching 26 600 tonnes in 2008. This total is slightly overestimated as the figure includes garden peas and other types of pea. Basing calculations on sources specialising in mangetout peas, European imports are probably some 20 000 to 23 000 tonnes, a significant figure. The main suppliers of the European market are as follows, starting with the largest: Kenya (12 800 tonnes), Guatemala (3 900 tonnes), Zambia (2 000 tonnes), Egypt (1 400 tonnes), Peru and Zimbabwe (1 300 tonnes) and finally Morocco (1 000 tonnes). China, India and Madagascar are also exporters but of much smaller volumes (less than 500 tonnes). Mangetout peas are sold

mainly on the restaurant market but, like pre-packaged beans, are gradually being more widely distributed. They are sold topped or tailed or untrimmed, with a preference for the former. Packaging is similar to that used for French beans, with produce delivered loose and also packaged in punnets. A smaller number of references is used: a 2 kg box for loose produce (topped and tailed or not) and 250 g punnets. Larger packaging units for loose pods are used only in Morocco. It is also one of the rare suppliers of the European market to ship non topped and tailed pods with a smaller commercial value. Topped and tailed pods in punnets come in several specific forms such as the 150 g and 200 g punnets that tend to be shipped to the northern European markets. Boxes contain from 8 to 24 punnets but here again operators can adjust packing to customer demand. The mangetout pea market seems to be more speculative than that of French beans, with substantial variations in price according to supply and more fluctuating demand.

© photos Pierre Gerbaud



Mangetout peas - Kenya
Punnets (250 g)



Mangetout peas - Kenya
Loose in box (2 kg)



Mangetout peas - Kenya
Punnets (150 g)

French beans — African

		Senegal	Burkina Faso
Range	core of range	Bobby	Filet
	complement	Filet	
Freight	land		
	air	Cargo and regular flights	Regular flights
	sea	Containers	
	availability	Unlimited for containers, medium by air	Medium
	price	High	High
	frequency	Weekly	Weekly
	service quality	Average	Medium
	destinations	France, Belgium, Netherlands, Italy	France (Roissy-CDG)
Competitiveness		Strong for Bobby, medium for filet	Medium for filet
Productivity		Good. Land available, development potential, skilled labour for Bobby and perfectible for filet	Medium. Land available, skilled labour for filet
Production organisation		Individual growers and groups. Increasingly professionalised sector.	Individual growers and groups. Longstanding growers lacking interest in growing beans, whence the decrease in production in recent years. But production is increasing again.
Export organisation		Associations of grower-exporters and of exporters	Several grower-exporter associations
Type of market	position	Market shared with several competitors in France, dominant in Belgium and the Netherlands	Minority in France (various competitors), dominant in Belgium and the Netherlands
	competitors	Morocco, Kenya and Burkina Faso in France; Morocco and Egypt in the Netherlands	Morocco, Kenya and Burkina Faso (France)
	core market	Filet for France, Bobby for the Netherlands	Filet for France
	range	Whole range	Filet, mainly very fine
	certification	Several companies with GLOBALGAP certification	Increasing number of companies with GLOBALGAP certification
	reputation	Irregular for filet (France) and good for Bobby (Netherlands, France)	Good for filet but sometimes irregular
Development potential		Volumes of Bobby, improvement of filet sorting and packing, development of the topped and tailed market ongoing with an operator	Steady filet quality
Marketing period		100% counter-season (December to end of March / beginning of April), competition from all counter-season suppliers	100% counter-season (December to end of February / mid- March)
Observations		Supplier with strong potential and stakeholders whose professionalism continues to improve. Nothing much to be added for Bobby. For filet, a need to improve harvesting and above all sorting at packing stations. Filet growers are increasingly confronted with a yield problem. Possibility for improvement of the quality of the produce shipped by better logistic structure.	Sector recovering strongly. The re-launch is slowed by freight costs that are too high to be covered by the quality of the produce as this is uneven. When quality is high, the produce sells well in comparison with that of West African competitors. Release on the market at the right moment is still a crucial problem that operators must solve.

counter-season suppliers — Advantages and constraints

Morocco	Ethiopia	Egypt	Kenya
Filet	Bobby	Bobby	Filet
Bobby, flat beans (Helda)			Bobby
Refrigerated lorries			
	Cargo and regular flights	Regular flights	Cargo and regular flights
		Containers and reefers	
Unlimited	Limited	Very large by sea, medium if not small by air	Average and often irregular during the counter-season
Usually the lowest among non-European suppliers	Medium	Low for sea, medium for air	High
Several times a week and even daily depending on the distance of the market	Weekly	Weekly	Weekly
Medium	Good	Good, especially before the arrival of West African produce, and then more limited	Good
France, Spain Italy, Netherlands	Mainly Italy	Netherlands, Belgium, France, Italy	United Kingdom, France
High for filet and Helda, good for Bobby	High for Bobby	High for Bobby	High for filet and the various peas
Good. Land and labour available		Good. Land available, development potential, skilled labour for Bobby	Good. Land available, development potential, skilled labour for filet
			A few large operations that incorporate outgrowers, while training them and preparing them to respect increasingly strict private standards. The chain resolutely addresses private certification and is becoming increasingly professional.
			Several operators whose size and volumes exported vary form the driving force for the other sector operators.
Market shared with several competitors in France, minority in the counter-season in Belgium and the Netherlands	Shares Italian market with several competitors	Minority in France. Shares the market with various competitors in Belgium and the Netherlands	Market shared with several competitors in France, dominant in the United Kingdom
Senegal, Kenya and Burkina Faso (France), Senegal and Egypt (Netherlands)	Senegal, Egypt, Morocco	Morocco, Kenya and Burkina Faso (France), Morocco and Egypt (Netherlands)	Morocco, Kenya and Burkina Faso (France), Morocco and Egypt (Netherlands)
Filet for France, Bobby for the Netherlands	Bobby for Italy	Bobby for the Netherlands, Italy and Belgium	Filet for the United Kingdom and France
Whole range		Whole range	Whole range
GLOBALGAP for part of produce	GLOBALGAP for part of produce	GLOBALGAP for part of produce	GLOBALGAP for most exporters. But above all many operators seek to attain the level of GLOBALGAP requirements without seeking certification, cost being a limiting factor in this.
Quality generally lower than that of West African competitors during the counter-season period	Good for Bobby	Good for Bobby	Excellent for all produce exported—mainly filet and pre-packaged beans
Filet quality	Regular quality and volumes of Bobby	Quality, evenness and cost when greenhouse production or produce exported by air are concerned.	Greater availability, especially on the French market during the counter-season
All year round with a dip in August and September	100% counter-season (December to end of April). Competition on the Italian market with produce from Senegal, Morocco and Egypt.	All year round with a dip in supply from November to March-April (greenhouse production).	All the year round according to the destination country. Supply is smaller in France, for example, when competition is strong (counter-season from December to March).
Production has increased steadily since the diversification of Moroccan exports and the development of French bean growing, mainly thanks to exports of Helda to Spain. In spite of the impressive volumes, this supplier finds it difficult to establish a true quality image for filet beans during the counter-season period when preference generally goes to produce from its competitors.	A supplier recognised and reputed for the quality of its work with Bobby. However, it is handicapped by quality concerns that, combined with the high cost of air freight, often cause importers to halt their seasons early.	Distinct improvement in quality and competitiveness. The source has been a real alternative to Senegal when the latter was less regular on markets such as Belgium and Italy.	Long the reference as the EU's leading bean supplier, Kenya has now been overtaken by Morocco thanks to the large production of Helda. It remains the reference for quality on the filet bean market that the others try to emulate. Handicapped by high freight costs, it stands out by the high quality of the produce shipped and the strong development of pre-packaged produce with high value added.



Producer country sheet

Green beans in Morocco

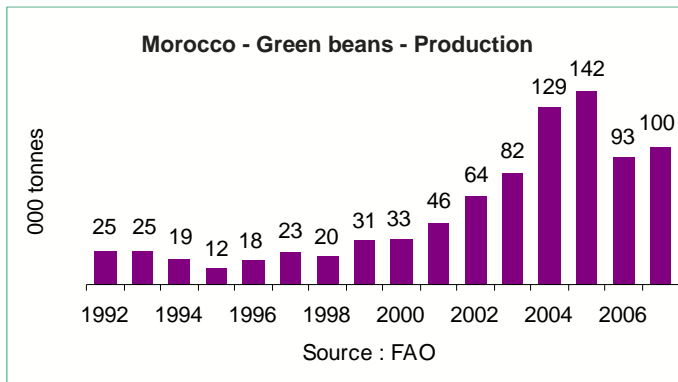
by Cécilia Céleyrette

It has taken Morocco about a decade to become a major contributor in the green bean market, thanks to economic and logistic advantages that make it very competitive with regard to its African competitors. Production was initially in northern Morocco and then shifted to the south (the Souss) with the sole aim of developing flows to the European market. Production has increased five-fold in ten years. Green beans are the second largest export vegetable after tomatoes. The greater part of the crop is for the European market—especially Spain and France—but shipments to the northern European markets are now developing as well.



Production zones

Two main categories of green beans are grown in Morocco: flat Helda beans and the French or filet (needle) beans. The latter are well-suited to the variety of climatic conditions in the country and grown for export in two zones in particular. Thus 80% of production is in the Souss-Massa region and 11% in the Rabat-Salé zones. Farmers generally grow two crops with yields of 15 tonnes per ha. Extra-fine filet beans are grown near Rabat (Skhirat), while the crop in the Souss-Massa region (Agadir) consists mainly of Bobby beans because of heat and transport time. Most green bean production is in open fields (2 080 ha, that is to say 4 000 ha counting two cycles) while 260 ha is under glass. Helda is grown practically only in the Souss-Massa region (98%) with 80% in greenhouses. The area devoted to the latter variety totals over 1 800 ha with an average of one and a half cycles per year and yields of 25 to 30 tonnes per ha. However, development is slowed by problems of water resources and the availability of land in the Souss-Massa region.



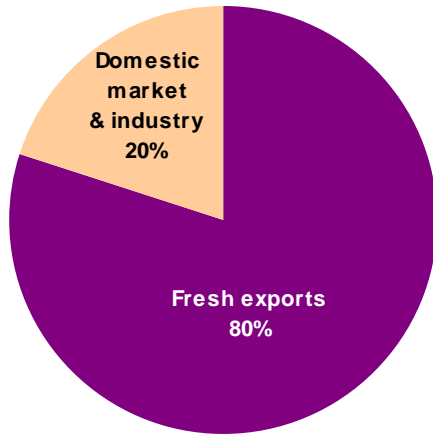
Production

The bean crop has increased very rapidly in Morocco, making it the second largest producer country in the world after Kenya. Harvest figures increased from 20 000 tonnes in the 1990s to more than 100 000 tonnes in the 2003-04 season. The crop seems to be marking time at the moment, in particular as a result of poor weather conditions that have reduced potential production. In addition, growers are also focusing on other high value-added crops such as garden peas (2 600 ha) and mangetout peas (60 ha).

Production calendar and varieties

The main varieties grown in Morocco are either dwarf varieties grown in open fields or poly tunnels or climbing varieties suitable for greenhouses. Most green bean production is in open fields with two cycles, making it possible to cover practically the whole year, with varieties such as 'Polysta' for Bobby beans and 'Venta' for fine and very fine French beans. It is noted that growers use the same varieties for fine, very fine and even extra-fine beans. The Helda bean segment is dominated by the three varieties 'Estefania', 'Oriente' and 'Dona'.

Green beans — Morocco — Production calendar												
	S	O	N	D	J	F	M	A	M	J	J	A
French beans												
Helda beans												

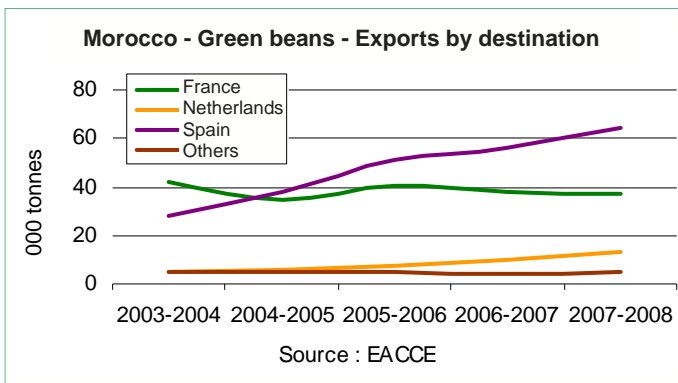
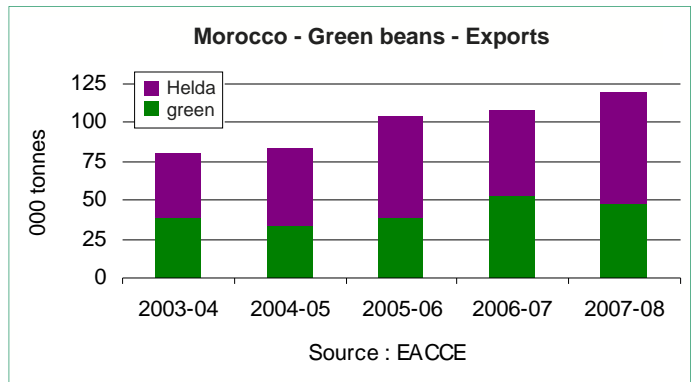


Outlets

A large proportion of production is exported. The figures are 80% of green beans and 100% white beans. Thus only small volumes go to the domestic market or are processed.

Total exports

Green bean exports have increased strongly at the end of the present decade, quickly reaching 30 000 tonnes. However, after general enthusiasm among importers, the distribution of this fragile produce now tends to be concentrated in the hands of specialists. Imports now vary between 50 000 and 60 000 tonnes, practically all of which is shipped to the European market. The French market share is comparatively stable at 25 000 to 30 000 tonnes. Spain is Morocco's second-largest customer but tonnages of green beans fluctuate considerably. In contrast, shipments to the Netherlands are still increasing (4 100 t in 2003-04 and 10 200 tonnes in 2007-08) at the expense of African sources and Egypt. Shipments of Helda beans have practically doubled in the last five years, reaching 72 000 tonnes in 2007-08, of which 80% was shipped to the Spanish market.



Logistics

This produce is very delicate and must reach its destination as soon as possible. It is shipped either by air (extra-fine) or by refrigerated lorry. In the latter case, it is recommended that the conditions should be 4°C with 95% relative humidity as if the temperature is higher or lower or fluctuates the beans turn brown, first at the tips and then all over. Furthermore, it is recommended that green beans should not be transported in the same lorry as tomatoes or other produce that do not have the same temperature and relative humidity requirements. When conservation conditions are very favourable, quality is not lost for four or five days. Transport by lorry takes two to three days via Tanger to the Perpignan wholesale market.

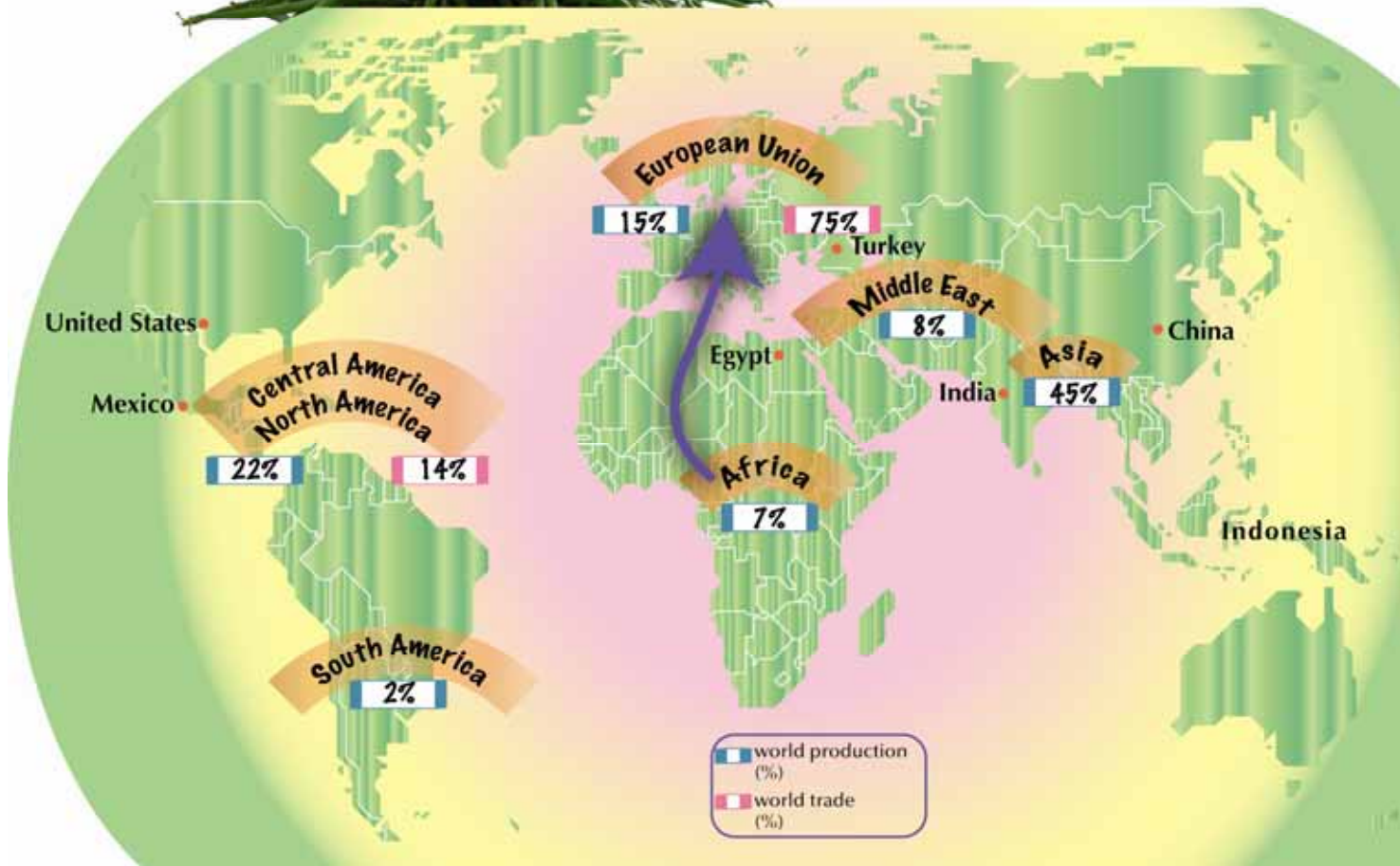


French beans

production 8.8 million tonnes

(filet, snap beans, etc.)

world trade 455 000 tonnes



tonnes	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total, incl.	23 869	24 031	26 968	27 891	30 634	30 596	29 922	31 418	32 711	36 012	41 744
Mexico	22 271	20 827	25 040	26 780	28 797	28 086	26 883	27 497	26 787	28 573	31 947
Guatemala	262	376	350	254	478	339	422	1 679	4 535	6 728	8 392
Peru	34	21	107	30	16	259	239	156	154	190	522
Canada	1 185	2 544	1 310	486	832	1 341	1 862	1 527	832	222	456
Nicaragua	0	0	0	0	24	0	18	280	100	41	240
Others	16	234	124	139	172	304	233	213	146	149	170
Dom. Rep.	102	29	36	203	316	267	266	66	158	109	17

Source: US customs, code 070820

tonnes	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total, incl.	1 029	1 144	1 339	1 310	1 435	868	1 119	1 635	1 555	1 132	992	849
Oman	705	947	882	976	993	727	925	1 397	1 211	1 028	992	749
China	0	37	269	161	154	100	144	164	278	80	0	100
United States	0	0	38	14	21	21	0	0	0	15	0	0
Mexico	157	70	65	22	24	6	0	1	0	1	0	0
New Zealand	158	79	79	97	77	1	3	0	0	0	0	0
Others	9	10	6	40	166	14	47	72	65	9	1	0

Source: Japanese customs, code 070820000

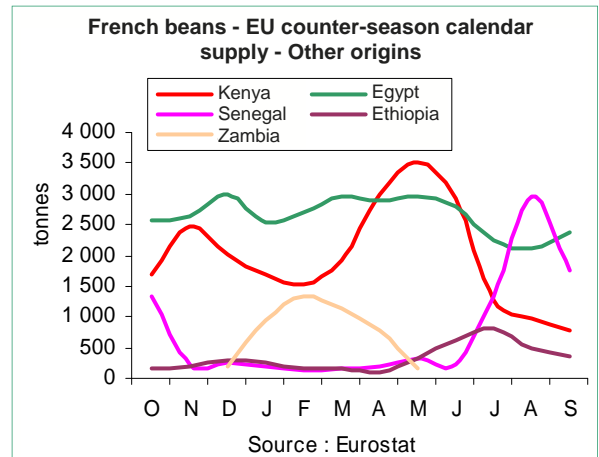
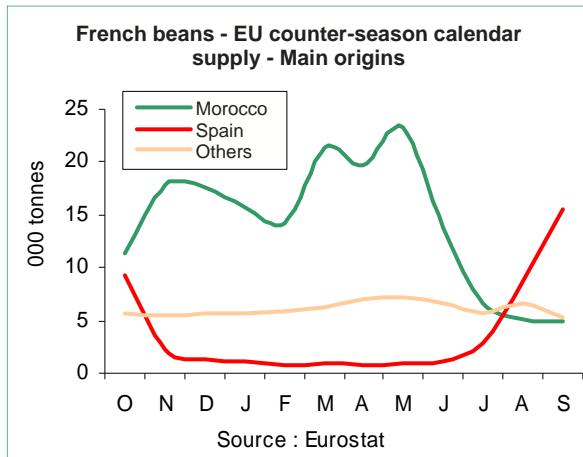


French beans World production	
2006	000 tonnes
World	6 416
China	2 431
Indonesia	830
Turkey	564
India	420
Egypt	215
Spain	215
Italy	191
Morocco	142
Belgium	110
United States	97
Thailand	92
Netherlands	70
Greece	68
Romania	64

French beans World exports	
2006	000 tonnes
World	460
Morocco	109
France	70
Kenya	37
Netherlands	36
Mexico	29
Egypt	28
Spain	26
United States	26
United Kingdom	20
Malaysia	15
Belgium	13
Germany	12
Kirghizistan	7
Senegal	6

French beans World imports	
2006-2007	000 tonnes
World	460
EU-25, incl.	333
<i>Spain</i>	81
<i>Belgium</i>	73
<i>France</i>	53
<i>Netherlands</i>	36
United States	36
Canada	30
Egypt	26
Singapore	11
Sri Lanka	6
United Arab Em.	5
Malaysia	3
Switzerland	3
Lebanon	2

Sources: FAO, EU customs, USA, Japan, CIRAD



Sources: professional sources, FAO, EU and Japanese customs, IFAS

entry point

4%

4%

4%

6%

6%

6%

6%

2005-2006

Source: Eurostat

French beans — European Union importations and production									
tonnes	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Total, including	182 021	208 225	251 474	282 584	321 058	345 671	341 783	336 363	318 069
France	26 914	27 257	64 429	66 391	70 003	87 511	70 773	51 418	45 934
Netherlands	27 188	36 476	36 628	48 011	52 626	45 980	45 271	45 562	47 559
Germany	8 080	6 451	8 354	8 149	8 007	9 693	8 426	11 627	9 890
Belgium	3 890	5 318	5 309	6 032	5 753	10 182	8 175	5 498	3 584
Italy	8 092	6 606	4 825	2 327	4 228	4 274	3 622	3 912	2 957
United Kingdom	298	693	664	809	1 186	833	498	798	382
Denmark	6	15	9	184	299	311	571	485	819
Poland	435	247	432	687	364	328	458	749	534
'Summer' supply	74 903	83 063	120 651	132 591	142 465	159 113	137 793	122 065	113 465
Intra EU without Spain	74 903	83 063	120 651	132 591	142 465	159 113	137 793	122 065	113 465
Morocco	19 865	32 927	43 096	56 937	79 960	84 977	102 631	109 058	110 092
Kenya	23 169	22 514	21 539	23 202	28 854	30 543	32 980	36 620	36 459
Egypt	17 956	19 895	21 625	21 750	27 513	27 000	27 007	27 765	22 054
Senegal	5 974	5 830	5 608	4 800	5 556	7 059	7 040	6 424	5 385
Ethiopia	3 523	3 168	2 140	2 648	3 534	4 509	4 689	3 342	2 979
Burkina Faso	2 264	1 985	1 326	1 197	903	562	660	841	1 221
Zimbabwe	2 371	2 373	1 781	1 379	1 397	2 038	1 295	730	182
Dominican Republic	454	478	509	615	484	385	413	724	690
Zambia	2 479	4 060	2 007	2 225	1 466	1 307	948	720	338
Turkey	713	781	1 108	1 239	979	889	790	638	710
Tanzania	19	207	340	213	687	1 009	1 055	520	580
Guatemala	42	40	49	134	367	310	363	379	287
Total extra EU	81 802	96 594	103 064	118 070	153 155	161 830	181 133	189 495	182 434
Spain	25 316	28 568	27 759	31 923	25 439	24 729	22 857	24 803	22 170
'Autumn-winter-spring' supply	107 119	125 162	130 823	149 993	178 594	186 559	203 990	214 298	204 604
Extra EU with Spain	107 119	125 162	130 823	149 993	178 594	186 559	203 990	214 298	204 604

Source: Eurostat, code 070820



2008 French bean season in Senegal

Increasingly uneven supply

The last season was far from exceptional. Although French beans from Senegal are still the most regular and the most sought-after during the counter-season period, it has to be noted that they lost some of their lustre at certain periods during the last season. The beans arriving from Senegal generally stood out because of their irregular quality. However, brands that we had already identified as displaying slow but steady progress continued to perform well and have now gained firm positions as quality produce. In contrast, the desire to ship larger and larger volumes while neglecting work on quality upstream has been more than unfavourable for certain brands and, in the long term, for Senegal as a source of supply.

Senegalese produce has displayed quality problems on all the markets monitored, sometimes even losing ground—often to the benefit of Egypt. Although Morocco and Egypt are confirming their desire to gain counter-season market shares, they have not yet won and Senegal, like Burkina Faso, can still maintain and even improve its position on the sole condition that it achieves better mastery of the fairly recurrent problems of quality.

Increasingly frequent logistic problems affecting quality

Senegalese operators have gradually increased their shipments by sea to reduce export costs and face fiercer competition from Maghreb sources (Morocco and Egypt). It has taken time for this to be implemented but it now seems to be better mastered, obviously on condition that a number of rules are respected. Unfortunately, sea exports have been less reliable for two seasons now and exports by air are now being repositioned. Almost all the operators questioned see the advantages of transport by sea—which is cheaper—but more and more are choosing positions on niche markets even if the costs are a little higher.

It seems urgent that Senegal should improve the organisation of production procedures and set up quality control so as not to lose the benefit of the work that has been done. As a supply source, Senegal now seems less untouchable in the counter-season period and although transport by sea was a fresh advantage for a while, it

could very well bring about a fall if operators do not better guarantee the quality of batches of produce.

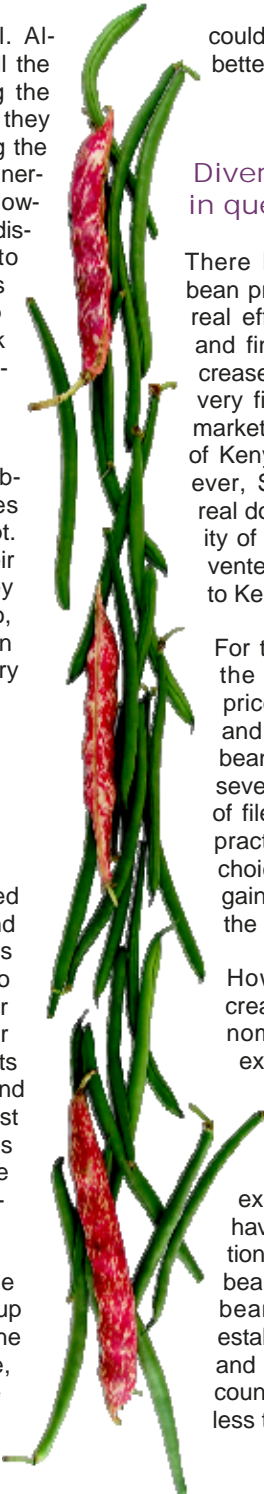
Diversification of supply in question?

There has also been specific knowhow in Bobby bean production in Senegal. Operators have made a real effort to diversify supply by shipping very fine and fine filet beans. This has enabled them to increase the volumes exported, obtain better prices as very fine filet beans fetch higher prices on certain markets, and to gain market shares at the expense of Kenya, the leading source of this produce. However, Senegal has always found it difficult to gain real domination, mainly because of the uneven quality of work in packing stations that has always prevented the source from being a serious alternative to Kenya.

For three seasons now, the poor yield of seed of the 'Amy' variety, high labour costs, irregular prices on the main destination market (France) and the more regular prices obtained for Bobby beans on markets like the Netherlands have led several large operators to question the maintaining of filet bean cultivation. Some have thus switched practically all production to Bobby. This gradual choice since 2006 has enabled Burkina Faso to gain a better position on the filet bean market at the expense of Senegal.

However, supply from Senegal has also decreased gradually. It seems that the world economic downturn has affected trade more than expected and the 2008-09 counter-season was completed in an entirely different context, with a decrease in the profitability of the Dutch market and more uneven production of some filet and Bobby beans. The difficulties experienced on the Bobby bean market this year have shown the advantages of supply diversification for Senegalese exporters. Trials of new filet bean seed are in progress. Will the Senegalese bean sector find the resources needed to re-establish the work on quality that had been started and that had made its beans a 'must' during the counter-season period, a feature that is less and less true? ■

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© Vincirin



French bean cultivation in Africa

by Benoît Leverrier, benoit.leverrier@wanadoo.fr

Requirements

Under tropical conditions, French beans are mainly grown during the dry season in the Sahel zone (Senegal and Burkina Faso). In Kenya, production zones are at different altitudes with different climates and so beans can be produced all the year round. Although it grows on many soil types, French bean does best in soils that are fairly heavy but not too much so as the plants are susceptible to root asphyxia. The vegetative cycle is very short, especially in Sahel areas, with harvesting beginning 45 to 60 days after sowing. The cycle is longer in highland zones in Kenya, lasting for a minimum of 60 days. For this, plant development must be enhanced, with rigorous attention paid to fertilisation and irrigation. In spite of its short vegetative cycle, green bean is subject to attacks by pests and diseases that can affect both produce quality and financial returns.



© Hubert de Bon

Soil

Crop rotations are necessary to reduce fungal attacks after germination and emergence and to enhance field productivity. The best preceding crops are cereals. Leafy vegetables and Cucurbitaceae should be avoided. Soils with various textures (silty-sandy, clayey-sandy) can be chosen. Cultivation is possible on sealing soils (silty) but a few precautions are required during the sowing to emergence period. Bean has a short vegetative period and so must develop rapidly. This is why meticulous, rigorous attention must be paid to soil preparation. Soil suitable for growing French beans must have the following features:

- tilled to a minimum depth of 35 to 40 cm;
- homogeneous structure and a fine, aerated seed bed;
- satisfactory levelling to avoid wet areas (causing poor plant development and the risk of fungal attack).

The basal dressing must be placed when the soil is prepared so that it is located in the root development zone. Organic fertilisation is not recommended as it can increase susceptibility to pests and diseases in case of poor decomposition. Only well-rotted organic material turned in when the land is prepared can be applied.

Sowing

Sowing must be performed so as to allow reasonable but not excessive vegetative development of the plants. Too high a density causes the etiolation of the plants, thus increasing fragility and sanitary risks. This is why the following factors must be taken into account in sowing densities:

- the variety and its vegetative development;
- the planting season (lower densities in wet periods);

- the irrigation method used (lower densities with furrow irrigation).

Registered, treated seed is recommended as this protects the seedlings against the first pests (bean fly) and is free of diseases of the *Fusarium* and common blight type. The quantity of seed required is some 30 kg per hectare for densities of about 200 000 to 250 000 plants per ha. When trickle irrigation is used, higher densities of up to 300 000 plants per ha are sown. Inter-row spacing is generally 30 to 40 cm and the plants are set out at 5 to 7 cm intervals along the rows. In rainy or very humid periods, greater spacing along

the row allows the plants to dry more quickly after rainfall. Seeds are sown at a depth of 2 to 5 cm on soil that has been left to drain well (if irrigation has been applied prior to sowing). Care should be taken not to sow at too shallow a depth in light filtering soil (sandy). In contrast, a depth of 2 to 3 cm is enough in heavy and/or sealing soil. Although irrigation is necessary and recommended in sandy soil, watering is not recommended between sowing and emergence in sealing soil. As a general rule, pre-sowing irrigation of silty-clayey soil is sufficient for germination and homogeneous, regular emergence in the field.

Fertilisation

The choice of form of fertiliser is important as the French bean cycle is short. The fertilisers used must contain elements that are taken up easily and quickly. The main elements (N, P, K) must be applied rationally, partly before the crop is sown (basal dressing) and the rest as top dressing during the vegetative cycle.

Single and complete fertilisers are applied in many production zones. Nitrogen fertiliser (N) is in urea, ammonia or nitric form, phosphorus (P) is applied as ammonium phosphate or triple superphosphate and the most common forms of potassium are potassium sulphate or ni-

trate. Chloride forms should be avoided as chlorine is toxic for many market garden crops and for French beans in particular. Shallow hoeing should be performed when top dressing is applied or fertilisation can be followed by watering. In some perimeters with more sophisticated installations, fertilisation—especially top dressing—can be combined with trickle irrigation.

In addition to the main elements, secondary elements are generally combined with the basal dressing; these are magnesium in the sulphate form and calcium in the form of slag. The trace elements essential for the crop (molybdenum, zinc, copper and manganese) are applied if necessary by foliar spraying or via the trickle irrigation system.

French bean — Fertilisation — Recommended quantities and fertilisation plan

	N	P	K
Recommended quantity per hectare	70-90 u	80-100 u	150-180 u
Basal dressing as % of recommended fertilisation	40-50 %	40-50 %	40-50 %
Top dressing (sowing + 15 days)	25-30 %	25-30 %	25-30 %
Top dressing (sowing + 25-30 days)	25-30 %	25-30 %	25-30 %

Irrigation

As for most counter-season crops in tropical countries and especially in the Sahel zone, it is essential to irrigate fields of French beans for a crop that is satisfactory in terms of both quality and quantity. In some highland zones (in Kenya), rainfall may cover part of the water requirements. Fields are traditionally watered by gravity irrigation. Some perimeters have installed more sophisticated techniques such as trickle irrigation and sprinkler irrigation.

Gravity irrigation

This type of irrigation requires good land levelling so that the water flows freely along the rows. Defects in levelling cause local accumulation of water with a risk of plants wilting as a result of root asphyxiation and the spread of certain fungal diseases. Very large amounts of water are required and the quantity is difficult to manage, especially during the rainy season when the total of irrigation water and precipitation may sometimes be excessive).

Trickle irrigation

Very well suited to this kind of crop,

trickle irrigation requires rigour, in particular as regards filter equipment as water with a particle load can foul irrigation piping. This method uses much less water than gravity irrigation and the management of quantity is more flexible and rational. In addition, the technique can be used to apply top dressing with the applications split and distributed throughout the cultivation period. Much care must be taken in the choice and quality of the fertilisers used for fertigation and the risk of blocking of the drippers can affect the overall quality of irrigation of all the rows and the field.

Sprinkler irrigation

This technique also enables better management of volumes and application of water throughout the vegetative cycle. It is better to water in the morning to avoid risk of leaf burn and also to limit risk of fungal infection during sultry weather. Sprinklers with large jets or large drops should not be used as they can damage foliage and also splash the pods with earth and reduce the commercial yield of the field. This watering technique has the advantage of limiting the populations of certain pests—in particular spider mites and thrips.

French beans are sensitive to water stress, especially at the emergence stage and during flowering/pod growth. However, excessive irrigation should not be applied at the post-emergence stage in order to avoid fungal attacks at the root collar of seedlings. A slight, rational water shortage after emergence enhances plant rooting as the roots explore a deep level of the soil. Irrigation frequency and dose are determined in the light of meteorological conditions, taking daily evaporation into account in particular. Installing tensiometers in the field can be a help in taking decisions concerning irrigation depths and frequencies. Knowledge and experience of the soil and the crop should be taken into account in irrigation management. It is preferable to perform both furrow and sprinkler irrigation in the morning, allowing the foliage to dry during the day. Sprinkler irrigation should not be carried out immediately after leaf spraying with fungicide or insecticide. Irrigated just before picking should be avoided. Harvesting conditions will be more comfortable (no wet areas) and the produce of better quality (no risk of mud or wet earth on the pods).



French bean varieties

Varieties photos © Seminis

The French bean varieties used for export to the European Union market have changed little since the mid-1990s. About half a dozen are used for all the crops in African and Mediterranean producer countries. The Royal Sluis company, a member of the Seminis group, supplies most of the seed for this particularly delicate counter-season crop. Several other seed companies are breeding new varieties that may soon afford a broader choice for producers.

Different varietal type: Bobby, fine filet and very fine filet

The varieties 'Amy', 'Teresa' and 'Samantha' are grown for fine stringless filet ("needle") beans while 'Paulista' and 'Nerina' are used more for Bobby type fine beans. 'Nerina' seems to be approaching the end of its life and is being gradually replaced by 'Paulista'. The 'Julia' and 'Sagana' very fine filet varieties are grown for export to France and for canning (in Cameroon and South Africa). The geographical distribution of the varieties is fairly even according to producer country although certain varieties will be grown more or less according to the market segment pattern sought. Thus, Kenya and Burkina Faso concentrate more on filet beans. Morocco, Egypt and Senegal opt for a more varied use of the varieties available according to destination markets on which Bobby bean is predominant. The different varieties have more or less the same production characteristics and differ in pod shape and length or have a more or less marked green colour (under the same production conditions). The very widespread 'Amy' variety seems to be more susceptible to rust, one of the main diseases of French bean.



Paulista

Bobby type

Size: 30% width 6 to 8 mm, 60% from 8 to 9 mm
Colour: brilliant dark green

'Paulista' is the best Bobby bean variety. It gives a stable yield and its quality is much requested for export. It also has high tolerance to transport. It is grown in Senegal, Gambia, Morocco, Ethiopia, Egypt, Kenya and South Africa (for the domestic market).



Samantha

Filet type

Length: 12 to 13 cm straight pod

'Samantha' is a vigorous variety thanks to its powerful root system and adapts well to stress. It has a very high yield potential. It is grown in Kenya and Burkina Faso.



Teresa

Filet type

Length: 13 to 14 cm pod
Colour: dark green
Resistance: rust, anthracnose and common mosaic

'Teresa' is the leading rust-resistant filet variety, making it important in a producer country like Kenya where this disease can cause serious problems. Kenya exports its entire production to the United Kingdom.



Amy

Filet type

Size: 70% smaller than 8 mm
Long, straight pods

'Amy' is a vigorous variety with staggered flowering. It has excellent storage qualities after harvesting and packing. It is also a reference in manual picking. It is grown in Kenya, Senegal, Burkina Faso, Zambia and Zimbabwe. Most of the production of 'Amy' is shipped to France.

© Hubert de Bon



Pests and diseases of French beans

Crop protection should make it possible to produce beans that meet quality standards and respect maximum residue limits for pesticides. It must be in conformity with both the regulations in force in the producer country and with the MRLs laid down in the destination country. Chemical control must be rational above all. Observation and the detection of a minimum threshold must be taken into consideration before any fungicide application.

The main diseases

The appearance, spread and intensity of fungal diseases vary according to zone (the Sahel zone in Senegal or Burkina Faso, the highland zone in Kenya) and production period (during the rainy or dry season in Kenya). At certain times of the year, some diseases may have marginal qualitative and economic effects or, in contrast, a major impact on production.



Technical recommendations can help to prevent the occurrence of these fungal diseases:

- respect of the rotation and cropping pattern in fields used for growing French beans;
- irrigation management: this limits the spread of many diseases;
- use registered, treated seed;
- grow varieties known to be resistant;
- set up a phytosanitary programme in conformity with the MRL standards in force.

Alternaria

Disease caused by *Alternaria* sp. is generally limited to the lower leaves and does not affect the other aerial parts of the plant. However, the upper parts and the pods may be attacked under very moist, cold conditions. Pod symptoms may only appear after picking, once the beans have been packed and exported. It is important to respect recommended planting densities so that the plants dry quickly after rainfall or sprinkler irrigation. Fungicide treatments may be necessary.

Anthraco-nose

First, the leaves are attacked by the fungus. Subsequently all the plant organs are attacked in turn and especially the pods. Some bean varieties are resistant to this fungal disease. Such cultivars should be chosen in order to avoid risk. Fungicide sprays during cultivation can help to limit and control damage caused by this fungus.

Bacterial blotch of bean

The bacterium that causes the disease can attack all parts of the plant. Bad weather (cold and wet) enhances development. Appearance of the disease can be limited by using treated, selected seed. Some fungicidal treatments—copper-based sprays in particular—during cultivation limit the development of the disease.

Rust

Leaf symptoms appear first. All the foliage may be affected and wither during very wet weather. Production is compromised in this case. The disease is controlled by careful choice of fields (avoid low-lying land), irrigation management (water in the morning so that plants dry during the day) and the use of resistant varieties. A preventive fungicide spraying programme can be used as a last resort.

Pythium, damping-off

Emerging seedlings display necrotic, black roots and soon wilt. Root necroses can affect plant development and commercial yields in apparently healthy adjacent zones. Limiting attacks requires careful respect of crop rotations and the avoidance of plants susceptible to these diseases. Too much water and irrigation at the sowing/emergence stages increase the risk of outbreaks of these fungal diseases. It is recommended that sound seed treated with fungicide should be used. In addition to these two main diseases that can affect crops at emergence, attacks of *Fusarium* wilt and root and neck rot are similarly possible.

The main pests

As with the main fungal diseases, the damage caused by the main pests can vary according to the production zone and the season. Other pests including the bean fly, the pod borer and the 'army worm' can also affect French bean production. Regular field inspections are required to determine intervention thresholds and to design treatment.



Aphid colony

Aphids

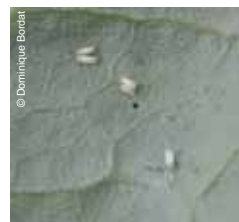
In addition to direct damage to the plant (poor growth), aphids secrete honeydew that causes sooty mould. Honeydew and sooty mould affect harvest quality. Aphids on crops are also a serious factor in the spread of virus diseases. If chemical control is justified, priority should be given to active substances that are harmless for the natural predators of aphids.

Noctuid moth caterpillar

Attacks by this caterpillar are concentrated on pods in particular and cause serious damage. Any batch of beans found to contain caterpillars is intercepted on arrival in Europe. This is why it is important to have a programme for the control of this pest. Preventive spraying is commonly performed. This can be combined with the introduction of specific predators. In this case, the active substances used should not affect the predator populations.



Noctuid



Whitefly

Whitefly

This pest is found in numerous production zones and it sometimes has a strong impact on market garden crops. Damage is caused by honeydew and the spread of numerous viruses. The honeydew secreted by larvae leads to sooty mould. The spread of viruses in case of strong infestation by whitefly can compromise plant growth and the harvest. Insecticide spraying is becoming increasingly difficult as whitefly has developed resistance to numerous active substances. Although the new generations of substances are still effective, integrated control methods should be used, including in particular the introduction of natural predators (parasite Hymenoptera).



Nematode damage

Root-knot nematodes

The spread of nematodes in the root system affects plant growth. Well-managed crop rotations and appropriate tillage limit the impact of the pest in French bean crops.

Bean fly

The adult flies lay eggs on young seedlings and the larvae spread in the stems and the plant finally withers. Damage caused by this pest is generally controlled by the use of treated seed.



Bean fly damage

Spider mites

Strong red spider mite attacks affect plant growth and hence harvests. The weather conditions in hot, dry zones enhance the development of this pest. Although chemical sprays can eradicate mite populations, increasing resistance is observed. Predators can also be introduced to limit mite populations in infested fields. In this case, it is essential to use pesticides that do not harm the predator that has been introduced.



Spider mite damage



Thrips damage

Thrips

Pricking by thrips affects the growth of the plant, which finally withers. Spread of the pest is enhanced by heat. Insecticide spraying is necessary in some cases.



French bean harvesting and post-harvest

© Photos Vilmorin



Harvest

Harvest frequency will be adjusted to the type of bean exported. Extra fine beans (Kenya) are picked every day. It is advised that Bobby beans should be picked every three or four days and filet beans every two days. These intervals should be maintained throughout production so as not to penalise commercial performance by large amounts of sorting rejects. The pods are picked by hand, with the stalks. Particular care is needed to conserve the quality of the harvest:

- harvest boxes should not be over-filled (to avoid any risk of crushing);
- freshness should be conserved by not leaving produce in the sun;
- the produce should be placed in a cold store as soon as possible—even before sorting if the latter is delayed.

Picking is best carried out in the morning but not aware of the specific quality requirements of

if the plants are too wet. The pickers must be made these beans.

Packing

Packing operations result in boxes of produce that must be in conformity with the EU quality standard for French beans (standard EC 912/2001). For this, the produce must be sorted after picking in order to:

- remove pods that are broken, perforated, twisted, etc.;
- remove plant debris (leaves and stalks);
- grade the beans by size.



Each box packed for the export market must display the product characteristics, that is to say category, size and all the regulation information (origin, name of producer/exporter, etc.).

Beans 'en filet' ('needle beans') European standard	
Pod width	Size
not exceeding 6 mm	very fine
not exceeding 9 mm	fine
not exceeding 12 mm	average

Storage

Whatever the transport method chosen (air or sea), it is essential that produce is placed in cold store as soon as it has been packed. Minimum storage temperature is about 4°C and this makes it possible to store French beans for about a week. This pattern is applied for exports by sea, especially from Senegal. For shorter marketing channels (air freight) and for fine grade beans, storage temperature should be close to 10 to 12°C.

In addition to the question of temperature, the storage atmosphere for packed products should have relative humidity of around 80% for storage at 4°C and some 90 to 95% for storage at about 10°C. Excessive humidity can cause changes in pods and the appearance of moulds. This is especially important for produce transported in refrigerated containers (Senegal). Packed produce is stored in cold rooms with moderate ventilation to avoid the drying of the pods. It is important not to break the cold chain when the produce has reached its destination in order to conserve the quality of the beans.





Indicators

The main fruits	In shares by total volume and expenditure on fruits for the month in France		
	%	Volumes	Expenditure
Strawberry	10	24	
Apple	27	20	
Banana	16	11	

Pages

The trends for the main produce of the month significantly influence the overall situation of the fruit market. A column entitled 'Indicators' discussing these fruits precedes the pages devoted to a selection of exotic and citrus fruits.

Avocado	30
Banana	31
Orange	33
Grapefruit	34
Litchi	35
Mango	36
Pineapple	37
Sea freight	38

MAY 2009

Strawberry

The market was fairly satisfactory even though supply was plentiful. The Spanish season continued while French production was quite substantial and larger than in 2008. Demand was fairly brisk thanks to comparatively attractive prices and satisfactory fruit quality. The average monthly price at shipping stage was therefore satisfactory in spite of a distinct decrease at the end of the month.

May 09 / May 08

Price	=	Vol.	↗
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Apple

The market worsened. Supply for the southern hemisphere was only moderate but large European stocks remained to be cleared. In addition, demand displayed its usual seasonal slump. Prices displayed a downward trend in this context, except for 'Gala'. The markets for 'Golden Delicious' and 'Granny Smith' were particularly difficult.

May 09 / May 08

Price	↘	Vol.	↗
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Banana

The supply deficit limited the downward movement of prices. Demand decreased as it does during this period every year as a result of the increasing pressure of supply of seasonal fruits. However, all groups of supply sources displayed a supply deficit. Prices therefore decreased in comparison with those observed in April but remained distinctly higher than the average.

May 09 / May 08

Price	↘	Vol.	↘
-------	---	------	---

Sea freight

The most significant feature of May for reefer owners and operators had little to do directly with the specialised reefer business. As the oil price started to rise, the cost of bunkers increased 20% over the course of the four weeks. With very little change in the box rate for voyage fixtures between the beginning and end of the month the average TCE calculation suffered, particularly for older units.

May 09 / May 08

large reefers	↘	small reefers	↘
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Notes concerning market appraisal methodology

The statistics on the following pages are estimates of quantities put on the market in France. They are only calculated for the main supplier countries and are drawn up using information on weekly arrivals or market release statements by representative operators. The figures in the 'Main fruits' section above are provided by the CTIFL, with SECODIP being the source. The data published in the French market pages are provided solely as a guide and CIRAD accepts no responsibility for their accuracy



Avocado

MAY 2009

The market deteriorated rapidly, becoming extremely difficult at the end of the month. First, supply started to increase strongly in Week 20 and the market was overloaded with 'Hass' in the second half of the month. However, the Israeli and Mexican seasons came to an early end in April and the volumes from Spain were markedly smaller than average. But supply from southern hemisphere suppliers increased tremendously. Volumes from Kenya were moderate and arrivals from South Africa larger than average. Above all, those from Peru increased very rapidly and were massive in the second half of the month.

Second, demand was not as dynamic as in previous years, probably as a result of large volumes of competing fruits sold at very attractive prices (particularly melon).

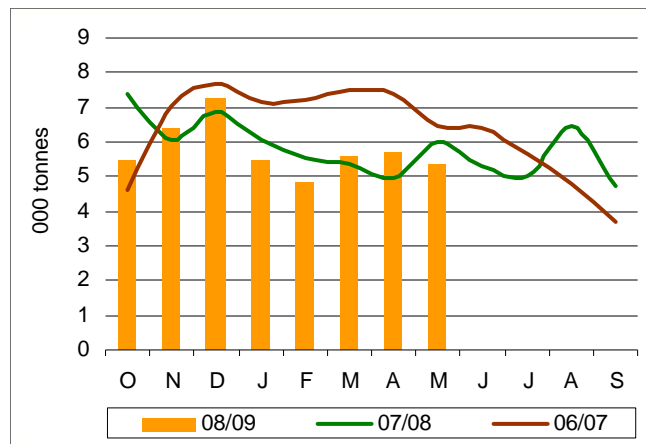
Prices therefore decreased rapidly to close to cost price at the end of the month. The situation was particularly difficult for large fruits (sizes 12, 14 and 16) that were particularly plentiful in the shipments from Peru.

Monthly and annual comparisons

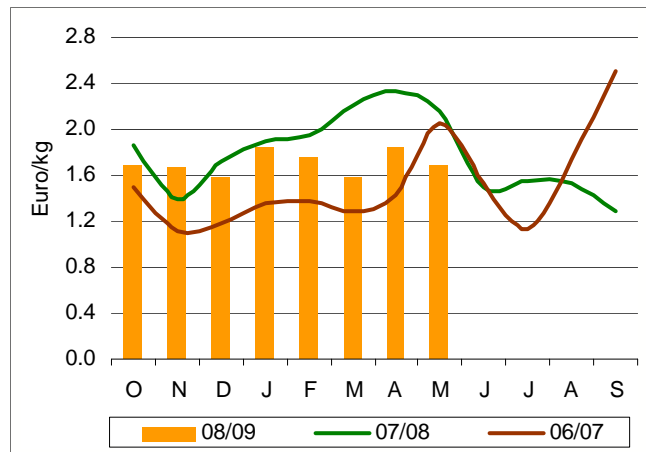
Volumes	Price
May 2009 / April 2009	
↘ - 7%	↘ - 9%
May 2009 / May 2008	
↘ - 11%	↘ - 22%

Estimated market releases in France

Volumes



Price at import stage



Estimated market releases in France by origin

Tonnes	May 2009	Comparisons (%)		Total season 2008/2009	Season comparisons (%)	
		2009/2008	2009/2007		08-09/07-08	08-09/06-07
Peru	2 630	+ 50	+ 248	4 811	+ 60	+ 484
Mexico	-	- 100	- 100	8 192	+ 3	0
Spain	587	- 64	- 81	11 022	- 36	- 28
Israel	-	-	- 100	11 984	+ 27	- 44
Kenya	331	- 53	- 27	2 487	+ 18	- 3
South Africa	1 796	- 3	+ 64	3 040	+ 13	+ 124
Total	5 344	+ 15	- 17	41 536	- 2	- 20



© Denis Loellier

Banana

MAY 2009

The supply deficit limited the seasonal decrease in prices. Sales continued to slow. The season's fruits occupied a large proportion of retail shelf space, especially in southern European countries and France. However, promotion operations for banana were still numerous on certain markets such as France.

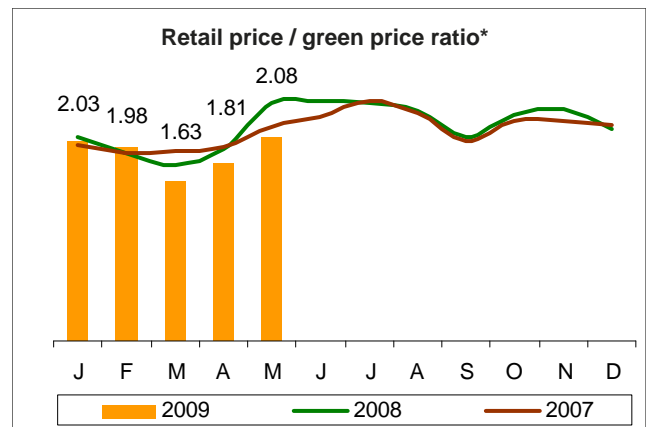
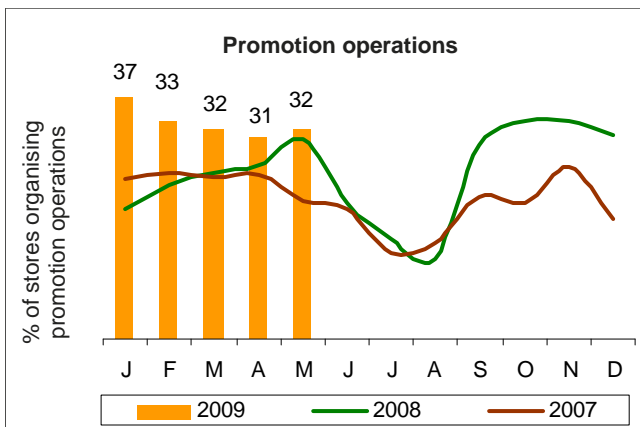
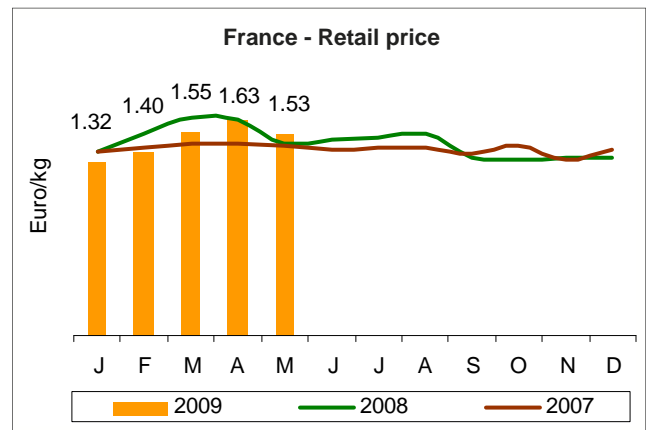
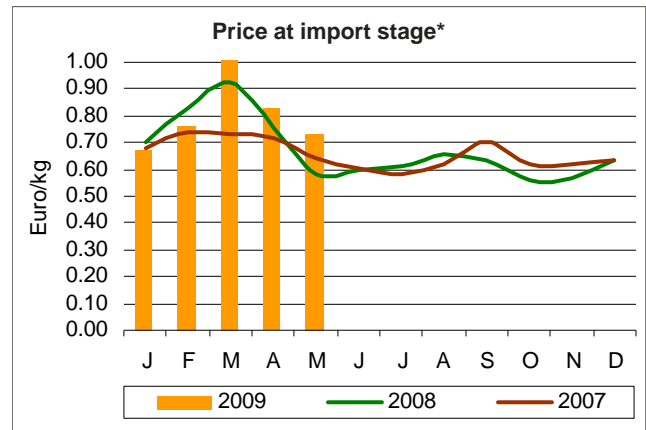
Furthermore, supply was short from all groups of production sources. Arrivals from Africa decreased strongly after the peak in April and remained moderate. Likewise, volumes from the French West Indies were already smaller than average and then decreased strongly during the last third of the month because of weather problems. Finally and above all, supply of dollar bananas was particularly small. Firstly, the deficit in Costa Rica was even more marked than in previous months. Secondly, after being average for the first three weeks, arrivals from Colombia plummeted at the end of the month because of a strike. Finally, arrivals from Ecuador were only average as exporters targeted the United States market in priority.

The seasonal price decrease was thus only moderate and the average monthly price was distinctly higher than average.

Monthly and annual comparisons	
Volumes*	EU reference price**
May 2009 / April 2009	
↘ - 17%	↘ - 12%
May 2009 / May 2008	
↘ - 21%	↗ + 26%

* Arrivals from Africa/West Indies ** Green price in Germany (GlobalGap)

French banana market — Indicators



* African origin

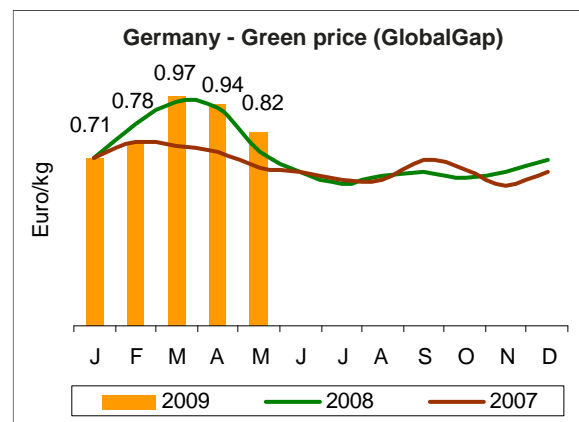
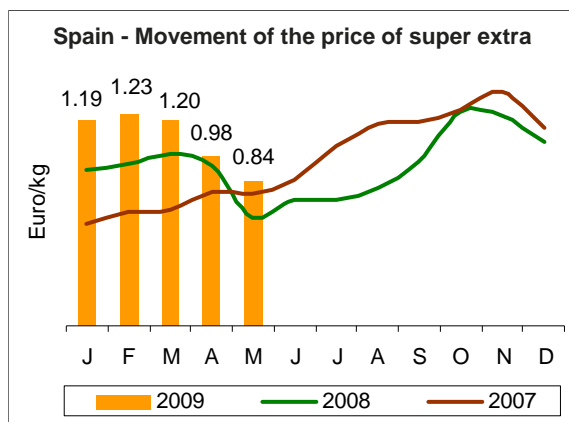
European banana market — Indicators

Main origins in Europe

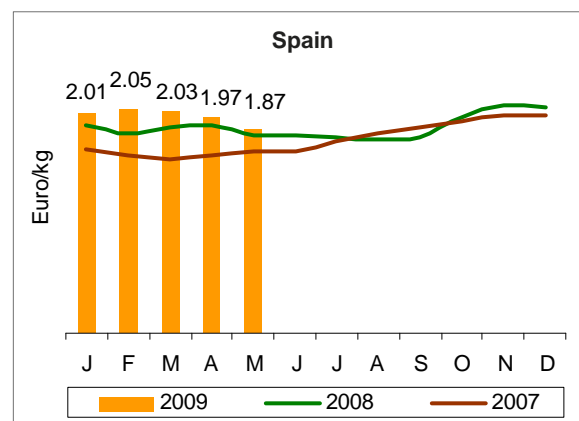
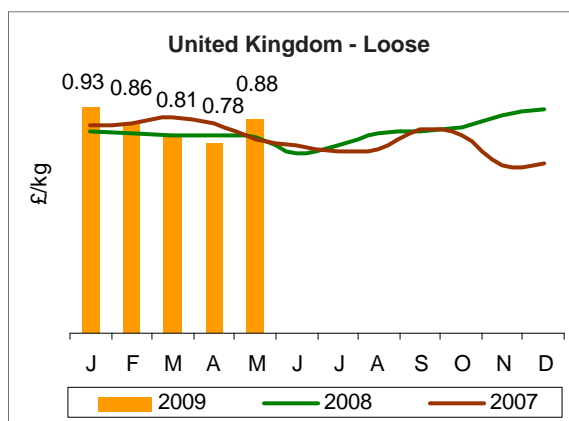
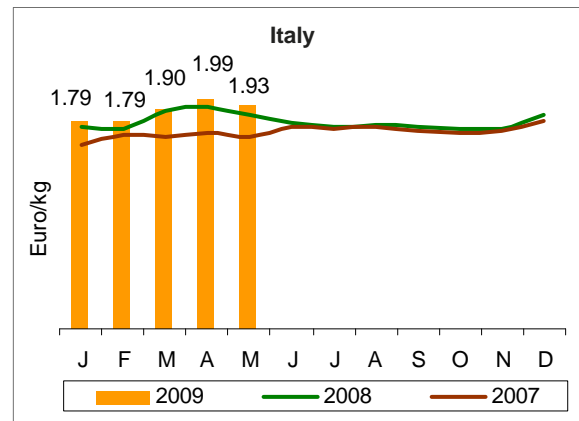
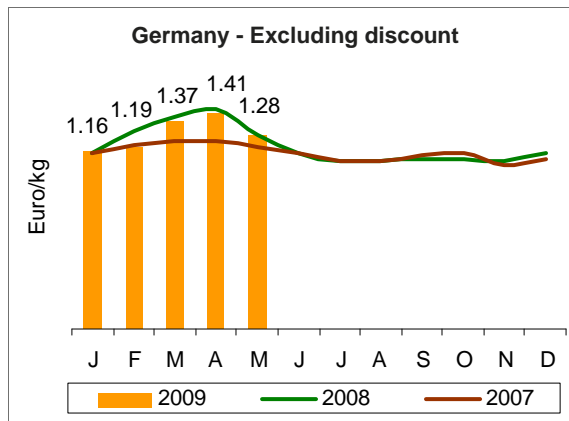
Tonnes	May 2009	Monthly comparisons (%)		Total season 2009	Season comparisons (%)	
		2009/2008	2009/2007		2009/2008	2009/2007
Martinique	12 627	- 51	- 37	61 125	+ 11 274	- 29
Guadeloupe	3 372	- 15	- 18	17 805	+ 36	- 10
Canaries	31 421	- 6	- 9	146 200	- 22	- 12
Côte d'Ivoire	12 565	nd	nd	61 144*	nd	nd
Cameroon	18 787	+ 8	+ 1	98 924	- 16	+ 1
Ghana	1 518	- 64	- 37	11 630	- 38	- 1

* Excluding containers from January to March

Green price in Europe



Retail price in Europe



Sources: CIRAD, SNM, TW Marketing Consulting



Orange

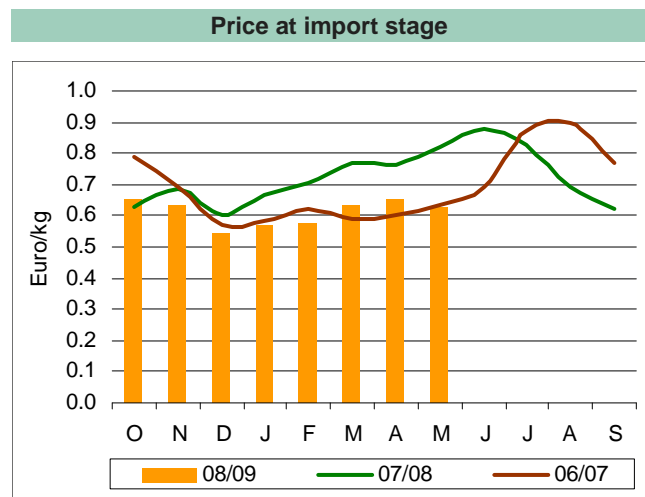
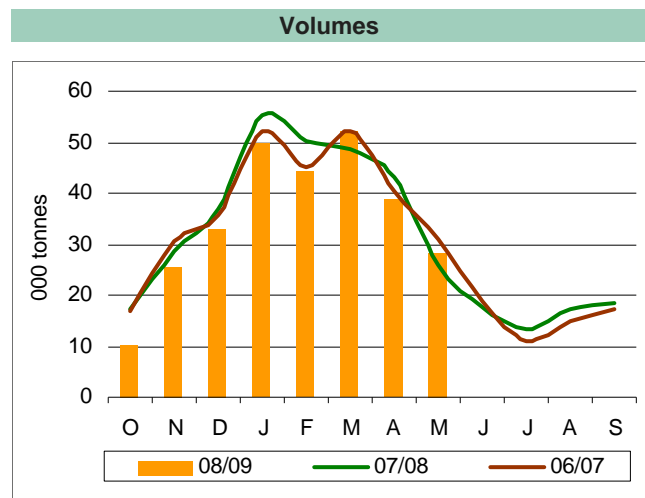
MAY 2009

The market remained very difficult. The seasonal dip in demand was probably more marked than in previous years because of the large volumes of competing fruits. The large volumes of Spanish 'Navelate' remaining to be sold continued to be the main reference for most of the month. The average monthly price remained rock bottom for this variety as supply consisted mainly of small fruits sold at extremely low prices.

The other sources or varieties failed to find a position on the market in this morose situation. The season for Spanish 'Valencia' only really started right at the end of the month. Prices soon bottomed out especially as fruits were very small this season, further hindering sales. Likewise, only very limited quantities of 'Maroc Late' were shipped to the EU. Much of the crop had to be sold on the domestic market as shipments to Russia were also limited by the impact of the economic downturn on consumption and exporters' caution with regard to the risk of non-payment for the goods.

Monthly and annual comparisons	
Volumes	Price
May 2009 / April 2009	
↘ - 27%	↘ - 4%
May 2009 / May 2008	
↗ + 10%	↘ - 23%

Estimated market releases in France



Estimated market releases in France by origin						
Tonnes	May 2009	Comparisons (%)		Total season 2008/2009	Season comparisons (%)	
		2009/2008	2009/2007		08-09/07-08	08-09/06-07
Spain	25 909	+ 26	- 11	249 026	- 2	- 9
Morocco	2 474	- 50	+ 23	8 792	- 33	+ 52
Total	28 383	+ 10	- 4	257 818	- 3	- 7



Grapefruit

© Eric Imbert

MAY 2009

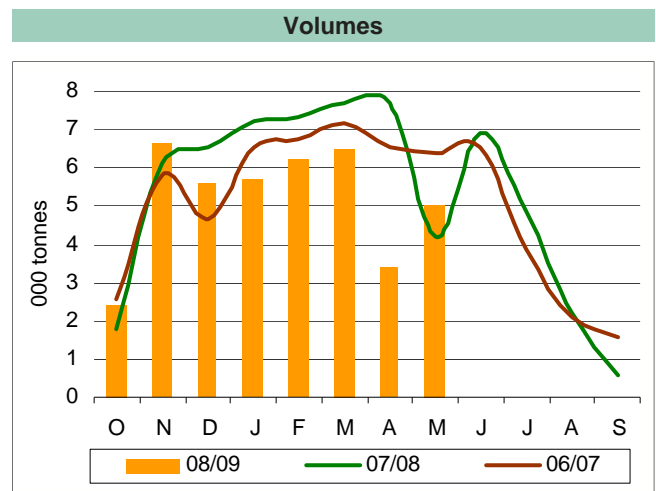
The market was particularly disappointing for lack of demand. Supply from northern hemisphere sources displayed a noticeable deficit. Marginal quantities of Turkish fruits were delivered to the EU but the quantities of Israeli grapefruits were fairly substantial as shipments were larger than in preceding years and significant quantities were carried over from April. But supply from Florida was distinctly smaller than in other years and deliveries stopped very early in the second half of April. French market supply was completed by a few batches from Corsica.

This promising prospect in the EU and uncertainty about the effects of the financial crisis on the Russian market led southern hemisphere exporters to starting their season earlier than in previous years. Arrivals from South Africa and Argentina were therefore distinctly greater than average.

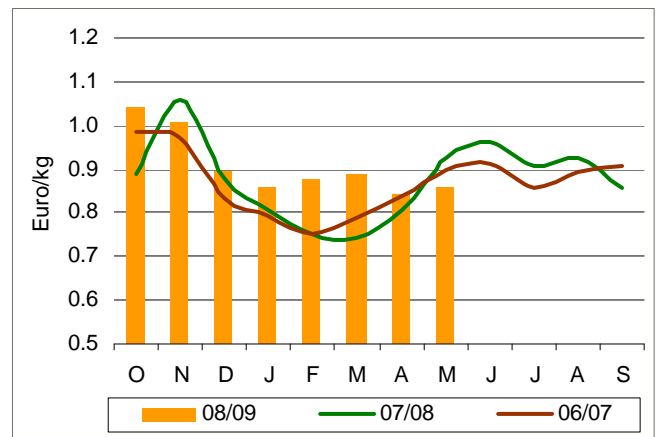
However, the both marked and unexpected weakness of demand throughout the EU disobeyed all forecasts. The operators working with northern hemisphere sources continued to account for most of supply but were unable to increase the price of their fruits. Prices even held at very disappointing levels for Israel. This meant a difficult situation for the southern hemisphere. Supermarket references were not fixed until very late, especially for Argentina. Average monthly prices were distinctly lower than the average, especially for the latter source.

Monthly and annual comparisons	
Volumes	Price
May 2009 / April 2009	
↗ + 49%	= ↗ + 2%
May 2009 / May 2008	
↗ + 20%	↘ - 7%

Estimated market releases in France



Price at import stage



Estimated market releases in France by origin						
Tonnes	May 2009	Comparisons (%)		Total season 2008/2009	Season comparisons (%)	
		2009/2008	2009/2007		08-09/07-08	08-09/06-07
Florida	24	- 99	- 98	27 603	- 26	- 11
Israel	455	+ 38	- 40	7 070	+ 22	+ 2
Turkey	9	- 57	-	2 168	- 33	- 43
Argentina	2 018	+ 242	+ 40	2 018	+ 242	+ 33
South Africa	2 529	+ 63	- 8	2 529	+ 63	- 8
Total	5 035	+ 20	- 21	41 388	- 19	- 10



Litchi

MAY 2009

Supply of litchi to the European market in May was slightly larger and more varied than in April, which marked the start of the Thai export season. Thailand continued to ship litchi to Europe throughout the month, essentially by sea. A few occasional batches from Mexico and China complemented supply. Weak demand for the fruit gave litchi the role of niche market tropical fruit. It also caused prices to fall—more markedly in the second half of the month.

Most deliveries of litchis from Thailand arrived in the Netherlands, as in previous years. Dutch operators then forwarded the fruit to the various European markets. Most of the goods arrived in sea containers at the rate of several units per week, starting in mid-April and continuing in May although they seem to have dwindled in mid-month. In the first half of May, Thai litchis sold steadily on the Dutch market at prices that were fairly good in comparison with the preceding period. A slight increase in price was even noted, probably resulting from a slowing of deliveries. A dip in supply in mid-May led to a return to shipments by air (in Weeks 20 and 21), with these fruits selling at a euro more than those arriving by sea. Arrivals by sea resumed in the second half of May, but quality was more uneven and selling prices fell. Uneven fruit colour and frequently large stones discouraged the already

weak demand for a fruit in direct competition with the small seasonal fruits.

Supply sources for the French market were more varied, with limited and irregular volumes. At the beginning of the month, a few batches of fresh litchis on the branch from Thailand arrived, packed in 8-kg boxes. The asking price of EUR10.00 per kg was difficult to reach and this soon fell. Sales of good quality fruits tended to be concluded at between EUR9.00 and 9.50 per kg. The deterioration of the goods resulting from poor sales pulled prices down to EUR8.00 per kg and less for ends of batches. These shipments ended after a few attempts for lack of a sales niche. In parallel, fruits shipped from Thailand by sea fetched around EUR4.00-4.50 per kg during the first half of the month. Their uneven quality (small fruits with mediocre taste) and poor demand led

to chaotic market releases with irregular supplies. A few batches shipped from Mexico by air were also available in the first half of May. The high prices asked and worsening quality reduced sales considerably and the produce finally changed hands at open prices. A few batches of litchis from China packed in 2-kg baskets did not find buyers on traditional markets either. They were also sold directly to specialists in ethnic products.

Only very small quantities were sold on the Belgian market in the second half of May. A few batches from Mexico sold with difficulty at between EUR8.00 and 9.00 per kg when the fruits were of good quality. They were exposed to competition from Thai fruits imported by air and priced at around EUR5.50 per kg.

Litchi — Import price on the French market — Euros

Weeks 2009	19	20	21	22	May 2009 average	May 2008 average
By air (kg)						
Thailand		5.50	5.75-6.00		5.60-6.00	6.80-7.45
By sea (kg)						
Thailand	4.50-4.75	4.50-4.75	4.00	3.50-4.75	4.10-4.55	4.75-5.75



© Christian Didier

Mango

Mango — Weekly arrivals — Estimates in tonnes				
weeks 2009	19	20	21	22
By air				
Mali	80	60	60	50
Burkina Faso	20	25	20	15
Côte d'Ivoire	120	100	60	40
By sea				
Brazil	1 230	1 500	1 300	1 150
Peru	90	40	-	-
West Africa*	1 430	2 110	1 700	1 560

*Côte d'Ivoire, Mali, Burkina Faso

MAY 2009

Market conditions worsened markedly throughout May. The reason was not so much the volumes arriving (about 150 containers per week) but the distinct slowing of demand. Furthermore, multiple sources, a broad range of varieties and very uneven quality strongly contributed to the weakening of prices. The series of public holidays in May also shortened the sales period at a time when competition from the season's fruits was increasing.

Market conditions for mango deteriorated quickly in May as a result of a combination of several factors. The late starting at the end of April of the West African sea export season caused a sudden increase in volumes in May, while demand tended to decrease. This was complemented by moderate shipments from Brazil, consisting of small fruits unsuited to demand and that were more difficult to sell. In addition, their very uneven quality and rapid ripening considerably increased commercial pressure on the various destination markets. These two core suppliers were complemented by Guatemala, Costa Rica and numerous other secondary sources, thus increasing the volumes released on the market. These fruits—consisting of many varieties and mainly small and of irregular quality—strongly contributed to upsetting the structure of the market, not to mention the residual batches from Peru where the season ended in mid-month. This disorganised supply faced increasing

quantities of the season's fruits preferred by consumers. European production has been large this year and caused a rapid decrease in prices, making competition with imported fruits fiercer.

Weak demand was a feature in May, caused in particular by a market accustomed to limited supply throughout the first quarter of 2009. The marked decrease in the quantities exported from Peru caused European supermarkets to display a degree of lasting lack of interest in mango. Caused first of all by high price levels resulting from small supply, it continued for reasons of lack of market structure and the frequent unsuitability of the fruits available (variety, size, quality, etc.).

The air mango market displayed much the same pattern as that for fruits shipped by sea. The increase in the tonnages arriving from West Africa soon saturated a market on which demand was poor. These fruits, and es-

pecially minor varieties shipped from Mali ('Palmer', 'Haden', 'Smith', 'Irwin', etc.) sold with difficulty at the beginning of the month in competition with increasing volumes of 'Kent'. Marked lack of interest in 'Valencia' was also noted. Problems of over-supply were accompanied by the unsuitability of fruits to trade requirements. Most West African exporters shipped fruits that were not very ripe and not very well coloured—criteria nonetheless essential in trade—in order to reduce the risk of seizure should fruit fly larvae be present.

In addition to shipments from West Africa, limited quantities of fruits from other sources were to be found on the air mango market. A few batches of 'Haden' and 'Palmer' from Brazil were sold at the beginning of the month, together with 'Irwin', 'Mora' and 'Cavallini' from Costa Rica, 'Namdookmai' and 'Mahachanok' from Thailand and 'Ataulfo' from Mexico.

Mango — Import prices on the French market — Euros

Weeks 2009		19	20	21	22	May 2009 average	May 2008 average
By air (kg)							
Mali	Amélie	2.40-2.50	2.30-2.40	2.30-2.40	2.20-2.40	2.30-2.40	2.30-2.45
Mali	Valencia	2.50-3.00	2.30-3.00	2.00-2.50	2.00	2.20-2.60	2.10-2.70
Mali	Kent	3.00-3.50	2.80-3.20	2.50-3.00	2.00-3.00	2.55-3.15	2.10-3.00
Burkina Faso	Amélie	2.00-2.20	2.20-2.30	2.00	2.00-2.20	2.05-2.15	2.04-2.40
Burkina Faso	Kent	2.80-3.50	3.00	2.00-3.00	2.00-2.80	2.45-3.05	2.30-3.20
Côte d'Ivoire	Kent	4.00-4.50	3.50-4.00	2.50-3.50	2.00-4.00	3.00-4.00	2.95-3.60
By sea (box)							
Brazil	Tommy Atkins	3.00-5.00	3.00-4.50	2.50-4.00	2.50-3.25	2.75-4.20	4.25-4.75
Peru	Kent	4.50-5.00	4.00	3.00-4.00	-	3.80-4.30	5.50-5.75
Mali	Kent/Keitt	-	-	3.00-4.50	2.75-4.00	2.85-4.25	4.30-5.00
Côte d'Ivoire	Kent	4.00-6.00	3.00-5.00	3.00-4.50	2.50-4.00	3.10-4.85	4.10-5.50



Pineapple

© Denis Loelliet

Pineapple — Import price		
Euros	Min	Max
By air (kg)		
Smooth Cayenne	1.65	1.90
Victoria	2.50	3.80
By sea (box)		
Smooth Cayenne	5.50	7.50
Sweet	5.50	8.50

MAY 2009

The situation on the pineapple market was satisfactory as a whole in May. Supply from Latin America was more limited and, without being exceptional, demand was sufficient to ensure smooth sales. As at the end of April, sales on the air pineapple market were more steady and prices higher, in particular as a result of limited supply, whatever the source. However, the situation was much more complicated for 'Victoria' pineapple, which is suffering from waning interest.

Supply of 'Sweet' was comparatively limited during the first half of the month. With momentum gained at Easter, the North American market seems to have continued to be the most profitable destination for Latin American shippers. However, the volumes available were only just sufficient to supply the different promotion operations that had been scheduled. Sales were therefore smooth but without a marked rise in prices. Demand for pineapple was seen on the markets in northern and southern Europe and this further accentuated the slight impression of under-supply. The increase in volumes of 'Sweet' in Week 21 coincided with a decrease in demand, but this hardly affected prices. In contrast, the arrival of larger, unbalanced volumes in the last week of the month totally changed

the physiognomy of the market and sent 'Sweet' prices downwards. The situation was stable throughout the month on the 'Smooth Cayenne' market. Demand was good and prices fairly steady. This is explained first of all by small supply and secondly by fairly strong demand, especially on the southern markets. At the end of the month, the increase in volumes and the fall in 'Sweet' prices also affected the prices of 'Smooth Cayenne', but to a lesser degree.

The situation was good on the air pineapple market for the whole month. Supply decreased from all sources, making it easier to shift the produce available. Prices did not really increase but were firmer. In contrast with the usual situation on this market, much less fruit was sold

on commission. Sales and prices both lost a little ground at the end of the month. Batches of 'Sugarloaf' pineapple from Benin—of good quality and hence much sought after—sold at from EUR1.90 to 2.05 per kg depending on the period.

Little change was observed on the 'Victoria' pineapple market. Lack of interest was still its feature and increasingly limited quantities were released on the market. In addition, uneven quality was not an encouragement for buyers. Only fruits from Mauritius seemed to hold their own in terms of both quality and price. A slight improvement was observed at the end of the month when volumes were still limited but sales were better.

Pineapple — Import prices on the French market — Main origins — Euros

Weeks 2009		19	20	21	22
By air (kg)					
Smooth Cayenne	Benin	1.80-1.90	1.80-1.90	1.80-1.90	1.80-1.85
	Cameroon	1.80-1.90	1.80-1.90	1.80-1.90	1.80-1.85
	Ghana	1.70-1.80	1.70-1.80	1.70-1.80	1.65-1.80
	Côte d'Ivoire	1.80-1.90	1.80-1.90	1.80-1.90	1.80-1.85
	Guinea	1.85-1.90	1.85-1.90	1.85-1.90	1.85-1.90
Victoria	Côte d'Ivoire	2.50	2.50	2.50	2.50
	Réunion	3.00-3.50	3.00-3.50	3.50-3.80	3.30-3.80
	Mauritius	3.00-3.30	3.00-3.30	3.00-3.30	3.00-3.30
By sea (box)					
Smooth Cayenne	Côte d'Ivoire	6.00-7.50	6.00-7.00	6.00-7.00	5.50-7.00
Sweet	Côte d'Ivoire	7.00-8.50	7.00-8.50	6.50-8.00	5.50-6.50
	Cameroon	7.00-8.50	7.00-8.50	6.50-8.00	5.50-6.50
	Ghana	7.00-8.50	7.00-8.50	6.50-8.00	5.50-6.50
	Costa Rica	6.50-8.00	6.50-8.00	6.50-8.00	5.50-7.00



Sea freight

MAY 2009

The most significant feature of May for reefer owners and operators had little to do directly with the specialised reefer business. As the oil price started to rise, the cost of bunkers increased 20% over the course of the four weeks. With very little change in the box rate for voyage fixtures between the beginning and end of the month the average TCE calculation suffered, particularly for older units.

Operators had no luck in their efforts to clear the Open List or build momentum in what remained a torpid market into early June. On the one hand Star Reefers found itself with an unwelcome five additional units to fix Spot as a result of the failure of vertically-integrated Russian multinational Sunway while Ecuadorian banana production scaled back as a result of the seasonally cool conditions. Lower demand for capacity on the one hand and greater supply on the other is clearly no recipe for market recovery.

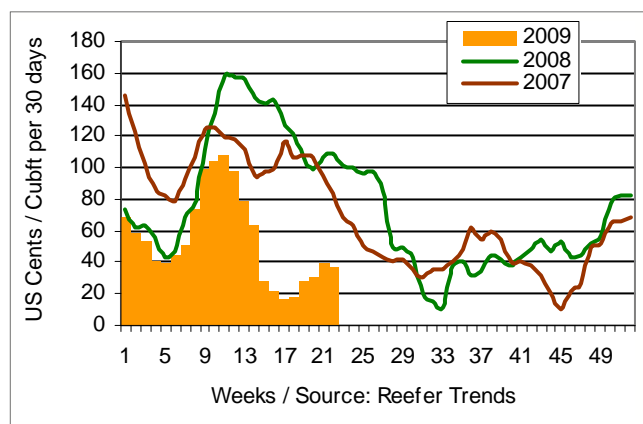
Fearing an equally weak market in the medium term some operators chose to lay up or demolish. With an ever-increasing percentage of South African citrus disappearing into containers and banana volumes likely to be lower than the seasonal average until the end of July the 26 vessels reported to be laid up at the end of the month may not be enough to stimulate a rates revival in the medium term.

Monthly spot average

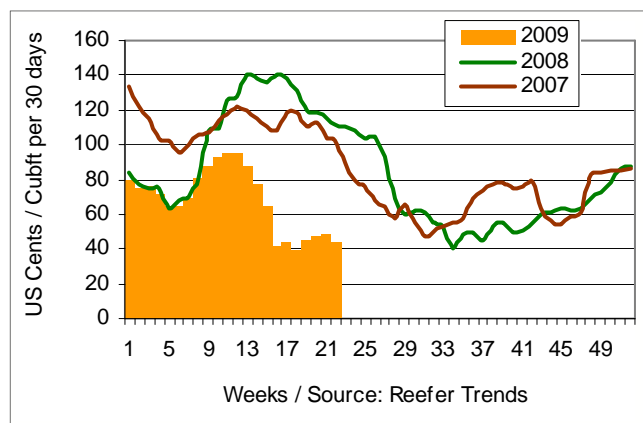
US\$cents/cubic foot x 30 days	Large reefers	Small reefers
May 2009	29	49
May 2008	101	117
May 2007	101	110

Weekly market movement

Large reefers (450 000 cuft)



Small reefers (330 000 cuft)



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Wholesale market prices in Europe

May 2009

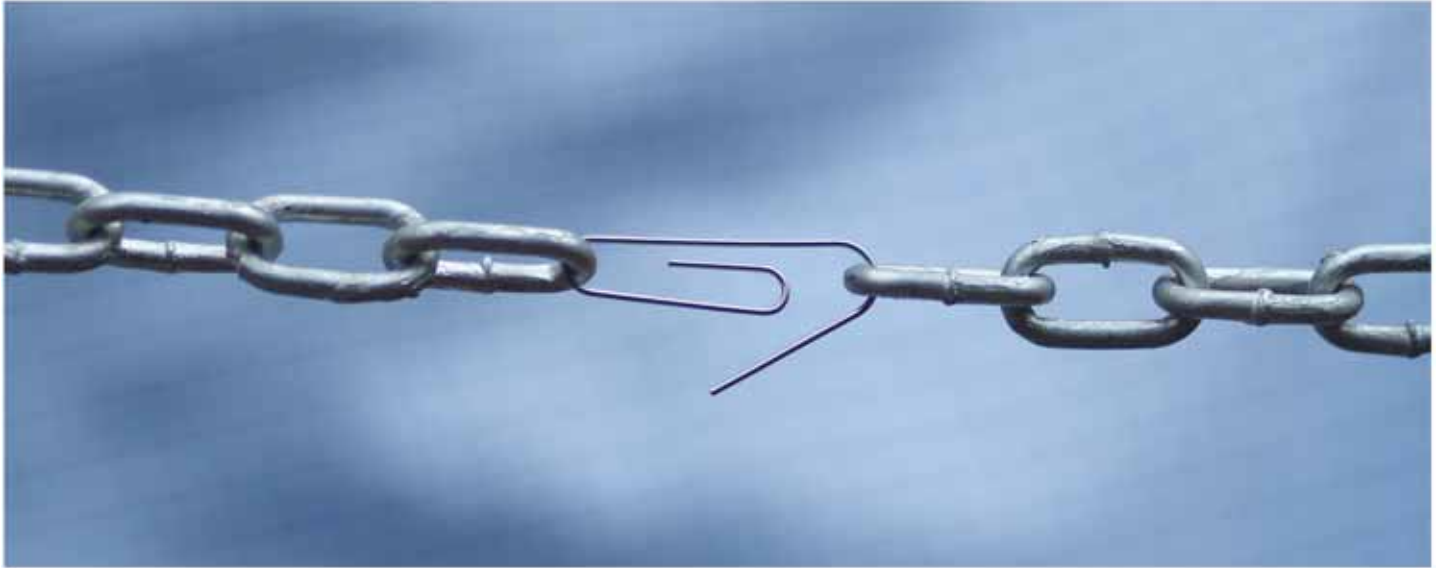
					EUROPEAN UNION — IN EUROS					
					Germany	Belgium	France	Holland	UK	
AVOCADO	Air	TROPICAL	BRAZIL	Box			12.10			
			PERU	Box	3.50	5.78				
	Sea	ETTINGER	ISRAEL	Box			6.30			
			PERU	Box			4.50			
		FUERTE	SOUTH AFRICA	Box		5.83	4.50	5.25		
			PERU	Box	4.75	7.35	5.25			
		HASS	SOUTH AFRICA	Box			5.25	8.25		
			KENYA	Box					7.49	
		NOT DETERMINED	PERU	Box					6.05	
			SOUTH AFRICA	Box					6.33	
	PINKERTON	SOUTH AFRICA	Box	3.75			5.75			
BANANA	Air	SMALL	COLOMBIA	kg		6.30	6.53			
			ECUADOR	kg				5.00		
	Sea	SMALL	ECUADOR	kg			1.70			
CARAMBOLA	Air		MALAYSIA	kg		4.63	4.85	4.07	4.86	
	Sea		MALAYSIA	kg				3.13		
COCONUT	Sea		COTE D'IVOIRE	Bag		9.30	7.88	8.13	9.21	
			DOMINICAN REP.	Bag			11.88		8.64	
			SRI LANKA	Bag		6.50		13.50	9.79	
DATE	Sea	NOT DETERMINED	ISRAEL	kg		8.74			5.87	
			TUNISIA	kg				1.72		
		MEDJOOOL	ISRAEL	kg	6.60	7.40	8.50	8.00		
			SOUTH AFRICA	kg		8.40		8.40		
GINGER	Sea		THAILAND	kg	0.92		1.30	0.82	0.98	
			CHINA	kg	0.85	0.91	1.00	0.80	0.85	
GUAVA	Air		BRAZIL	kg		5.06	4.30	4.50		
KUMQUAT	Air		ISRAEL	kg					4.61	
			SOUTH AFRICA	kg		4.88		4.50		
LIME	Air		MEXICO	kg			3.75			
	Sea		BRAZIL	kg	0.67	1.29	1.17	1.06	1.24	
			MEXICO	kg	1.11			1.38	1.41	
LITCHI	Air		MEXICO	kg		6.00				
			THAILAND	kg		6.00		4.31		
	Sea		MADAGASCAR	kg					3.17	
LONGAN	Air		THAILAND	kg		8.40		7.75		
MANGO	Air	HADEN	BRAZIL	kg				3.17		
			KEITT	kg				3.25		
		KENT	COTE D'IVOIRE	kg		3.68	3.75			
			MALI	kg			2.80	3.25		
		AMELIE	BURKINA FASO	kg			2.50			
			MALI	kg			2.50	2.99		
		PALMER	BURKINA FASO	kg			2.50			
			BRAZIL	kg	3.25					
		Sea	NAM DOK MAI	THAILAND	kg				6.40	
				BRAZIL	kg	0.81		0.94	0.88	0.72
	ATKINS	GUATEMALA	kg	0.94				0.88		
		HADEN	GAMBIA	kg	1.07					
	KEITT	BRAZIL	kg						0.72	
		GHANA	kg		1.18					
	KENT	COTE D'IVOIRE	kg		0.98	1.28				
		BURKINA FASO	kg		1.01					
	NOT DETERMINED	COSTA RICA	kg						1.00	
		PORTO RICO	kg						0.99	
		GAMBIA	kg						0.95	
		BRAZIL	kg				0.88			
PALMER										

					EUROPEAN UNION — IN EUROS					
					Germany	Belgium	France	Holland	UK	
MANGOSTEEN	Air		THAILAND	kg		7.80	8.40	6.38		
MANIOC	Sea		COSTA RICA	kg		1.23	1.15	1.17		
PAPAYA	Air	NOT DETERMINED	BRAZIL	kg		3.57	2.95	2.92	3.28	
		FORMOSA	BRAZIL	kg		3.38		3.11		
	Sea	NOT DETERMINED	BRAZIL	kg	1.71	1.94		1.53		
			COTE D'IVOIRE	kg	1.14			1.50		
		FORMOSA	ECUADOR	kg		2.14				
			BRAZIL	kg		1.64				
PASSION FRUIT	Air	PURPLE	BRAZIL	kg					4.61	
			ISRAEL	kg			5.80			
			KENYA	kg	4.88	4.50	5.20	4.00	4.61	
			SOUTH AFRICA	kg	4.88		6.00	4.75		
		YELLOW	ZIMBABWE	kg		4.55		4.63	4.46	
			COLOMBIA	kg	7.00	6.88	7.60	7.00		
PERSIMMON	Air		BRAZIL	kg		2.85	3.80			
	Sea		SOUTH AFRICA	kg	2.00					
PHYSALIS	Air	LOOSE	COLOMBIA	kg				5.67		
		NOT DETERMINED	COLOMBIA	kg		6.25	8.38	6.25	6.56	
	Sea		COLOMBIA	kg	4.38	5.18		4.49		
PINEAPPLE	Air	MD-2	COSTA RICA	Box				8.25		
			SMOOTH CAYENNE	CAMEROON	kg			1.92		
		VICTORIA	GHANA	kg		1.55				
			COTE D'IVOIRE	kg			2.50			
			MAURITIUS	Box		11.80		11.00		
			REUNION	kg			4.00			
		MD-2	SOUTH AFRICA	Box	11.00	11.60		9.75		
	Sea		BRAZIL	Box				8.25		
			COSTA RICA	Box	7.00	10.50	7.25			
			COTE D'IVOIRE	Box					7.14	
	GHANA		Box					7.49		
	HONDURAS		Box	8.20						
PITAHAYA	Air	RED	ECUADOR	kg				6.50		
			VIET NAM	kg		5.00		6.17		
		YELLOW	COLOMBIA	kg		8.76		7.00		
PLANTAIN	Sea		COLOMBIA	kg			1.05	0.94		
			ECUADOR	kg			1.10			
RAMBUTAN	Air		THAILAND	kg			8.40	5.75		
			VIET NAM	kg		7.50		6.25		
SWEET POTATO	Sea		EGYPT	kg			0.85			
			HONDURAS	kg		1.17			0.82	
			ISRAEL	kg	1.25					
			SOUTH AFRICA	kg			1.30			
TAMARILLO	Air		COLOMBIA	kg	5.60	6.14	8.40	5.60		
YAM	Sea		BRAZIL	kg			1.67			
			GHANA	kg			1.10	1.07		

Note: according to grade

These prices are based on monthly information from the Market News Service, International Trade Centre UNCTAD/WTO (ITC), Geneva.
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All Katopé growers and supply partners are committed to advanced safety, ethical and environmental standards.

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The personal touch