The international vanilla market

Price is the main handicap

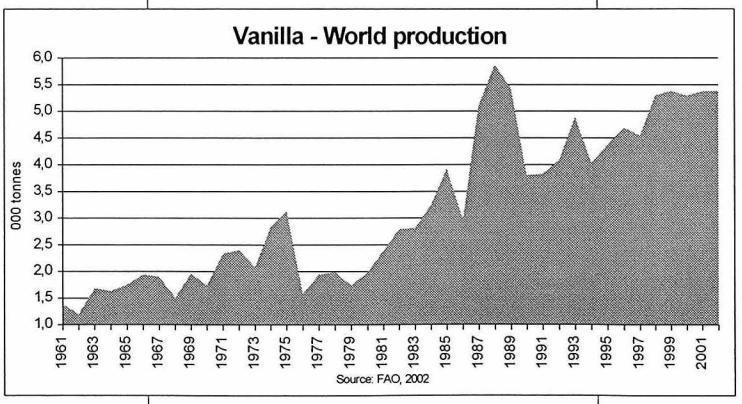
Highly speculative and very sensitive to rumours, the international vanilla market is in no way standard. Prices can vary from 1 to 10 over a period of a few months with market releases stable at 2 300 tonnes. Nearly three-quarters of the world export potential is held by Madagascar. The very attractive prices of recent years are encouraging certain countries to invest in the sector. This medium-term increase in supply could reverse the situation in a market that, given the prices, is already moving away from natural vanilla and becoming increasingly interested in substitutes. A decrease in demand and an increase in supply make an explosive cocktail. But when is it going to go bang?

The main feature of the international vanilla market is its total opacity. The main indicators enabling a rapid definition of the sector, such as production or import levels are contradictory according to the source, without going into the question of price levels which remain a quasi-military secret. They are usually announced to spread confusion. In this context, addressing the market seems to call more for a crystal ball than for economic science.

Growing but volatile production

World production is of the order of 5 400 tonnes (FAO data, 2002). It has increased strongly in recent years and is returning to the record level of the end of the 1980s. The collapse of production in 1990 and 1991 has been forgotten. Average annual growth has been about 4 percent over a 10-year period. However, these indicators should not lead to forgetting the strong production volatility in the short term. Mainly for reasons of weather conditions, production can fall by 20 percent from one year to the next, as in 1986, 1990 and 1994. This uncertainty with regard to production is the key factor in the functioning of the market.

The other factor is demand and this can be estimated using customs data in the main consumer countries: the United States, the European Union and Japan. On the basis of various sources, the international market in 2001 would seem to have totalled some 2 300 tonnes (excluding re-exports from non-producer countries, a figure that has been comparatively stable for three years. The United States has the lion's share with nearly two-thirds of world imports. The European Union takes 30 percent. Japan and the rest of the world have equal shares in the remaining 6 percent. Re-exports from non-producer countries total about 70 tonnes per year, with the United States re-exporting 40 to 50 tonnes.



France is the main European Union importing country (258 tonnes) followed by the United Kingdom (151 tonnes) and Germany (144 tonnes). These three countries account for three-quarters of European imports.

Madagascan hegemony

The world supply situation is relatively simple. Practically all exports are from four countries, with Madagascar being the uncontested leader with 63 percent of international supplies in 2001. Indonesia and the Comoros are strongly present on the market with 21 and 9 percent respectively. They are followed by modest suppliers like Uganda, India, Jamaica and Papua New Guinea.

However, other suppliers do exist that are little or not taken into account in world statistics. Tahiti and Reunion (several tonnes of black vanilla) have found niche markets (domestic and restaurant). Its unique aromatic profile resulting from the variety grown gives Tahiti vanilla its firm position on the market.

Madagascar's quasi-hegemony nevertheless hides changes between producer countries that should be taken into account. Possibly more than in other sectors, the influence of prices on investment in production is felt rapidly and durably. Prices have been very high for two years. Political instability in Madagascar, the decrease in production after hurricanes Eline, Gloria and Hudad in 2000 and a mad rush towards agricultural diversification (fall in price of agricultural commodities) are encouraging producers to enter the market. Trade operators wish to ensure their supplies and depend as little as possible on sudden

Black vanilla – Imports et re-exports – Estimates 2001

In kg	Total	EU	USA	Japan	Others
Producer countries	**2 284 041**	**707 000**	**1 444 900**	**70 599**	**61 542**
Madagascar	1 448 352	546 000	807 300	53 706	41 346
Indonesia	474 931	19 000	447 700	600	7 631
Comoros	205 260	98 000	93 000	11 355	2 905
Uganda	75 623	16 000	58 600	1 023	0
India	27 122	4 000	22 800	0	322
Jamaica	15 400	15 000	400	0	0
Papua N.G.	12 587	5 000	4 300	23	3 264
China	7 800	2 000	100	100	5 600
French Polynesia	4 910	0	3 700	1 014	196
Tonga	3 818	0	3 000	696	122
Mexico	3 646	0	3 500	0	146
Réunion	1 946	0	0	1 946	0
Mauritius	1 000	1 000	0	0	0
Turkey	1 000	1 000	0	0	0
Costa Rica	410	0	400	0	10
Vanuatu	136	0	0	136	0
Taiwan	100	0	100	0	0
Re-exports	**72 200**	**47 000**	**25 200**	**0**	**0**
United States	43 000	43 000	0	0	0
Switzerland	2 000	2 000	0	0	0
Norway	1 000	1 000	0	0	0
Netherlands	5 000	0	5 000	0	0
France	5 100	0	5 100	0	0
Germany	5 100	0	5 100	0	0
Italy	100	0	100	0	0
Japan	100	0	100	0	0
Spain	800	0	800	0	0
United Kingdom	9 000	0	9 000	0	0
Singapore	1 000	1 000	0	0	0

Source: customs, professional sources

fluctuations of the international market.

Stimulated by their governments, private investors (such as McCormick, the US giant in the sector) and sometimes by aid for development (especially in Uganda), India and Uganda are developing production and should be on the international market in three or four years. The Comoros Islands are the third largest world producer and seem to be in the same position as the two preceding countries.

Certain information leads to considering that Comoros production is growing and the 200-tonne threshold was exceeded in 2001. Other more limited development projects are being started, in particular in East Timor (with USAid funding).

Vanilla – Market share by supplier	
Madagascar	63%
Indonesia	21%
Comoros	9%
Uganda	3%
India	1%
Jamaica	1%
Papua New Guinea	1%
Others	1%

Customs sources

Leaping prices

The new development projects and the possible new supplier countries should not lead to forgetting the situation of Madagascar, the leading world producer. Sources indicate that the 2000 harvest was comparatively small at some 850 tonnes of black vanilla (Cyclope 2001).

Black vanille — Import price			
$US/kg	1999	2000	2001
United States	21	34	87
France	27	41	86
Germany	27	36	102

Professional source

This modest figure contributed to maintaining the shortage suffered by the market for two years. Analysis of international market prices confirms this. UE import market prices reached Euro 100 per kg in 2001 and Euro 150 per kg in 2002 (first eight months of the year).

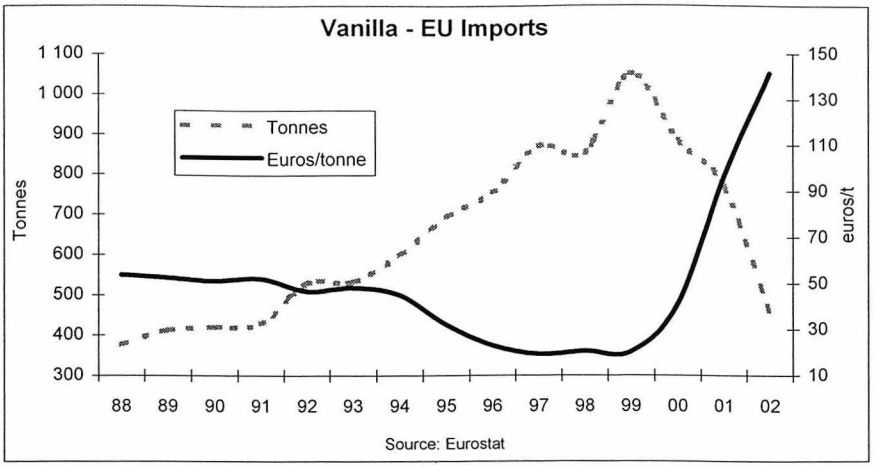
These official figures (Eurostat) are confirmed by other studies. Germany imported vanilla beans at $US 102 in 2001, France at $US 86 and the United States at $US 87. The first data for 2002 confirm the rocketing prices with the usual price mentioned being $US 180 to 200 per tonne (US import price). Prices were multiplied by nearly 10 from 1999 to 2002.

Vanilla is used as an ingredient in numerous foods. Two sectors account for a large proportion of world supplies: ice cream and beverages, and especially cola. Recent news has put the entire sector on the alert. Already a large consumer of vanilla, the Coca-Cola Company announced the launching of *Vanilla Coke*, containing natural vanilla, in May 2002. Operators immediately calculated the effect that a successful launch of the new product would have on the group's already substantial vanilla requirements. Certain sources consider that Coca-Cola would use about 200 tonnes of vanilla per year. Assuming a 10 percent increase in its vanilla purchases if the product is successful and, in this case, imitation by competitors (*Pepsi Vanilla*, *Virgin Vanilla*, etc.), world demand could increase by 20 to 40 tonnes. This is far from a revolution.

Natural versus synthetic vanilla

The change may well come from another direction. Synthetic vanilla is widely used and competition on markets is longstanding and becomes more fierce when the price of vanilla rockets. This has obviously been the case for two years. The price ratio between the two products is 1:10 or even 1:15. The consumption of synthetic vanilla totals 12 000 to 15 000 tonnes per year whereas world trade in vanilla (2 300 tonnes) represents less than 50 tonnes of natural vanillin. There is a clear difference between the two products. Vanilla does not consist of vanillin alone but contains several tens of aromatic compounds that give it all its value.

The aroma industry develops synthetic products held to be increasingly close to the natural model. However, the demand for food products with a 'natural vanilla' or 'vanilla' label is still as strong. It remains to be seen whether the inordinately high world prices put off industrial users. Some importers



already deplored a strong decrease in sales in early 2002. The demand for synthetic vanilla is increasing. A study by the journal *The Public Ledger* reported that world imports of synthetic vanilla had increased strongly since 2000. However, some observers consider that the markets for the two products—natural vanilla and synthetic vanillin—are separate. The food industry would not seem to decide on the basis of price alone.

Nevertheless, end-users are complaining about the poor quality of the beans available on the international market. It seems difficult to attain the minimum standard of 2 percent vanillin. As proof of this, the French fraud administration lowered the accepted limit to 1.6% in 2001.

The labelling of vanilla

French regulations could open a breach if it allowed the use of the term '*Arôme Naturel Vanille*' (natural vanilla aroma) not only for aromas extracted from vanilla beans. Indeed, the vanillin prepared by fermentation using a natural source (biotechnological vanillin) and a natural process can form up to 10 percent of the total weight of vanillin in a natural vanilla aroma (*Arômes, Ingrédients, Additifs*, No. 40). France would be making a rather free interpretation of a European regulation specifying that 'natural vanilla aroma' should contain bean extract exclusively or almost exclusively.

Black vanilla — European Union imports — 2001

Tonnes	FRA	GBR	DEU	NLD	IRL	AUT	DNK	GRC	PRT	ESP	BEL	SWE	FIN	ITA	Total
Extra-EU	**301**	**156**	**154**	**85**	**72**	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**771**
Madagascar	209	86	102	79	70	0	0	0	0	0	0	0	0	0	**546**
Comoros	39	36	23	0	0	0	0	0	0	0	0	0	0	0	**98**
United States	26	4	8	3	2	0	0	0	0	0	0	0	0	0	**43**
Indonesia	3	7	7	0	0	1	0	0	0	0	1	0	0	0	**19**
Uganda	6	3	7	0	0	0	0	0	0	0	0	0	0	0	**16**
Jamaica	0	15	0	0	0	0	0	0	0	0	0	0	0	0	**15**
Canada	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**11**
Mexico	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
Papua N.G.	0	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
India	0	4	0	0	0	0	0	0	0	0	0	0	0	0	**4**
Switzerland	0	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
China	0	0	0	2	0	0	0	0	0	0	0	0	0	0	**2**
Norway	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Turkey	0	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
Mauritius	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Singapore	0	0	0	0	0	0	0	1	0	0	0	0	0	0	**1**
Intra-EU	**109**	**208**	**43**	**153**	**90**	**104**	**48**	**3**	**14**	**36**	**19**	**1**	**6**	**21**	**855**
France	0	129	16	5	43	0	0	0	14	1	12	0	0	11	**231**
Netherlands	0	42	17	0	0	0	0	0	0	1	1	0	0	0	**61**
Germany	35	24	0	81	43	104	44	0	0	2	2	0	0	10	**345**
Italy	0	6	0	0	0	0	0	0	0	25	2	0	0	0	**33**
UK	1	0	0	67	4	0	2	3	0	1	1	0	0	0	**79**
Denmark	0	1	10	0	0	0	0	0	0	0	1	1	0	0	**13**
Spain	0	6	0	0	0	0	0	0	0	0	0	0	0	0	**6**
Belgium	60	0	0	0	0	0	0	0	0	6	0	0	0	0	**66**
Sweden	0	0	0	0	0	0	2	0	0	0	0	0	6	0	**8**
Austria	13	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**

Source: Eurostat / Customs code 0905

A few definitions

Bean (or pod): the whole fruit of vanilla.
Black vanilla: the highest grade of cured vanilla.
Curing: the process that brings out the aroma of the beans.
Cut vanilla: parts of beans cut or broken to remove damaged or spoiled parts.
Givre: exudate of vanillin on the surface of the cured pod.
Green vanilla: ripe fruits that have not yet been cured.
Red vanilla: lower quality cured vanilla.
Split: a pod splitting naturally to release seeds.
TK: French term for vanilla intermediate between red and black.
Vanillin: the main component of vanilla aroma after curing. Vanillin can also be produced by chemical synthesis and by biotechnological methods.

Furthermore, biotechnological vanillin is reported to be extremely difficult to detect or even undetectable when mixed with vanilla extract. This disturbs those who defend 100 percent natural foods.

Quality, a remedy for the crisis

With an excessively high price enhancing supplies in the medium term and decreasing demand for natural vanilla in the short term, the sector is trapped a in vicious circle. Three of the features of the international vanilla market are highly speculative cycles, inadequate raw material quality and more or less direct competition from synthetic vanilla. Aiming at improving the quality of the products available and increasing productivity in the field would seem to be the right choices in the context of a market that is just as likely to swing upwards as downwards ■

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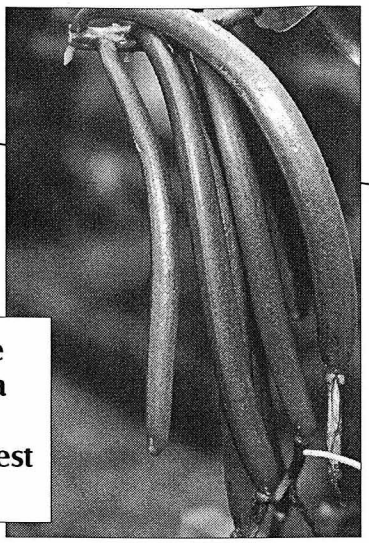
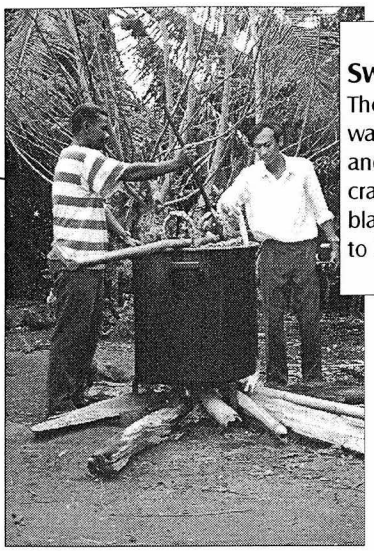
Curing vanilla in Madagascar

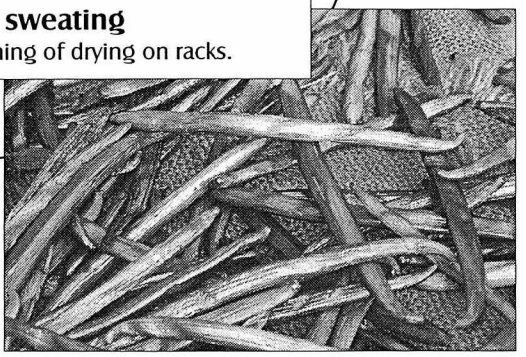


A bundle of vanilla beans at the harvest stage



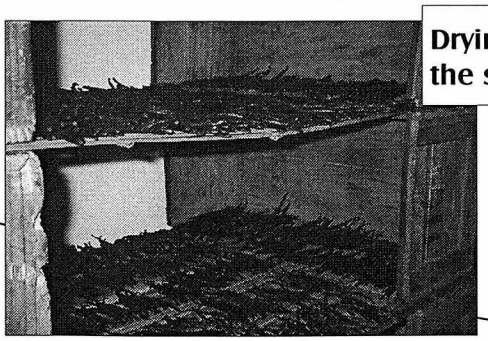
Sweating vanilla
The beans are scalded in water at 60°C for 3 minutes and then placed in wooden crates lined with woollen blankets and 'sweated' for 24 to 72 hours.

After sweating
Beginning of drying on racks.



Drying on a rack in the sun

Drying in the shade



Curing in a wooden box
for two to three months.
Waxed paper wrapping prevents excessive drying.

The process

The curing of vanilla beans consists of scalding at 60°C for 3 min, sweating for 24 to 72 hours, drying on racks in the sun and then in the shade for 3 to 4 months and curing in wooden boxes for 2 to 3 months. While in the boxes, the beans are sorted and graded according to length, colour and whether or not they have split. The top grade thus consists of large, completely black unsplit beans. This is followed by several grades down to the lowest, consisting of small, red split beans. Sorting rejects, referred to as 'cuts' are also sold.

Vanilla over the year in Madagascar

O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J
Pollination									Harvesting - Drying - Maturation						

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