South African Avocado Growers' Association Yearbook 1987. 10:164-167
Proceedings of the First World Avocado Congress

The European avocado market: short (1990) and long-term (1995-2000) forecasts

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SYNOPSIS
On the basis of earlier work, an avocado consumption of slightly over 200 000 tons is forecast for the 1990-91 season. The selling price will then foreseeably be 30-35 per cent lower than the current price unless the propaganda effect results in a suitable shift in the demand between 1987 and 1990. The position of the market balance between 1995 and 2000 will depend on the demand structure. This communication reports some predicted figures in this respect.

INTRODUCTION

The European avocado market has been the subject of a host of studies ever since the earliest work was reported by Cadillat in 1969 and 1970. Stother (1971), Gazit (1976), Diaz Robledo (1976), Azulay (1981), Sachar (1983) and the author (1983 and 1984) among others, made supply-and-demand balances for the European market and put forward predictions for different dates based on various criteria. The author (1984) reported a review of the material published thus far and studied the real contributions of the different papers to the chronological knowledge of the market structure and analysed the accuracy of the predictions made in each.

This communication is aimed at checking the predictions made in the papers published in 1983 and 1984 by contrasting it with the data gathered in the last three campaigns, and to extend the forecasts beyond the full-scale production stage of late plantations, namely 1995.

MATERIAL AND METHODS

The study is based on the data reported by the author (1983 and 1984), which have been approximated in time to the current structure of the European market demand and used to make market predictions for the 1985-86 (in 1983) and 1990-91 (in 1984) campaigns. Seasons subsequent to that of 1983 are dealt with on the basis of official production, consumption and foreign trade statistics obtained from various sources (see Tables 1 a and b, and 2).

TABLE 1a Avocado imports by France per campaign between 1983 and 1986

Exporters	Imports[1] (ton)		
	1983/84	1984/85	1985/86
Israel	27 283	37 292	33 783
Spain[2]	4 620	6 638	10 133
RSA	4 321	9 729	11 673
USA	5 848	989	1 391
Martinica	3 094	4 203	3 016
Other countries[3]	1 499	911	1 909
Total	46 675	59 762	61 905

[1] Campaigns running from October to September in every case.
[2] The figures for the French imports from Spain do not coincide with those given by the Spanish Service for Export Control (SOIVRE), which were 6 888 and 9 093 tons for 1984/85 and 1985/86, respectively.
[3] Cameroon, Ivory Coast, Kenya, Morocco and Mexico.
Source: Results calculated by the author from monthly figures of the French foreign trade provided by Azulay, SA.

TABLE 1b Avocado imports by France per year between 1984 and 1986

Exporters	Imports					
	1984		1985		1986	
	ton	%	ton	%	ton	%
Israel	31 713	61,05	34 917	58,75	41 258	61,84
Spain	5 128	9,88	8 971	15,12	7 477	11,25
RSA	4 324	8,27	9 936	16,72	11 752	17,61
USA	5 614	10,81	964	1,62	1 387	2,07
Martinica	4 158	8,00	3 830	6,44	2 199	3,29
Other countries[1]	1 037	1,99	808	1,35	2 642	3,94

[1] Cameroon, Ivory Coast, Kenya, Morocco and Mexico.
Source: Figures calculated by the author from statistics provided by the Agricultural Mission of the French Foreign Trade Centre of the French Embassy in Spain.

The estimations of the time-evolution of demand aimed at determining the equilibrium points are based on the overall consumption and average price in Marseille. This is obviously not very orthodox on account of the ostensible seasonality of quantities and prices, as well as the time and space segmentation of European import markets. It should therefore be taken as an overall estimation where the average price does not correspond exactly to the quantity consumed, but is arbitrarily adopted as representative. This approximation is accurate enough for a global analysis and it is in this framework that the results and comments that follow should be placed. A somewhat more detailed study' on the demand, broken down into two periods, is currently under way.

TABLE 2 European imports per campaign between 1983 and 1986

Period	Imports (ton)		
	1983/84	1984/85	1985/86
October-December	22 900	31 100	28 100
January-September[1]	47 300	59 150	58 309
Total	70 200	90 250	86 409
Corrected Total[2]	78 500	102 750	100 579

[1]Figures calculated by the author from data given by the Israeli NFB in September 1986.

[2]The previous figures, corresponding to the consumption of the United Kingdom, Germany, France, Italy, Austria, the Nordic countries and Holland, were added to those estimated for other consumers of whichSpain was the most important. The correction is probably negative.

RESULTS AND DISCUSSION

The European avocado market is currently characterised by a growing demand which is steadily absorbing the increased supply resulting from the plantations set up in the past twenty years. The relative importance of the European market, formerly just a small part of the world market, is growing at a steady pace. Thus, European avocado consumption which accounted for only 0,8 per cent of the overall world consumption in 1970, increased to 2,62 per cent in 1980 and to slightly over 6 per cent by 1985. Notwithstanding its small significance within the context of world consumption, it is of considerable relevance to the supplying countries, namely Israel, which supplied 58,7 per cent of the European consumption demand of 1985-86, followed by Spain (18,9 per cent), South Africa (16,9 per cent) and other countries (5,5 per cent).

In Figure 1 is shown the variation of avocado consumption by the European market, plotted for the French market - the main consumer - and the remainder of European countries as a whole. Although no precise data is available for 1986, the European consumption is estimated at 111 000 to 121 000 tons, based on the French consumption (Table 1 b).

In the years preceding 1983, the consumption rate was 65 per cent for France, 17,5 per cent for the United Kingdom and 17,5 per cent for the rest of Europe. The variation in these proportions is a key to the prediction of future market trends (Calatrava, 1984, 28), which are commented on below.

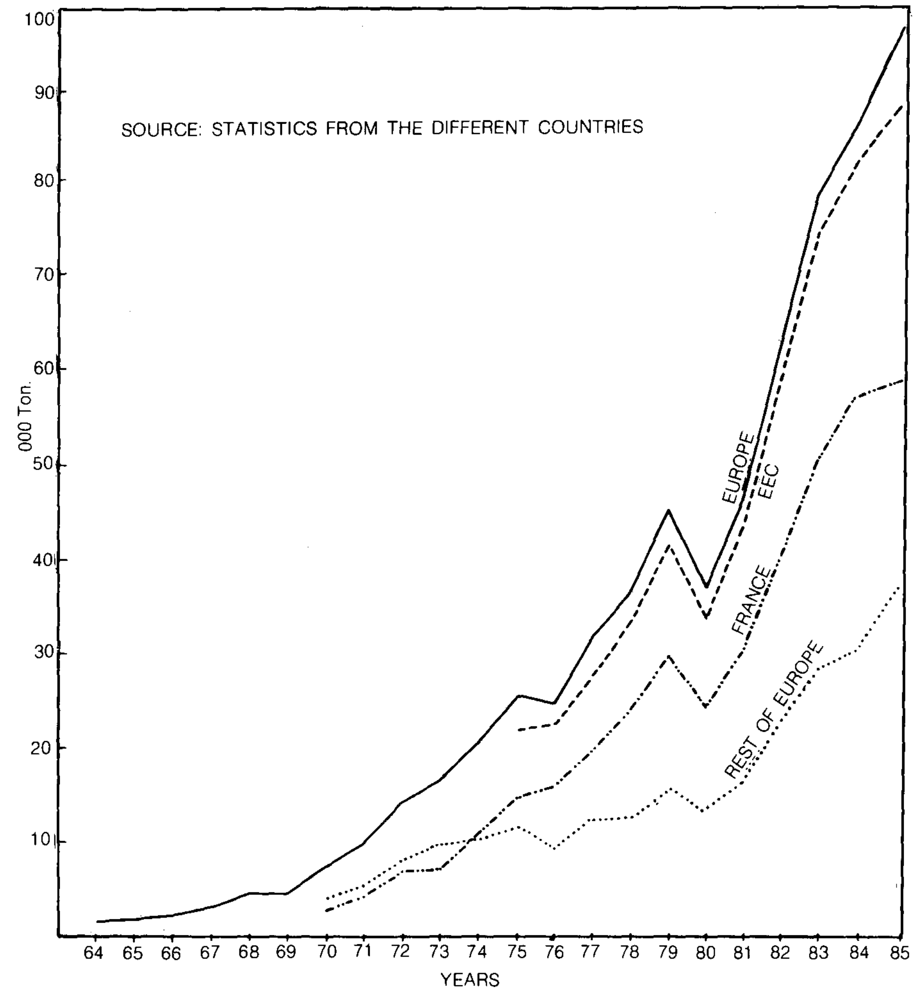

Fig 1 Evolution of the overall avocado consumption by Europe, EEC and France

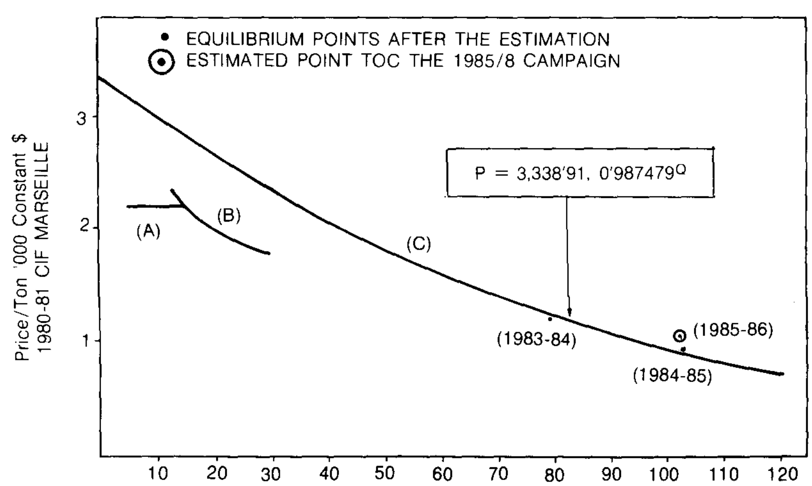

Fig 2 Estimation of historical demand curves for the European avocado market since 1970

No price-fall or oversupply problems were foreseeable from the predictions made by the author (1983) for the 1985-86 campaign, the equilibrium of which was predicted to be around 100000-110000 tons. In fact, the actual consumption for the season was slightly above 100 000 tons (see Table 2), of which about 60 per cent corresponded to France.

The prediction made by the author for 1990-91 is still valid. It should be remembered that the predicted supply was between 197 000 and 222 000 tons, depending on the hypothesis[2]. In order that this supply be absorbed, consumption should remain on the increase, as shown in the last two decades. Moreover, such a demand would only be consumed at an average actual price equivalent to the current price if a propaganda effect of 17 per cent were maintained between 1983 and 1990 (Calatrava, 1984) - this has obviously not been the case over the past three yeras. If one assumes such a propaganda effect to be felt from 1986-87 and the corresponding shifts in the demand curve to occur, the predicted supply would be consumed in the 1990-91 season at an average actual price 30-35 per cent lower than the average current price (1985-86 campaign), while consumption at the current price would amount to 160 000 tons. Thus, either the propaganda effect is even stronger or the predicted supply will not be saleable at an actual price higher than 65-70 per cent of the current price.

By 1995, late plantations contributing to the supply will practically be those already planted, and the greatest increase will correspond to recent Spanish plantations. The Spanish supply to the European market - including the Spanish market itself - will definitely have tripled and will amount to 55 000-65 000 tons by 1995. The Israeli supply will not foreseeably vary much from that of the 1990-91 campaign - it will increase on average with 15-20 per cent at the most. As far as South Africa is concerned, its export supply to Europe should range between 30 000-35 000 tons, so that the overall supply of the three aforesaid countries to Europe should be between 225 000 and 250 000 tons, or slightly above the latter figure if the supply by other countries is considered. Propaganda effects to the order of 13 per cent annually should be kept as at present, if the supply is to be consumed at prices not much lower than the actual current price (1986-87).

The supply should have stabilised somewhat by the end of the next decade as a result of the current trend not to set up further plantations, the number of which will not predictably increase significantly between 1987 and 1992 - at least in Spain or Israel. On the basis of this assumption, the supply by the end of the century could be estimated at between 275 000 and 280 000 tons, 80 000 tons of which would be grown in Spain.

The stabilisation of the supply does not necessarily imply its long-term maintenance inasmuch as internal demand increases once a stable equilibrium has been reached and could result in positive effects on prices or foster new plantations. In other words, the propaganda effect and the producer's knowledge could show more clearly after a steady equilibrium has been reached at fairly low prices.

This reasoning can be summed up by drawing a few conclusions about the positive and negative symptoms shown by the market in relation to whether the increased supplies predicted for the next decade will feasibly be absorbed under acceptable equilibrium conditions.

Among the negative symptoms it is worth noting that:
• The price effect prevailed over the propaganda effect in the past three campaigns.
• Recent empirical studies carried out on scarcely consuming markets such as the Spanish one revealed a clearer response to price than to propaganda.
• The per cent distribution of consumption has hardly varied in the last 10 years.

The positive symptoms worthy of notice are as follows:
• Notwithstanding the last negative symptom commented on above, there has been a decrease in the contribution of French supply from 65 per cent in 1985 to 60 per cent in 1986.
• The supply is gradually being absorbed and prices continue to be interesting, although they are decreasing in real terms.
• The decrease in the growth rate of plantations in producing countries could be indicative of a stabilisation in the supply, whether temporary or permanent, by the end of the next decade.
• The marked increase of the supply in the current campaign (1986/87) is being absorbed by consumers at acceptable prices.

Thus, there are two interrelated questions to be answered in the next three decades, namely:
• Will the high rates needed for the shift in demand caused by the propaganda effect eventually be reached, or is the current price too distant from the equilibrium price for a stable market and will the price effect continue to be the prevailing component of the increasing consumption process?
• Will the structure of consumption rates change according to the trend observed in 1984 or is that a circumstantial trend basically due to the logically marked first-phase increase of the incipient consumption by a producer such as Spain, which was over 9 000 tons (about 250 g per inhabitant) in 1985-86?

The joint action of producers on consumption aimed at achieving the high propaganda effect levels required at present, is mandatory, inasmuch as leaving the answer to the above two questions to the market inertia could be decisively fatal. A joint propaganda campaign biased towards each producer should replace current individual advertising campaigns. This would call for a state-of-the-art study of consumption in each country aimed at determining the factors limiting further expansion, which should be overcome at a later stage.[3] In earlier work, Calatrava & Lopez Nieto (1981 and 1983), and the author (1983) prompted a model campaign for the Spanish market based on a previous study of consumption.

The aforesaid prospective studies to be carried out on the European countries should analyse the potential of market-manufactured avocado products (purees, guacamols, desserts, etc).

Consumers should cooperate in this fostering of consumption by facilitating propaganda and contributing to educate the individual consumer and, above all, by enforcing home regulations about the organoleptic quality and sanitary safety of the product offered to the public, as avocado features a very short acceptation-rejection interval, especially sensitive to the effect of the first few fruits taken by the consumer (Calatrava & Lopez Nieto, 1981). Thus, Spain, one of the potentially great markets, maintains a steadily increasing consumption with the incorporation of new consumers. Avocado is by now available at a high percentage of retail outlets, particularly in winter. Yet, it is rather distressing to see the poor quality of the fruits sold, particularly in new consumer districts where shopkeepers lack pertinent knowledge and information to deal adequately with the product and to advise customers about its properties and gastronomic potential. This is no doubt adversely affecting the prospective expansion of the avocado market.

[1] The prices for such points were calculated in French currency and converted to constant dollars of 1980-81; the quantities are the totals in Table 2.

[2] The information currently available makes it advisable to correct the interval by defect, since the predicted consumption of 17 000 tons for South Africa in 1990 could be underestimated insofar as about 14 000 tons were already consumed in 1985-86. According to the hypothesis on which the forecast was made (Calatrava, 1984), the supply from South Africa to Europe in 1990-91 should be somewhat below the predicted 27 000 tons, so that the average predicted interval of 210 tons would be closer to the 200 000-tons limit.

[3] The peculiarities of avocado and the marked segmentation of the European market according to the consumer's attitude towards this type of product, compels the use of a design of this kind.

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