

THE SOUTH AFRICAN EXPORT MARKET FOR AVOCADOS AND THE EXCHANGE RATE: EFFECTS ON PROFITABILITY

J VAN ZYL & J A GROENEWALD

DEPT. AGRICULTURAL ECONOMICS, UNIVERSITY OF PRETORIA, PRETORIA

SUMMARY

South Africa is likely to lose some of its seasonal advantages on the export market due to stiffer competition. The resulting lower prices and exchange rate interactions may cause the profitability of avocado production to decrease. Production, marketing and research should adapt to such events. Marketing should become more consumer orientated, production costs minimized and research directed at those areas with the biggest potential returns.

OPSOMMING

Groter kompetisie sal waarskynlik veroorsaak dat Suid-Afrika syseisoenale voordeel op die uitvoemark verloor. Die gevolglike laer pryse en wisselkoers-interaksies kan veroorsaak dat die winsgewendheid van avokadoproduksie daal. Produksie, bemarking en navorsing behoort hierby aan te pas. Bemarking behoort meer verbruiksgeoriënteerd te wees, produksiekoste geminimaliseer te word en navorsing gerig word op daardie gebiede met die grootste potensiele voordele.

INTRODUCTION

Since 1980, more than 50 per cent of the total volume of production of South African avocados has been sold on export markets. This percentage has furthermore increased dramatically since 1980. Based on actual plantings it is estimated that in 1990 export markets will be the destiny of approximately 80 per cent of total production. It is thus evident that the avocado industry in South Africa, and more specifically its profitability, will increasingly be affected by external factors dictated by international trade such as export markets and exchange rates.

It may therefore be important to evaluate the factors that influence the export market for South African avocados, as well as to determine the effect of exchange rate on net revenue and thus also profitability.

This paper concentrates on the characteristics of world avocado production and consumption, the export market for avocados and the effect of the fluctuating South African exchange rates on profitability of avocado production.

WORLD PRODUCTION

The avocado, originating in Central America, can be cultivated in most of the subtropical areas of the world. It is estimated that 86 per cent of the total world production is still produced on the American continent and Caribbean Islands. Table 1 shows the world production of avocados, the contribution of each continent and of the more important producing countries to it.

Four countries, namely Mexico, U.S.A. Dominican Republic and Brazil, dominate world production with more than 100 000 tons per annum each. Other producers with a production of more than 50 000 tons per annum are Peru, Indonesia and Israel. The total production of South Africa accounts for less than 2 per cent of total world production.

TABLE 1

World production of avocados (FAO Production Yearbook, vol. 37)

COUNTRY	1977	1981	1982	1983
	1 000 TONS			
World	1 183	1 489	1 549	1 586
Africa	99	112	116	117
South Africa	15	21	22	22
Zaire	22	24	24	24
Cameroon	18	25	26	27
Northern and Central America	663	992	981	983
Dominican Republic	130	134	135*	136*
Mexico	274	453	455	488
U.S.A.	92	166	214	218*
Martinique	2	1	3	3 *
Southern America	311	305	319	327
Brazil	112*	110*	120*	125*
Chile	15	25	26	26*
Peru	76	64 *	66*	67*
Asia	104	145	128	153
Indonesia	66	111	60*	65*
Israel	17	8	40	60
Europe	3	2	2	2
Oceania	3	3	3	3

*FAO-estimation

AVOCADO EXPORTING COUNTRIES

The ratio of avocados that are internationally traded to total world production is relatively small. Of the total world production of approximately 1,6 million tons only 100 000 tons are being traded on export markets, thus less than 1,0 per cent. It is therefore important to note that the major producers of avocados are not necessarily exporters, or rather have not yet entered the export market.

The major exporters of avocados are Israel, the U.S.A. and South Africa. These three

countries account for approximately 90 per cent of world avocado exports. Other smaller exporters are Spain, Martinique, Mexico and Kenya. Each country is subsequently viewed separately.

ISRAEL

Israel is by far the world's largest exporter of avocados. The development of production and exports from 1959/60 are depicted in table 2.

The harvesting of avocados starts in mid September and the season extends till May. Supply is proportionally distributed through the marketing period because of the different ripening periods of cultivars. The mean annual yield of full grown orchards is 10 ton per hectare, but this varies from region to region. The most common cultivars are Fuerte, Hass and Ettinger, which together represent 85 per cent of total production, while the rest consist largely of Nabal and Reed.

Exports are mainly marketed under the trademarks "Carmel" and "Holyland", and are estimated on 60 000 ton for 1 985. This is considerably more than the 40 000 ton for the previous season. This increase concerns all three major cultivars.

TABLE 2

Production and exports of Israeli avocados (1 000 tons)

YEAR	PRODUCTION	EXPORTS
	1 000 TONS	
1959/60	0,2	0,0
1969/70	4,1	3,0
1974/75	16,4	13,5
1978/79	28,4	25,2
1980/81	7,5	6,6
1981/82	37,0	31,0
1982/83	55,0	46,0
1983/84	50,0	44,0
1987/88	100,0	

Source: Fruit Production & Marketing Board, Israel

South Africa

South African exports have been handicapped by weather, especially droughts as experienced for example in 1982, 1983 and 1985. Although production is of an uncertain nature, exports showed a mean increase of 24 per cent per annum. Avocado exports from South Africa are shown in Table 3.

The avocado industry is dominated by the Fuerte cultivar, but new expansions also include cultivars like Hass and Ryan. Most of the new Fuerte plantings are in areas where ripening will be earlier. This implies that the South African season will start in the beginning of March rather than in April. However, the purpose of most of the new

plantings is to maintain production during the period August to October so that continuity can be established in local and export markets. It is estimated that 60 per cent of all exports in 1990 will consist of Fuerte.

TABLE 3
Avocado Exports From South Africa

YEAR	QUANTITY (1 000 kg)
1970	1 480
1974	3 040
1975	4 800
1979	9 276
1982	12 000
1985	24 000*
1987	29 600*
1989	36 000*

* Estimation based on actual plantings

The U.S.A.

Two states of the U.S.A. export avocados, namely Florida and California. Although Californian exports have increased sharply since 1981, Florida is the traditional supplier of exports.

Florida and California are in direct competition with each other on both the local and export markets. The production seasons differ somewhat. Californian production decreases in October when Florida reaches its peak and extends till December. According to the "California Avocado Commission" there is potential for expansion and they expect to double exports in the near future.

Hass is the most important cultivar, while the major export markets are France, the U.K. Sweden, Germany and the Netherlands.

Spain, Martinique and Kenya

Spanish avocado production increased dramatically over the last 10 years. Trees are relatively young in 1983 only a third of the trees were bearing. Based on new plantings, production can vary between 36 000 tons and 55 000 tons towards the end of the 80's. Hass is the most important cultivar. Other important cultivars are Bacon and Reed.

These cultivars extend the season to June and July. New plantings of these cultivars are slow and thus cannot be expected to become great competitors of South African avocados in the near future. The biggest export market is France.

Of the Caribbean Islands, Martinique is the most important supplier of avocados to the EEC-countries, especially to France. Avocados are marketed from August to October. Although exports amounted to only 2 520 tons in 1983, the island expects to export more than 7 000 tons in 1988.

Avocado production in Kenya has increased considerably since 1975; during 1980 it was more than 8 000 tons, during 1981 it amounted to 12 000 tons and in 1982 production surpassed 17 000 tons. Avocado exports from Kenya are shown in Table 4.

TABLE 4
Exports of avocados from Kenia to European countries

COUNTRY	1980 (t)	1981 (t)	1982 (t)
U.K.	219,0	309,4	374,8
France	245,6	431,7	375,8
West Germany	121,3	123,7	151,8
Switzerland	21,9	4,2	8,5
Belgium	12,3	25,1	6,4
Holland	10,5	1,7	19,4
Italy	3,2	7,7	-
Djibouti	7,5	12,7	11,3
Sweden	-	0,4	-
Other	13,4	12,4	8,0
TOTAL	654,7	928,0	956,0

Source: Aldrich (1985: 8)

THE EXPORT MARKET FOR AVOCADOS

Europe is the world's biggest outlet, absorbing approximately 80 per cent of all exports. France and the U.K. constitute 85 per cent of the European avocado market. France imports four times as much as the U.K. Table 5 shows the comparative per capita consumption of avocados in the U.K., France and Germany.

TABLE 5
Comparative per capita consumption of avocados in selected countries

COUNTRY	1980 (gram)	1981 (gram)	1982 (gram)	1983 (gram)
United Kingdom	119	150	169	195
France	424	976	1 356	1 012
West Germany	26	26	27	64

Source: Aldrich (1985: 8)

Sales in Britain are low and undeveloped during the winter; in France the summer market is undeveloped. The European market can thus be developed to absorb 85 000 tons in the near future (EEC imports for 1983: 71 000 tons). Commerce also regards France and Britain as the best prospects for expanding sales. There are also other differences in the consumer preferences: France prefers smaller avocados while the U.K. prefers larger fruit.

Aldrich (1985) advances the reasons for France being the biggest consumer of avocados:

Israel used France as test market when the product was initially started.

Hors d'oeuvres form part of the normal French meal and marketing strategy concentrated on this.

Because France is the biggest market for export avocados, the French market will be used as representative of the European export market.

THE SUPPLY OF AVOCADOS ON THE FRENCH MARKET

Table 6 shows French avocado imports. The French market grew with 74% from 1981 to 1984. Israel is the biggest supplier; their exports to France increased with 159 per cent over the same period. Quantities from South Africa vary between 5 386 tons and 7 352 tons; exports were negatively influenced by drought. One consequence was a decline of the South African share. Decline in imports from South Africa and Israel in 1984 were counteracted by increased imports from the U.S.A. (+120%), Spain (+37%) and Martinique (+85%).

Israel plans to expand its exports even further. For the 1 985 season the export aim has been 67 000 tons of which 42 000 tons to France. The import pattern of avocados to France is illustrated by Figure 1, while Figure 2 illustrates the seasonal supply.

South African avocados reach France (as well as the rest of Europe) from March until September. According to figure 1 South Africa competes with several countries. Strong competition is experienced at the beginning of the South African season until Israel's season ends; prices are low. However, what is more distressing is that despite an unfavourable Dollar/Franc exchange rate, the competition of U.S.A. exports has been strengthening rather than weakening.

TABLE 6
Imports of avocados to France (tons)

COUNTRY	1981	1982	1983	1984
U.S.A.	7 312	1 949	2 544	5 614
South Africa	5 386	7 352	5 465	4 324
Israel	12 257	24 578	35 107	31 713
Other	4 857	6 816	7 674	10 325
TOTAL	29 812	40 695	50 790	51 976
South Africa's share of the market (%)	18,1	18,1	10,8	8,3

Source: Aldrich (1985)

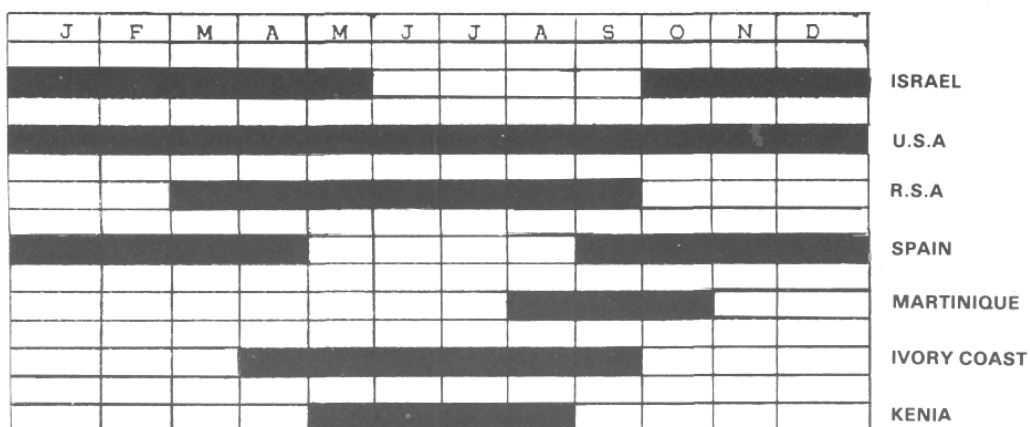


Fig. 1. The import pattern of avocados to France

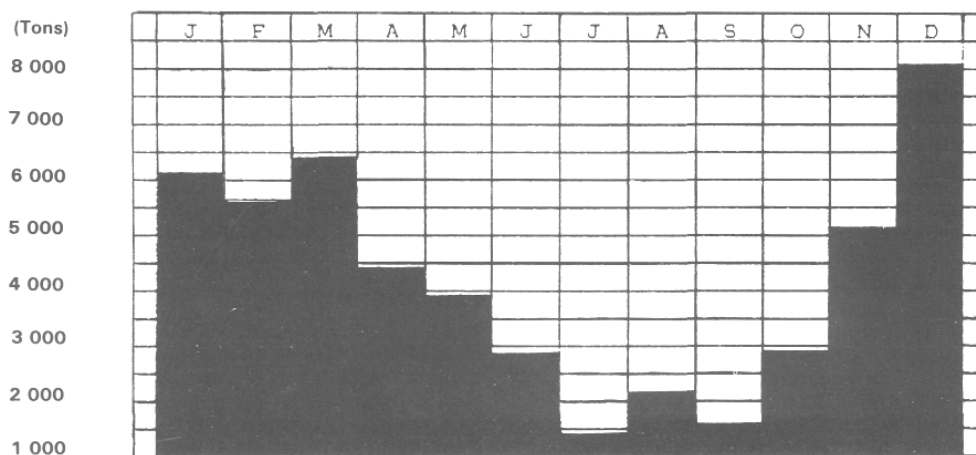


Fig. 2. The seasonal supply of avocados to France, 1983 (tons)

TABLE 7

The mean annual wholesale price of avocados per 4 kg box and country of origin in French Franc (FF)

COUNTRY OF ORIGIN	1980	1981	1982	1983	1984
Israel	49,69	54,27	45,87	50,22	44,23
South Africa	48,15	48,35	47,18	59,64	63,39
California 1)	56,61	56,50	61,94	56,27	58,43
Spain	60,33	40,30	37,29	64,50	44,54
Martinique	49,18	42,03	38,49	44,63	44,66

1) Marketed in 6 kg boxes. Prices were, however, converted to 4 kg units for comparison purposes.
Source: Marche's Agricoles - L'Echo des Halles

TABLE 8

Mean monthly wholesale price of avocados in France during 1984 in French Franc (FF) per 4 kg box.

COUNTRY OF ORIGIN	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Israel	56,40	62,62	-	-	60,00	-	-	-	-	40,89	41,62	45,82
R.S.A	-	-	-	-	61,17	60,40	60,00	64,73	69,55	74,13	-	-
California 1)	-	-	-	57,28	59,97	59,87	49,28	-	-	-	-	-
Spain	52,13	-	-	-	-	-	-	-	-	39,38	35,33	40,35
Martinique	-	-	-	-	-	-	-	73,67	37,50	-	-	-

1) Marketed in 6 kg boxes, but converted to 4 kg units for comparison purposes

Source: Marche's Agricoles - L'Echo des Halles

PRICES AND PRICE TRENDS

South Africa obtained above average prices, especially in 1984 namely FF 61,35 (lowest) and FF 66,75 (highest) per 4 kg box. The highest price for Israeli avocados within the same size class, was only FF 47,28.

The South African season that extends from March till September is characterized by competition with Israel in the beginning and end of the season, California during the whole season and also to a lesser extent with Kenya and Martinique. This competition has a negative effect on prices of South African avocados, especially during April and May.

Californian avocados are marketed in 6 kg containers that are increasingly accepted as the desired size. Prices compare favourably with those of South Africa. It must furthermore be kept in mind that California increased its market share from 4,8 per cent (1982) to 10,8 per cent (1984) notwithstanding an unfavourable Dollar/Franc exchange rate.

FUTURE COMPETITION

Commercial trends lead one to suspect that in the immediate future, France and Britain will still be the countries with the biggest potential of increased consumption. Avocados are relatively unknown in the Benelux countries and it is estimated that promotion campaigns can stimulate exports to 8 000 ton per annum within a few years. The biggest stimulus for avocado sales has been the selling of avocados that are ready for eating. The result was a dramatic increase in sales.

It seems however that an over supply situation may very well develop fairly soon. A conservative supply of 115 000 tons, based on plantings in Israel and the R.S.A., is expected for 1985/86. At present only 60 percent of the total area under avocados in both countries is in production. Expansions in the U.S.A. and Mexico will probably be less dramatic, while Africa is still being hampered by logistic problems. The biggest question mark hangs over non-traditional producers like Southern America and Spain. Spain already has a cultivar that competes directly with South Africa's seasonal advantage. Furthermore, exports of only 10 percent of Brazil's total production will be more than the total South African exports.

As supply increases on the European markets competition will obviously become more severe. The avocado is also losing some of its exotic and luxury characteristics and values. The consumer will thus become more choosy with the result that consumers' preferences will play a bigger role. It will merely be part of good business to consider these in all developments, including cultivar selection. This will probably force prices down to levels corresponding with the total supply.

South Africa may not only lose much of its seasonal advantage and thus its relatively higher prices, but price levels may also decrease over the year as a whole, thereby further reducing the profitability of South African avocado exports.

Table 9 shows South Africa's price advantage in French Franc (FF) over other countries.

TABLE 9

Mean annual prices of South African avocados relative to other countries, 1982 - 1984 (per 4 kg box) FF

ORIGIN	1982	1983	1984	MEAN
Other countries	42,40	53,12	59,23	51,52
R.S.A.	47,18	59,64	63,39	56,74

EXCHANGE RATES

The South African exchange rate has recently weakened considerably against all the major currencies including those of the EEC. This has led to bigger revenues, and thus profits, from exports over the short term. Over the longer term however, increases in input costs, due to the weaker Rand, will reduce the initial higher profits to lower levels. The reduction depends at least partially on the relative amount of inputs that are dependent on or connected to imports.

Prices of fertilizers, other chemicals and fuel are directly influenced by exchange rates. A realistic assessment of cost to these inputs amounts to R 58, R 383 and R 217 per hectare under producing avocado trees respectively, thus contributing more than 40 percent of total variable costs (Agricultural Production Economics, 1985). All other input costs are however indirectly influenced by exchange rate through inflation. It is thus evident that higher profits stemming from the weaker Rand can only be a short term phenomena. Over the longer term input costs will rise, thereby canceling out windfall profits and increasing the riskiness of production.

It would, even without signs of economic recovery, also be very unwise to formulate over optimistic expectations of export earnings, based on a weak Rand. One has to bear in mind that gold normally constitutes approximately 50% of South Africa's total export earnings. A small change in the gold price can have considerable effects on the exchange rate of the Rand. Even a smallish increase may under present conditions strengthen the Rand considerably. Any temporary economic setback in the U.S. can bring this about. It will, furthermore, strengthen the competitive situation of U.S.

avocado exports *vis-à-vis* their competitors, including South Africa.

CONCLUSION AND RECOMMENDATIONS

South Africa is likely to lose its seasonal advantage on the export market in the near future due to new entries to the market and stiffer competition. This will probably cause prices to decrease by about 10 per cent.

The stiffer competition and the loss of some of the avocados' exotic and luxurious consumption characteristics may also cause the general price level for avocados to drop significantly on the export markets. This will then result in still smaller revenues and profits. If it is taken into account that the weak Rand will only benefit avocado exporters over the short term, and that the Rand may even rally because of a higher gold price, it is evident that profits may even drop further.

The combined effect of stiffer competition and resulting lower prices, and exchange rate interactions may cause the profitability of avocado exports, and thus production in general, to decrease dramatically. The effect of decreasing profits can only be cushioned by acting early.

From a marketing viewpoint consumer preferences must be taken into consideration: consumers prefer the Hass cultivar, ready to eat avocados, quality of packaging and quality of fruit will play bigger roles in future. On the other hand producers should restrict expansions and new plantings to high yielding areas, thereby minimizing production costs. Capital costs should also be curtailed, particularly large items with relatively low salvage values like packing houses and units. This also pertains to machinery.

It has been shown by numerous researchers that the reduction of costs when profitability is decreasing, thereby also reducing risk, results in the highest net farm income over the long term. In view of expected price trends it is therefore important that avocado producers act now in order to ensure maximum profits.

It is also important to direct the main thrust of our research to those areas or fields which will benefit the industry most; this will mean research which will expand revenue, as influenced by production and price (including quality and season aspects) relative to costs. It will also mean research which will enable growers to economize on expensive inputs relative to less expensive areas. Seen in the light of our limited research resources, it may become important to weigh up relative prospective benefits and costs of research efforts in order to decide on realistic and optimal priorities.

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