California Avocado Society 1989 Yearbook 73:87-106

Mexican Avocados: Threat or Opportunity for California?

Ramón Paz-Vega
Avocado grower, Uruapan, Michoacan, Mexico; consultant; chairman of the board, UCAIM; assistant to the chairman. Union of Avocado Growers of Michoacan.

I want to thank the directors of the Society for this opportunity to speak to you today. I am really happy to be here, because I can contribute to the good communication and better understanding of our two industries. This morning I am going to quickly describe the Mexican avocado industry: how it is, what is happening there, what we are doing, and what we expect for the future. After that, I am going to analyze a more controversial issue — a very important question for you: Is the Mexican avocado industry a real threat for the California industry? In doing that, I am going to show you some data and some facts; and then I will share with you some of my thoughts on the matter.

The Mexican Avocado Industry

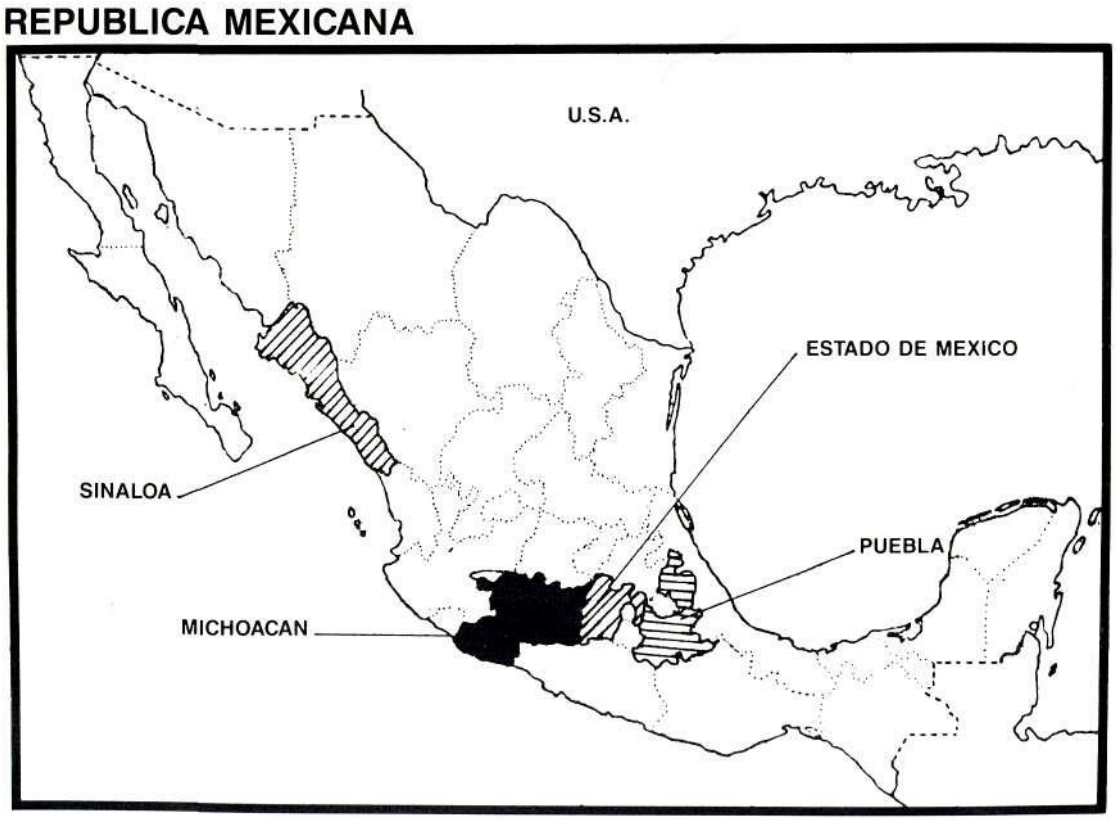
As all of you well know, the avocado is a unique product; it is one of the wonders that Mexico gave to mankind. Now we see how its culture and its consumption are steadily increasing in the whole world. We proudly keep in Mexico the leadership in these fields. Our country is the largest producer of avocados on earth, with a crop in 1988 of 1.5 billion pounds (21, 20). World production was close to 3.1 billion pounds in 1985; 45% of that volume was grown in Mexico, followed by Brazil and the United States (Table 1) (1, 51, 74). Mexico has been always the largest consumer of avocados, too. In recent years that consumption has increased remarkably due to the extensive production of better varieties, mainly 'Hass'. Per capita consumption now exceeds 18 pounds. As a result, an extremely strong domestic market has arisen, consuming huge volumes of this fruit at good prices (10, 50).

Table No. 1. 1985 WORLD AVOCADO PRODUCTION (Millions of Pounds)

Mexico	1,380
Brazil	599
U.S.A.	506
Dominican Republic	200
Israel	150

Avocados are grown everywhere in Mexico. However, commercial growing takes place in just 16 states, and only in four of them do we find important crops: Michoacan, Sinaloa, Puebla, and the State of Mexico (50). The State of Michoacan is by far the main growing area in the country, and believe me, it is truly "Avocadoland" (Figure 1).

Figure No. 1. Avocado Growing States in Mexico.



But how big is this "Avocadoland?"

In Michoacan we farm almost 200,000 acres of avocados. Bearing trees have 70% of that surface, and developing trees have the remaining 30%. State average yields are close to 6,500 pounds per acre, although it is common to find good orchards with yields of 10,000 or 15,000 pounds per acre as their average. The industry grows at a rate of four or five percent every year (21, 20). Close to 60% of the Mexican crop comes from Michoacan. In that state 98% of the commercial orchards are grafted to the 'Hass' variety, which is also widely preferred in our markets. Thus, almost 90% of the Mexican 'Hass' avocados are harvested in Michoacan. As shown in Table 2, in 1988 the crop of the state was close to 900 million pounds (10, 21).

Avocado growing is the most important industry in Michoacan. There are 25 municipalities whose economies depend on avocados (Figure 2). It generated an income per acre in 1988 of around 200 million dollars and employed directly more than 40,000 people on a permanent basis, plus many more seasonal workers. Avocados represent 62% of the value of all the fruits grown in the state (21, 20, 50).

Table No. 2. AVOCADO PRODUCTION IN MEXICO AND IN MICHOACAN
(Thousands of Pounds)

Year	Mexico	Michoacan	% Mich.
1981	982,301	318,584	32.4
1982	1,035,398	349,558	33.7
1983	1,160,312	523,115	45.0
1984	1,351,770	730,088	54.0
1985	1,382,743	809,721	58.5
1986	1,416,593	807,522	57.0
1987	1,449,175	849,053	58.6
1988	1,476,709	883,015	59.8

Can you imagine what this area looks like?

Figure No. 2. Avocado Growing Areas in Michoacan.

In Michoacan, avocados are grown on the slopes of the central state mountains, sometimes in small valleys, but more frequently on the hillsides. There are orchards in a very wide range of altitudes, from 4,500 to 7,500 feet above sea level. This means that avocados are grown under many different microclimates. According to the Koppen classification, there are 11 climates in this avocado area; most of them are temperate,

sub-humid, with summer rains. Under these conditions, blooming and harvesting seasons vary a lot. Temperatures fluctuate between 57° and 80°F, with an average of 64 °F. Rains occur mainly in the summer and early fall months. It rains between 43 and 67 inches per year (20).

Soils in the avocado growing area have a volcanic origin. Most of them are andosols, although a number of other orders can be found. Those soils have a slightly acid pH, between 5.5 and 7.0. Their organic matter content is between 1% and 6%. Most of them are very deep (more than three feet) and have very good internal drainage (20).

Let's see now some aspects of avocado culture in Mexico.

The technology for avocado growing in Michoacan is better every year. We are not the leaders in this field, but our knowledge and expertise improve as we learn what other growers in Mexico and the world are doing—by traveling, through communications, or in day-to-day practice. Unfortunately, we do not have continuous and coordinated research programs. Trial and error is still our most common method of researching.

Rootstocks in our area are seedlings of the Mexican type. Clonal propagation of rootstocks is not a commercial practice yet (50).

During late winter and spring, we have a dry season. Almost 80% of the orchards are irrigated at this time of the year. Water comes from rivers, streams, and some wells. The cost of irrigation is very low: water is free; the only expenses are for energy for pumping and for maintenance and depreciation of the equipment and facilities. Micro-irrigation methods are found only in 15% of the acreage; most orchards are watered by flooding individual basins (20, 50, 23).

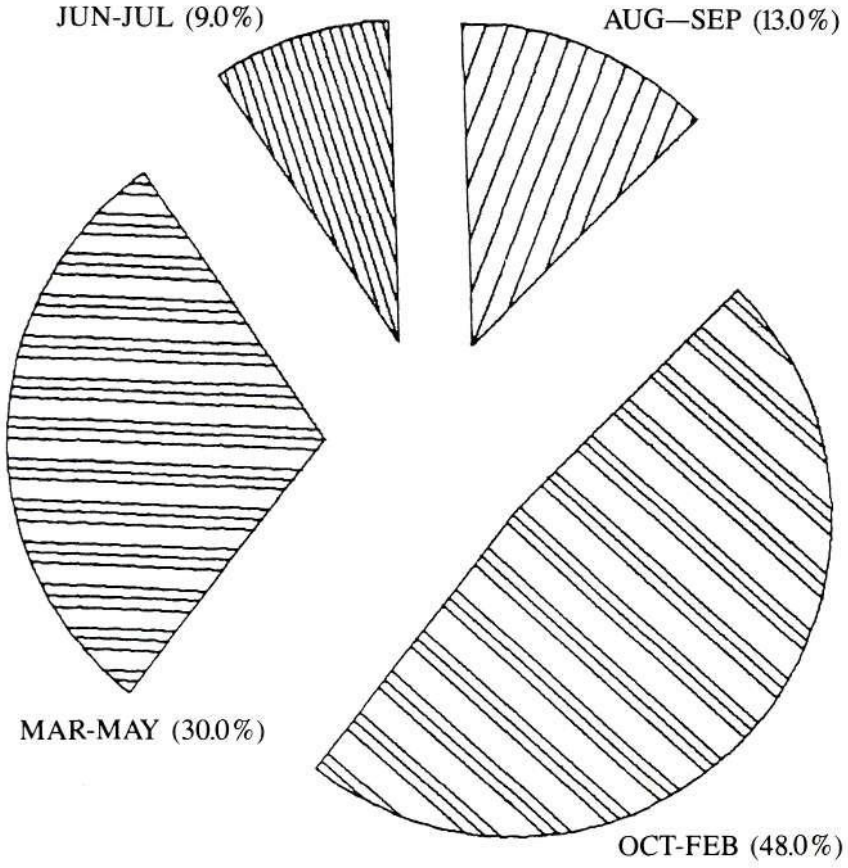
Chemical fertilizers are widely applied. Nitrogen, phosphorus, potassium, and minor elements are spread three or four times per year. Foliar sprays are also very common. Manuring is a traditional practice; most growers apply 100 to 200 pounds of manure per adult tree every two years (20, 50).

Pests and diseases are important problems in avocado farming in Mexico. In commercial orchards, their control often amounts to up to 20% of the production costs. The most important pests are thrips, brown mites, white flies, the omnivorous looper, and the amorbia leaf roller. Believe it or not, the seed weevils are not serious damaging pests in Michoacan; most growers do not even know them. The most well-known diseases are anthracnose, fruit scab, trunk cankers, and of course, avocado root rot20. However, root rot is not as important in Michoacan as it is in other areas. Some surveys show that it is found in only 0.27% of the trees. The most affected orchards show 20% of their trees infected by the rot (23, 33).

Weeds are also a big problem, mainly during the rainy season. Usually they are controlled with herbicides in the area under the canopy of the trees, or by mowing between the rows (20, 23).

As you already know, avocados are grown in Michoacan under very diverse weather conditions. This is why we have significant quantities of 'Hass' fruit during the whole year. However, as you can see in Figure 3, almost 50% of the crop is handled between October and February.

Figure No. 3. CALENDARIO DE COSECHA EN MICHOACAN MICHOACAN AVOCADO HARVEST CALENDAR



Harvesting methods vary according to the final destination of the fruit. Most of it goes to the domestic markets; for them, the fruit is just pulled and it drops to the ground. For export markets, the picking is very similar to your common methods here in California (20).

Now, let's see how expensive avocado farming is in Mexico.

Production costs in Michoacan have increased in the last few years due to inflation and other economic problems of Mexico. However, translated into dollars, those costs have remained almost the same for the last five years. Development costs during the three initial years are close to $6,500 per acre (66, 18). Yearly costs for bearing trees are low, between $600 and $900 per acre. Growers with an average yield of 10,000 pounds per acre have a break-even price of nine cents per pound (20, 66). The major components

of this cost are labor (30-40%), fertilizers and manure (25-30%), and pesticides (15-20%) (66).

Let's talk now something about marketing and industry organization.

Probably one of the weakest aspects of the avocado industry in Mexico is the lack of efficient grower organizations. In a practical sense, they do not exist in any Mexican state but Michoacan; and even in that place, they are not very good. We have in our state 16 local associations which together form a State Union, eight small cooperatives, and one credit union. These organizations have almost 1,500 members, less than 25% of the more than 6,000 growers in the state. Research, promotion, and many other activities needed for avocado industry development cannot be accomplished due to this problem. Currently, we are promoting state legislation to form something like a marketing order; and we expect to obtain it in the next year (20, 50, 18, 43).

As we have seen, most of our avocados are sold in Mexico. Almost 96% of the Michoacan crop goes to domestic markets. This fruit is an essential part of the Mexican diet. The Mexican market is the largest in the world, with 85 million people, most of them avocado consumers; and it is still growing. We even have imported avocados from California, expecially before 1982. For some years, Mexico was one of the largest foreign markets for California avocados (45, 24, 29). Huge volumes are consumed, at good prices. There are no quality, packing, or maturity standards. For this reasons, quality in local markets sometimes is not very good.

The strength of the national market kept Mexico, and specifically Michoacan, away from the export markets. Until 1984, domestic prices were higher than those in foreign countries (Table 3), and there was no need to export (38, 45). However, in recent years prices have dropped, and now we are competitive in world markets. There are two reasons for this change in price levels: first, the steady increases in the supply of avocados; and second, the fall of the purchasing power of the Mexican people in the '80s (29).

Table No. 3. PRECIOS RURALES PROMEDIO DEL AGUACATE EN MICHOACAN.
(Michoacan Avocado Average Prices - Farm Level)

Ano (Year)	Pesos /Kg.	Tipo de Cambio (Exchange Rate)	U.S. Dollars /Kg.	U.S. Cents /Lb.
1982	50.00	61.70	0.81	36.6
1983	90.00	123.28	0.73	33.0
1984	120.00	171.40	0.70	31.6
1985	160.00	256.40	0.62	28.0
1986	260.00	900.00	0.28	12.7
1987	400.00	1,700.00	0.24	10.8
1998	1,300.00	2,250.00	0.58	26.2

As you see, conditions have changed. Since 1985, we have started a serious effort to participate in world markets. Our exports are growing every year (Table 4), although we have had some initial problems: there are not enough packing houses and cold rooms; quality control has not always been good; our fruit has sometimes suffered from chilling injury and anthracnose; there are not enough good roads, ports, and means of transportation; etc. (41, 18, 46, 42, 13). However, we have marketed successfully so far; our fruit, shipped by sea, has started to obtain recognition in Europe, Japan, and Canada (41, 13). Some California firms are helping in this effort, trying to keep in touch with their customers on a year-round basis (17). Last year, seven of the eight Michoacan exporting firms founded an association. Their main objectives are quality control and international market development. Throughout the 1987-88 season, they promoted our produce in Europe through a campaign that presented the Mexican avocado as the "authentic" avocado (46).

Table No. 4. MEXICAN AVOCADO EXPORTS

Year	Volume (Thousands per Pounds)
1980	1,137
1981	1,429
1982	425
1983	1,254
1984	91
1985	2,301
1986	5,973
1987	26,106
1988	33,186

Exported volumes are still very small; probably they will never be very large. Our domestic market keeps its strong position. When a decrease in the supply appears or the export volume increases, as in 1988, prices react quickly. The greatest hindrance to the development of Mexican avocado exports is the strength of the domestic market. Even more, if the Mexican economy grows again in the next few years, consumption and prices will increase as well (45, 17). Everything in the Michoacan avocado industry has been directed for years toward domestic markets (38, 17). Ninety-one percent of the packing houses pack and select by hand. Six percent have mechanical sizers, and only two new packing houses have electronic equipment (49). A recent survey showed that only between 8 % and 13 % of the Michoacan crop is exportable, due to quality problems; only 26% of the orchards follow the cultural practices needed to obtain that kind of fruit. The remaining growers do not care much about quality because the market has not demanded it (28). For all these reasons, Mexico cannot "flood" any foreign market with avocados.

A Threat for California

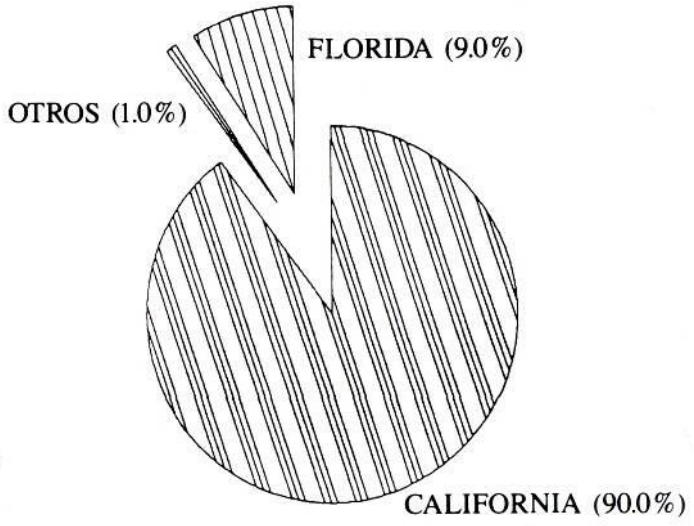
After describing the Mexican avocado industry, let's analyze whether it is a threat for your industry. Quite often it is said here in California that it is. Some of you speak of a "complete destruction" of your industry because we would "flood" your country with our avocados (1). It is said that your markets "would collapse" with our fruit63, that your sector is too import-sensitive (2), and some other things.

To what extent is this true?

To establish a framework for analysis, let's review some aspects of the United States avocado market.

The United States is the third largest avocado grower and avocado consumer nation in the world (1, 51). The California crop represents more than 90% of the country's production (Figure 4). This large volume and the quality of your varieties allow your industry to dominate the market widely (27, 39).

Figure No. 4. PRODUCCIÓN DE AGUACATE ESTADOS UNIDOS U.S.A. AVOCADO PRODUCTION



The United States production averages 555 million pounds in the '80s (Table 5).

Generally speaking, export volumes are limited, and imports even more (27, 39, 70, 48).

Table No. 5. AVOCADO PRODUCTION IN THE U.S.A. AND IN CALIFORNIA
(Thousands of Pounds)

YEAR	USA	CALIFORNIA
1981	592,606	524,703
1982	403,007	346,128
1983	521,837	445,336
1984	604,070	544,545
1985	505,963	440,927
1986	415,574	352,741
1987	601,204	546,749
1988	447,871	381,991
AVERAGE	555,516	447,890

The average prices of avocados in California, shown in Table 6, used to be similar to, and sometimes lower than, in the Mexican market. This situation is not common any longer (54, 11). The 'Hass' variety predominates, as you well know, with a share of the crop close to 80 % (57, 60). The prices for this variety are much better, at least 15 % higher than the average. The other varieties, that you call "greenskins", receive prices between 20% and 40% lower than the average (52, 11) because they are not as widely accepted in the market (16, 5).

Table No. 6. CALIFORNIA AVOCADOS — AVERAGE PRICES

YEAR	U.S. DOLLARS/LB.
1977	0.30
1978	0.37
1979	0.35
1980	0.75
1981	0.18
1982	0.34
1983	0.23
1984	0.19
1985	0.29
1986	0.51
1987	0.17
1988	0.55

Growing avocados in California is expensive. Development costs range between $20,000 and $26,000 per acre. Yearly costs for bearing trees fluctuate between $5,200 and $5,700 per acre. Growers with an average yield of 10,000 pounds break even at 37 cents per pound (7, 8). A recent report from the University of California says that the

cost advantages which California possessed are being eroded, and now it is an increasingly high-cost producer (35). The land is expensive due to the demographic pressure existing in these areas; urbanization in California is not abating, especially in the southern areas, as over 500,000 people are added each year (34, 35). Labor is also expensive, and wages tend to rise even more. The number of workers will probably be insufficient in the future; and avocados are listed among the 30% most labor-intensive crops in California (56, 35, 34, 72). Irrigation water is very costly, too; in some areas it averages $325 per acre-foot, which accounts for 30-55% of the gross grower returns (55, 9); and there are important forces tending to eliminate subsidies and to raise water prices even more (35).

According to the agricultural census of 1987, the acreage of the California avocado industry has remained stable in recent years, up only 0.6% from 1972; but the number of farms showed a small decline—there are 3.3% fewer growers now than 15 years ago (26). It is quite clear that this industry has not grown for years, although it has reached a stable, non-declining level.

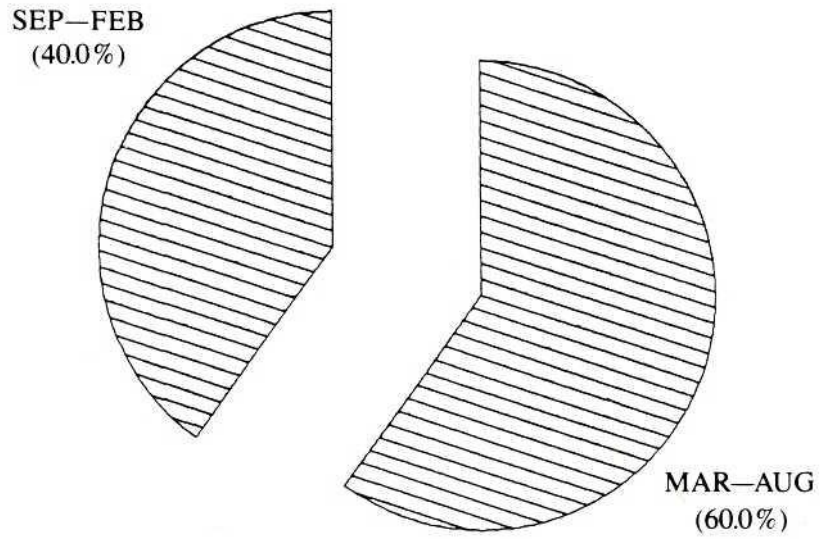
In addition to high costs, you as growers face other problems like soil diseases, winds, and frosts, which occur relatively often in many of your groves (27, 59). The climatic areas where you can grow avocados are very limited6. Thus, it is clearly not possible to expand the growing zones, to stabilize the erratic production levels, or to reduce production costs. In the long range, the opposite may be expected (45). One of your farm advisors wrote recently about some of these problems: "It is the end result of growing a tropical or subtropical tree crop in a semi-arid region such as southern California" (9). An important nurseryman from your industry said that you will be lucky if your acreage remains stable in the future (6).

Demand, on the other hand, has been steadily increasing in the U.S. market. Per capita consumption of avocados in 1965 was only 0.3 pounds, it was 1.1 pounds in 1975, and it averages 2.3 pounds in the '80s (29). American population is also increasing, at a rate of 2.5 million people per year (29). The fresh fruits and vegetables proportion of total food expenditures has increased a lot, due to changes in life style (29, 36, 64). Avocado consumption is also growing because of the higher rate of growth in the number and income of the hispanic segment of the population; they have an important ethnic taste for avocados (29, 36). Today, you could move a 450 million pound crop, and you should make money; the demand is there at least for that (31), and it increases at a rate of 25 million pounds per year (47). Furthermore, frozen fruit and vegetable consumption has trended upward since 1965 (29, 36). Processing is more important every day in California, taking out of the fresh market a lot of fruit. Sales of these products are five or six times greater now than seven years ago, and they will expand dramatically as they move more into the retail markets (15, 65, 71). A long-time director of this Society recently wrote that with the increased consumption of avocados as the years go by, even in an "on" year you should have no problem selling your crop (6).

It can be deduced from published data of the California Avocado Commission and from other sources, that the California crop follows a definite seasonal pattern (Figure 5).

More than 60% of the crop is marketed between March and August, and less than 40% during the remaining months. The best varieties, mainly 'Hass', predominate in the market throughout that peak period (5, 52, 53, 60). Less desirable varieties go to market in the fall and winter months; some of you have said that they weaken market strength because of poor quality in too many instances and because they are not as commercially acceptable as a properly matured 'Hass' avocado (5, 16).

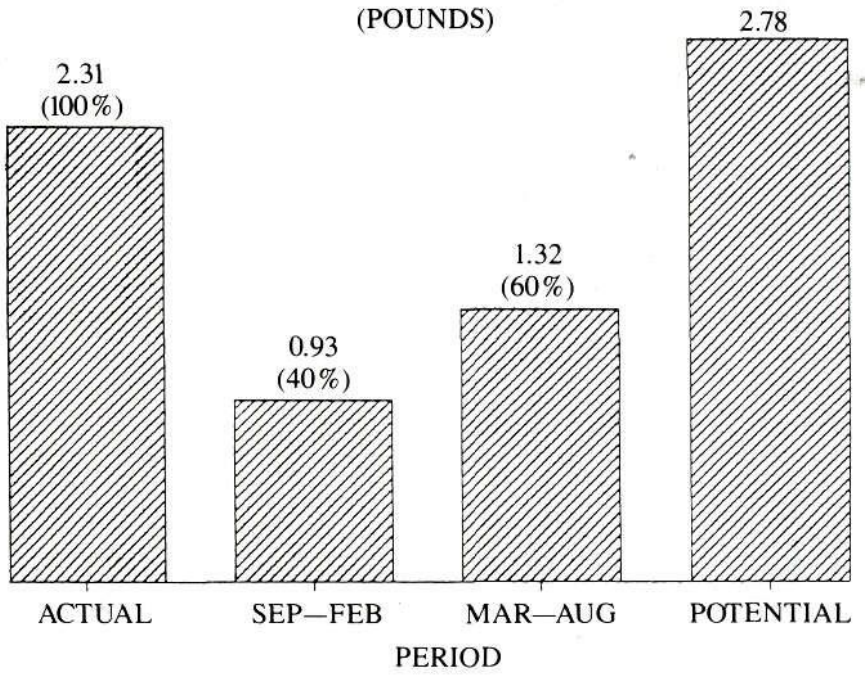
Figure No. 5. CALENDARIO DE PRODUCCIÓN EN CALIFORNIA SEASONAL PATTERN OF CALIFORNIA CROP



The U.S. per capita consumption is 2.31 pounds per year as an average, at the average price in the '80s of 36 cents per pound. That amount is distributed according to the seasonal pattern of the production that was discussed before: at least 1.32 pounds between March and August, and 0.93 pounds as a maximum between September and February. Consumption declines during the fall and winter months merely because there are not enough quality avocados in the market. If the supply were adequate, consumption would remain around the same magnitude as in spring and summer, and the per capita figure would increase at least to 2.78 pounds per year (Figure 6). Thus, the potential demand of the United States market equals 667 million pounds. Therefore, an unsatisfied demand does exist; more than 111 million pounds are needed per year, in an average year, to supply fully the market in the fall and winter season (45). Due to this "void," the United States has imported avocados from Chile and other countries throughout that season in recent years (1, 25, 48, 52). Sometimes these imports have come from such unexpected nations as Denmark, France, and the Ivory Coast (48). I have not considered in these calculations any future increase in the demand-building factors like increased population, higher consumer income, changes in habits and life styles, etc. Neither has an eventual decrease of the California crop been taken into account. When and if these things take place, the unsatisfied demand could be even larger. Probably you remember some numbers shown in the meeting of this Society one year ago by one of the members. According to him, with good promotion the per capita

consumption in the east and midwest could be raised to be 50% of the figure for the west and southwest. The potential demand would be close to 800 million pounds (47). In that case, the unsatisfied demand, at the average price of 36 cents, would be close to 350 million pounds.

Figure No. 6. CONSUMO PER CAPITA EN E.U. U.S. MARKET PER CAPITA CONSUMPTION



Let's go back now to our question and its answer.

Under the current situation, Mexican avocados definitely are not a threat to your industry. You are very well protected by a number of important trade barriers that preclude the entry of our product into your markets.

The first barrier is the import authorization that must be issued by the USDA. This is the most well-known barrier. The permit is never granted, due to the long-standing quarantine against our fruit (27).

The second barrier is a tariff of six cents per pound. This amount is so big that it almost equals our production costs. Other countries enjoy lower tariffs, or do not have to pay them (27, 39, 48).

In the third place comes a number of other regulations, some about the kind of allowed pesticides and their residues. We have more and different pest problems, and sometimes we use products not authorized in your country. Some other rules are about the meeting,-by imported avocados, of maturity requirements and quality standards in force for Florida, whose varieties are quite different from ours and yours (27, 39, 67, 68).

There is a non-written barrier that appears to me to be the most important. It is the strong opposition from your industry. Once and again, using different means, many of you have expressed this opposition (1, 2, 3, 4, 14, 58, 63). Your market structure is more oligopolistic than competitive, due to marketing arrangements such as cooperatives and marketing orders (35). Your industry is well organized in this way, which allows you to obtain favorable policies and protection from your government (73). After reading and listening to the words and expressions that have been used to speak to the public and to government officials about your concerns in this matter, I can only conclude that this opposition is much more emotional than rational—something that has been recognized also by some important executives of firms within your California avocado industry (17, 25, 61, 62).

As you can imagine, the Michoacan avocado industry is, in fact, interested in having a share of the U.S. market; but we would not like to compete against you. As I already explained, the peak of the Michoacan avocado production is exactly in the fall and winter months, just when there is a shortage in your domestic market. We think that we can have in Michoacan not only the quantity, but also the quality, to supplement the California production. I want to stress the words "to supplement," and to make them clearly different from the words "to compete." We would very much like to ship our fruit here, but only during the appropriate seasons and in limited amounts. We would like also that our fruit be marketed by the California industry handlers. In this way, we would not harm you as growers, and competition would not increase. Remember one important fact that should be quite clear by now, and that has been verified by some reliable people from here (17): our domestic market does not allow us to export a lot of avocados; we just cannot do it. We could only export during certain seasons, and not very large volumes.

Of course, under this scheme, Mexican handlers could sell California avocados in our country whenever prices and market conditions are good. The Mexican market is very interesting for you, because we can take large volumes during some seasons. I will not insist on this idea, because you already have exported and still export to Mexico. Our economy is much more open now, and you can ship fruit there whenever you want to (44).

The idea of supplementing your production could seem to some of you as a threat for the future of your industry. It is said here in California that we are not debating if our avocados will come to the United States, but when they will come (17). Many of your efforts have had the purpose of stopping, or at least delaying, this from happening (2,3,4,14,55,63). My point today is that for the future, Mexican avocados could be a problem only if you, as an industry, fail to recognize them as an opportunity. I want to invite you to open your minds and think about some facts and trends of the market. California handlers know their markets, both domestic and foreign. They are interested in keeping them and supplying them. Mexican avocados can be an important resource to achieve these objectives on a year-long basis. The California industry can benefit because our fruit should help to maintain the markets when your production cannot

satisfy the demand. This is something that most California handlers understand quite well. Some of them are marketing Chilean avocados here. Some others are selling Mexican avocados in Europe, Canada, and Japan. Some large California organizations are giving advice to Chilean growers although they do not handle their fruit yet. All of them understand that this has become a business of truly international proportions. They want to be better able to meet the needs of customers here and around the world on a continuing basis, and that involves sourcing fruit from various countries as needed (15, 17, 25, 61). Some of them say this is something that California growers need to realize: this is a world market (61). I only want to add that there is no one single country in the world that can supply avocados better than Mexico. We are the most reliable source because of our proximity, the size of our crop, the 'Hass' variety that we grow, our season, and our cost competitiveness.

You as growers can also benefit by turning the problem into an opportunity. The gains from trade are the increased consumption possibilities which result from reducing prices of goods or by extending their availability in time and space (35). Once your markets are fully supplied during the whole year, demand will undoubtedly grow. In this sense, our fruit would be the fuel for the promotion and market expansion proposed to this Society one year ago (47), and it would support the growth of your processing business. You could still be able to sell your crop without foreign competition during your main season. Just remember the Chilean table grape deal. Both Chile and California benefited from using Chilean grapes and California grower-shippers (35). Per capita grape consumption increased dramatically: it was 3.8 pounds in 1965, then 2.9 pounds in 1975, and now it is greater than 6.5 pounds (29). Wouldn't you like this to happen to avocados?

The California avocado industry has been more market-oriented in recent years. The most important thing when you work under marketing concepts is satisfying your customers' needs. American consumers have the right to enjoy a quality avocado whenever they want, at every time of the year, and not only when California can supply it. Let's think about this. By precluding the entry of more avocados, you, the small number of people in the California avocado industry, are sharing some gains. But there are losses being distributed over a large number of consumers. They can also benefit if your handlers are better able to supply them on a year-long basis (45).

I think that the possibility to be partners with the Mexican avocado industry deserves serious and rational consideration from you. Why not change the threat into an opportunity? Everybody would benefit, and competition would not increase.

A recent report from the University of California suggests to most California agricultural industries not to compete on the production side, because there are many low-cost producers in the world, and it will be very difficult for California to maintain current markets. Instead, they propose to those industries to develop the marketing side; only organized and well-planned marketing strategies could help California to keep and expand its markets. They say that the world has changed: new and low-cost producers have appeared, and input costs in California have increased. They conclude that

California can no longer monopolize the United States market, but it can take advantage of its marketing position and skills (35). Today, I am proposing a marketing strategy to your industry that can work in this way.

You have an important strength to take advantage of: your oligopolistic market structure, your cooperative, and your marketing order. Forget about seed weevils; they will not come. They exist in only two of the eleven microclimates found in the Michoacan growing zone. There are large areas in Michoacan free of them that could qualify as "definite areas or districts" whose production could be imported into the United States according to your laws (51), and there are international inspection procedures, widely recognized, to assure that shipments are free of pests. That is the way we export successfully to Europe, Canada, and demanding and severe Japan. The advantage of your marketing structure is that you can obtain the import authorizations from the USDA and get the profits to benefit your growers.

It is well known that import authorizations are used as trade barriers to grant the exclusive right to market a good to some people (73). By giving the permits to your industry, the government keeps on granting oligopoly power to you, in order to protect your industry. If you take the initiative, you will keep the exclusive markets that you now enjoy. No one else would sell avocados in the United States.

Also, stop being concerned about geopolitical agreements (2, 58, 3,4,14). It is difficult to stop them. Geopolitical and economic agreements are the name of the game nowadays in international politics. Europe bets its future on them. Canada and the United States have them. The Pacific Rim is another example. Africa, Latin America, and even the countries in Eastern Europe are walking in that direction. Do you think it is appropriate to go against this world trend? I think it would be better to adapt your industry to these changes and take advantage of them. Geopolitical relations between Mexico and the United States are very special. Your government and your people want us to spend our scarce money in fighting drugs—the drugs that your people consume. You want us to pay our debt, most of it with United States banks. You want us to stop the flow of illegal immigrants because it affects your economy and your social welfare. You want us to open our economy to allow more trade and more foreign investment, usually on your behalf. And we are doing all these things.

But how do you reciprocate?

We need resources to go on. Couldn't you, the California avocado industry, buy and sell some of our avocados and make a profit from that? Wouldn't that be fair? That would be a very good way to receive any future geopolitical agreement between our two countries. With our new regulations in foreign investment, doors are open and you could even think of widely investing in Mexico (32).

I want to leave these ideas with you today. You, as an industry, can discuss them or just forget them. You can start preparing your future, to keep it in your hands, or you can appeal further to your government protection. The United States policies in international

agricultural trade have been found inconsistent and in serious disarray by a California academic officer, who criticizes your attitudes in favor of free trade, particularly on part of others, while your actions speak loudly of protectionism (22). Legislation cannot fix international trade (19), and protectionism will not last forever. When the moment comes, we will be there. There are many examples of how protection harms the consumers; and in the long range, the protected industries suffer as well (30, 73). Direct competition would be more harmful than beneficial for both industries, but it can emerge. Much of the foreign competition California faces is really competition with other United States firms; for food distributors in other areas of your country, California is merely one source of supply among others (35). Some of them are very interested in Mexican avocados.

One year ago, speaking to you about the new produce world of the future, Mark Affleck compared it to a race. He was very clear in stressing that with commitment, decision, and hard work, you can win and you will win. I am a runner, too, and I agree with him. The problem is that this is not an individual race; a team is needed. The California avocado industry has been always a winning team. Marketing and industry organizations are your major strengths, but high costs and limited volumes are weakening factors. In Michoacan we are just trying to put the team together. We already have good runners, which are our low production costs, high volumes, a good variety, and a good season; but we are weak in industry organization and marketing. We cannot race against you yet. I think that your team and our runners can supplement each other. We both can have a much stronger team. I invite you today to join forces. Let's run relays, and let's win the short and the long distance races.

BIBLIOGRAPHY

1. AFFLECK, M. 1986. The international avocado industry - a global perspective. California Avocado Society Yearbook 70:51-55.
2. AFFLECK, M. 1988. A new produce world. California Avocado Society Yearbook 72:97-104.
3. AFFLECK. M. 1989. Political landscape. California Grower 13(6):6.
4. AFFLECK. M. 1989. Hawaiian hurdle. California Grower 13(7):6.
5. ATKINS. O. 1987. Report of the Variety Committee. California Avocado Society Yearbook 71:35-38.
6. ATKINS, O. 1988. Report of the Variety Committee. California Avocado Society Yearbook 72:30-33.
7. BEKEY. R. 1987. Sample costs for growing avocados. California Grower 11(10):46-49.
8. BEKEY. R. 1988. Development and production costs for Central Coast avocados. California Grower 12(3): 16-19, 40.
9. BENDER, G. S. 1988. Water bills hurt. California Grower 10(10): 14-15.
10. BOYER-VIDAL. G., el al. 1986. Estudio de mercado del aguacate Michoacano. I. Situación de le producción y comercialización del aguacate Hass in el Estado de Michoacan. Instituto Mexicano de Comercio Exterior - Bureau pour le Developpement de la Production Agricole. Mexico-Paris.

11. CAC. 1989. The road to avodollars: determining avocado grove profitability. California Grower 13(9): 18-20.
12. CAC. 1989. Growing Times. California Grower 13(3): 11.
13. CAC. 1989. Commission assesses European avocado market. California Grower 13(9):8.13.
14. CAC. 1989. Growing Times. California Grower 13(9):11-12.
15. CALAVO. 1988. Annual Report. Calavo Growers of California. Tustin, CA.
16. CAS. 1987. Deja vu. News & Notes, the newsletter of the California Avocado Society. 2:4.
17. CURRIER. W. 1989. The Market Report (March 28). Avocado Growers Association. Escondido. CA.
18. CURRIER. W. 1989. Tierra del aguacate. IN: The Market Report (April 25). Avocado Growers Association. Escondido. CA.
19. DARLING. K. 1987. Foreign “friends" and "foes." California Avocado Society Yearbook 71:113-118.
20. DEL RIO, M. A., et al. 1988. Marco de referenda y diagnostico del cultivo del aguacate en el Estado de Michoacan. Uruapan, Mich. Instituto Nacional de Investigaciones Forestales y Agropecuarias.
21. DEL RIO, M. A., et al. 1989. Marco de referencia del cultivo del aguacate en el Estado de Michoacan. Prima parte. Fruticultura de Michoacan 2(22): 13-15,20-21.
22. FARRELL, K. R. 1987. Marketing challenges facing California Agriculture. California Avocado Society Yearbook 71:107-111.
23. GALLEGOS, E. R. 1983. Algunos aspectos del aguacate y su producción en Michoacan. México. Universidad Autónoma Chapingo.
24. GARRETT, R., et al. 1987. Postharvest handling: transportation aspects. Proceedings of the symposium "Marketing California Specialty Crops: Worldwide Competition and Constraints." Davis. University of California Agricultural Issues Center.
25. GREEN, R. 1989. Ice to the Eskimos? - Chilean avocados in the U.S. market. California Grower 13(9): 32-33.
26. GREEN, R. 1989. Census shows gains in citrus acreage. California Grower 13(9):37.
27. IMCE. 1984. Perfil de mercado del aguacate in Estados Unidos de Norteamérica. México. Instituto Mexicano de Comercio Exterior.
28. JIMÉNEZ, R. P. 1988. Cuantificacion de la producción de fruta de aguacate cv. 'Hass' para exportación en el Estado de Michoacan. Bachelor's thesis. Universidad Michoacana de San Nicolás de Hidalgo. Uruapan, Mich.
29. LEARN, E., et al. 1987. Demographic shifts, trends, and other factors affecting demand for California agriculture. Proceedings of the symposium "Marketing California Specialty Crops: Worldwide Competition and Constraints." Davis. University of California Agricultural Issues Center.
30. LEVINSON, M. 1987. Asking for protection is asking for trouble. Harvard Business Review 87(4):42-47.
31. MESKE, G. 1987. (California Avocado Society annual meeting, audience participation panel). California Avocado Society Yearbook 71.

32. MONJARAS, M. J. 1989. Estudio sobre las principales infermedades radiculares que atacan al aguacatero en Los Municipios de San Juan Nuevo y Urupan, Michoacan. Bachelor's thesis. Universidad Michoacana de San Nicolás de Hidalgo. Uruapan, Mich.
34. MORSE, K. 1988. The green bean caper. California Grower 12(12): 14.
35. MOULTON, K., et al. 1987. Competitiveness at home and abroad. Proceedings of the symposium "Marketing California Specialty Crops: Worldwide Competition and Constraints." Davis. University of California Agricultural Issues Center.
36. PALMER, T. 1988. Supply and demand and specialties crops. California Grower 12(3):29-31.
37. PAZ-VEGA, B. P. 1985. Comercialización internacional de aguacate. Master of Marketing thesis. Universidad Regiomontana. Monterrey, N. L.
38. PAZ-VEGA, R. 1986. Aguacate: la necesidad de exportar. Fruticultura de Michoacan l(2):3-4.
39. PAZ-VEGA, R. 1986. El aguacate en Estados Unidos: un mercado cercano pero inaccesible. Fruticultura de Michoacan l(3):24-26.
40. PAZ-VEGA, R. 1986. Algunas reflexiones sobre la comercialización del aguacate. Fruiticultura de Michoacan. 1(5):28-31.
41. PAZ-VEGA, R. 1987. La exportación de aguacates de Michoacan en 1986. Fruticultura de Michoacan 2(6): 10-11, 14-15,24-26.
42. PAZ-VEGA, R. 1987. Los problemas de aguacate Michoacano en Europa durante 1986. Fruticultura de Michoacan 1(11):11-14.
43. PAZ-VEGA. R. 1987. La organización de los aguacateros en otros países, ¿.modelo para los Michoacanos? Fruticultura de Michoacan 1(12): 11-15,28.
44. PAZ-VEGA, R. 1987. Abundan los problemas en el comercio con Estado Unidos. Fruticultura de Michoacan 2(14): 12-15.
45. PAZ-VEGA, R. 1987. Mexican avocado exports to the United States: facts and reflections. Uruapan, Mich. Union Regional de Productores de Aguacate del Estado de Michoacan.
46. PAZ-VEGA, R. 1989. Se desaprovecha un año ideal en la exportación de aguacate. Fruticultura de Michoacan 2(21): 18,21-23.
47. PETERSON, R. W. 1988. Promotions and supply management. California Avocado Society Yearbook 72:69-74.
48. RAMOS, U. G. 1989. Personal communication. Agricultural Counselor. Mexican Embassy in Washington, D.C.
49. RANERO, V. A. 1989. Industrialización y comercialización fruticola en el Estado de Michoacan. Fruticultura de Michoacan 2(23):3-5.
50. SANCHEZ-COLIN, S. 1987. Current status of avocado growing in Mexico. California Avocado Society Yearbook 71:157-163.
51. Staff Report. 1986. World avocado production soars. California Grower 10(6):8,11.
52. Staff Report. 1986. Early greens campaign set by CAC as plans for new season develop. California Grower 10(8): 18-20.
53. Staff Report. 1987. How CAC arrived at crop forecast. California Grower 11(1): 11-12.
54. Staff Report. 1987. Avocado returns. California Grower 11(2):7-8.

55. Staff Report. 1987. Water update: price hikes, shortages. California Grower 11(8):9,27,31.
56. Staff Report. 1987. Immigration: a threat to you? California Grower 11(9):43.
57. Staff Report. 1988. California farm, ranch products yield $14.5 billion. California Grower 12(2):4-5,9.
58. Staff Report. 1988. Affleck and avocados. California Grower 12(7):9, 14-15,18-19,24.
59. Staff Report. 1988. Historical frost patterns. California Grower 12(12): 10.
60. Staff Report. 1989. Avocados: early maturity predicted. California Grower 13(2):6.
61. Staff Report. 1989. Leader of the pack. California Grower 13(9):14.
62. TOUMEY, J. 1987. A talk with Calavo's new president. California Grower 11(3):24-25.
63. TOUMEY, J. 1987. The transhipment battle. Berryhill rebuffs avocado growers. California Grower 11(5): 10-12.
64. TOUMEY, J. 1987. How to market specialty crops: competition and constraints. California Grower 11(7): 10-14, 41-43.
65. TOUMEY, J. 1987. Will processed products catch and pass fresh avocados in the next five years? California Grower 11(9):46-47.
66. UCAIM. 1989. Encuesta sobre costos de producción del aguacate in Michoacan. Unpublished report. Uruapan, Mich. Union de Crédito Agrícola e Industrial de Michoacan.
67. USDA—AMS. (No date.) United States Standards for Grades of Florida Avocados. Washington, D. C. United States Department of Agriculture - Agricultural Marketing Service.
68. USDA. 1987. Avocados grown in south Florida and imported avocados: maturity requirements (7 CFR Parts 915 and 944). Federal Register 52(79): 13688-13693.
69. USDA. 1987. Importation of fruits and vegetables from definite areas or districts (7 CFR Pan 319). Federal Register. 52(152).
70. USITC. (Several dates.) Summaries of Trade and Tariff Information. Washington, D. C. United States International Trade Commission.
71. WHITE. R. 1989. Calavo products. California Grower 13(7):26.
72. WILLIAMS, R. L. 1987. Who will pick your fruit next year? California Avocado Society Yearbook 71:55-61.
73. WRIGHT. B., et al. 1987. Trade barriers and macroeconomic factors affecting exports of California specialty crops. Proceedings of the symposium "Marketing California Specialty Crops: Worldwide Competition and Constraints." Davis. University of California Agricultural Issues Center.
74. ZENTMYER. G. A. 1987. Avocados around the world. California Avocado Society Yearbook 71:63-77.