# What Should You Do in the Face of International Competition?

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Chile is now the third largest Hass producer in the world, behind Mexico and California, and has become a formidable competitor for US avocado consumer dollars. It currently has 45,767 acres (Chilean Fruit Growers Association) as compared to the California industry with an estimated 58,987 bearing acres (CAC Industry Statistical Data). Many of Chile's orchards are younger than five years. The California avocado industry experienced a similar rapid expansion period from the mid 70's to the mid 80's, a time in which the increases in planted acreage and production exceeded market demand. From 1974/75 to 1984/85, the California industry grew from 20,715 to 72,861 bearing acres. As California's groves have matured, and ultimately many have become too crowded, productivity stabilized at 5,000 to 6,000 pounds-peracre.

For several years now, successful promotion by CAC and shifts in the ethnic makeup in the US market have increased demand for avocados that has outstripped supply, resulting in very profitable returns. Recognizing this market opportunity, Chilean avocado growers have focused their efforts on the US as their major export market. New Zealand, which exports fruit to Australia, has also targeted the US as a means to expand their market opportunities.

The good returns, in turn, have brought about a wave of new plantings in these countries; Chile is projected to surpass 200 million pounds in 2001 and New Zealand will reach over 100 million in the next four to five years. Both countries need to export the bulk of their avocados, and the only available and profitable destination in the foreseeable future is the US market.

With the inevitable increased competition in the US market from foreign producers, California growers must critically analyze their orchard management strategies to optimize production and

minimize costs. The avocado is becoming a world commodity like the banana and it will achieve price equilibrium within international markets. Having to compete on an international price basis will bring, at least in the near term, returns much lower than those that we are accustomed to receive. These returns could be in the 40¢ to 80¢ perpound range on a multiple-year basis. Given the relatively low average production per acre in California and the high costs of this production, prices in this range will make it very difficult for small growers to survive. Table 1 provides a breakdown of gross income and production costs if one were to harvest 10,000 pounds-per-acre under the competitive world market prices. Note that 10,000 pounds-per-acre, a seldomachieved goal by most, is almost double our industry's average. No debt service and depreciation is added to these calculations and there is no assignment of value to owner participation in management and grove care.

While farming efficiency is multi-faceted, one of the most dramatic ways to achieve increased productivity is to adopt a rigorous canopy management program in the orchard. Management of the canopy (tree size) can help the grower achieve the following:

- 1. Rejuvenated canopies tend to consistently produce more fruit. The fruit are usually larger and can be size-picked earlier. Pre-bloom size picking decreases the potential for alternate bearing.
- 2. Smaller trees (maximum height 15 ft.) will cost less to harvest.
- 3. Shortage of labor, especially during critical months when size picking is practiced, would be alleviated through increased harvest efficiency of individual pickers working smaller trees, i.e. a picker can harvest more fruit from smaller trees.

### TABLE 1

Gross income as a function of fruit price and average production costs for an avocado orchard producing 10,000 pounds-per-acre in California

#### **GROSS INCOME**

@ 80¢ per pound:
 @ 60¢ per pound:
 @ 40¢ per pound:
 \$4,000

#### PRODUCTION COSTS

Harvest costs @ 8 to 12¢ per pound: \$800 to \$1,200
Water costs: \$1,000 to \$2,500\*
Pest control: \$100 to \$300
Cultural costs: \$300 to \$500
CAC Assessment @ 3.75%: \$112 to \$150

## TOTAL PRODUCTION COST: \$2,312 to \$4,650

\* Recent increases in energy costs can significantly increase the cost of water, particularly to those who have pumping charges or pump their own water.

With total costs ranging from \$2,312 to \$4,650, net returns become very low when prices dip below 60¢ per pound. It would be difficult for the small-to-medium size grower (with one to 40 acres) to continue at this low rate of return.

In order for our industry to remain strong and move forward, we will have to accomplish two important goals: 1) We will need to continue to capitalize on the quality of the California avocado and on the fact that we can harvest our avocados, precondition them and deliver them ready-to-eat within a week from harvest — and 2) We need to increase the efficiency of production by producing more fruit per acre at a lower cost.

- 4. In the event "snap" harvesting becomes an industry practice, savings would be even greater if trees are smaller.
- 5. Safety issues are likely to be less critical if trees are kept below 20 ft.
- 6. The cost for pest control will be lowered with smaller canopies by allowing for better coverage by aerial application and the potential for use of ground spray rigs.
- 7. Managed tree canopies will allow for more efficient honey bee movement throughout the orchard.

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High density Lamb-Hass grove and abundant sét in Moorpark, CA

8. If new plantings are contemplated, high-density plantings should be considered for high production and a faster return on investment.

The Hass avocado tree, under proper management and cooperating weather conditions, has the potential to produce above 15,000 pounds-per-acre on a sustainable basis, a volume we should strive to achieve if we are to survive and compete with imports. Dr. Stefan Köhne (Director of Research, Merensky Technological Services, South Africa), in a recent CAC-sponsored visit to California, reviewed South African canopy management practices with local growers. Their company is the

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largest single producer of avocados in South Africa with several thousand acres in production. Dr. Köhne stated that converting to an aggressive canopy management program has made all of the difference in boosting tree productivity. He stated that they had increased Hass production to 15,000 to 20,000 lbs. per acre annually by adopting a hedgerow system through mechanical or manual pruning. Reports of similar accomplishments are emerging from Australia and Israel.

We may find ultimately, with complacency for the status quo in orchard management and the lack of conviction to manage our trees in an efficient manner, that we will pay a far greater price than the costs associated with pruning the trees.

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