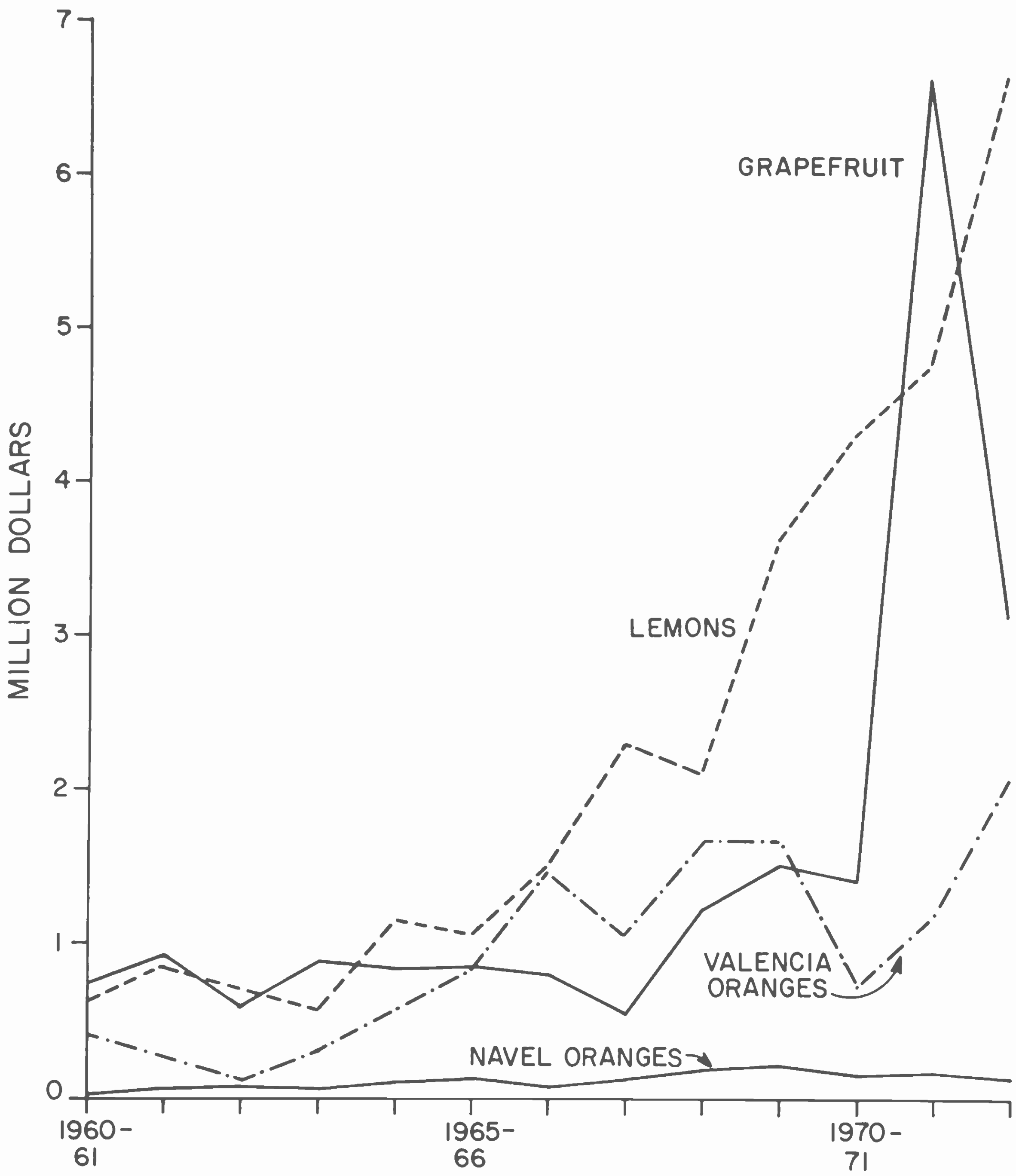
Are Exports of Desert Citrus On the Upturn?

*by Roger Fox, C. Curtis Cable, Jr. and Gary Jordan**

Important and dramatic changes have occurred in the world market for citrus. As a result, citrus fruits from the Desert valleys of Arizona and California are now consumed in many parts of the world.

In recent years, the Japanese have been purchasing larger and larger quantities of lemons and grapefruit. They now consume annually about 1.8 pounds of fresh lemons per person, almost equal the 2.0 pound average for the U.S. The elimination of import barriers on lemons in May of 1964 and on grapefruit in July of 1971 is largely responsible for Japan's expanded demand for these fruits. Intensive market development efforts, particularly by west coast handlers, were also important.

Figure 1. Value of Desert Citrus Exports 1960-61 through 1972-73



The total value of citrus exports from the Desert valleys, though highly variable, has increased from an average of $1.8 million per year in the early 1960's to about $10.3 million in the early 1970's.[1] These figures *exclude exports of fresh citrus to Canada* because the marketing orders specify Canada as part of the regulated "domestic" market that also includes the continental U.S. and Alaska.

The more than fivefold increase in the total value of fresh citrus exports represents a definite "upturn." How-

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[1] *The estimated export value figures used in this article are based on prevailing F.O.B. prices in Arizona for the 13 seasons studied. The export quantity figures were taken from the published reports of the Desert Grapefruit, Lemon, Navel Orange, and Valencia Orange administrative committees. The Desert valleys district comprises those producing areas in the Coachella and Imperial Valleys of California and the Salt River Valley and southwestern Yuma County of Arizona.*

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ever, before we answer the question raised by the title of this article, it is necessary to evaluate the recent experience in more detail. As is so often the case when dealing in numbers of this type, the answer is that, "it all depends . . ."

An examination of Figure 1 clearly indicates that the various citrus types have not experienced equal growth in exports. Grapefruit and lemons exhibit the most increase, with lemons showing a steady increase of about 31 percent per year since the 1963-64 season. Changes in Desert orange exports have been less impressive. In fact, the value of navel orange exports has decreased each year since the 1969-70 season. However, even these figures are misleading since they do not take into account changing prices or changes in production and domestic sales.

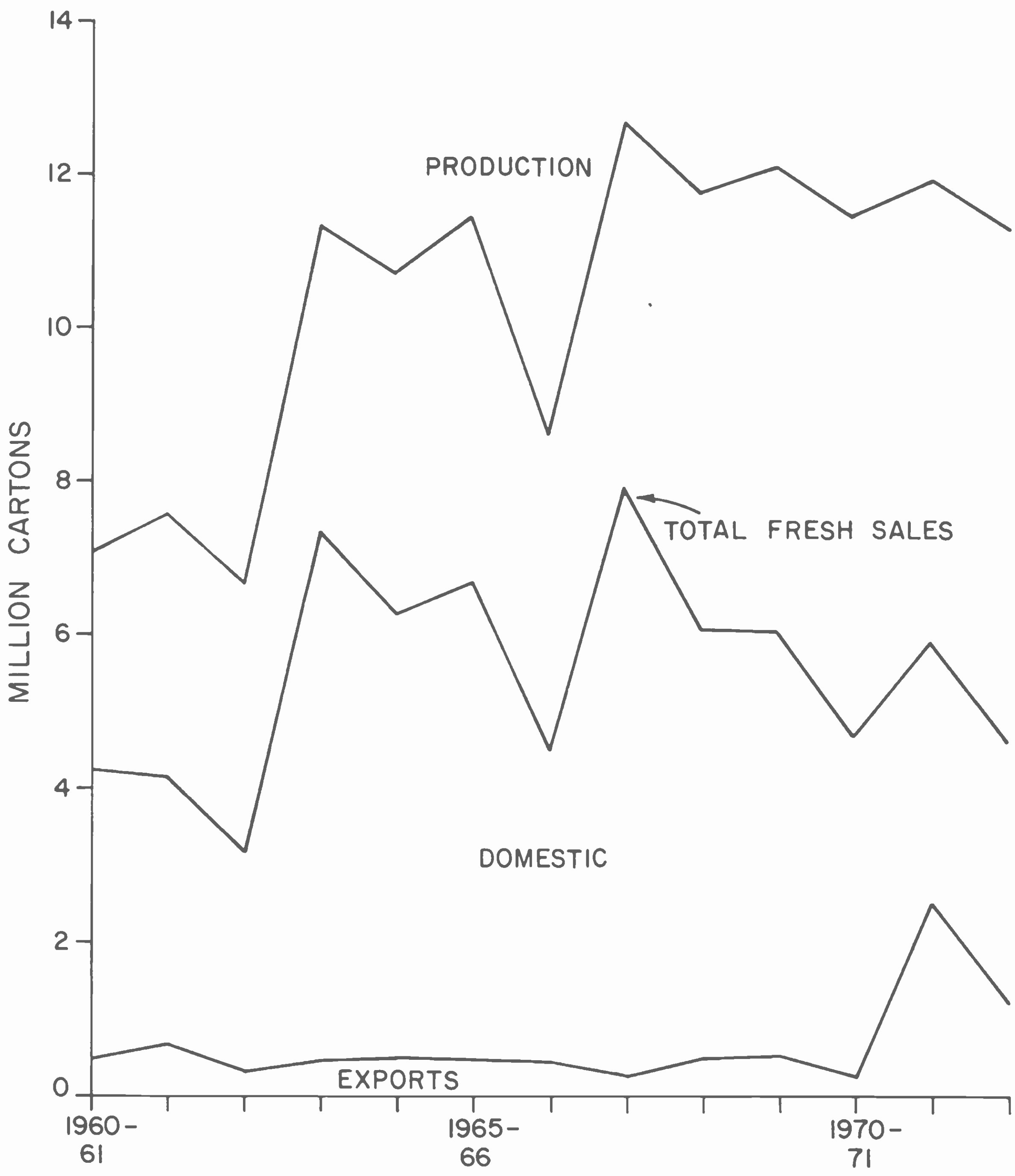
Interestingly, F.O.B. prices for both grapefruit and lemons have increased during the 1960's. These increases have not been steady. On a per carton basis, however, grapefruit prices increased from $1.45 to $2.56 and lemon prices from $3.35 to $4.68 between the early 1960's and the early 1970's.[2] This means that the value of Desert grapefruit and lemon exports increased more rapidly than the volume. Furthermore, since valencia orange prices have tended to decline and navel prices have, on the average, remained constant during this period, the relationships among the four citrus types in Figure 1 have been substantially influenced by price changes.

In order to concentrate on the relationships among exports, domestic sales and production, Figures 2, 3, 4, and 5 were prepared. Each figure shows total production and sales on a volume basis. The difference between total fresh sales and exports represents fresh domestic sales, recognizing that "domestic" as used in this article includes sales within the continental U.S., Alaska, and Canada. Correspondingly, the difference between production and total fresh sales represents that portion of the crop sold to U.S. processors.

Figure 2 shows that Desert grapefruit exports remained fairly constant for the eleven seasons from 1960-61 through 1970-71. The sharp increase in exports occurred immediately following the elimination of import barriers by Japan in July of 1971. Because of this increase, exports now represent a larger proportion of total fresh sales than in the early 1960's — 36 percent for the 1971-72 and 1972-73 seasons compared to 14 percent for the three seasons, 1960-61 through 1962-63. Grapefruit is the only citrus type for which data on exports from the Desert valleys to Canada are readily available. Although records are not available for the 1971-72 and 1972-73 seasons, the data for the 1960's indicate an upward trend going from an average of 160,000 cartons in the early 1960's to 416,000 cartons in the late 1960's. When exports to Canada are added to the export line in Figure 2, giving a traditional representation of "exports," the growing importance of foreign sales is accentuated.

The volume of fresh lemon exports from the Desert valleys has increased at a fairly steady rate since the 1962-63 season (Figure 3). In general the increase in exports accompanied the upward trend in domestic sales and total production. More specifically, exports constitute the same proportion of total production now as they did in early 1960's, approximately 14 percent.[3] As a percentage of total fresh sales, lemon exports have risen from 27 percent in the early 1960's to an average of 35 percent for the last three seasons. Consequently, whether or not we assert that fresh lemon exports are

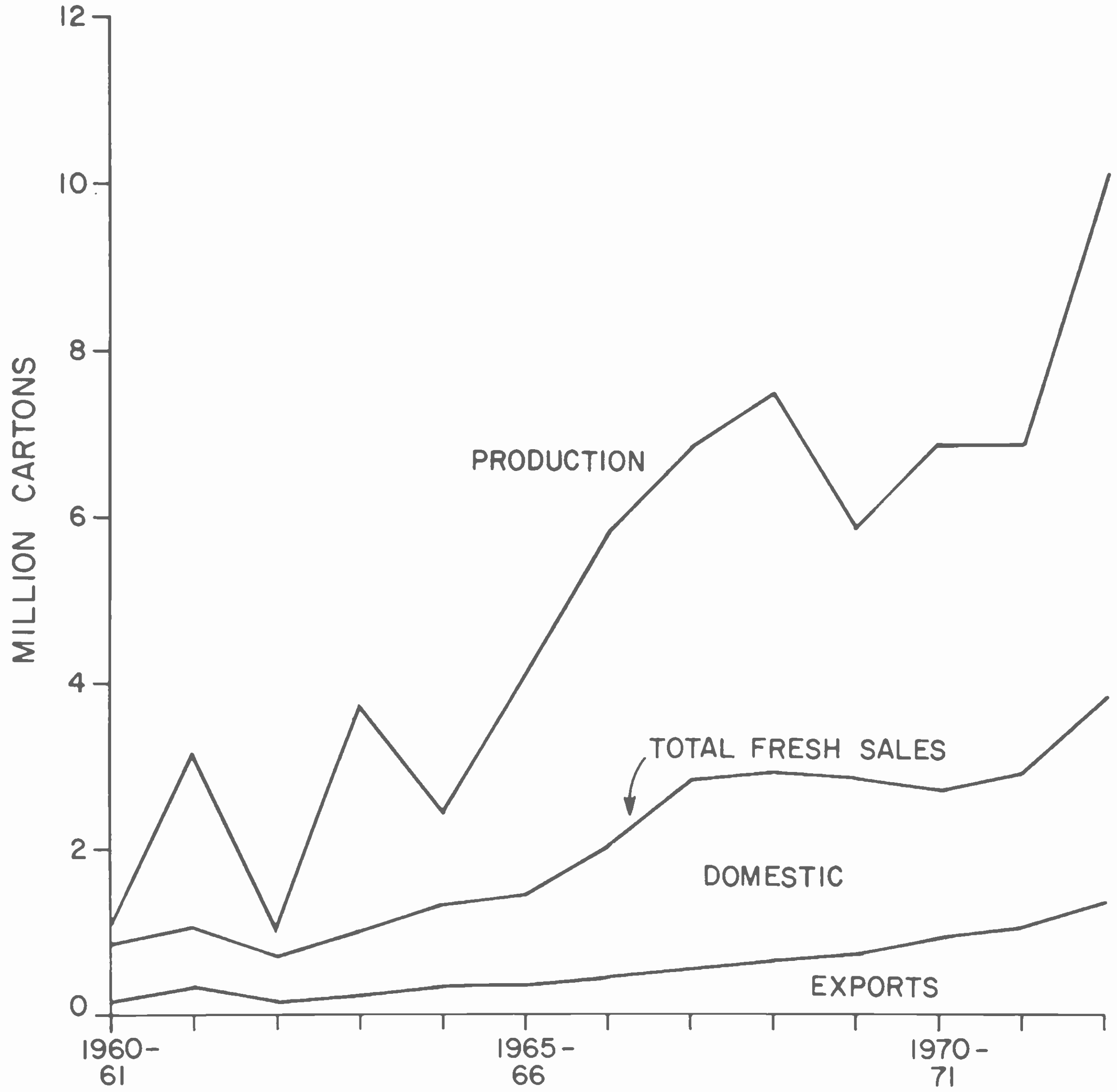
Figure 2. Production and Fresh Domestic and Export Sales of Desert Grapefruit 1960-61 through 1972-73 (Carton weight, 32 pounds)



[2] *Net carton weights are those commonly used by the Desert citrus industry; grapefruit, 32 lbs.; lemons, 38 lbs.; and oranges, 37.5 lbs.*

[3] *Preliminary reports for the 1973-74 season indicate that exports represented 27 percent of the Desert lemon crop. Whether or not this increase reflects a one year phenomenon is not clear at this time.*

Figure 3. Production and Fresh Domestic and Export Sales of Desert Lemons 1960-61 through 1972-73 (Carton weight, 38 pounds)



on the upturn depends on our measurement technique — value, quantity, proportion of production or proportion of fresh sales.

On a quantity basis, the impact of Japan's elimination of trade barriers on lemons in 1964 is not as immediately evident as in the case of grapefruit. However, the opening of the Japanese market appears to have contributed to the rise in F.O.B. prices for lemons, and therefore to the sharp increase in the value of exports noted in Figure 1.

The export situation for fresh oranges from the Desert valleys is quite different than that for grapefruit and lemons, particularly in the case of navel oranges. As illustrated in Figure 4, navel orange exports have been an insignificant proportion of total fresh sales — about 4.6 percent in recent years. Furthermore, the quantity of navel exports has declined in each of the last three seasons. On a value basis, navel exports represent about two percent of total exports from the Desert valleys. Competition from other producing areas in the U.S., and particularly from other producing countries, has made it difficult to expand fresh orange exports from the Desert valleys.

Exports are considerably more important for valencias than for navels. In the late 1960's exports of valencia oranges represented more than 30 percent of the total value of exports from the Desert valleys. Valencia's share fell to nine percent during the 1971-72 season; it was 18 percent in 1972-73. These figures reflect the high variability of valencia exports, ranging from 31,000 cartons in 1962-63 to 784,000 cartons for the 1968-69 season (Figure 5). Although remaining at a fairly low level, valencia exports as a proportion of total fresh sales have increased from 6.5 percent in the early 1960's to slightly more than 14 percent in recent seasons. As a proportion of production, valencia exports have remained fairly constant at about five percent per crop season.

What are the implications and conclusions to be drawn from this review of Desert citrus exports?

On the bases of quantity and value, the export of most types of Desert citrus has increased during the past 13 seasons. The principal exception being navel oranges where decreases have been registered for the recent crop years.

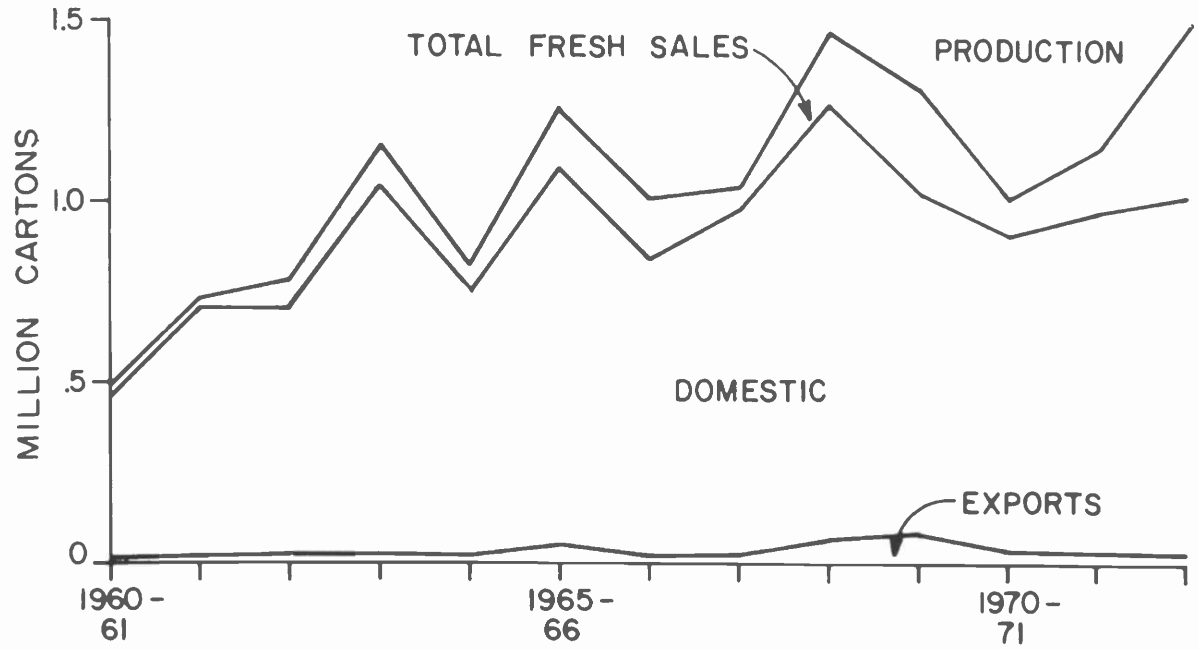
When exports are considered in relation to production, the increases are not as impressive. For example, fresh lemon exports from the Desert valleys have increased steadily since 1962-63, yet they constitute the same proportion of total production now as they did in the early 1960's.

As a proportion of total fresh sales, exports of all Desert citrus types have increased during the period studied. This fact is important since the increase in exports has no doubt helped maintain or increase F.O.B. prices for fresh fruit. This relationship is most evident for lemons where F.O.B. prices have increased at the same time exports were increasing. Since fresh fruit returns weigh heavily in total grower returns, the influence of exports on average F.O.B. prices should not be overlooked.

The importance of reducing trade barriers is illustrated by lemons and grapefruit. Trade statistics for Japan show that yearly lemon imports from the U.S. increased from less than one million dollars in the early 1960's to \$23.5 million in fiscal 1974. Japan's imports of fresh grapefruit from the U.S. rose in one year from \$782,000 to over \$18 million as a result of trade liberalization in July of 1971. By 1973-74, Japan's grapefruit imports had reached \$32.8 million. Nearly two-thirds of total U.S. exports of grapefruit went to Japan in 1973-74.

Although the reduction of trade barriers can increase exports, it must be remembered that international trade is a two-way street. Reciprocal or multilateral concessions are the bases of trade negotiations. Increasing exports usually means more imports. Sometimes the same product becomes involved as exemplified by recent U.S.

Figure 4. Production and Fresh Domestic and Export sales of Desert Navel Oranges 1960-61 through 1972-73 (Carton weight, 37.5 pounds)



Tariff Commission efforts to reduce the import tariff on fresh grapefruit. In any case, trade concessions are difficult to obtain and are subject to reversal as political and economic conditions change.

What does the future hold for exports of citrus from the Desert valleys? At present there are no trade negotiations underway that would lead to large increases similar to those resulting from Japanese liberalization. The U.S. Congress is currently debating a new trade bill that would give the President authority to negotiate reductions in tariff and nontariff barriers. Passage of this bill will set off a new round of bilateral and multilateral trade negotiations. It is hoped that concessions relating to nontariff barriers and preferential agreements of the European Common Market will be forthcoming. Liberalization in this area could be important to the U.S. citrus industry.[4]

Barring any dramatic changes in trade regulations, the short run outlook for citrus exports from the Desert valleys is as follows.

Lemon exports will continue to grow as the Japanese and other markets continue to expand. Industry representatives expect that total California-Arizona lemon exports will increase by about 500,000 cartons per year for the next five years. The Desert valleys district currently contributes about 14 percent of the lemon exports of the two-state area. This share is expected to increase as the Desert district is currently experiencing the most rapid increase in production.[5]

[4] *Some minor progress with respect to oranges and grapefruit has already been made.*

The grapefruit and orange prospects are less optimistic. The Japanese consumer seems to prefer Florida and Texas grapefruit over the Desert product. Consequently, exports from the Desert valleys are not expected to maintain the peak level attained in 1971-72. Preliminary reports for the 1973-74 season indicate another decline in fresh grapefruit exports, the second in as many years.

Orange exports are expected to fluctuate near recent levels. In addition to large producing areas elsewhere in the U.S., many foreign countries produce oranges. This means that competition in the international market is intense. High production cost in the Desert district suggests that exports will be based on quality and seasonal availability. Desert navels will continue to face strong competition from other winter oranges. Desert valencias will have a slight advantage in that they are available for export during the late spring and early summer, a period of reduced supply elsewhere.

[5] *Preliminary data for the 1973-74 season show the Desert's share at 19.6 percent.*

Figure 5. Production and Fresh Domestic and Export Sales of Desert Valencia Oranges 1960-61 through 1972-73 (Carton weight, 37.5 pounds)