AGRICULTURAL DEVELOPMENT SYSTEMS EGYPT PROJECT

UNIVERSITY OF CALIFORNIA, DAVIS

FRESH VEGETABLE EXPORTING CHANNELS: AN EXAMPLE OF TOMATOES

By
Waheed Megahid
Ain Shams University, Cairo, Egypt

WORKING PAPER

USAID/EGYPT

FRESH VEGETABLE EXPORTING CHANNELS:
AN EXAMPLE OF TOMATOES

By
Waheed Megahid
Ain Shams University, Cairo, Egypt

Assistance from the Agricultural Development Systems Project of the University of California, Egyptian Ministry of Agriculture, and USAID, is gratefully acknowledged, but the author is soley responsible for the views expressed in this paper.

Economics
Working Paper Series
No. 70

October, 1981

Agricultural Development Systems:
Egypt Project
University of California
Davis, Ca 95616

FRESH VEGETABLE EXPORTING CHANNELS:
AN EXAMPLE OF TOMATOES

by

Dr. Waheed Meghid

Egypt is one of the largest tomato producers in the world. The annual average of Egyptian tomato production is estimated to have reached almost 2 million tons a year between 1975 and 1979. This represents about 4.6 percent of the world tomato crop. Egyptian tomato production shows an annual tendency to increase by about 75 thousand tons. On the other hand, Egyptian fresh tomato exports are estimated to be only 4,000 tons annually between 1979 and 1980, which is only about 0.2 percent of total world exports. Since the early 1950's Egyptian fresh tomato exports were subject to a drastic instability in the annual quantity and in the export markets as shown in the tables below (see Tables 1 and 2).

The minimum requirement to create and develop an exporting industry for any perishable product is an efficient production base with efficient cultural techniques to ensure a regular supply of suitable varieties with good qualities. But the experience from successful exporting countries and also the lesson from our Egyptian case informs us that the separation of the production activity from the exporting activity can not achieve any success. Moreover, improvement in production cannot be realized in isolation from the influence of an integrated system of exporting.

Although many viewers attribute lack of success in exporting to inefficient production, we pay more attention in this paper to

TABLE 1

Fresh Tomato Exports From Egypt, 1951-1979

(Tons)

Year	Exports	Year	Exports	Year	Exports
1951	1	1961	3590	1971	1920
52	14	62	3372	72	5980
53	36	63	2237	73	5089
54	499	64	3119	74	1976
55	1486	65	3570	75	2188
56	866	66	4211	76	2475
57	445	67	673	77	3845
58	1247	68	629	78	8311
59	3480	69	422	79	4172
60	4178	70	1010		

TABLE 2

Distribution of Egyptian Tomato Exports

1951-1979

	Western Europe		Eastern Europe		Arab Countries	
	Q	Y	Q	Y	Q	Y
1951-55	300	73.57	--	--	103	25.29
1956-60	299	14.61	--	--	1720	84.20
1961-65	218	6.87	2	--	2594	92.97
1966-70	7	0.5	352	25.34	889	63.67
1971-74	313	9.81	2495	78.81	366	11.45
1975-79	274	6.56	1423	34.12	2421	58.03

marketing, and evaluate to what extent it plays a role as a constraint on the vegetable exports in general, through the example of tomatoes. We start with a brief description of the export marketing channels followed by a case study to assess this exporting market performance in accordance to its structure and conduct.

MARKETING CHANNELS

Although tomatoes are grown widely throughout Egypt, most for export are grown mainly in a few areas at El-Fayoum, as well as some other secondary areas in provinces where growers have some experience with cultivating exportable varieties, and where the harvest season agrees with the Egyptian exporting months. A few years ago tomato purchasing for export at the farm level was done primarily on the basis of contracts between the large exporters and relatively large individual growers. Recently, about 80 percent or more of total purchasing of tomato exports at the farm level was done by brokers. In many cases the brokers buy the total harvested tomatoes from growers at the prevailing farm price and transfer it either to exporting points or to domestic markets. In the case of tomatoes for export, brokers take the responsibility for the grading, packing and transporting operation. Although brokers try to meet the quality requirements of exporters, they may pay more attention to minimizing marketing costs and maximizing profits regardless of quality standards or the long term success of the export program.

A few large and longstanding exporters still prefer to deal directly with growers than to deal with brokers. There are also two or three exporters who depend partly on their own farms and partly on contracting other farmers or direct purchasing at the

farm level. In these cases, the handling of the product is done completely under the control of exporters who control also harvest timing according to the maturity and color of fruit

1. Packing

Packing is one of the few marketing operations which takes place in the export marketing channels. Field containers made of plastic or palm leaf strings are used for packing. Some exporters and brokers have collecting and operating centers located at the nearest village or nearest road to these centers. The product is transported in plastic, wooden, or palm crate containers where grading and packing operations are done. In most cases, packing and grading are done at the farm edge under a shed or tree.

The main packaging used for exported tomatoes is the carton boxes of 3, 4, or 6 kilograms capacity. Private exporters use locally made cartons while the public sector company uses carton boxes made of imported materials according to the drawback system. This system is not allowed for private exporters, and thus they must pay higher packaging costs. A considerable proportion of tomato exports is packed in the traditional domestic palm crate packages especially for shipment to some Arabian seaports. The packing operation in all cases is done by hand by inexperienced workers. Exclusion of nonsuitable fruits and grading according to size and color are done at the same time.

2. Transportation

Due to the lack of field roads, transportation of tomatoes for export from the field to the collecting centers or to nearest suitable roads for lorries is mostly on animal back or donkey cart. Transportation to shipping points is often by lorries of two to five tons capacity without any special facilities for

perishables. Transportation from El Fayoum to Cairo airport takes about two hours and about four hours to Alexandria under normal conditions.

Loading and unloading operations at various levels are done by hand. Piling and stacking in large numbers of layers damages the bottom layers. Often the exported product at the export point may wait many hours or even days because of unexpected delays in planes or ships or lack of space. In such cases the commodity is stored in open air with much deterioration in quality.

About 70 percent of total tomato exports in 1980 was transported abroad by airplane through Cairo airport while the rest was by ship from the Alexandria, Port Said and Suez ports. Both airplanes and ships do not have storage compartments with correct air circulation and temperature control. Slight delays can result in spoiled fruits even with short transit times.

One of the important limitations and problems which face vegetable exports is the shortage of the available space in charter or liner airplanes. The air freight for each gross ton of tomatoes (nearly 550 kgs net) represents about 100 percent of the FOB value of gross ton. The high freight cost is also one of the major problems facing horticulture exporting and limits the competitive power of Egyptian exports in most markets.

3. Inspection and Agriculture Quarantine Controls

Two kinds of inspections take place at the exporting points for each kind of exported vegetables. These are done by the Public Agency for Controlling Exports, and The Plant Quarantine Department. They are to ensure that the export products conform with standards applied for fresh vegetables at the imported markets. Some inspectors say that many tomatoes arriving at the port do not conform to the quality standards of tomato exports

and it is normal to find in one package fruits of different sizes, color, and perhaps varieties, with some defects such as scars and open cracks. The regulations allow some exemption for exporters to deal with lower quality produce when the importer approves this. These exemptions in recent years have covered nearly all tomatoes exported.

4. Dealing With Import Markets

Many exporters have their own representatives or persons in one or several importing countries. These representatives receive the product and control the selling of the product. They usually sell directly to wholesalers to avoid paying commissions to brokerage commission houses. In the past, some exporters sold to importers at predetermined prices. As a general rule, vegetable exports are done on the basis of confirmed letters of credit. The exporting price must be no less than a minimum guaranteed price which is set by a commodity board. Selling on consignment basis to a commission house is the most common method of exporting perishable products. Such a method allows the exporter to gain the highest possible prices at a modest selling fee.

EXPORT MARKETING STRUCTURE AND PERFORMANCE

The fresh vegetable exporting industry in Egypt consists of many unstable, unspecialized and inefficient, small exporters. In 1977, there were about 65 general exporters who also dealt in fresh tomatoes. This increased to about 125 exporters in 1980. Only 25 exporters who exported tomatoes in 1977 were still exporting them in 1980. About 100 new exporters entered the tomato exporting business in 1980 while 40 exporters or about 60 percent discontinued. The average exports for each exporter were about 83.7 tons in 1977 and about 40 tons in 1980. Larger exporters in 1980 shipped about 440 tons of tomatoes, or about 9

percent only of the total tomato exports, compared with 675 tons, and 12.5 percent in 1977. Also the cumulative percentage of tomatoes exported by the larger three, five, and ten companies less in 1980 than in 1977 (see Table 3). On the other hand, there were about 55 exporters in 1977, each of them dealing on an average with about 32 tons. In 1980 there were about 115 exporters who dealt only with about 24 tons on average.

None of the exporters have adequate marketing facilities or equipment. None of them utilize marketing studies and research. They work with very poor knowledge and information except about prevailing prices in the market or markets in which they deal.

Thus, it could be concluded that the structure of fresh tomato exporters is unconcentrated and entrance is relatively easy. However, prevailing conditions are poor. The main dimensions of tomato exporting could be summarized as follows:

-Interdependent activity without formal agreement by very small, inefficient firms whose goals are independent profit maximization.

-Very small market shares for each exporter in the export markets with little individual influence or bargaining power.

-Some exporters follow tactics of predatory price cutting in the export markets. (the CIF price of Egyptian fresh tomatoes in Saudi Arabia has falen from about $ 1300 to $1000 per ton in the last three seasons).

-Seeking to achieve a quick and large profit without consideration of future conditions. The quality of exported product under these conditions tends to be lower, which results in less exports to fewer markets in subsequent years.

TABLE 3

Distribution of Tomato Exports by Exporter Size Class

Item	1977	1980
Total Tomato Exports (tons)	5440	4973
Number of Exporters	65	125
Percent of Exports by Largest Exporter	12.4%	8.9%
Percent of Exports by 3 Largest Exporters	32.7%	22.9%
Percent of Exports by 5 Largest Exporters	46.7%	35.33%
Percent of Exports by 10 Largest Exporters	67.4%	51.16%
Average Exports For Each Exporter	83.7	40

MARKET PERFORMANCE

Market performance is the final outcome of the market structure. In general it is difficult to make a perfect evaluation of the market performance, and our analyses will be focussed on the technical and distributional efficiency dimensions. The following points may be made:

-In spite of what is said about Egypt's favorable economic and climatic advantages, Egyptian tomato exports cannot compete with the other countries in the export markets either in price or quality.

The same can be said for horticultural exports generally, given Egypt's present market structure and level of technology.

-All exporting firms in general are of very small size which reduces technical efficiency, given the high ratio of overhead costs and the degree of risk involved in such a business. Small size also prevents use of new technology or spending for marketing research which has become very important and limiting factor in the export business.

-The amount of tomato exports (as well as other nontraditional vegetable exports) is very small compared with what is possible for Egypt.

-The degree of vertical integration involved within the vegetable exporting market is very low and over the years has been diminsihing further.

A CASE STUDY: THE EL NILE COMPANY

The El Nile Company is the most important public exporting agency dealing with nontraditional exported vegetables, including

fresh tomatoes. It started to export vegetables in the 1960-1961 season aiming to make a significant contribution toward increasing exports from nontraditional vegetables.

The El Nile Company was designed to be a highly integrated system with most of the exports being produced on the company farms. Their farms reached a maximum of about 350 feddans in the 1965 season. Besides the company farms, they also had a number of contracting growers.

The El Nile Company had a permanent branch in Trieste to make market contact with European markets and to supply market information to Egypt. Statistics indicate that the company achieved some progress not only in raising nontraditional vegetable exports, but also in improving some vegetable production practices in limited areas to better meet exporting requirements.

El Nile fresh tomatoes exports reached a maximum of about 2,500 tons annually in the 1965/66 season. Since 1967/68, El Nile Company changed its policy to limit its activity to commercial practices only and ended production of its own products. Since 1966, El Nile fresh tomatoes exports decreased, both in absolute volume and as a percentage of the total exports of Egyptian fresh tomatoes as shown below (see Table 4).

Currently, the El Nile Company depends on a few contracting growers besides direct purchasing from others and avoids dealing with brokers. The company also still has an experienced staff to control all of the marketing operations, attempting to keep a reasonable standard of quality compared with the other exporters. But these efforts are not enough to develop its exports or to regain lost markets in Europe. Some European importers say that it is not satisfactory to deal with El Nile Company because of

the bureaucracy and red tape.

From this brief case study, it could be concluded that the key to any improvement of vegetable exports is through reforming the exporting market toward a few firms large enough to adopt efficient techniques and technologies and to achieve a high degree of vertical integration. It is not easy to recommend specific types of export marketing reform, but the developed exporters give some alternatives and more studies are needed in this subject.