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Abbreviations and Acronyms

AERI	Agricultural Export and Rural Income Project
APRP	Agricultural Policy Reform Project
ALEB	Agriculture-Led Export Business Project
ATUT	Agricultural Technology Transfer Project
AoA	Agreement on Agriculture
CAPMAS	Central Agency for Public Mobilization and Statistics
CIF	Cost of Insurance and Freight
COMESA	The Common Market for East and South Africa
ERSAP	Economic Reform and Structural Adjustment Program
EU	European Union
EUEPA	European Union – Egypt Partnership Agreement
EUREGAP	Euro-Retailer Produce Working Group Good Agricultural Practices
fed	Feddan: Local area measure unit (fed = 4200 m^2)
FOB	Free on Board
GAFTA	The Greater Arab Free Trade Agreement
GDP	Gross Domestic Product
GMP	Good Manfacturing Practices
GOE	Government of Egypt
ha	Hectare (ha = 10000 m^2)
HCCP	Hazzard Critical Control Point
L. E.	Livre Egyptianne (Egyptian Pound)
MALR	Ministry of Agriculture and Land Reform
NE	Near East
NFIDC	Net Food-Importing Developing Countries
SPS	Sanitary and Phytosanitary Measures
TBT	Technical Barriers of Trade
US $	US Dollar
WTO	World Trade Organization

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I. Major Determinants of agricultural and agro-industrial production

I. 1. Natural resource endowments

The total agricultural area in Egypt is 7.8 million feddans (about 3.3 million hectares) consisting of 7.7 million feddans lying within the Nile basin and delta, and about 80,000 ha of Oasis and rainfed. Of the total area in the Nile basin and delta, some 6 million feddans are "old" lands, and the remaining 1.7 million feddans are new reclaimed land. With a total population of 70 million (in 2004), area of cultivated land per head is estemated at 0.11 feddans (0.05 ha) which is among the lowest in the world. See table 1.

Land scarcity is reflected in the four fold increase in land rent since the liberalization of land rent in 1997. To address this issue, the government launched a major program of land reclamation in the Western Delta through the Nasser Canal, the Eastern Delta, and Sinai (Es Salam Canal), and more recently in the South of the New Vally (Toshka) and East Aloweinat on the borders with Sudan. This program in its first phase is planned to add about 1.3 million feddan to the cultivated area in Egypt and other 2.5 million feddans more by 2017.

Table 1. Egypt's land area and population

Item	1989-1991	2002
Total land (1000 ha)	99,545	99,545
Arable land (1000 ha)	2,282	2,825
Irrigated land (1000 ha)	2,621	3,291
Population (1000)	56,207	69.106
Population annual growth%	2.2	1.8
Total population/ Arable land	25	24
Cultivated land per head (ha)	0.05	0.05

Source: CAPMAS

Water resources in Egypt are deemed to be limited when compared with the rate of population growth that is increasing continuously. Egypt's share of the Nile water is 55.5 billion m^3 as agreed upon between Egypt and Sudan in 1959. Agriculture is the largest consumer of water resources in Egypt with total consumption of about 85 percent of total water budget. The remaining portion of the water share is utilized for other purposes such as drinking and municipal uses, industry, navigation and other applications. The water share per person for all water uses in Egypt is estimated at 2 m^3/day which is under the poverty line according to international standards.

I. 2. Principal characteristics of agro-ecologic zones

Four agro-ecological zones can be identified in Egypt based on soil characteristics and water sources. First: old land: includes Nile Valley and Delta Regions which covers a total area of 5,400,000 feddans. This region is characterized by its alluvial soils (clay to loamy). Nile water is the main source for irrigation. Second: New lands : It is mainly located on both the east and west sides of the Delta and is scattered through various areas in the country and covers a total of 1,900,000 feddan. Reclamation of this land was started since early 1950's and still going on. Its sand characterizes land, coarse textured, calcarcous and non-calcareous soils except in some areas of this land in the northern part of the Delta are alluvial. The majority of the new lands uses Nile water as

the main source for irrigation, whereas in some desert areas, underground water is the only source for irrigation and new irrigation techniques such as sprinkler, and drip irrigation are used. Third: Oasis: which is characterized by alluvial, sandy and calcareous soils. It included a total area of 100,000 feddans. Underground water is used as a main source of irrigation . Fourth: Rainefed : which includes approximately 400,000 feddans located in the north coastal areas in Sinai and Matrouh, where rainfall ranges between 100-200 mm annually.

Egypt's agriculture is fully irrigated, enjoying worm climate and exceptionally fertile soil. These circumstances enabled Egyptian farmers to grow a rich varity of crops, including grains, cotton, berseem (clover), legumes, fruits, and vegetables. The country essentially has two seasons, summer and winter; spring and fall are quite short. With this seasonal pattern, the cropped area is about 14 million feddans, so compared to the total agricultural area (7.8 million feddans), the cropping intensity is 180 percent. The climatic differences between north and south have some impact on the geographical distribution of crops. For example, humidity in the Delta suits long-staple cotton. The drier, hotter climate of south favors the planting of sugercane, onions and lentils.

Variations in climate are not great, however, and major crops were grown in most of the climatic zones. Perennial irrigation permitted double and even triple cropping on most of the arable land. Furthermore, it enabled farmers to switch the crop rotation from a three to a two-year cycle.

In the old lands, an elaborate crop rotation system is followed. The main winter crops are wheat, berseem (clover) and broad beans. Among the summer crops: maize, rice and cotton are dominant. Vegetable crops such as tomato, potato, cucumber, melons and others are cultivated in the three seasons. Mixed farming is common, with a varity of crops being combined with a few heads of cattle, sheep or poultry.

I. 3. Farm structure

On the eve of the 1952 Revolution, ownership of land was heavily concentrated in a few hands, where about 0.1 percent of total owners (about 2.8 million) held 20 percent of the land and 0.4 percent controlled one-third, in contrast to the 95 pecent of small owners with only 35 percent of the land. In addition, 44 percent of all rural inhabitants were landless. In 1952, the government initiated a phased land reform program that limited individual land ownership to 50 feddans as maximum as of 1969. More than 700,000 feddans or about 12 percent of the cultivated area were distributed, and more than 341,000 families, primarily tenants received land. As a result of the land reform the share of those owning fifty feddans dropped to 15 percent, and 95 percent of oweners came to control 52 percent of the land instead of the 35 percent they had owned before the reform. However, the number of small owners, those with fewer than five feddans, increased to 3.29 million in 1984 from 2.92 million in 1961, while the area they owned dropped from 3.17 million feddans to 2.9 million feddans. This suggested that land fragmentation worsened, as a result of the continual division of land among heirs in accordance with inheritance laws. The number of landless families also rose because of population growth.

Land tenure, however, rather than landownership, reflected how land was actually operated in Egypt. Land was either operated by the owner with family and/or hired labor,

rented for cash, or sharecropped. The operational unit was called the Hiyazah (holding). The average size of a holding was probably less than two feddans by the end of the 1990s. (see table 2)

According to the agricultural census in 1990, total holdings reached 2.9 million, covering about 7.8 million feddans. Approximately 2.27 million owners (78 of total holdings) held 2.59 million feddans (33 percent of total lands), while 0.3 million (10 percent of total holdings) held about 4 million feddans (51 percent of total lands). These statistics show that more than two-thirds of the total land area in 1990 was owned and cultivated by landlords, and only about 10 percent of the total area was rented (erither for cash or sharecropped). In 2000, approximately 2.5 million holders (67 of the total holding) held 1.8 million feddans (20 percent of the total lands. This means that the fram holdings became more fragmented.

Table 2. Farm holdings by class in the years 1989/90 and 1999/2000

Class	1989/1990				1999/2000			
	Holdings		Area		Holdings		Area	
Feddan	Number	%	Fed.	%	Number	%	Fed.	%
L. t. 1	1050900	36.11	508144	6.47	1615590	43.45	722310	8.09
1-	713808	24.53	941139	11.98	881085	23.70	1117147	12.51
2-	502061	17.25	1137402	14.47	516926	13.90	1154210	12.93
3-	239057	8.21	776600	9.88	239106	6.43	768792	8.61
4-	111165	3.82	484349	6.16	107389	2.89	453511	5.08
5-	139584	4.80	771243	9.81	169064	4.55	920130	10.31
7-	59342	2.04	478795	6.09	65362	1.76	521512	5.84
10-	42808	1.47	494897	6.30	57236	1.54	654599	7.33
15-	18124	0.62	298809	3.80	24322	0.65	394955	4.42
20-	16786	0.58	387144	4.93	21661	0.58	493271	5.52
30-	10502	0.36	383258	4.88	11910	0.32	429915	4.82
50-	4520	0.16	287585	3.66	5654	0.15	357119	4.00
100+	1622	0.06	909803	11.58	2686	0.07	941056	10.54
Total	2910279	100	7859168	100	3717991	100.00	8928527	100.00

Source: Complied and computed from: MALR, Agricultural Consensus.

There are considerable evidence that cropping patterns and crop yields differed according to farm size. It was found that farmers who cultivated one *feddan* or less were more likely to grow cotton than those with holdings greater than ten *feddans*, Also yield levels of different-sized farms varied by crop. For instance, wheat yields were higher on small farms, while the opposite was true for rice. There was agreement, however, that larger farms produced proportionally more fruit crops, probably because the high capital investment and the long-term commitment required would be prohibitive to small farmers, who needed more flexibility.

I. 4. Agro-industrial structure overview

The food-processing sector is one of the key economic sectors in Egypt. Its contribution to value added, employment and exports is significant and increasing during the last fifteen years. The value added of the food processing sector increased from LE 5.81

billion or US 1.7 billion in 2002. These values represented 24% and 28% of the industrial value added in 1998 and 2002 respectively (Makary 2004)). In the food processing industry employed more than 750,000 workers representing around 35% of labor employed in the industrial sector (Makary 2004).

In addition to such direct employment there is indirect employment related to processed food. Employment in the food processing industries constitute 16 percent of the total labor force in Egypt. Importance of the food processing sector is further manifested by both forward and backward linkages to other sectors.

Using the CAPMAS inter-industry transactions table for 2000/2001, flows of products from raw materials through the food processing industry and on to final utilization can be described. In this table beverages are excluded from processed food. Purchases of crop materials for processing equaled 37 percent of the total value of output of the processed food industry . Another 11 percent of output value went for livestock products for processing. Together, agricultural crop and livestock raw materials accounted for 48 percent of total value of output of the industry.

Other backward linkages of food processing to supplying industries include cotton ginning (cottonseed for meal), petroleum, electricity, transportation, and trade and finance. Purchases of all locally supplied intermediate products accounted for 58 percent of the total output value of the industry.

Another 25 percent of output value went for the purchase of imported intermediate goods. The composition of these imported inputs by industry is not available in the table. These figures imply that 83 percent of the value of output of food processing was used to purchase intermediate products needed in production. The remaining 17 percent was the value-added due to the labor and capital used in the production process. This is the total factor income generated within the processed food industry. This 17 percent can also be thought of as the additional value created by the production process within the industry,

In terms of utilization, 86, percent of the output of the industry goes for final consumption within the country or for export. Deliveries of processed foods as intermediate products go partially to livestock production as animal feeds and to restaurants and hotels. Minor quantities go to the beverage industry, the chemical industry, the service industry and transportation.

I. 5. Infrastructure(1)

Transportation facilities

Shortage of adequate transportation and cooling facilitities is an obstacle to the development of horticulture in general and to horticultural exports in particular. The exsisting transportation facilities are poor and the transportation system implies expensive costs for all agricultural products. There have been some government efforts to improve transporting produce to export markets, including increased availability of airfreight space, reduction of airfreight costs, development of sea-shipment capability for

(1) This section draw upon: USAID/Egypt. 2002. Assessment of Egypt's Agricultural Sector Competitiveness. Development Allernative, Inc. Cairo, June.

table grapes and strawberries, reduced transit time to northern EU markets with sea-truck transport using Italian Slovenian ports, increased refrigated containers availability, and more efficient port procedures. Also, a new cold holding facility has recently been constructed at Cairo International Airport.

However, much more should be done to increase efficiency of the transport system that reduce costs and maintain product for both export and domestic horticultural and other agricultural products with imporved handling and movement.

Constraints exist for all three modes of transport – land, sea, and air- are discussed below.

Land transport

Egyptian truking rates are very high, as much as 50 percent higher than in competitor countries such as Lebanon and Jordan. Truck operators try to cover the high operating costs per running kelometer by overloading. In the case of perishables, overloading causes significant product losses. Overloading also seriously damages roads and reduces the availability of flatbed trucks to haul refrigerated containers to seaports because the truking revenues of such purposes are lower than those of overloaded hauls. Other important transportation problems includes poor road conditions, particularly on roads to seaports which increase truck breakdowns and maintenance costs; inadequate turck servicing facilities along important roads. Other problems that are rather related to institutional and policy reasons included: 1) high cost of imported tiers as a result of import tariff of 40 percent; 2) duties on imported refrigerated trucking equipment as high as 45 percent; 3) restrictions on importation of trucks over five years old which limits the supply of good quality used trucks.

Air transport

Air cargo space for perishable products is not regularly available during peak exporting periods, and is more expensive compared to Egypt competitors. The lack of adequate inbound cargo discourage regular cargo scheduling and forces higher outbound rates. Whereas a cold store facility has been constructed at Cairo International Airport, other locations, such as Aswan and Luxor are lacking cold storage facilities for horticultural product shipments.

Excessive cargo handling costs at Cairo Airport are another major deterresnt to export expantion. Commercial rates for loading and unloading a cargo aircraft are about $170 per ton, which is similar to rates charged at European airports, thus do not induce the low labor cost in Egypt. Only Egypt Air and Egyptian Aviation Services (EAS) are authorized to provide cargo handling services. Lack of competition in Cargo handling results in excessive fees. Airlines have limited equipment to service their own flights because of the low number of flights, and they are not allowed to share equipment or facilities.

Sea transport

Port facilities for refrigerated containers are poor. Lengthy inspection procedurs on imported container food shipments result in demurrage charges, interest charges on money tied up in inventories, need for larger container inventory and port congestion. All food consignments must be inspected by four agencies, first for radiation, second for

food quality, third for safety and quality, and the fourth for safety and quality of both fresh produce and, fish and dairy products. With few exceptions (frozen products) inspections, and in all cases labarotory analyses, are done independently and sequentially rather than simultaneously.

Total capacity of Egypt's ports is 50 million ton. Alexandria ports is the largest and equiped with storing capacity of 172000 square meter, cereal stores of 150000 ton, and a rfrigerator with 6000 ton capacity. Alexandria import recieves about 70 percent of egypt's trade. Damiatta port is the second largest with storing capacity of 150,000 ton and expandable to double of this amount.

Technology facilities

As for technology and infrastructure, fixed line and mobile subscribers increased from 30 per 1000 people in 1990 to 177 per 1000 people in 2002. Number of personal computers is 16.6 computers per 1000 people in 2002. Number of internet users is 28 per 1000 people. For each 1000 people there are 177 of line and mobile subscribtions, 16.6 computers, and 28 intenet users.

I. 6. Agricultural marketing systems

The agricultural marketing system-comprising collection, transportation, packaging, transformation, storage, and wholesale and retail market systems- has to transmit information through prices so that farmers can make investment and production choices based on accurate reflections of market conditions. The system needs to be reinforced by regulatory institutions, such as laws for market conduct and the enforcement of contracts, grades, and standards.

In Egypt today, markets are not functioning efficiently, particularly in price formation, information creation and transmission and arbitrage. The main administrative intervention in wholesale markets to stabilize urban food prices. This intervention needs to be eliminated to permit markets to promote stability through arbitrage and to allow for market segmentation.

In the hortcultural sector, domestic producers apparently suffer from exessively large margins and inadequate infrastructure for exporting. Having little experience in farm management, farmers most of the time simply sell their crops in the field, and the buyers take care of harvesting, sorting, packing, and marketing. Under this system, farmers usually are not aware of the quality requirements of export markets. The system of market integration between the farm and the retail market has changed little since the beginning of the Structural Adjustment Program, and market information systems are still inadequate.

Most farmers, including small export-oriented farmers, practice the traditional "Kelala" system, selling the crop in the the field at a price per feddan. The buyer takes possession of the produce in the field and handles harvest, selection, grading, and transportation. In this system, prices are more important than quality and almost all grades of produce manage to find their niches. This system is well adopted to the domestic market. In the export market, however, quality comes first and must be established and maintained throughout production, harvesting, sorting, packing, and transportation. Exporters buying from small farmers are introducing changes in the

kelala system by selective buying and contractual arrangements including quality criteria.

II. Evolution of agricultural performance

II. 1. Trends in overall cropping pattern, yields and production of major crops

The crop production system includes field crops, vegetables, fruits, medical, aromatic and ornamental plant crops. The total cropped area for the agricultural year 2003/2004 was estimated at 6.08 million hectar or about 13.9 million feddan with a cropping intensity of about 180*%.* The major field crops were corn, rice and cotton in the summer season and wheat and berseem clover in the winter season. Cereal crops occupied about 6.65 million feddan or about 45% of the total cropped area. The major cereal crops were in million feddan: wheat approximately 2.46, maize 1.93. rice 1.57, sorghum 0.39, and barley 0.23.

The cropping system policy has changed with the Implementation of the Economic Reform and Structural Adjustment Program. Before the reform the government intervened in the specification of the area and production of major crops including cotton. wheat, rice, sugar cane and onions. The system was carried out by the implementation of a planned basic cropping pattern for each agricultural year (November 1 to October 31) under the cooperatives in each village. The area of total crop land of each village was included in a map, which identified the crops to be grown during the different cropping seasons for each tract of land in the agricultural year.

In the second half of the 1980s a liberalized cropping policy was initiated in the context of the overall reform program. The government allowed farmers to make their own decisions over what to grow. Also during the 1990s further actions were taken in the introduction of more liberalised price and marketing policies, especially also on the side of cotton from about 1994 onwards. As a result of the reforms, price developments and other factors which are impacting on the competitiveness of various crops considerable changes in the cropping patterns have occurred also during the 1990s. For this period it can be summarized that on the side of field crops the areas grown with cereals have increased while the areas under cotton have drastically decreased. As shown in Table 3, the comparison between areas planted in 1990 with those in 2000/2001 shows that areas planted with wheat and rice increased from 821 and 435 thousand ha in 1990 to 1100 and 630 thousand ha for the two crops respectively with 34% and 45% increases in the period 1990-2004. The area of maize remained the same for the mentioned period with 0.83 million ha. Meanwhile, the area under cotton decreased by nearly 50% from about 0.42 million ha in 1990 to 0.27 million ha in 2004.

Discussion of the overall situation of the major crops are presented below.

Table 3. Area, yield and production of crops in Egypt's agriculture in the years 1990, 1995 and 2004.

Crop	1990				1995				2004				G.R.(1990-2004)			G.R.(1995-2004)		
	Area		Yield	Prod.	Area		Yield	Prod.	Area		Yield	Prod.	Area	Yield	Prod.	Area	Yield	Prod.
	1000 ha	%	Ton/ ha	1000 Ton	1000 ha	%	Ton/ ha	1000 Ton	1000 ha	%	Ton/ ha	1000 Ton	%	%	%	%	%	%
Cereals	2283.4	44.6	5.7	13022.2	2726.6	47.0	5.9	16097.3	2773.0	45.6	7.2	20079.9	1.4	1.7	3.1	0.2	2.2	2.5
wheat	821.3	16.0	5.2	4268.0	1055.4	18.2	5.4	5722.4	1100.0	18.1	6.5	7177.9	2.1	1.6	3.8	0.5	2.1	2.5
Rice	435.9	8.5	7.3	3167.4	588.5	10.1	8.1	4788.0	630.0	10.4	9.5	6000.0	2.7	1.9	4.7	0.8	1.8	2.5
Maize	830.2	16.2	5.7	4798.6	735.9	12.7	6.1	4535.2	830.0	13.6	7.0	5800.0	0.0	1.5	1.4	1.3	1.5	2.8
Sorghum	134.2	2.6	4.7	629.6	147.7	2.5	4.5	661.2	160.0	2.6	5.9	950.0	1.3	1.6	3.0	0.9	3.1	4.1
Starchy Roots	86.5	1.7	21.2	1840.9	132.9	2.3	21.7	2888.0	98.5	1.6	23.4	2303.8	0.9	0.7	1.6	-3.3	0.8	-2.5
Potatoes	79.7	1.6	20.5	1637.8	123.0	2.1	21.1	2599.1	85.0	1.4	22.9	1950.0	0.5	0.8	1.3	-4.0	0.9	-3.1
Sugar cane	110.6	2.2	100.3	11095.3	128.8	2.2	109.5	14104.8	135.0	2.2	121.0	16335.0	1.4	1.3	2.8	0.5	1.1	1.6
Sugar beets	14.3	0.3	40.1	574.7	21.0	0.4	43.7	920.0	65.0	1.1	44.0	2860.5	11.4	0.7	12.1	13.4	0.1	13.4
Vegetables	389.8	7.6	23.7	9246.1	425.5	7.3	24.3	10348.0	574.4	9.4	25.9	14873.0	2.8	0.6	3.5	3.4	0.7	4.1
Tomatoes	155.9	3.0	27.2	4233.8	149.3	2.6	33.7	5034.2	191.0	3.1	35.5	6780.0	1.5	1.9	3.4	2.8	0.6	3.4
Onions	10.5	0.2	54.9	577.0	17.2	0.3	22.5	386.3	23.0	0.4	27.4	630.0	5.8	-4.8	0.6	3.3	2.2	5.6
Fruits	292.6	5.7	15.8	4617.5	353.0	6.1	16.7	5903.8	443.8	7.3	16.8	7466.0	3.0	0.4	3.5	2.6	0.1	2.6
Citrus fruits	125.6	2.5	17.8	2243.9	129.7	2.2	17.5	2278.5	143.7	2.4	17.8	2561.5	1.0	0.0	1.0	1.1	0.2	1.3
Bananas	14.3	0.3	28.4	415.5	14.5	0.2	34.4	498.7	21.1	0.3	41.7	880.0	2.8	2.8	5.5	4.3	2.2	6.5
Dates	21.8	0.4	24.8	541.9	25.6	0.4	26.4	677.9	29.6	0.5	37.2	1100.0	2.2	2.9	5.2	1.6	3.9	5.5
Grapes	37.9	0.7	15.4	584.7	49.2	0.8	15.0	739.5	65.0	1.1	17.0	1104.0	3.9	0.7	4.6	3.1	1.4	4.6
Pulses total	181.4	3.5	2.9	530.5	157.9	2.7	2.9	458.7	166.0	2.7	2.9	487.4	-0.6	0.0	-0.6	0.6	0.0	0.7
Beans dry	9.6	0.2	2.4	23.6	6.1	0.1	2.2	13.9	19.5	0.3	2.7	53.0	5.2	0.8	5.9	13.8	2.3	16.0
Broad Beans dry	144.9	2.8	3.1	451.0	123.7	2.1	3.2	392.3	127.2	2.1	3.1	400.0	-0.9	0.0	-0.9	0.3	-0.4	0.2
Cheack beas	5.6	0.1	1.8	10.4	6.1	0.1	1.9	11.8	6.8	0.1	1.6	10.9	1.4	-0.8	0.3	1.2	-1.9	-0.9
Oil Crops	525.3	10.3	0.3	146.4	466.5	8.0	0.5	205.8	448.0	7.4	0.6	243.2	-1.1	4.9	3.7	-0.4	1.3	1.9
Ground nuts	12.3	0.2	2.1	26.0	44.6	0.8	2.9	130.6	59.0	1.0	3.2	191.0	11.9	3.1	15.3	3.2	1.1	4.3
Sesame seed	17.6	0.3	1.2	22.0	30.2	0.5	1.1	32.3	30.5	0.5	1.2	37.0	4.0	0.0	3.8	0.1	1.0	1.5
Sunflower seed	14.6	0.3	2.1	30.9	29.6	0.5	2.2	65.5	15.7	0.3	2.3	35.4	0.5	0.7	1.0	-6.8	0.5	-6.6
Soya beans	41.4	0.8	2.5	106.7	26.0	0.4	2.4	63.4	5.9	0.1	3.0	17.7	-13.0	1.3	-12.0	-15.2	2.5	-13.2
Olives	9.0	0.2	4.6	41.9	22.0	0.4	9.4	208.0	50.0	0.8	6.4	320.0	13.0	2.4	15.6	9.6	-4.2	4.9
Fiber Crops primary	431.8	8.4	0.7	319.0	312.2	5.4	0.8	255.8	279.4	4.6	1.0	305.2	-3.1	2.6	-0.3	-1.2	2.5	2.0
Cotton	417.2	8.2	2.0	838.0	298.4	5.1	2.1	639.7	270.0	4.4	2.8	750.0	-3.1	2.4	-0.8	-1.1	3.2	1.8
Green fodders	1128.0	22.0	52.4	59107.2	1113.0	19.2	52.4	58321.2	1221.0	20.1	52.4	63980.4	0.6	0.0	0.6	1.0		
Others	793.3	15.5			1057.6	18.2			1047.9	17.2								
Total	5118.0	100.0			5804.0	100.0			6081.0	100.0								

Source: Compiled and computed from FAOSTAT.

Cotton

The major shift since 1952 was the significant reduction of the cotton area and the parallel increase in that of clover, horticulture, and rice. Originally, the government put a maximum limit on the cotton area to avoid excess production and lower prices on the world market; the Egyptian supply of long-staple cotton affected world prices because of its large share. As the cotton area shrank, however, the government began to set minimum limits, because cotton was needed in order to obtain foreign exchange. Cheap cotton has represented an important source of foreign currency for the government and has enabled it to subsidize consumer clothing. At the same time, cotton became less profitable for the farmer than other, noncontrolled or less controlled crops. The cotton area has been decreasing during the last two decades. Befor cotton prices were fully liberalized in 1997, the government policy requiring farmers to sell all their cotton output to the government at fixed prices that were kept below world market prices.

Cotton output also declined, but not in the same proportion as the decline in land area, because of the rise in yields. Yields increased over the long term, although they fluctuated annually. Overall, they increased by about 50 percent between 1952 and 1980 but stagnated or actually declined in the 1980s. The continuous breeding of new varieties and the pest-control program organized by the government helped increase the yield in the 1990s.

Wheat

The wheat area has been increasing during the last ten years. This may be explained by the fact that the government procurement price was kept close to the domestic free market price. Wheat was also the basic staple; small and medium-size farmers retained large proportions of it for subsistence or animal feed. The straw also served as animal forage in the summer. Wheat production increased over the long run, because of rising yields. Yields rose steadily, especially between 1980 and 1987; the annual growth rate increased from 5 to 6 percent in the period from 1980 to 1987. The diffusion of high-yielding varieties (HYVs) has been the main source of yield growth throughout the last two decades. Between 1990 and 2004, wheat production grew at 3.1 percent annually which resulted from 1.4 percent growth in area combined with 1.7 percent growth in yield.

Maize

The area planted with maize remained relatively stable. Maize was consumed by both humans and animals. The rise in production occurred as a result of the increase in yields. The yields rose by about 40 percent after the completion of the Aswan High Dam in 1964. Perennial irrigation enabled farmers to plant maize during May or June instead of July or August. The new timing afforded the crop cooler temperatures and escape from the summer maize borer. Yields were also bolstered by the application of more water and fertilizers. Plant breeding played virtually no role in yield increases until the 1980s, but HYVs probably accounted for most of the increase in yields in the 1980s. Between 1995 and 2004, maize production grew at 2.8 percent annually.

Rice

Rice, area expanded sharply by about 500,000 *feddans* promptly after the Aswan High Dam was built (1964) and has hovered around 1 million *feddans* since then. Rice was an important staple, and about one-third of it was probably consumed by small farm households. It was a partially controlled crop; the government procured one-half of the output and subsidized it to consumers, but procurement prices were close to the domestic free market price. The consumer subsidy was lowered after 1987. Production increased in proportion to yields. Yields exhibited a steady upward movement as water became more available and fertilizer use increased. Yield increase was also achieved by the breeding and diffusion of new varieties. New varieties were being developed by the end of the decade. In the next half of the 1990s rice area exceeded 1.5 million feddan but the government has been trying to reduce it to only 1 million feddan for water saving purposes. Because of this expansion of rice cultivations, Egypt was able to export some 300,000 ton of rice which makes the second export crop after cotton.

Clover

Clover occupied by far the largest area of all crops, increasing by about 500,000 *feddans* between 1952 and 1987 and comprising about one-quarter of the cropped area in the latter year. The government policy vis-à-vis clover was diametrically opposite to its cotton policy. Clover was used as animal feed, and the government protected both the crop and meat by tariffs. This protection made clover a lucrative crop for many farmers, especially as demand for livestock grew during the oil boom. Farmers, especially small farmers, also had to grow sufficient amounts of clover to feed their draft animals. The expansion of animal-displacing mechanization did not lead to a reduction of the clover area. On the other hand, clover fixes soil nitrogen, and a serious reduction in its area could have an adverse impact on soil fertility. Clover production increased mainly because of the expansion of the land area; little plant breeding was undertaken, and yields remained relatively stable. The slight increase may have been caused by the additional labor time, water, and fertilizers allocated to the crop and by the farmers' delay in planting cotton, which followed clover, so as to allow an extra cutting of clover.

II. 2. Production costs for fruits and vegetables

Statistics and information concerning production costs for fruit and vegetables in Egypt are relatively scarce and inaccurate. Official cost statistics usually concentrate on the major field crops for which regular detailed data are available for different agricultural zones in the country. Table 3 provides data concerning revenue and cost for selected field and vegetable crops on per kilogram basis. Comparison between crops with respect to production cost – excluding capital investment and depreciation for irrigation system, interest and rent- reveals that bebby bean expenses is LE 0.28/kg is the least whereas cotton expeses LE 1.41 kg is the highest. Potato's expenses in the old (valley) land is estimated at LE 0.3 kg which is a bit less than potato's expenses in the new land, LE 0.32/kg.With respect to gross margin on per kg basis, calculated as total revenue minus total expenses, fine bean gross margin, LE 1.46/kg was the highest among the studied crops, followed by cotton; LE 1.12/kg, and maize gross margin was the least; LE 0.24/kg.

Table 4. Revenue and cost comparison, selected crops

Item	Maize	Valley Potato	Bobby Bean	Rice	Wheat	New Lands Potato	Fava Bean	Cotton	Fine Bean
LE / Kg									
Total Revenue	0.53	0.70	0.70	0.69	0.83	0.98	1.29	2.53	2.00
Expenses*									
Seed	0.04	0.17	0.13	0.02	0.04	0.12	0o05	0.06	0.15
Fertilizers	0.09	0.05	0.07	0.05	0.07	0.10	0.05	0.21	0.15
Pesticides	0.02	0.01	0.04	0.0	0.02	0.04	0.05	0.28	0.06
Mechanization	0.06	0.03	0.01	0.09	0.12	0.02	0.09	0.19	0.03
Hired Labor	0.09	0.04	0.04	0.07	0.09	0.04	0.10	0.67	0.14
Total	0.29	0.30	0.28	0.25	0.34	0.32	0.34	1.41	0.54
Gross Margin	0.24	0.40	0.42	0.42	0.49	0.66	0.94	1.12	1.46

*Excludes capital investment and depreciation for irrigation system, interest, and rent.
Expenses and Gross margin may not add due to rounding.
Source: USAID /Egypt. 2002. "Assessment of Egypt's Agricultural Sector Competitiveness". Development Associates, Inc. Cairo, June.

Tables 5 and 6 present detailed information with respect to farm budget including revenues and costs, of two of important export products; strawberry and fine green beans, respectively.

Production costs of strawberry is estimated at LE 35,428 / feddan, 40 percent of which is spent on royalty transplants. The other major cost items include fumigation, tunnel and beehives, and harvest respectively 13, 12, 10 percent respectively. With total revenue estimated at LE 56.200/feddan, producer net income from strawberry is estimated at LE 20,772/feddan which is higher than producer net income from other non-traditional horticultural crops. It should be noted that the cost deducted do not include depreciation on capital improvements, interest expense, and rent. Production costs of fine green beans is estimated at LE 4138/feddan, the largest item of which is fertilizers costing LE 1630 per feddan. With a total revenue of LE 8575, the profit is LE 1737/feddan. Table 6 provides information about variable costs for green peas, tomato and potato in the old and new land.

II. 3. Fruits and vegatable production and marketing

II. 3. 1. Production

One of the most significant shifts in land use in Egypt's agriculture was the expansion of the horticultural area. Egyptian farmers cultivated a wide array of fruits and vegetables, including tomatoes, cucumbers, potatoes, lettuce, onions, citrus, and mangoes. The area planted with fruits expanded steadily and reached about 1,057,000 *feddans* in 2004. Fruits, like vegetables, were not a controlled crop, and demand rose with the rise in incomes. Citrus fruits and grapes, the two dominant crops, were planted on more than 343,000 and 155,000 feddans, respectively

Vegetables were planted on more than 1.36 million *feddans* by 2004 and the area has stabilized since then. The most prevalent crops was tomatoes and which in 2004 occupied more than 455,000 *feddans.* Area planted with fruits and vegetables together accounted for almost 15 percent of the overall cropped area 14 million feddans in 2008. Vegetables were not a controlled crop, and demand for them grew rapidly during the oil boom. Domestic demand leveled off subsequently, and no significant export outlets had

been found by 1990. Further expansion would probably depend on establishing such markets, not a simple task considering the stiff regional competition.

From the perspective of relative abundance of raw material, it is evident that potatoes, tomatoes, oranges, and watermelons would seem to be the most likely choices. However, not all varieties suitable for fresh market sale are equally suitable for processing, and vice versa.

In fact, the processors of horticultural products usually select or breed varieties that satisfy their particular needs in terms of traits such as: planting and harvest dates, solid content, Brix level, color after processing, processing (as opposed to field) yield, target buyer or consumer, and so on. For that reason total production is a very crude indicator of processing potential.

Table 5. Strawberries farm revenue and expenses- without nursery

Revenue	LE/fed
Export Product	47,200
Domestic Product	9,000
Total	56,200
Expenses*	
Royalty / transplants	14,120
Land & preparation	1,570
Fumigation	4,666
Fertilizer	1,700
Irrigation & Fertigation	3,966
Tunnel & Beehives	4,200
Pest & Diseases Control	1,120
Harvest	3,746
Tools	340
Total	35,428
Profit	20,772

* Excludes capital investment and depreciation of irrigation system, interest and rent. Source: ATUT - Unpublished estimates, March 2002.

Table 6. Fine green beans: farm revenue and expenses

Revenues	LE/fed
Export Product	5,200
Domestic Product	675
Total	5,875
Expenses*	
Land Preparation	100
Seeding	750
Fertilizers	1,630
Weed Control	60
Pest & Diseases Control	290
Irrigation	170
Harvest	648
Tools	340
Transport	150
Total	4,138
Profit	1,737

* Excludes capital investment and depreciation of irrigation system, interest, and rent.
Source: ATUT - Unpublished estimates, March 2002.

Table 7. Variable costs of production for selected vegetable crops in the old and new land, 2004

Cost item	Green Peas				Tomato				Potato		Onion			
	Old land		New land		Old land		New land		New land		Old land		New land	
	LE/fed	%	LE/fed	%	LE/fed	%	LE/fed	%	LE/fed	%	LE/fed	%	LE/fed	%
Land preperation	384	18	406	15	400	7	650	11	1030	27	150	5	1490	17
Seeds/transplants	400	19	560	21	900	15	900	15	1080	29	500	16	880	10
Labor	500	24	1010	38	1000	16	850	14	425	11	800	25	1850	21
Pesticides	300	14	150	6	2000	33	2000	34	640	17	700	22	3000	33
Fertilizers	240	11	335	13	1465	24	1105	19	512	14	660	20	948	11
Irrigation	200	10	90	3	300	5	450	8	70	2	100	3	300	3
Package materials and transportation	75	4	75	3	0	0	0	0	0	0	310	10	550	6
Total	2099	100	2626	100	6065	100	5955	100	3757	100	3220	100	9018	100

Source: Abdel Mo'omen, S. A. 2004. "Economic Study for Production and Marketing for Major Vegetable Crops in Egypt in Proceeding of the 12th Conference for Agricultural Economists.

As table 7 shows, the main fruit crops include oranges and grapes which occupied 90.7 and 64.2 thousand hectars in 2003. Mangoes, tarngarine, peaches, figs, dates and apples occupied areas ranging between 30 to 45 thousand hectors in 2003. Areas cultivated by grapes and margoes have grown with faster rates Comared to other fruit crops. In regards vegetables, tomatoes occupied the largest area among vegetable crops. Production of fruits and vegetables follows partly from the changes in area shown above, but also from changes in yield, which relate to both weather and techology employed. Table 8 summarizes fresh fruit and vegetable production in 1990, 1995-2003.

Orange:

Orange is the leading fruit with view of its planted area and production. The naval variety production makes up 80 percent of all production, the remaining 20 percent is made up from Mandarin, Valencia, and Clementine. Oranges with the exception of the Valencia, are harvested during December – April. Egypt exports less than 5 percent of the total production of orange which amount to nearly 2 million tons. In the Nile Vally and Delta Orange is mostly grown in small flood irrigated lots – 2-3 feddan. In the new lands, orange archards are larger and rely more on the modern irrigation systems. Orange yields range between 8.0 mt/feddan in lower Egypt to 6.0 mt/feddan in Middle Egypt.

Potato

Production of potato is practiced by over 100,000 traditional smallholders in the Delta and Nile Valley. Corporate farms in desert new lands of up to 5,000 feddan each and are the main suppliers to export and processing markets. Almost all production in the Delta and valley goes to satisfy domestic consumption either for local demand or to the wholesale markets in Cairo (Al-Obbour) and Alexandria. About 15 percent of total production is exported. Approximately 20 percent is saved for seed. Egypt is entirely dependent on Europe for disease resistent seed potatoes. Potato yield ranges between 8-9 mt/feddan in small farms and about 12 mt/feddan in the large farming techniques.

Poor cultural partices experienced by smallholder potato producers reduce both yield and quality. These practices include use of uncertified seed, in adequate chemical applications, and use of untreated manure risking brown rot disease.

Tomato

Tomato is the most geographically dispersed horticulture crop in Egypt. Most tomato production is achieved by small and medium sized farms in the old land under open field conditions using flood irrigation. In the New lands, large farms grow tomato using plastic row tunnels, intensive cultivation, and drip irrigation in the winter season and for a small irregular export market. The need to produce tomatoes that withstands poor post-harvest handling practices, has restricted farmers to a relatively limited number of mostly processing varieties. These varieties are not acceptable in some potential export markets. Tomato yield varies widely by season and area. Yields under Tunnel system are significantly higher. Generally, poor cultural practices are experienced by smallholder tomato producers. They do not have financial capabilities enough for optimal use of chemicals or tunnel systems. Poor transport and handling cause even more damages and more deterioration of quality.

Table 8. Area Harvested for Selected Horticultural Crops in Egypt (1991-2001)

Crop	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Beans, Green	32250	30057	29762	30952	40112	49443	46079	35943	46067	51729	51624
Broad Beans, Dry	326060	425074	297052	374067	294752	329462	355152	385064	318707	270643	333833
Broad Beans, Green	548	560	571	560	571	583	595	607	619	619	619
Cantaloupes&oth Melons	55905	50000	42857	40000	40883	54462	47619	45238	57143	84524	84524
Carrots	9090	8202	9621	10410	11314	10102	12229	11762	10690	10921	9407
Citrus Fruit,Total	297745	352305	347255	302762	308790	303374	309886	312805	336076	324733	333088
Cucumbers and Gherkins	37007	37776	35714	36905	38095	39286	42857	44048	45238	45238	45238
Dates	64286	65357	53021	61076	61076	64990	66667	78571	76133	69005	76190
Fruit excl Melons,Total	704802	881164	884536	819274	840398	863488	889848	908652	1015017	990433	1020479
Onions, Dry	29000	32005	35005	26000	40874	45933	36429	72200	82779	68095	60667
Oranges	205590	234752	231095	213040	204581	200421	204136	200081	222262	208819	215919
Peaches and Nectarines	29919	40000	50000	60714	69048	77381	84845	82519	86002	77917	80564
Pears	15912	17969	15595	14286	13336	12731	11624	9576	10902	9936	10274
Potatoes	210162	184336	178571	154236	292948	309452	196574	211545	184912	180810	180952
Strawberries	3795	3690	3762	3929	4060	4707	5774	5407	6402	6383	238333
Sweet Potatoes	11226	8862	13057	14669	15124	15193	20150	22371	25048	23919	78571
Tang.Mand.Clement.Sats	48836	76450	76405	54238	69133	68514	71536	78252	76190	78571	450243
Tomatoes	328117	362019	351064	353619	355576	412267	401490	422007	450979	465343	144145
Watermelons	102498	72557	76190	95238	122424	100100	149683	129724	160402	161643	2001

Source: Compiled and computed from FAOSTAT.

Table 9. Production of Selected Horticultural Crops in Egypt (1991-2001)

Crop	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Beans, Green	147628	128832	106000	127000	165067	201797	219527	179410	200021	201628	221893
Broad Beans, Dry	466000	382000	438000	357000	392300	442394	476252	523129	307083	353909	439480
Broad Beans, Green	2200	2250	2200	2200	350842	2300	2350	2400	2450	2450	2450
Cantaloupes&oth Melons	462831	401000	340000	345000	130987	525913	546814	467421	560000	850000	850000
Carrots	93127	89774	104733	118333	2278458	108760	137627	129450	122113	128214	116045
Citrus Fruit,Total	2307271	2424921	1855446	2062694	250000	2379173	2226292	2121218	2433085	2372284	2441218
Cucumbers and Gherkins	250299	270310	247000	248000	677934	253000	255000	258000	260000	260000	260000
Dates	603490	603652	631290	646039	5903789	738147	740838	839805	905953	1006710	1102350
Fruit excl Melons,Total	4620556	5307156	5016869	5288274	386345	6309340	6223861	6347400	6791425	6889124	7211869
Onions, Dry	556000	606000	742000	481000	1555024	447734	396132	722672	889797	762993	652940
Oranges	1624238	1771457	1324170	1513050	267000	1613256	1522098	1441652	1636600	1610520	1713720
Peaches and Nectarines	52381	105000	159000	213000	54272	321000	376969	429853	301191	240193	249232
Pears	44028	92925	80000	65000	2599100	57917	56630	41391	38336	51641	51641
Potatoes	1786057	1618650	1600000	1324649	36994	2626021	1802761	1984013	1808890	1783640	1800000
Strawberries	25200	25000	27000	32000	165016	45938	52321	53684	70612	69106	276000
Sweet Potatoes	127520	89815	142929	152262	411134	147629	190323	225560	253053	275936	420000
Tang.Mand.Clement.Sats	267734	340733	205337	250089	5034197	448709	434554	421811	511755	481182	6579910
Tomatoes	3795987	4693985	4762570	5010682	1199813	5995411	5873441	5753279	6273760	6785640	1730480
Watermelons	893899	711307	714000	923000	165067	1126560	1735448	1409405	1670320	1785280	221893

Source: Compiled and computed from FAOSTAT.

II. 3. 2. Traditional horticultural crops marketing systems

Generally, traditional fresh horticultural crops include mango, date, dried onion, garlic, potato and sweet potato. They are grown primiarily for the domestic market, difficult to differentiate as value-added products, and nomally sold as bulk. Two different systems are used to market these products.

Tomato and potato are sold after harvest, to local traders and wholesalers. Most small and medium size farmers secure production loans from these traders/wholesalers, and are obligated to sell them at least a part of their crop. Some oranges are also sold after harvest but the "kelala" system is more common. Under the "kelala" system the buyer purchases the fruit, before harvest while it is on the tree and not completely ripe, and is responsible for subsequent production and harvest activities. While this system reduces the farmer's costs and risk, it also reduces his profit potential. After leaving the farm the products are sold into local markets, and into the four major wholesale markets serving the major cities[1)]. From the major wholesale markets they make their way to retail markets and vendors in the major cities and throughout the country through various levels of wholesalers. Exporters and major processors (for example, tomatoes, potatoes) purchase their requirements directly from farmers through contract growing arrangements or at harvest, or through independent buyers. Figures 1, 2 and 3 portray the value chains for three crops; grapes, green bean and cantaloupe respectively.

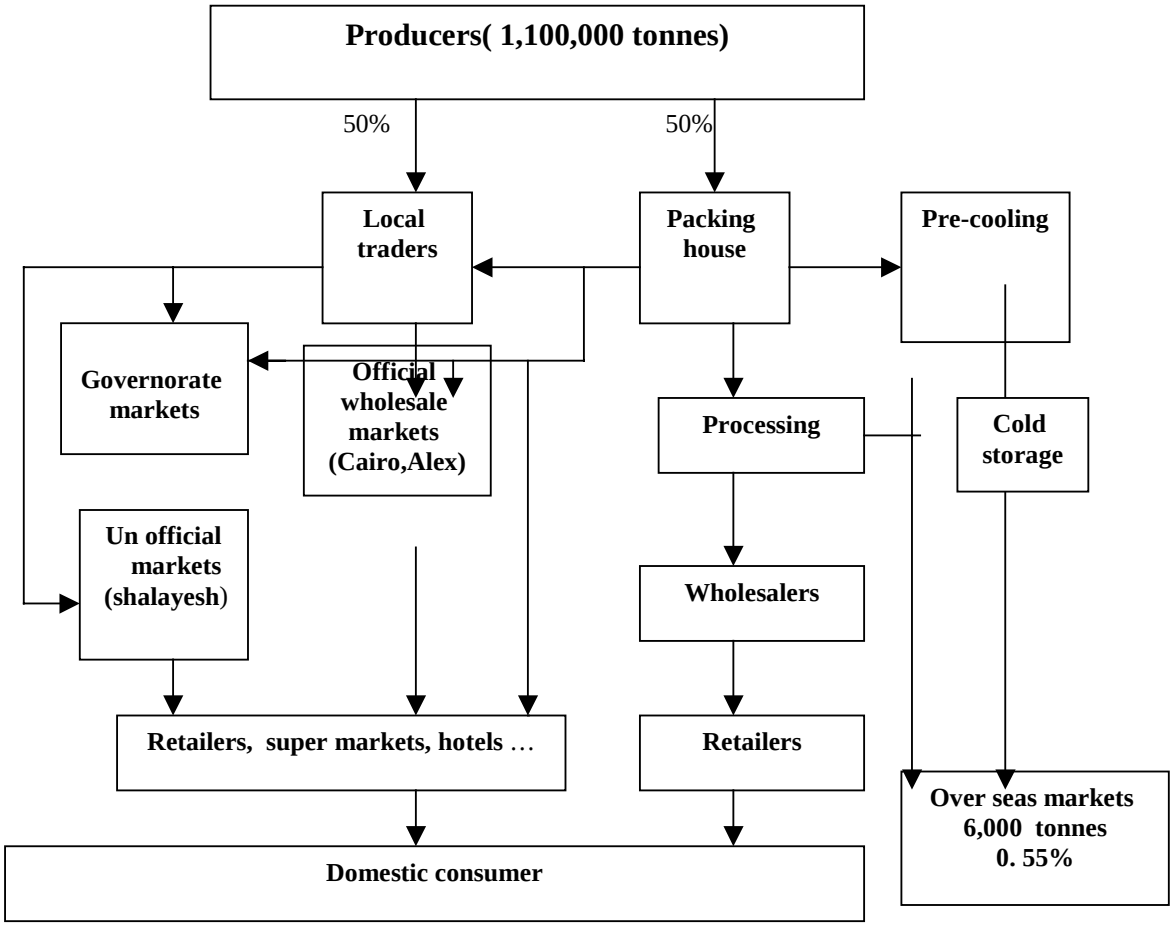
II. 3. 3. Size of the market

The market for horticultural product may be distinguish to domestic and overseas markets. The domestic market may be subdivided into retail, institutional and processing. The overseas markets may be subdivided into conventional and special segments such as organic and fair trade. Table 10 provides market size for five produce items estimated at 2002-3.

Oficial statistics by the CAPMAS put exports of green beans, grapes, strawberries there is estimated at 7,000, 6,000, and 2,500 metric tons respecively. The probablly under-counting of flows in the mehodology of oficial statistics gathering related to the volume that passed the cold terminal in Cairo Airport. (USAID 2004).

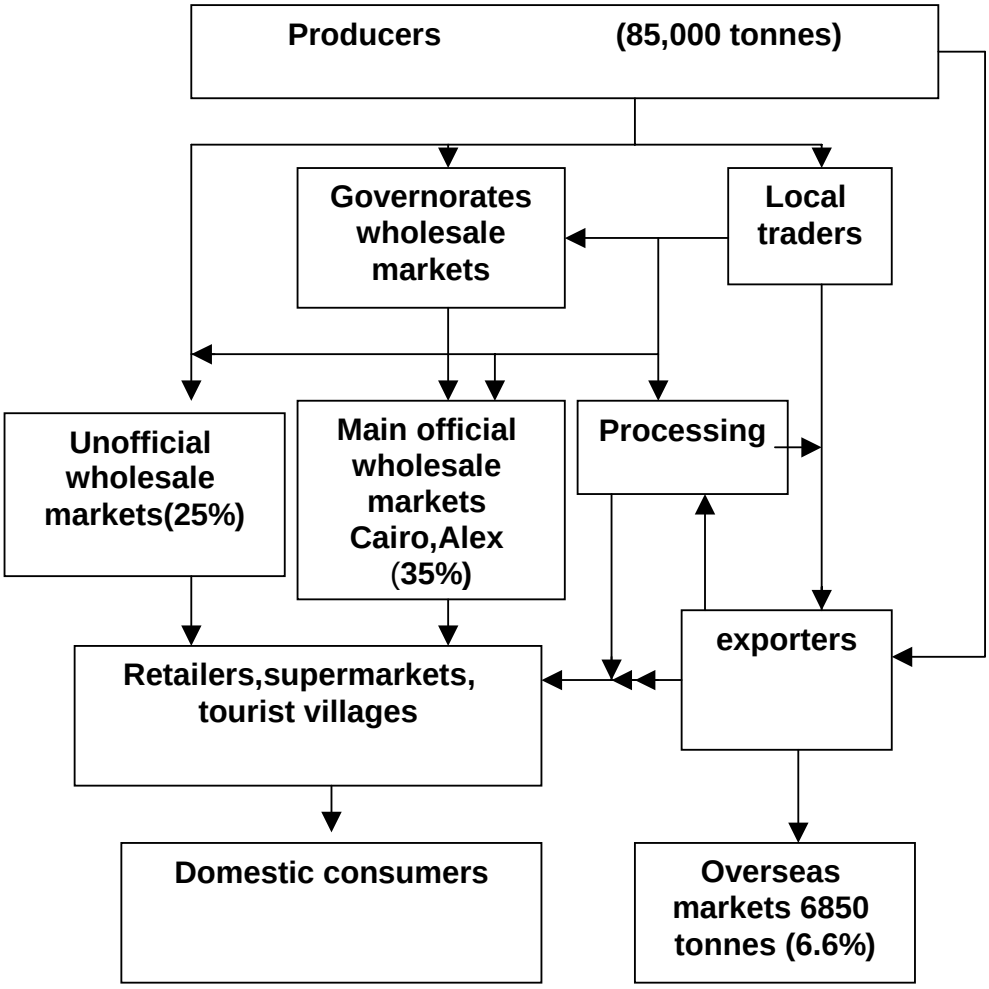
(1) These four principal wholesale markets are: Obbour (in Cairo), Alexandria, Mansoura and Assyout.

Figure(1): The grape value- chain



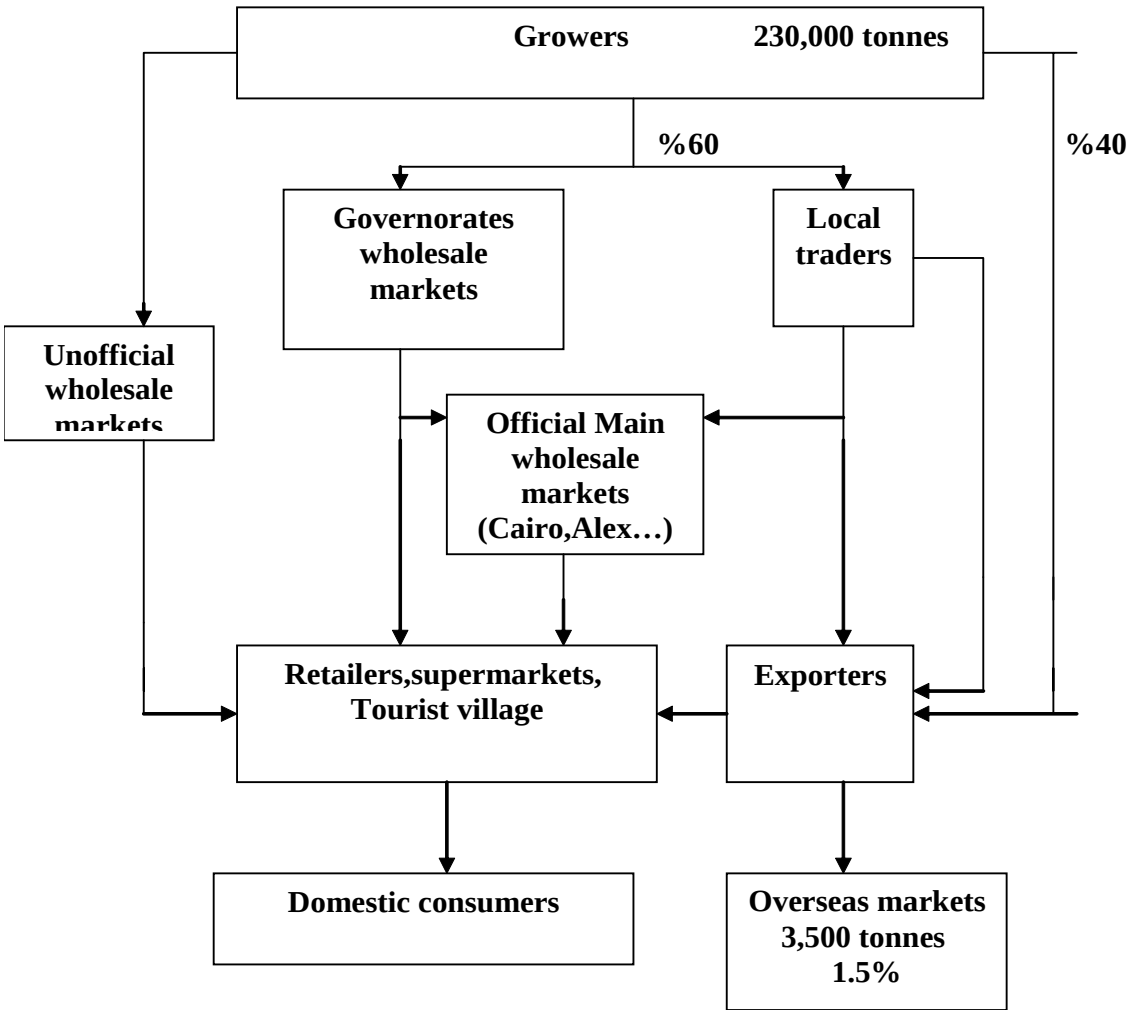
Source: Young, J., Assem, A. and Heikal, M. 2004. Egypt's Horticultural Competitiveness Framework Benchmarking Exercise, AERI Project USAID, Cairo.

Figure (2): The green bean value-chain



Source: Young, J., Assem, A. and Heikal, M. 2004. Egypt's Horticultural Competitiveness Framework Benchmarking Exercise, AERI Project USAID, Cairo.

Figure (3): the cantaloupe value chain



Source: Young, J., Assem, A. and Heikal, M. 2004. Egypt's Horticultural Competitiveness Framework Benchmarking Exercise, AERI Project, USAID, Cairo.

Table 10. Market size for selected horticultural products, estimates of 2002-3

Market	Green beans		Peppers		Grapes		Cantaloupe		Strawberries	
	000mt	%	000mt	%	000mt	%	000mt	%	000mt	%
Egypt	210	87.9	387	99.9	1.100	98.7	230	98.5	68	89.5
Overseas	29	12.1	0.5	0.1	14	1.3	3.5	1.5	8	10.5
Total	239	100.0	387.5	100.0	1.114	100.0	233.5	100.0	76	100.0

Source: Young, J., Assem, A. and Heikal, M. 2004. Egypt's Horticultural Competitiveness Framework Benchmarking Exercise, AERI Project USAID, Cairo.

II. 3. 4. Price levels and marketing margins

Prices at diferent levels for selected fruit and vegetable crops are shown in table 11. Estimates of marketing margins of these crops range between 36 percent (for garlic) and 59 percent (for Onions) of the consumer price.

II. 3. 5. Export destinations for fresh fruit and vegetables

Egypt's export profile is generally concentrated not only in terms of commodities but also of markets. Egypt's horticulture export profile is no exception. Generally the EU is the largest market for the Egyptian exports of fruit and vegetables, while the Arab countries has the second largest share. As table 12 shows, the EU was the most important destination for Egypt's exports of potatoes with 66 and 73 percent in 1995 and 2001 respectively. However, the EU is of minor imprtance as a market for Egypt's oranges and onion. The kingdom of Saudi Arabia is the main destination for Egypt's oranges and onions and tomatoes with a shares of 69, 61, and 79 percent of total exports of these products respectively in 2001. EU monthly imports records as presented in table 13 show that share of Egypt's exports in EU imports is relatively significant with respect to specific products in certain months. For example, Egypt's fresh grapes represent 9.8 and 14.7 percent of EU imports in the months of June and July respectively 2000. More than a third of EU imports of green been in November and December come from Egypt.

II. 4. Food Consumption

Major staple food commodities in Egypt include cereals; mainly wheat, rice and maize; edible oils and sugar. Table 14 presents evolution of food consumption, self sufficiency, and per capita consumption of major food commodities in Egypt in the years 1990, 1995, and 2002. Cereals total consumption increased from 13.4 million tons in 1990 to 15.1 million tons in 2002. These amounts represent 69 and 63 percent of the national consumption including non-human purposes as well as human consumption. Total (human) consumption grew at 5 percent annually between 1990 and 2002. Wheat is the most important staple commodity in Egypt. Per capita consumption of wheat is 130 kg a year which is among the highest in the world.

Egypt's population is expected to grow to 90 million by the year 2020. With economic growth at a rate of 5 percent, it is estimated that the demand for food will grow at 4 percent annually. Under these circumstances, in order to maintain the current self-sufficiency ratios of commodities such as wheat, edible oil, milk, meat and sugar, domestic production should increase at 4 percent annually. To achieve this goal Egypt

would need to divert more agricultural resources to food production leaving little of these limited resources for export production.

II. 5. Imports of food commodities and products

Egypt is among the net food importing countries (NFIDC). The total value of agricultural imports amounted to US$ 3.13 billion in 2002, up 38 percent over 1990. Imports of grains, wheat and maize, accounts for 45 percent of the total value of agricultural imports. With respect to processed food, Egypt imports large amounts of

Table 11. Price levels and marketing margines of selected fruit and vegetable crops, 2003.

Commodity	Price			Marketing Margins			Share in consumer price		
	Farm gate	Wholsale	Retail	Wholsale	Retail	Total	Producer	Wholsaler	Retailer
	LE/Ton	LE/Ton	LE/Ton	LE/Ton	LE/Ton	LE/Ton	%	%	%
Garlic 1	950	1250	1500	300	250	550	63.3	20.0	16.7
Pepper 1	1200	2000	2300	800	300	1100	52.2	34.8	13.0
Squach 1	1500	2000	2500	500	500	1000	60.0	20.0	20.0
Tomatoes 2	475	578	1023	103	445	548	46.4	10.1	43.5
Potatoes 2	579	707	1194	128	487	615	48.5	10.7	40.8
Onions 2	329	484	808	155	324	479	40.7	19.2	40.1
Beans,green 2	798	1187	2058	389	871	1260	38.8	18.9	42.3
Oranges 3	601	877	1202	276	325	601	50	23.0	27.0
Mandarines 3	479	866	1242	387	376	763	38.6	31.2	30.2
Apples 3	1020	1594	2177	574	583	1157	46.9	26.4	26.7
Grapes 3	1013	1590	2045	577	455	1032	49.5	28.2	22.3

Source: Young, J., Assem, A. and Heikal, M. 2004. Egypt's Horticultural Competitiveness Framework Benchmarking Exercise, AERI Project, USAID, Cairo.

Note: The data for these crops are for Menia Governorate as an averaged for 2003-2004

2) Abdelmoomen,S. A. 2004. Economic study for production and marketing for major vegetable crops in Egypt in proceeding of the 12 th conference for Agricultural Economists The competitive advantages of Egyptian Agriculture September 2004

3) Abd Alhamed, A. K.2004. "Economic study for production and marketing for major fruit crops in Egypt", in proceeding of the 12th Conference for Agricultural Economists on The competitive advantages of Egyptian Agriculture, September.

Table 12. Export destinations for fresh fruit and vegetables

Product	Country	1995	2001
Potato	Total (mt)	418,680	185,150
		market share (%)	
	United Kingdom Germany Italy Lebanon Greece	24 22 8 12 12	16 26 27 20 7
Tomato (Fresh or chilled)	Total (mt)	9,700	4510
		market share (%)	
	Kingdom of Saudi Arabia Lebanon	57 36	79 0
Onions	Fresh or chilled Total (mt)	115,580	166360
		market share (%)	
	King. Of Saudi Arabia Lebanon UAE	29 10 16	61 14 0
Strawberries	Fresh, total (mt)	717	1240
		market share (%)	
	KSA Kuwait	73 8	17 7
Oranges, fresh	Total (mt)	41,945	257,860
		market share (%)	
	KSA Russia UK UAE	14 27 19 9	69 5 4 8

Source: Computed from Annex Table 1.

Table 13. EU Monthly Imports of selected Fresh Fruits and Vegetables from Egypt, 2000

Month Commodity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Fresh grapes												
Total (ton)	28157	52525	64682	45414	34009	18103	11540	13915	16014	23632	15651	21272
Egypt (ton)					1	1776	1697	93				
Share						9.8%	14.7%	0.7%				
Strawberries												
Total (ton)	2978	6939	8666	2070	990	8175	3296	816	583	155	337	2136
Egypt (ton)	294	157	110	8							53	461
Green bean												
Total (ton)	8490	7744	8891	10278	10152	6323	3119	2121	2669	5797	9620	10646
Egypt (ton)	1889	983	796	2452	2236	1161	137	17	31	1108	3575	3502
Share	22.2%	12.7%	9.0%	23.9%	22.0%	18.4%	4.4%	0.8%	1.2%	19.1	37.2%	32.9%

Source: Compiled and computed from: USAID. 2002. "Assessment of Egypt's Agricultural Sector Competitiveness", Development Alternatives, Inc., Cairo

Table 14. Evolution of total consumption,per capita consumption and self sufficiency ratio in Egypt for major food commodities

Commodity	1990				1995				2002				G.R.		
	food cons.		P.C.C.	S.S.R.	food cons.		P.C.C.	S.S.R.	food cons.		P.C.C.	S.S.R.	food cons.	P.C.C.	S.S.R.
	1000 ton	%[1)]	K g /yr	%	1000 ton	%[1)]	K g /yr	%	1000 ton	%[1)]	K g /yr	%	%	%	%
Cereals, Total	13442	68.99	241.00	61.42	15114	68.26	245.20	65.50	16584	60.64	235.20	63.26	1.33	-0.59	-0.50
wheat	8222	80.24	147.40	41.65	8932	78.74	144.90	50.44	9197	78.88	130.40	53.03	0.42	-1.49	0.72
Rice	1777	87.54	31.90	104.09	2503	85.05	40.60	108.53	2672	84.40	37.90	117.97	0.94	-0.98	1.20
Maize	3211	50.39	57.60	75.31	3391	48.69	55.00	65.12	4392	37.99	62.30	56.22	3.76	1.80	-2.08
Sorghum	203	32.22	3.60	100.00	263	39.79	4.30	100.00	285	38.00	4.00	100.00	1.15	-1.03	0.00
Starchy Roots,Total	1370	75.11	24.60	100.93	1523	60.73	24.70	115.15	1596	76.18	22.60	108.07	0.67	-1.26	-0.90
Potatoes	1197	78.24	21.50	107.06	1278	57.88	20.70	117.71	1281	74.78	18.20	110.92	0.03	-1.82	-0.85
Sugar	1725	100.00	30.90	56.29	1709	95.16	27.70	68.49	2028	90.33	28.80	66.82	2.48	0.56	-0.35
Pulses	424	73.48	7.60	92.03	489	73.87	7.90	69.34	695	76.80	9.90	57.35	5.15	3.28	-2.68
Vegetable Oils,Total	449	55.92	8.10	12.58	451	49.40	7.30	13.25	430	57.10	6.10	24.57	-0.68	-2.53	9.22
Soyabean Oil	18	100.00	0.30	100.00	72	67.29	1.20	24.30	117	47.37	1.70	24.70	7.18	5.10	0.23
Sunflowerseed Oil	232	88.55	4.20	3.05	166	91.71	2.70	13.26	170	91.89	2.40	5.95	0.34	-1.67	-10.83
Cottonseed Oil	182	100.00	3.30	36.81	160	100.00	2.60	32.50	67	90.54	1.00	98.65	-11.69	-12.76	17.19
Vegetables,Total	8206	89.93	147.20	101.33	9111	89.86	147.80	102.06	12296	89.74	174.40	103.01	4.38	2.39	0.13
Tomatoes	3814	90.00	68.40	99.91	4529	89.99	73.50	100.02	5684	89.95	80.60	100.49	3.30	1.33	0.07
Onions	460	88.97	8.20	111.61	232	85.61	3.80	142.44	274	81.31	3.90	186.94	2.41	0.37	3.96
Fruits,Total	4011	89.67	71.90	103.24	5264	89.89	85.40	100.82	6517	89.77	92.40	102.04	3.10	1.13	0.17
Oranges,Mandarines	1504	89.15	27.00	108.60	1727	89.76	28.00	102.18	1876	89.42	26.60	106.05	1.19	-0.73	0.53
Lemons,Limes	362	88.73	6.50	100.00	263	89.46	4.30	104.76	246	89.45	3.50	108.00	-0.95	-2.90	0.44
Bananas	373	89.88	6.70	100.00	453	90.06	7.40	99.20	767	89.92	10.90	99.65	7.81	5.69	0.06
Dates	513	90.00	9.20	95.09	608	89.94	9.90	100.30	999	89.92	14.20	100.36	7.35	5.29	0.01
Grapes	523	89.40	9.40	100.00	666	89.52	10.80	99.33	989	89.50	14.00	99.91	5.81	3.78	0.08
Meat	885	100.00	15.90	83.50	1184	100.00	19.20	83.70	1583	100.00	22.40	91.09	4.24	2.23	1.22
Bovine Meat	449	100.00	8.10	67.71	587	100.00	9.50	67.12	689	100.00	9.80	80.41	2.32	0.45	2.61
Poultry Meat	262	100.00	4.70	100.00	396	100.00	6.40	100.00	644	100.00	9.10	99.22	7.19	5.16	-0.11
Animal Fats	176	53.33	3.20	27.58	157	73.71	2.60	44.60	170	96.05	2.40	66.10	1.14	-1.14	5.78
Butter, Ghee	129	100.00	2.30	60.47	131	100.00	2.10	58.78	147	100.00	2.10	65.99	1.66	0.00	1.67
Milk	2125	78.82	38.10	85.01	2479	82.55	40.20	90.98	3538	82.20	50.20	94.91	5.21	3.22	0.61
Eggs	119	84.40	2.10	100.00	134	82.72	2.20	100.00	160	80.40	2.30	100.50	2.57	0.64	0.07
Fish, Seafood	495	94.29	8.90	59.62	520	93.69	8.40	67.21	1055	79.80	15.00	58.32	10.64	8.64	-2.01
Freshwater fish	213	100.00	3.80	100.00	253	100.00	4.10	98.42	501	100.00	7.10	99.80	10.25	8.16	0.20
Marine fish, other	164	100.00	2.90	14.63	29	100.00	0.50	37.93	119	100.00	1.70	10.08	22.35	19.10	-17.24

1) Percentage of food consumption to national consumption. Non-human consumption include feed, manufacturing purposes, waste, and other uses.

Note: SSR is the self- sufficiency ratio calculated as the percentage of production to the national consumption.
PCC refers to per capita consumption, it takes into consideration only human consumption.

Source: Computed from FAO STAT.

meat and dairy products with a value of US$ 640 in 2002 representing 20 percent of the total imports. See table 15.

The balance of agricultural and food trade shows a large deficit that amounted to US$ 2.35 billion in 2002, up 20 percent from the deficit in 1990. The food deficit means that exports to earn foreign exchange are essential to safeguard Egypt's food security.

Table 15. Egypt's imports of major food commodities in the years, 1990, 2002

Top 20 imports	1990		2002		G. R
	1000$	%	1000$	%	%
Wheat	853000	37.54	**815563**	26.03	-0.37
Maize	249000	10.96	**591568**	18.88	7.48
Beef and Veal	144110	6.34	**250000**	7.98	4.70
Cake of Soya Beans	65310	2.87	**215597**	6.88	10.46
Beef and Veal,Boneless	0	0.00	**189762**	6.06	
Tobacco Leaves	90028	3.96	**169326**	5.40	5.41
Tea	137485	6.05	**141177**	4.51	0.22
Broad Beans, Dry	179	0.01	**79523**	2.54	66.20
Oil of Soya Beans	32	0.00	**77382**	2.47	91.41
Soybeans	4006	0.18	**71291**	2.28	27.11
Sugar Refined	217512	9.57	**65892**	2.10	-9.47
Butter	112297	4.94	**65801**	2.10	-4.36
Lentils	40664	1.79	**64683**	2.06	3.94
Oil of Palm	135000	5.94	**63353**	2.02	-6.11
Meat Meal	9555	0.42	**56150**	1.79	15.90
Tobacco Products nes	0	0.00	**49354**	1.57	
Sugar (Centrifugal, Raw)	98165	4.32	**47172**	1.51	-5.92
Butter of Cow Milk	55371	2.44	**44674**	1.43	-1.77
Sesame Seed	21012	0.92	**41118**	1.31	5.75
Offals Edibl Fresh	39273	1.73	**34277**	1.09	-1.13
Total	2271999	100	3133663	100	2.72

Source: FAOSTAT

III. Evolution of agro-industrial performance

III. 1. Evolution and general structure of agro-industrial processing

The agro-industrial processing sector is highly diverstified among large number of products that are related to agriculture. With the exception of cotton industry, all agro-industrial processing activities are related to food processing. Food processing subsectors can be classified – according to available statistical data – to four subsector; meat and meat products, dairy products industry, processed vegetables and fruits, and aniscellances industries. Miscellaneous industries include among others: oil and edible oil, grain mills, flour production, lovestoc fodder, barkery products, sugar production and refining, chocolates and candies, macaronies, and beverages.

III. 1. 1. Value added by sub-sector

The total value added of the food processing industry is US$ 6.1 billion in 2000 representing 27 percent of the aggregate value added of agriculture and food processing industry together which amounts to US$ 22.7 billion in 2000. Tables 16 and 17 provide information with regard to value added for food processing in private and public enterprises respectively by sub-sector.

Table 16. Value added for food processing (private enterprise) by sub-sector, 1996-2000

Code	1996		1997		1998		1999		2000	
	000LE	%	000LE	%	000LE	%	000LE	%	000LE	%
Processed meat	84036	4.7	130178	4.3	115892	3.9	64540	1.1	215980	5.2
Processed fish	13807	0.8	13767	0.5	11634	0.4	11456	0.2	870	0.0
Canned fruits & Veg.	159431	8.9	88239	2.9	121109	4.0	296270	5.0	241963	5.8
Oil and Edible oils	45662	2.5	655284	21.8	381367	12.7	243681	4.1	484081	11.5
Milk processing	222177	12.4	170595	5.7	196728	6.6	219063	3.7	376704	9.0
Grain mills	235884	13.1	117960	3.9	168026	5.6	282531	4.7	727971	17.4
Flour production	6851	0.4	236064	7.8	55133	1.8	86166	1.4	37426	0.9
Livestock fodder	47980	2.7	423435	14.1	122348	4.1	195269	3.3	284728	6.8
Bakery products	388246	21.6	493834	16.4	648325	21.6	2758484	46.3	-182240	4.3
Sugar prod. & refining	153840	8.6	-854	0.0	38165	1.3	25829	0.4	118424	2.8
Chocolates & Candies	104535	5.8	159858	5.3	105233	3.5	160533	2.7	176135	4.2
Macaronis	37210	2.1	60145	2.0	49937	1.7	62256	1.0	30276	0.7
Others	117857	6.6	319319	10.6	389904	13.0	343233	5.8	1079796	25.8
Alcoh	-1459	0.1	33	0.0	64	0.0	35	0.0	4922	0.1
Beer beverages	0	0.0		0.0	98377	3.3	63329	1.1	49947	1.2
Non-Alcoh	181176	10.1	141441	4.7	524896	17.5	1122972	18.8	546054	13.0
Total	1797233	100	3009298	100	2997138	100	5962647	100	4193037	100
Total manufacturing	11135263		13111714		17995805		21810035		19453153	

Source: Computed from CAPMAS

Table 17. Value added for food processing (public enterprise) by sub-subsector, 1996-2000

Sub-sector	1996/97	1997/98	1998/99	1999/2000	2000/2001
Processed meat	9777	-1715	-7276	-12911	-3982
Processed fish	2097	2189	11315	4343	613
Canned fruits & Veg.	33854	41143	24029	6072	7495
Oil and Edible oils	-64082	169320	248138	186496	138673
Milk processing	-379	15213	17365	13099	3723
Grain mills	347151	120820	233092	159210	204673
Flour production			10610	-415	
Livestock fodder	42870	45201	-16878	8148	28180
Bakery products	79163	96162	37281	12699	56391
Sugar prod. & refining	441245	306588	548620	309839	485260
Chocolates & Candies	7212	5949	6428	-1343	3020
Macaronis	18461	32041	40930	36341	27570
Others	137114	13470	24641	28983	16013
Alcoh	37258	87961	1602	7257	16216
Total	1091741	930342	1179897	757818	983845
Total manufacturing	9818879	987532	8946054	2626300	550049

Source: Computed from CAPMAS

III. 1. 2. Employment by sub-sector

Agriculture in Egypt has been for a long time the largest sector in terms of labor force. Until the 1980s agricultural employment represented more than half (57%) of the total labor force. In the 1990s share of agricultural labor force dramatically decreased to only 33 percent of the total force by 2000. This is due to the fact that the agricultural labor force has been almost unchanged during the last two decades at around 8 million workers.

Food processing industry in Egypt is one of the important sectors with respect to absorbing labor. Although scarcity of data, there is evidence that food processing sector employ about 446 thousand workers 36.6 percent of which (163200 workers) are employed in the subsector of processed vegetables and fruit. The bulk of the remaining workers are engaged in the miscellaneous food processing industries mostly, grain milling and bakery activities. See table (17).

Employment effect is measured by Makary (2004) by relating employment to capital invested to test the capability of the sector in creating jobs both direct and indirect. The main conclusion is summarized as follows

- Processed food industry is still labor-intensive technique. Labor-capital ratio in the industry average around 10-11 workers per one million pound.
- The public sector is more labor intensive in processing meat, vegetable, edible oil, milk processing, and beverage. In these three subsectors the majority of private sector firms are rather medium and larger.
- The private sector uses a more labor-intensive technique in grain mills, bakery, chocolate and sweets where most of the private sector firms are rather small.

Table 18. Employment, by sub sector, 2000

Sub-sector	No. workers (000)
Meat and its products	36091
Dairy products	14586
Processed veg.& fruit	163181
Misc food processing	232161
Total	446019

Source: calculated from social account matrix for the year 2000.

III. 1. 3. Total sales by sub-sector

Available data by CAPMAS (tables 19 and 20) reveal that the value of processed food production amounts to LE19.3 billion in 2000; up 30 percent of the value of production in 1996. Total value of production of processed foods represented 19.4 and 21.4 percent of total value of production in the manufacturing sector in 1996 and 2000 respectively.

Food processing industry is composed of two major subsectors; private and public enterprises. The share of the private sector in the total production increased from 47.7 percent in 1996 to 72.5 percent in 2000. This trend of increasing role of the private sector in the food processing industry is a reflection of the implementation of structural adjustment program and privatization policy in Egypt during the 1990s.

Structure of private food processing sector in 2000 reveal that the major categories include grain milling, bakery products and oil and edible oil with shares of 17.3%, 11.8% and 11.3% of the total production of private sector respectively.

Table 19. Production of food processing (private enterprise) by sub-sector 1996-2000

Sub - Sector	1996		1997		1998		1999		2000		C.A.G. R.
	000 LE	%	000 LE	%	000 LE	%	000 LE	%	000 LE	%	%
Processed Meat	475752	6.75	582370	6.15	599532	5.06	545468	3.33	664215	4.76	8.00
Processed Fish	36039	0.51	49931	0.53	48593	0.41	43819	0.27	39440	0.28	2.23
Canned Fruits and Vegetables	640218	9.08	452450	4.78	553544	4.67	937936	5.72	836094	5.99	6.46
Oil and Edible Oils	531940	7.54	1694832	17.89	2164893	18.26	1880984	11.47	1572860	11.28	23.74
Milk Processing	641952	9.10	656462	6.93	1042436	8.79	1119251	6.82	1128111	8.09	13.15
Grain Mills	797982	11.31	899128	9.49	1579936	13.33	2167041	13.21	2415260	17.31	24.18
Flour Production	129108	1.83	441428	4.66	140218	1.18	271536	1.66	96937	0.69	-7.43
Livestock Fodder	428652	6.08	814439	8.60	540404	4.56	822389	5.01	871394	6.25	16.25
Bakery Products	1382610	19.60	1623032	17.14	1853033	15.63	4163193	25.39	1641468	11.77	4.20
Sugar Production and Refining	190494	2.70	202014	2.13	157980	1.33	129509	0.79	439619	3.15	18.87
Chocolates and Candies	443346	6.29	421256	4.45	468220	3.95	579387	3.53	436212	3.13	-0.41
Macaronis	318697	4.52	206441	2.18	248070	2.09	257353	1.57	224944	1.61	-9.10
Other food processing Industries	477296	6.77	955831	10.09	1000529	8.44	1124447	6.86	2085114	14.95	30.83
Alcoholic Beverages	717	0.01	50	0.00	101	0.00	57	0.00	15527	0.11	53.64
Beer Beverages	0	0.00		0.00	99626	0.84	119381	0.73	107736	0.77	100.00
Non-Alcoholic Beverages and Mineral Water	558531	7.92	471489	4.98	1357280	11.45	2237891	13.65	1374413	9.85	20.16
Total	7053334	100.00	9471153	100.00	11854395	100.00	16399642	100.00	13,949344	100.00	15.67
Total Manufacturing	32776241		40658467		51020265		58902918		54584947		
Share Of the Food Processing Sector In the Total Manufacturing Sector (%)	21.51		23.29		23.23		27.84		25.55		

Source: Computed from CAPMAS

Table 20. Production of food processing (public enterprise) by sub-sector, 1996-2000

Sub-sector	1996/1997		1997/1998		1998/1999		1999/2000		2000/2001		2001/2002		C.A.G.R.
	000'LE	%	000'LE	%	000'LE	%	000'LE	%	000'LE	%	000'LE	%	%
Processed Meat	87504	1.13	68815	0.90	58507	0.90	57976	1.03	71344	1.35	12284	0.22	-32.48
Processed Fish	12684	0.16	11417	0.15	26701	0.41	13714	0.24	7394	0.14	7171	0.13	-10.78
Canned Fruits and Vegetables	150756	1.95	174362	2.28	94159	1.45	42534	0.76	43621	0.82	49718	0.89	-19.90
Oil and Edible Oils	1403576	18.15	1605527	20.95	1698968	26.16	1579537	28.10	1184139	22.33	1137908	20.45	-4.11
Milk Processing	102977	1.33	66443	0.87	88644	1.36	60615	1.08	52402	0.99	65399	1.18	-8.68
Grain Mills	2525217	32.65	2697681	35.20	1900894	29.27	1747584	31.09	1628698	30.72	1995513	35.87	-4.60
Flour Production		0.00		0.00	42106	0.65	0	0.00		0.00		0.00	
Livestock Fodder	328988	4.25	236417	3.08	150933	2.32	155522	2.77	146051	2.75	149223	2.68	-14.62
Bakery Products	281006	3.63	262532	3.43	122855	1.89	110998	1.97	134974	2.55	110403	1.98	-17.04
Sugar Production and Refining	2102723	27.18	2204646	28.77	2056808	31.67	1606920	28.59	1803013	34.00	1801793	32.38	-3.04
Chocolates and Candies	40180	0.52	24184	0.32	27686	0.43	27926	0.50	8105	0.15	9442	0.17	-25.15
Macaronis	159420	2.06	161051	2.10	138758	2.14	121734	2.17	108922	2.05	112094	2.01	-6.80
Other food processing Industries	450006	5.82	38189	0.50	69789	1.07	68934	1.23	62101	1.17	81049	1.46	-29.02
Alcoholic Beverages	90269	1.17	112684	1.47	17602	0.27	26452	0.47	51453	0.97	31804	0.57	-18.83
Total	7735306	100.00	7663948	100.00	6494410	100.00	5620446	100.00	5302217	100.00	5563801	100.00	-6.38
Total Manufacturing	43434615		41267687		36902974		33379805		35230896		46255984		
Share Of the Food Processing Sector In the Total Manufacturing Sector (%)	17.8		18.6		17.6		16.8		15.0		12.0		

Source: Computed from CAPMAS

III. 2. Value added, employment and total sales for processed fruit and vegetables

Official statistices with regards to processed fruit and vegetable broken down to its sub sector are relatively scarce. The value added for the canned fruits and vegetables is estimated at about 250 million in 2000 (Table 21). About 97 percent of such value was created in the private sector compared to 3 percent in the public sector. Precessed fruits and vegetables' sector employs about 163000 workers. Total sales of canned fruits and vegetables , measured as the value of production, is estimated at LE 880 million in 2000, 95 percent of which was generated in private enterprises, and the remaining 5 percent in the public enterprises, as shown in table 22. It is clear that the share of the public enterprises has decreased in favor of the private enterprises. Thanks to privatization program under which two major public companies were privatized.

Table 21. Value added for canned fruits and vegetables, 1996-2000

Year*	Private enterprise		Public enterprise		Total	
	1000 LE	%	1000 LE	%	1000 LE	%
1996	159431	82.5	33851	17.5	193282	100.0
1997	88239	68.2	41143	31.8	129382	100.0
1998	121109	83.4	24029	16.6	145138	100.0
1999	296270	98.0	6072	2.0	302342	100.0
2000	241963	97.0	7495	3.0	249458	100.0

* As for public enterprises financial years are used.
Source: Computed from table 16 and 17

Table 22. Value of production of canned fruits and vegetables (private and public), 1996-2000

Year	Private enterprise		Public enterprise		Total	
	1000 LE	%	1000 LE	%	1000 LE	%
1996	640218	80.9	150756	19.1	790974	100.0
1997	452450	72.2	174362	27.8	626812	100.0
1998	553544	85.5	94159	14.5	647703	100.0
1999	937936	95.7	42534	4.3	980470	100.0
2000	836094	95.0	43621	5.0	879715	100.0

Source: Computed from table 19 and 20.

III. 3. Traditional markets versus modern supermarkets

An important trend among distributors of food products is across the entire EU, being developed by major multinational food companies and influencing competitive positioning of food produce by major supermarkets and hypermarkets in Europe and North America. With the trend that retailers are further consolidated into large chains, and the number of small retailers shrinks, producers and suppliers should place more emphasis on direct marketing to the large retailers.

Many of Egypt's food exports with higher value-added have been more targeted toward meeting regional tastes, rather than those of European markets. This will have to change if Egyptian food processors want to expand their market potential to the E. U or other regional markets. Of Egypt's trade within the Near East region, food products play a major role: Four of Egypt's eight largest regional exports are food products. In 1992, over 55 percent of its total regional food exports were accounted

for by just one market, Saudi Arabia. Major food exports to the region, in addition to certain fresh horticultural products, include processed products tailored to regional tastes, such as soft and hard cheeses, preserved vegetables, mango and guava juices, biscuits, candy and confectionery. In addition, Egyptian food processors are marketing limited quantities of frozen vegetables and jams products to North American “niche” markets, and Asian markets.

The supermarkets in Egypt, as in other developing countries, have targeted not the middle and working classes but upper income consumer. The items most attractive to this class are processed foods, many of them imported. Some supermarkets such as Metro offer the upper classes organic produce at a substabtial premium over conventional equivalents. The quality of Egyptian produce is markedly inferior compared to the requirements of supermarkets in North America and Western Europe. In provincial markets, the produce is resold much as it had been received from the field with minimal grading and sorting and misspackaging.

The English chain, Sainsbury opened a number of stores in Egypt at the beginning of the century, but it withdrew after only a couple of seasons due to in efficient management. Since then the Fresh chain Carrefour has build two hypermarkets, one in Cairo, the other in Alexandria.

Egyptian supermarket chains are buying their produce from a small number of selected suppliers. The larger super market suppliers operate a combination of their own farm and a procurement operation aimed at other farms and metropolitan wholesale market(1).

III. 4. Processed food exports with reference to fruits and vegetables

Processed food exports have almost doubled in the period 1998-2003, from US$ 62.1 to US$ 119.1 million in 1998 and 2003, respectively. This is an annual growth rate of 15 percent. The value of exports has steadily increased through the period 1998-2002 and reached US$ 124.3 million in 2002. In 2003, value of exports dropped to US$ 119.1 million with a 5 percent reduction compared to the previous year. See table 23.

Dehydrated vegetables group includes dehydrated vegetables, dried herbs and spices, and dried legumes. Apparent decline in dehydrated vegetables export is due mainly to decline in dried legumes export. On the other hand, the main dehydrated vegetables, especially onions showed significant increase in 2003.

In regards to structure of the processed food exports, the above-mentioned table 23 shows that exports of dehydrated vegetables, herbs and spices represent about a third, the highest share of total exports. Exports of frozen vegetables and fruits occupied the second rank in the years 1998, 2000, 2001, 2002, while exports of dairy products occupied second rank in the years 1999 and 2003.

Exports of fruits and vegetables juices and concentrates increased significantly in 2003 representing 9.4 percent of the total exports. Exports of canned , glass packed and pickled vegetables contributed more than 8 perecent of the total exports.

(1) Young, J., Assem A. and Heikal, M. 2004. Egypt’s Horticultural Competitiveness Framework Benchmarking Exercise. A Report for USAID/ Egypt, AERI project. Cairo.

Table 23. Value of Egypt's Exports of the Leading Processed Food Products by sub-sector, 1994-2003

(000 US$)

sub-sector	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Frozen Vegetables and Fruits	8,698	10,787	11,103	18,000	16,970	14,477	17,093	12,473	20,538	15,727
Growth Rate (%)		24	3	62	-6	-15	18	-27	65	-23
Dehydrated Vegetables	19,341	32,617	26,148	22,519	22,226	22,615	36,878	39,790	51,830	40.810
Growth Rate (%)		69	-20	-14	-I	2	63	8	30	-22
Fruit and Vegetable Juices and Concentrates	2,314	2,220	2,480	2,168	2,067	2,846	3,613	5,067	7,830	11,157
Growth Rate (%)		-4	12	-13	-5	38	27	40	55	42
Jams and Preserves	189	738	532	5,167	329	883	2,235	194	586	2,275
Growth Rate (%)		290	-28	871	-94	169	153	-91	202	188
Dairy Products	6,052	1,880	1,190	4,437	3,567	16,374	5,669	6,314	9,277	19632
Growth Rate (%)		-69	56	-1	-20	359	-65	11	47	111
Processed Meat/Fish Products	393	613	149	6,343	4,200	2,457	2,089	8,925	3,857	3,976
Growth Rate (%)		56	-76	4,157	-34	-41	-15	327	-57	3
Biscuits, Confectionary Products & Yastery Products	6,130	6,219	4,73-1	4,178	4,359	3,377	3,526	4,459	2,179	1,813
Growth Rate (%)		1	-24	-12	4	-23	4	26	-51	-17
Canned & Glass packed vegetables	1,137	1,923	838	4,277	1,979	4,495	6,201	12,230	9,898	10,299
Growth Rate (%)		69	-56	410	-54	127	38	97	-19	4
Dry Blends, Soup Mixes. Bouillon, and Sauce Mixes, etc	897	1,214	1,686	2,743	6,413	4,953	5,205	3,124	9,471	4,588
Growth Rate (%)		35	39	63	134	-23	5	-40	203	-52
Olive Products								228	322	2,861
Essential Oils								12.774	8.464	6008
Total	45,151	58,211	52,166	69,832	62,110	72,477	82,509	105,578	124252	119,146
Growth Rate (%)		29	78	33	-12	16	13	27	17	-5

Source: Central Bank of Egypt and CAPMAS.

Trends of exports at the subsector level reveal that processed food subsectors can be classified to three categories; fast, moderate and slow growing. Fast growing exports include canned, glass packed and pickled vegetables, fruits and vegetables juices and concentrates and dairy products. Products with moderate growth include dehydrated vegetables, herbs and spices. The remaining subsectors grow with relatively slow rates, these are frozen vegetables and fruits, biscuits, confectionaries and pastries, and dry blends, dry sauce mixes, soup mixes, and bouillon.

In terms of volume of exports as table 24 shows, its structure and trends, almost the same patterns as that of value of exports have been noticed but with some discrepancies. Frozen vegetables and fruits have lower share in the total exports volume compared to its value share, yet with decreasing trend. In 1998 the volumes of frozen vegetables and fruits and dehydrated vegetables, herbs and spices together amount to 38.7 thousand tons constituting 71.2% of the total volume exports. In 2002, the volume of the two categories reached 109 thousand tons representing 68 percent of the total volume of exports. This volume has dropped to 70 thousand tons in 2003 with 53% of the total volume.

Table 25 and 26 provide detailed information concerning exports of Egypt's frozen vegetables in terms of its value and volume respectively. Figures 4 and 5 portray evolution of the value and volume of frozen vegetables respectively.

III. 5. Foreign direct investment

Total imported investment in the food processing industry amounted to LE 164 million in 2000. this amount is three times the imported investment in 1996. it shoued be noted that share of imported investment in food processing sector amounts to only 4 percent in the total imported investment in the manufacturing industry in 2000. Annex tables (2) and (3) present the imported investment in private and public food processing.

Table 24. Volume of Egypt's Exports of the Leading Processed Food Products by sub-sector, 1996-2003 (Metric Tons)

Year	1996	1997	1998	1999	2000	2001	2002	2003
. Frozen Vegetables and Fruits	14,36	17,38	19,840	20,686	31,270	21,034	40,113	23,404
Growth Rate (%)		21	14	4	51	-33	91	-42
• Dehydrated Vegetables	21,61	21,57	18,871	21,110	45,842	66,800	69,349	46,850
Growth Rate (%)		0	-13	12	117	46	4	-33
• Fruit and Vegetable Juices and	2,389	2,319	1,911	3,520	4,744	13,200	12,218	18,472
Growth Rate (%)		-3	-18	84	35	178	-7	51
Jams and Preserves	101	5,740	271	1,140	2,676	230	716	3,200
Growth Rate (%)		1,147	-95	321	135	-91	211	347
Canned & Glass packed	3,992	4,209	3,972	9,256	10,756	23,298	16,523	11,231
Growth Rate (%)		5	-6	133	16	117	-29	-33
Dairy Products	3.011	3.080	2,163	7,698	3,328	3,711	6,703	3,574
Growth Rate (%)		2	-30	256	-57	12	81	-47
Processed Meat/Fish Products	3,221	3,171	2,186	1,583	1,139	2,514	3,538	1,784
Growth Rate (%)		-2	-31	-28	-28	121	41	-50
Biscuits, Confectionary Products	3,959	3,372	3,949	12,434	3,018	3,345	2,241	15,854
Growth Rate (%)		-15	17	215	-76	11	-33	607
Dry Blends. Soup Mixes, Bouillon,	3,667	2,743	1.215	1,586	1,536	2,302	6,139	3,336
Growth Rate (%)		-25	-56	31	-3	50	167	-45
Olive Products						147	212	2,581
Essential Oils						3.568	2.320	221
Total	56,68	64,75	54,218	80,011	104,50	140,149	160,072	130,509

Source: Central Bank of Egypt and CAPMAS.

Table 25. Export value of Frozen Vegetables, 1994-2003

US$

Product	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
POTATOES, FROZEN	9,609	680	141,233	3,272,871	2,035,474	2,408,494	456,369	271,164	2,294,044	535,835
PEAS, FROZEN	182,594	366,104	821,131	1,387,372	1,636,983	811,820	649,724	444,181	341,121	171,061
HARICOT, FROZEN	64,538	60,758	195,032	623,704	765,855	582,530	420,483	185,758	619,783	304,263
KIDNEY, FROZEN	19,552	0	0	5,131	6,885	7,058	51,795	57,057	1,962	0
OTHER LEGUMINOUS, VEG.FROZEN	111,572	38,054	129,342	229,300	142,376	90,451	91,763	98,490	81,084	288,274
SPINACH,FROZEN	48,865	87,040	162,692	302,839	449,283	343,853	224,770	121,257	195,555	89,971
SWEET, CORN FROZEN	0	5,986	0	10,168	9,030	20,328	0	94,501	30,632	30,139
MOLOHKIA FROZEN	454,844	339,165	681,785	1,278,465	1,488,925	1,107,946	1,088,817	912,750	562,840	651,266
OCRA , FROZEN	389,573	535,003	1,369,216	2,908,978	4,068,460	2,115,966	2,301,719	1,511,943	1,905,927	1,547,760
ARTICHOKES, FROZEN	502,378	981,574	607,262	1,024,717	1,502,507	2,471,627	1,696,463	1,312,635	2,271,646	3,069,782
OTHER,VEG. FROZEN	5,946,736	7,354,568	6,369,799	5,318,991	1,116,603	999,052	4,379,445	5,171,844	6,379,078	5,871,313
MIXTORES OF VEG., FROZEN	861,756	804,693	451,456	1,132,374	2,498,304	2,342,768	1,527,702	1,757,711	5,322,211	3,343,091
Total	8,592,017	10,573,624	10,928,948	17,494,911	15,720,685	13,301,893	12,889,050	11,939,291	20,005,884	15,902,754

Source: CAPMAS

Table 26. Export Volume of frozen vegetables, 1994-2003

Product	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
POTATOES, FROZEN	60,000	800	210,370	3,487,146	2,770,932	3,918,469	864,362	568,338	7,260,365	1,782,861
PEAS, FROZEN	241,060	409,116	1,037,409	1,278,327	1,961,339	1,285,958	1,104,865	1,048,196	689,531	259,924
HARICOT, FROZEN	115,965	103,228	335,428	1,090,390	1,205,675	873,600	624,734	329,216	1,008,755	471,674
KIDNEY, FROZEN	56,850	0	208,417	10,350	12,100	12,000	109,549	140,296	4,800	0
OTHER LEGUMINOUS, VEG.FROZEN	144,496	52,568	295,698	273,592	169,374	102,680	89,990	216,340	105,226	435,036
SPINACH,FROZEN	88,551	143,772	0	491,338	692,748	655,226	460,350	359,558	417,347	172,830
SWEET, CORN FROZEN	0	60,000	1,011,608	10,056	30,100	54,713	0	125,450	191,440	58,332
MOLOHKIA FROZEN	632,240	453,063	1,322,657	1,703,086	2,022,632	1,889,683	6,500,597	2,471,445	1,210,123	1,543,021
OCRA , FROZEN	396,849	490,839	276,239	2,764,627	3,616,514	2,572,180	2,776,969	2,729,811	3,211,494	1,917,284
ARTICHOKES, FROZEN	334,479	366,993	8,685,345	464,781	702,652	1,278,968	1,070,756	1,334,834	1,467,989	2,138,986
OTHER,VEG. FROZEN	8,050,328	9,334,604	755,829	3,521,464	1,283,320	1,227,655	6,345,487	8,399,588	8,314,925	8,789,630
MIXTORES OF VEG., FROZEN	1,249,058	1,270,086	25,000	1,806,593	4,186,206	5,273,153	2,750,483	3,280,844	15,176,349	4,567,522
Total	11,369,876	12,685,069	14,164,000	16,901,750	18,653,592	19,144,285	22,698,142	21,003,916	39,058,344	22,137,100

Source: CAPMAS, Egypt.

Figure 4. Egypt: Frozen Vegetable Exports (US$)

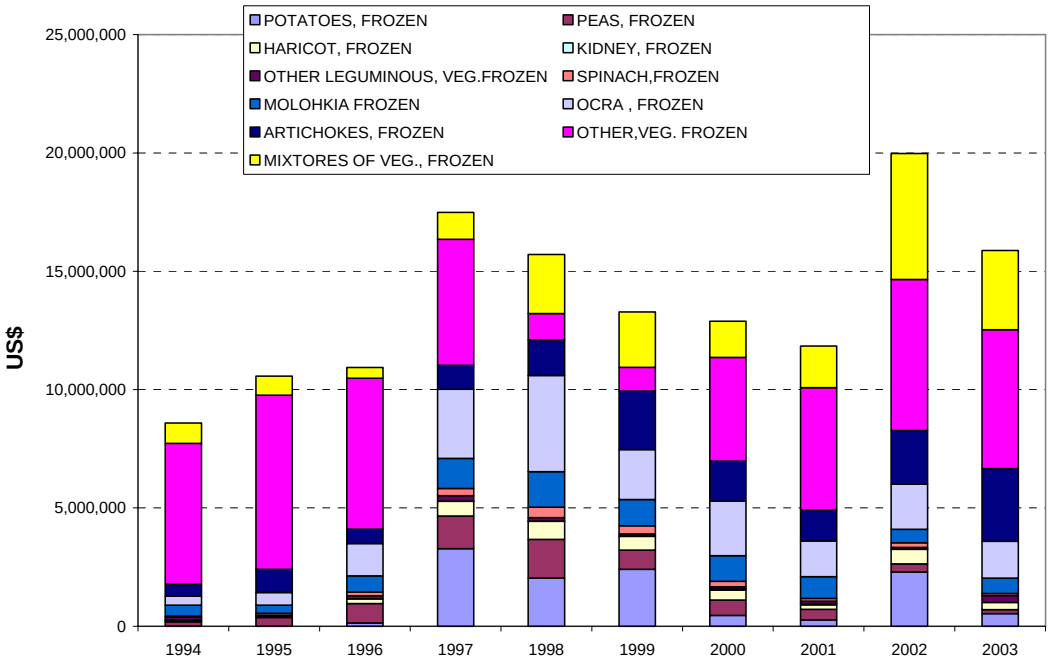
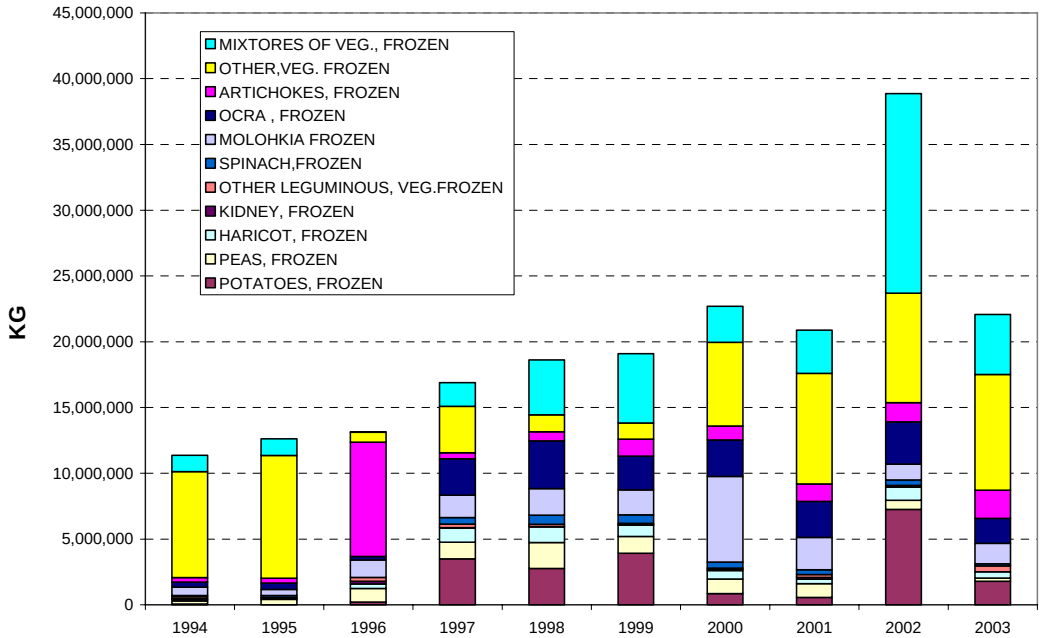


Figure 5. Egypt: Frozen Vegetable Exports (KG)



IV. Agricultural and agro-industrial policies

IV. 1. Brief history of major policy developments

During the period from the early sixties to the mid-eighties, the contribution of agricultural to the Gross Domestic Product (GDP) has declined from about 33% to about 20% with 36% of the labor force working in agriculture and 50% of population living in the rural area. The declining profitability in agriculture resulted in declining land productivity and increased labor migration out of agriculture to non-agricultural job opportunities, and even to work in agriculture outside Egypt i.e. in Iraq and Libya. The commercial balance of trade has changed from surplus to deficit. This was due to government intervention in agricultural production, marketing, and pricing. Administrative prices were very much lower than international prices. This represented heavy taxation on the agricultural sector in order to transfer the agricultural surplus to finance the development of the non-agricultural sectors. These interventionary policies had been adopted in the period from the mid 1960s until the mid-Eighties.

Realizing the resulting inefficiencies in the use of the agricultural resources due to government intervention, GOE took action to transform the economy gradually by reducing the role of the government and increasing the role of the private sector with the main objective of increasing the efficiency of the use of the agriculture resources in particular and the economic resources in general. This was achieved through two stages. The first period (1986-1990), included complete or partial liberalization for the prices of ten main crops; reducing or eliminating the obligatory deliveries of the strategic crops; reducing the subsidy on form inputs; eliminating the government monopolization of main farm inputs and strategic crops in addition to encouraging and expanding the market for private investment. The second stage 1990-1997 included the expansion of the procedures initiated in the first stage in addition to new procedures for economic reform on the macro level including, reducing and unifying the rate of exchange for the Egyptian pound and liberalization of dealings in foreign exchange; reducing the industrial and consumer subsidy which reduced the bias against the agricultural sector and limited the deterioration of agricultural terms of trade; reduction of budget deficit and limiting the supply of money which led to effective control over the inflation rate; liberalization of foreign trade which encouraged exports; and the privatization of some public sector companies. These macroeconomic procedurs have consolidated and interacted with the procedures of the first stage planned for the agricultural sector and are expected to have big impact on the performance of agriculture(1).

IV. 2. Sectoral policies and incentives

Before the implementation of structural adjustment program, the cropping pattern was determined centrally by the government and was used as a policy tool to achieve the goals of the agricultural policy. Thus, the crop mix determined every year by the Ministry of Agriculture and Reclamation (MOALR) was a mandatory one imposed and supervised by the agricultural cooperatives so that the farmers were not allowed to deviate from

(1) Siam, G. 2000. Economic, Social and Environmental Impacts of the Structural Adjustment Program in the Egyptian Agriculture, Working paper No.2, Center for Agricultural Economic Studies, Cairo University.

what was determined in terms of crop areas and rotations. Otherwise they would be fined.

However, the different crops had not been equally treated in such administrative crop pattern on equal foot. While cotton area was determined to be at a minimum of 1.2 million feddans, rice area was determined to be at maximum of 1 million feddan, and areas of vegetable, fruits and berseem (clover) were rather free.

Under liberalization, crop areas and rotations are determined by farmers, who are now free to grow whatever crops they want but with two exceptions. The first is that rice area at the national level should not exceed 1 million feddans allocated in specific governorates in north Delta. The second is that sugar cane area is fixed at a maximum of about 300 thousand feddans. allocated in specific governorates in Upper Egypt.

Recently serious problems have appeared. The area grown with rice has witnessed a significant increase reaching, in some estimates, 1.7 million feddans. While the cotton area has been fluctuating but with a decreasing trend, it reached its lowest level ever in 1995, that is 750 thousand feddans. The farmers are expanding their rice area encouraged by the high relative profitability and suspended fines of rice area violations.

This socially undesired expansion of rice area has led to severe problems in terms of water use and has negatively affected the area grown with cotton as a competitor to rice. The government has been trying to react to these problems through reconsidering the water plans and determining price for cotton that are higher than international prices in order to strengthen cotton profitability asgainst rice, which in turn contributed much of the complexities dominating the cotton sector and kept the distortions in the side of rice market.

IV. 3. Marketing and price policies

Wheat, maize and rice were subject to mandatory delivery quotas in the pre-reform period i.e. before 1987 and subject to voluntary deliveries in the reform period; prices are weighted averages of the prices received by farmers for the quantities delivered to the government and for the quantities marketed through private channels. Sugarcane is entirely procured by the government at administrative prices and delivered by farmers to public sector sugar mills.

During the reform period (i.e. after 1987) guaranteed floor were offered for wheat and rice (after removal of mandatory marketing). The floor prices for wheat is announced at planting time, which makes it possible for farmers to respond during the current season.

Import levels have some influence on domestic farm-gate prices because part of the imported wheat is sold on the free market. The government has been attempting to maintain relatively high farm gate price for wheat and to bring them closer to, or even higher than, international prices by increasing floor prices each year. Floor prices for maize have been set by the Ministry of Agriculture since the Principal Bank for Development and Agricultural Credit (PBDAC) began procuring maize through cooperatives. Maize farm gate prices are also influenced by wheat prices (because maize is a close feed substitute for wheat). Floor price for rice was set by the Ministry of Agriculture. Public rice milling companies have control over the modern milling capacity in which export rice is milled. Although rice exports represent no more than 10 percent

of total rice production, rice farm gate prices are affected by the international prices of rice and the levels of exports(1).

Prices for sugar are set by the Ministry of Agriculture. In fact, the government has a monopoly to mill, refine and trade refined sugar through the government-owned Egyptian Sugar and Refining Company. Because sugar is subsidized for consumers, providing a higher price to growers has a negative impact on the government budget. Inefficiencies in the sugar mills, reflected in high milling costs, also undoubtedly contribute to the difficulty of raising producers' prices.

Prices for the majority of farm crops have increased due to SAP, among other factors. Wheat, rice and cotton are the main crops that realized higher farm-gate prices. The Egyptian government follows a pricing policy for strategic farm crops aiming at inducing farmers for expanding their production and deliveries of these crops. Within the last two years, the government was offering a price for voluntary deliveries which was 25% higher the world price. This price was stable around the year and was not affected by the fluctuations in the international prices, even though wheat importation has been liberalized and the custom duties for wheat imports have been reduced.

The administrative prices for cotton have been changed to floor prices, which were 25% higher than world prices during the period from 1994/ 95 to 1996/97. Before SAP, cotton prices were heavily taxed (about 50.0% implicit tax) in most cases. However, the current subsidy is not agreeable with SAP, which aimed at eliminating price distortions, especially for tradable goods. In 1997, the government eliminated the floor price for cotton, leaving local prices to be determined according to world prices. Of course, this is expected to expose cotton revenues to fluctuations, especially if it is considered that cotton yield too is subject to fluctuations due to abnormal weather conditions.

IV. 4. Rural development Policies

Rural and agricultural population still represent considerable percentage of total population in Egypt. More serious is the fact that rural and agricultural population increase in absolute numbers while the major agricultural resources (land and water) are limited if not decreasing for several well-known reasons. Considering the fact that technological progress in agriculture is labor saving, Egypt faces real challenge is overcoming open and disguised unempolyment in rural areas. Rural non-form employment might be important not only in alleviating the unemployment problem but also in fastring rural development, reducing the urban/rural gaps, and avoding the negative impacts of rural exodus.

In spite of the shortfalls that have been charactering the development experience in Egypt, unmistakable favorable structural changes have been achieved in the economy. These changes have not been successful in bridging the gap between the living standards of agricultural population and their compatriots in other activities.

(1) Siam, G. 2000. Cuurent and Future Food Situation in Egypt with References to Food Security Policies. Workshop on Optimum Water Use for Food Security in Egypt. Ministry of Water Resources and Irrigation. AleinElsokhna, Egypt

IV. 5. Natural resources policies

It is now well know that water is the most limiting factors in the Egyptian agriculture which relies on the Nile water (55.5 BCM annually) for irrigation of almost 96 percent of the agricultural land (7.8 million feddan). The total developed water resources are estimated at 62.6 BCM including the Nile water as well as reuse of agricultural drainage water, underground water, treated wastewater and rainfall.

The target of GOE water policy is to increase the water resources by about 10.7 BCM through increasing water reuse, expanding the use of underground water, and treatment and reuse of wastewater. Potential for increasing the water resources hings on the execution of certain improvement projects in tropical lakes. The problem goes beyond water scarcity to the quality of irrigation water.

Land resources constitute a major component of any ginning agricultural development strategy. But soil fertility is deteriorating as a result of over- irrigation and an incomplete drainage infrastructure. The 1970s and 1980s have witnessed encroachment on the agricultural lands for urban purposes due to the population pressure.

The GOE initiated the implementation of national mega projects including Toshka Development Project, Sinai Development Project and Al Owynat East Project. The plan is to reclaim about 3,400,000 feddan depending on available ground water and the Nile water. The high degree of temprature and long duration of sunlight are among the advantages of Toshka that shortens the growth period of many crops including vegetables and fruits (especially strawberry and cantaloupe) , medicinal and aromatic plants, and ornamental plants, and ornamental plants.

V. International trade policies, with special attention to fresh and processed fruits, vegetables, and olive oil.

V. 1. Multilateral and bilateral engagements

Egypt is a party to several important trade agreements including WTO (the GATT agreement), the Egypt-EU agreement, COMESA, and the Arab Free Trade Agreement as well as a number of bilateral trade agreements.

As Egypt becomes more integrated into the global economy, its policies must conform to compliance requirements of WTO and other trade agreements. Global competition also a premium on policies that reduce production and marketing costs through efficient customs services, effective use of natural resources such as water and low cost production inputs. The growing role of the private sector is the most important change affecting how policies are formulated and implemented.

Egypt as NFIDC encounters difficulties in two fronts; first, heavy dependence on imports of food can lead to series of financial difficulties, due to more vulnerable balance of payment situation, regardless of the price of food. Second, investing in domestic agricultural production activities to supplement imports, and competition from dumped imports, due to export subsidies, will limit the few opportunities that similar products can enjoy both at the international and the domestic markets. Dependency on a limited number of international suppliers, particularly of staple food, often exacerbates instability

and shortages brought about by climatic and economic reasons. [1] There are concerns about increases in world food prices resulting from the market response to reduced subsidies and lower distortions for cereals, sugar, oilseeds and livestock products in the developed countries.

Egypt belongs to the 52 countries in the lower-middle income group. However, while classified as a food-deficit country, Egypt is not in the low-income food deficit group that is likely to capture most of the special and deferential treatment in the World Trade Organization negotiations.[2]

In regards Egypt's imports of fresh vegetables applied tariffs on tomato, onions, and aspargus are fixed at the same level of bound tariffs, that is 20 percent. Applied tariffs on Egypt's imports of processed vegetables; frozen and dehydrated; are 30 percent, 10 percent lower than the bound tariffs.

WTO- market access

As a result of the UR negotiations, Egypt presented base tariff rates for over 600 agricultural tariff lines and offered to bind all agricultural tariffs. For most products, the bindings were in the range of 5-80 percent . It is expected that the unweighted average of bound rates to fall to about 28 percent in 2005 down from 62 percent in the base period. Applied tariffs have mostly been considereably below the bound rates. Gradual reductions have been done on applied tariffs through the post-agreement period. The resultant unweighted average of applied tariffs on all agricultural products (except alcoholic bevarages) was estimated at 18.5 perecent, against the bound rate of 47.8 percent in 1998[3].

In regards Egypt's imports of fruit products, applied tariffs range between 30-40 percent which are lower than the bound tariffs that are ranging between 40-60 percent in January, 1,2005 (Table 27). Considering that fruit product are exportables, these rates seem high in a sence that they discourage export and rather induce producers to market their produce in the local markets.

Export subsidies

Since it did not declare any export subsidies in its WTO Schedules, Egypt is not eligible to provide such subsidies in the future. Under current WTO rules, Egypt would still be able to provide subsidies to lower internal transport and marketing costs and external freight costs.

A Fund for Equalizing Import and Export Prices (FEIEP) was established and has been supported from the government by an amount LE. 400 million aiming at developing production practices for improving export capability. This fund is distributed

(1) WTO Negotiations on Agriculture. 2000. Export Subsidies-Food Security or Food Dependency?; A Discussion Paper presented by Argentina, Brazil, Paraguay and Uruguay (MERCOSUR) Chile, Bolivia and Costa Rica; Document G/AG/NG/W/38, September 27.

(2) WB, 2000Toward Agricultural Competitiveness in the 21st Century Egypt Agricultural Export-oriented Atrategy, July 31,2000.

(3) Siam, G. 2003. Egypt's Case Study in WTO, Implementation of Agreement on Agriculture: The Experience, Developing Country Case Studies, FAO, Rome.

approximately 40:60 between the agricultural and textile sectors. Exporters of rice and horticultural products are benefiting from this fund.

Table 27. Actual and bound Advalorem duty on horticultural products in Egypt in 1/1/2005

Product	Actual rate (%)	Bound rate (%)
Dates	30	40
Figs	30	45
Grapes	40	60
Citrus	40	60
Melons	40	60
Pineapples	30	40
Bananas	40	60
Apples	40	60
Guava, mango	30	45
Vegetables:		
Potatoes	5	10
Tomatoes	20	20
Onions	20	20
Asparagus	20	20
Vegetables frozen	30	40
Cabbages	20	20
Vegetables dried	30	40

Source: Egypt's Schedules to the WTO

Egypt also applies other incentive measures aimed at export promotion For example, customs duty can be reduced on a selective basis to encourage greater local content and export-oriented activities. Similarly, the Export Development Bank of Egypt provides short- and medium-term loans to finance capital assets of export-oriented industries and credit to finance inputs for these industries. Processed agricultural products are among the beneficiaries of such credits.

Subsidies, and direct subsidies on inputs reduce the "true" tax on exportables and thus help reduce the anti-export bias embeded in the existing policy. However such measures result in heavy burden for the public budget their sustanability is uncertain, and they are unlikely to offset completely the anti-export bias of relatively high industrial and agricultural protection of import competing products.

SPS/ TBT with respect to fruit and vegetables

Concerning fruit and vegetable exports to the EU market, it is generally felt that most of the SPS measures applied by EU on these products are justified. However, following the establishment of the EU single market in 1993, there was a change towards a stricter import regime. With the single market, EU-wide standards were raised in 1998 in order to protect the Union's southern members, which essentially meant that exporters faced higher standards overall. While this may be WTO-compatible, a grey area was why would Italy allow the import of citrus from an area infected by white fly only in periods of domestic market shortage if the danger of infection were that significant. This may be an

issue for Egypt to pursue. Australia and China also prevented Egypt's citrus exports for the same reason of white fly infection.

To comply with the EU standards in terms of potato imports and to avoid suspension of Egypt's potato exports (if brown rut was found in five cases). A decision was taken recently to restrict the export of "baby" potatoes unless grown in specified fields.

Finally**,** two Ministerial Decrees have been issued aiming at ensuring good production techniques, soil treatment to eliminate insects, and safe seeds, as well as biosafety legislation to ensure access to importing countries' markets. In this regard, the Ministry of Agriculture and Land Reclamation and the Ministry of Economy and Foreign Trade (now the Ministry of Foreign Trade and Industry) have already issued the organizing rules for two major export commodities, potatoes and groundnuts (Ministerial Decree 61, 2000 for potatoes and Ministerial Decree 62, 2000 for groundnuts). Similar Ministerial decrees are being prepared for vegetables (beans, onion and garlic); fruits (grapes, citrus, strawberry and cantaloupe) and cut flowers. These decrees specify the locations that are permitted to grow exportable crops (to ensure the products are free of pests) and determine types and sources of seeds as well as methods of seed treatment, pest control methods for crops and soil. These specifications are prepared in consultation with importing countries.

EU- Egypt Partnership Agreement

Egypt has had a preferential trade agreement with the EU since 1997, and has recently signed a new agreement that has come to force in May 2005. Generally, the new agreement permits Egyptian manfactured products (except textiles) in duty free. Egyptian duties on European manufactured goods are reduced on a time schedule that varies with the classification of the goods. In agriculture, the new agreement expands windows and quotas in some cases and introduce some new agricultural products with zero duty quotas. Table 28 provides the agricultural offer of the EU to Egypt under the partenrship Agreement comared to the preferences that has been applied since 1997 and until the partnership came to effect in may 2004. It is clear that partnership Agrement (EUEPA) implied significant improvement of market access for Eypt's export horticultural products particularly potatoes and oranges. This is achieved through increasing the zero tariff quotas and enlargement of market windows.

Table 28. Agricultural Offers to Egypt, Preferences in 1977-2004 and Partnership Agreement

		Preferences, 1977-2004				Partnership Agreement as of May, 2004			
HS Code	**Description**	**Quantity**	**Duty**	**Calendar**	**O.Q. Reduction**	**Quantity**	**Duty**	**Calendar**	**O.Q. Reduction c]**
0601	Bulbs	NI 1)	NI	NI	NI	500 a]	0%		0
0602	Cuttings & Slips	NI	NI	NI	NI	2000 a]	0%		0
060310	Fresh cut and exotic flowers	NI	NI	NI	NI	3,000 of which 1,000 are exotic b]	0%	1/10-15/4	0
0604-99	Branches & other plants	NI	NI	NI	NI	500 a]	0%		0
0701-9051	Early Potatoes	109.670	0%	1/1-31/3	40%	Year (1) 130.000 (2)	0%	1/1-31/3	60%
070200	Tomatoes	unlimited	0%	1/2-31/3	0%+34.70ECU	unlimited	0%	1/11-31/3	0
070310	Fresh or chilled onions	12.120	0%	1/2-31/3	60%	15,000 a]	0%	1/2-15/6	60%
0703-2000	Garlic, fresh or chilled	NI	NI	NI	NI	3000 a]	0%	1/2-15/6	50%
070410	Cauliflower	NI	NI	NI	NI	1500 a]	0%	1/11-15/4	0
0704-9000	Cabbage	NI	NI	NI	NI	1500 a]	0%	1/11-15/5	0
0705-1100	Cabbage Lettuce	NI	NI	NI	NI	500 a]	0%	1/11-31/3	0
0706-1000	Carrots, Turnips	NI	NI	NI	NI	500 a]	0%	1/1-30/4	0
070700	Cucumbers &Gerkins	120	0%	1/1-29/2	100% if EP 67.9 ECU	500 a]	0%	1/1-29/2	0
070820	Leguminous vegetables Green Beans + Peas	7680	0%	1/11-30/4	60%	20000 a]	0%	1/11-30/4	0
0709-2000	Asparagus	unlimited	0%	1/11-29/2	100%	unlimited	0%	1/11-29/2	0
0709-3000	Aubergines	NI	NI	NI	NI	unlimited	0%	1/11-29/2	0
0709-4000	Celery	NI	NI	NI	NI	unlimited	0%	1/11-29/2	0
0709-7000	Spinach	NI	NI	NI	NI	unlimited	0%	1/11-29/2	0
070910	Fresh or chilled Artichokes	120	0%	1/10-31/12	100%	unlimited	0%	1/11-29/2	0
0709-51	Mushrooms (other than	NI	NI	NI	NI	unlimited	0%	1/11-29/2	0

Source: EU- Egypt Partenership Agreement.

Table 28. Contin'd

		Preferences 1977-97				Partinership Agreement			
HS Code	**Description**	**Quantity**	**Duty**	**Calendar**	**O.Q. Reduction**	**Quantity**	**Duty**	**Calendar**	**O.Q. Reduction c]**
070990	Courgettes	unlimited	0%	1/12-15/3	100%	unlimited	0%	1/11-29/2	0
0709909	Sweet Pepper	unlimited	0%	15/11-30/4	100%	unlimited	0%	1/11-29/2	0
0712	Dried vegetables		0%		100%	16000 a]	0%		0
0712-9090	Dried Garlic	1.200	0%		100%				0
0710 (except 4000-8061)	Frozen & provisionally preserved vegetables		0%	15/8-30/4	100%	Year (1): 1,000 (2) 2,000 (3)	0%		0
0711 (except 9030-9040)	Canned vegetables		0%	15/8-30/4	100%		0%		0
0712	Dried Onions	5.880	0%			16000 a]	0%		0
0713	Dried Leguminous vegetables (except seeds)		0%			unlimited	0%		0
071420	Sweet Potatoes	NI	NI	NI	NI	3000 a]	0%		0
0804-1000	Dates	unlimited	0%		100%	unlimited	0%		0
0804-5000	Guavas, Mangoes & Mangosteens	unlimited	0%		100%	unlimited	0%		0
080510	Fresh or dried oranges	7840	8.6 ECU/	1/1-31/3	60%	50,000=34,000 (0%duty)+E.P. Red.		12/1-31/5	60%
080520	Mandarins (incl. tangarines, clementines, simillar citrus)	unlimited	0%	1/1-28/2	100% +12.8 ECU	unlimited	0%		0
080530	Lemons and Limes	unlimited	0%	1/6-31/10	100% +30.9 ECU	unlimited	0%		0
080540	Grapefruit	unlimited	0%	1/1-31/4	100%	unlimited	0%		0
080610	Table grapes, fresh	unlimited	0%	1/2-30/6	60%	unlimited	0%	1/2-15/7	0
08071100	Watermelons	unlimited	0%	1/4-15/6	100%	unlimited	0%	1/4-15/6	0
08071900	Melon	120	0%	1/1-31/5	100%	1,000 a]	0%	1/11-31/5	0

Table 28. Contin'd

		Existing Preferences 1977-97				Partinership Agreement			
HS Code	**Description**	**Quantity**	**Duty**	**Calendar**	**O.Q. Reduction**	**Quantity**	**Duty**	**Calendar**	**O.Q. Reduction c]**
080820	Pears & Quinces	NI	NI	NI	NI	500 a]	0%		0
080930	Peaches, including nectarines	NI	NI	NI	NI	500 a]	0%	15/3-31/5	0
080940	Plums and Soles, fresh	NI	NI	NI	NI	500 a]	0%	15/4-31/5	0
081010	Fresh Strawberies	NI	NI	NI	NI	500 a]		1/11-31/3	0
08109085	Other fruit, fresh	NI	NI	NI	NI	unlimited	0%		0
08110812	Frozen fruits and nuts	NI	NI	NI	NI	Year (1): 1,000 (2) 2,000 (3) 3,000	0%		0
0812	Canned fruits	NI	NI	NI	NI				0
0904	Peppers of the genus piperor ground fruit of	unlimited	0%		100%	unlimited	0%		0
0909	Various seeds	unlimited	0%		100%	unlimited	0%		0
0910	Ginger, saffron, thyme,cumin	NI	NI	NI	NI	unlimited	0%		0
1006	Rice	32.000	0%		0%	32.000	25% reduc-		
1209 (except 1100 & 1900)	Seeds, fruits & spores (except beet	unlimited	0%		100%	unlimited	0%		0
1209 (except 12091100 &	Vegetables seeds	unlimited	0%		85%	unlimited	0%		0
1211	Medicinal & Aromatic plants	unlimited	0%		85%	unlimited	0%		0

Table 28. Contin'd

		Preferences 1977-97				Perinership Agreement			
HS Code	**Description**	**Quantity**	**Duty**	**Calendar**	**O.Q. Reduction**	**Quantity**	**Duty**	**Calendar**	**O.Q. Reduction c]**
1212	Locust beans, seaweeds & other algea, sugar beet cane & other veg. Products	unlimited	0%		100%	unlimited	0%		0
151560	Jojoba oil		0%		100%				
1515-5011	Sesame oil	NI	NI	NI	NI	1000 a]	0%		
1515-90	Other vegetable fats & oils	NI	NI	NI	NI	500 a]	0%		
1703	Molasses	NI	NI	NI	NI	350000 a]	0%		
2009	Fruit Juices	NI	NI	NI	NI	1000 a]	0%		
20019010	Mango chuttney	NI	NI	NI	NI	unlimited	0%		
2007	Jam & Marmalade, fruite jellies	NI	NI	NI	NI	1000 a]	0%		
200811	Peanuts / peanuts+C66Butter		0%		100%	3000 a]	0%		
2302	Residues derived from the stifting or other working cereals of leguminous plant	unlimited	0%		36%	unlimited	60% reduc-tion		
5301	Flax	NI	NI	NI	NI	unlimited	0%		

V. 2. Important policies with respect to fresh processed fruits, vegetables, and olive oil

Horticulture crops receive no direct incentives from the GOE. However, they do receive indirect subsidies which are mainly reflected in low cost irrigation water applicable to other crops. On the other hand, all crops including horticulture, are penalized by GOE policies that increase costs and/or reduce yields Exapmles of such policies include policies and regulations that delay the introduction of improved seed, relatively high import tariffs on farm inputs and equipments that increase the cost of production and the cost of cold chain equipment that will reduce post-harvest losses and preserve quality. Exchange rate policy which induce over-valued rates would maintain artificial prices of tradable goods.

To initiate or respond to competitive developments, actions have to be taken to bring down costs. Egyptian growers, exporters, shippers, and the GOE will have to:

- Seek new technologies that improve yield and/or reduce production costs.
- Reduce shipping costs.
- Reduce tariffs on crucial supplies and equipment such as refrigerated trucks.
- Increase access to cross-border trucking.
- Reduce the tax burden on export development ventures.
- Products should remain competitive in quality given.
- The implementation of Euro-Retailer Produce Working Group Good Agricultural Practices (EUREGAP).
- Major buyer requirements on technical issues:
- Chemical application: allowable chemical, residues
- Water quality: Contamination, pollution
- Records keeping.

V. 3. New potentials

The European Union is the world's largest undersuplied market for fresh horticulture products (World Bank 2001). Different countries have supplied the EU with products that could not be produced in southern European Union countries in the winter. However, the European Union still does not have stable year-round supplies of fresh horticultural products at reasonable prices. Consumption of most products drop dramatically from November to April. This prospect offers great potential for Egypt because of its proximity to large markets in European Union Western countries as well as in the Gulf countries. Egypt's climate and relatively cheap labor are suited to grow competitively many fresh horticultural products. With effective marketing strategies and careful planning, Egypt could export more of its fresh produce to Western and Eastern Europe, Saudi Arabia and other Gulf countries. Africa also could become a new market.

Supplies from outside the EU are strong for a number of processed horticulture products in which Egypt have advantages. For example, in 1990, 47 percent of all EU imports of prepared preserved fruit were from outside the EU, in addition to 59 percent of most dried vegetables and 59 percent of seafood products. Moreover, growth rates for exports of these products from outside the EU are relatively high, with average annual growth rates of 20 percent for prepared-preserved fruit, 12 percent for dried vegetables and 21 percent for seafood from 1986-90. for the major export item of frozen vegetables,

while non-EU imports only account for 13 percent of EU's demand, these extra-EU imports have been growing rapidly at 47 percent recently, indicating considerable future opportunities.

Horticulture export potential to the EU could be maximized through extending the marketing window. This can be achieved through production in Upper Egypt and adoption of available technology to store prechable crops such as strawberry and table grapes for up to three months without a loss in quality. The mega projects initiated in the Upper Egypt such as Toshka and Owynat East are expected to contribute significantly in Egypt's export through extending the marketing window and adoption of early mature varieties. Early mature varieties in the case of table grapes in particular has been successful in increasing Egypt's table grapes exports in the recent years. The EU-Egypt Partnership Agreement that came to effect in May 2004, extended the duty free import window from Februray 1, to July 15 instead of that window previously applied under the old preference, i. e. from Februrary 1 to June 30.

The Arabian peninsula and the Gulf are the other major regional destinations for Near East processed food exports including those of Egypt. They should remain a considerable market, considering that many oil-exporting countries will continue to be net food importers. Reinforcing this, in the case of processed foods, are cultural factors, and tastes of the region, a major determinant of export markets. Consumers in Near East markets have an obvious preference for NE traditional processed foods. These markets should continue to grow in line with population and income.

Opportunities for Egypt to expand its exports of processed fruits and vegetables are reasonably attractive, as international trade in processed foods has been growing strongly in recent years. There are good opportunities in neighboring Near East markets and the EU market as well.

Egyptian processed food exports with the strongest comparative advantages and good prospects include, among others, concentrated juices, bulk vegetable products and bulk edible oils for further refining in the EU markets. There are also additional opportunities for convenience food, particularly frozen vegetables, in developed markets where demand is growing strongly due to rising incomes and consumer trends. The Near East region has strong advantages in many domestic products with promising export potential, including edible oils, mainly olive oil; fruit juices; prepared fish; canned products such as olives, peeled tomatoes and apricots; dried products such as onions, garlic, sun-dried tomatoes; and certain frozen products mainly vegetables such as beans and peas.

Egyptian exporters still face serious constraints on increasing sales abroad. Domestically, the constraints include: low-quality domestic inputs, cumbersome duty-drawback and temporary admission regimes, excessive paperwork, fees and delays for customs and various inspections during export and import, workers that are poorly prepared for the jobs available; insufficient incentives to export and a lack of access to information on foreign markets and products standards.

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Annex

Annex Table (1): Evolution of Egypt's exports (Quantity and Value) of Major horticulture crops by destination

a- Potatoes

	1995		1996		1997		1998		1999		2000		2001		Market share		G.R. (of Q)
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	1995	2001	
Country	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	%	%	%
Lebanon	50486	10899	32901	5704	33546	5142	32630	5079	29783	3383	32825	4670	37239	5039	12049	19808	-4.95
Greece	48470	11394	53503	10055	25673	4299	47378	7441	42430	7082	15196	2929	12191	1891	11568	6485	-20.55
United Kingdom	101361	24121	89877	18644	64789	14236	55628	13113	46996	10110	24835	5513	29899	6248	24191	15904	-18.41
Germaany	90672	23402	106965	21160	72659	9872	55351	10141	75004	13905	31636	5675	47301	7739	21640	25160	-10.28
Kingdom of Saudi - Arabia	4165	915	257	94	1858	824	281	52	446	201	116	35	522	223	994	278	-29.26
Spain	30565	8795	31909	6109	2128	335	3182	717	117	32					7295	0	-100.00
Italy	32170	8679	36887	7337	18537	3570	18389	3561	33040	6281	37702	5822	49511	7534	7678	26336	7.45
France	25615	6593	23733	4369	1711	449	869	175	15	1.5	16	2	600	84	6113	319	-46.51
European Economic Community	750	188	2553	499	1293	212	802	120	19569	3436	2124	321			179	0	-100.00
Kuwait	3664	735	1768	198	2778	708	2938	435	2094	242	3704	386	2619	337	874	1393	-5.44
Others	30764	6385	30234	5659	7977	1582	10911	2316	6074	1359.5	7984	1179	5270	365	7342	2803	-25.48
Total	418682	102106	410587	79828	232949	41229	228359	43150	255568	46033	156138	26532	185152	29460	99924	98485	-12.71

Source: Compiled and computed from: CAPMAS, Egypt

Annex Table (1): Cont'd

b-Tomatoes, fresh or chilled

	1995		1996		1997		1998		1999		2000		2001		Market share		G.R. of (Q)
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	1995	2001	
Country	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	%	%	%
Kingdom of Saudi - Arabia	5548	915	8086	1170	11366	1162	17942	2075	4639	828	3601	712	3552	772	48	15	-7.16
Lebanon	3482	762	618	106	350	46	162	20	12	2					30	0	-100.00
Kuwait	419	88	1630	218	355	55	1068	163	479	70	389	58	188	37	4	1	-12.50
United Arab Emarates	66	15	289	42	66	11	45	4	8	2	4	1	140	34	1	1	13.35
Qatar	21	2			15	1.5	44	3.5	2	0.5	0.8	0.2	0.6	0.1	0	0	-44.71
Others	160	80	103	19	201	21.5	225	40.5	204	87.5	623.2	223.8	629.4	273.9	1	3	25.64
Total	9696	1862	10726	1555	12353	1297	19486	2306	5344	990	4618	995	4510	1117	84	19	-11.98

Source: Compiled and computed from: CAPMAS, Egypt

Annex Table (1): Cont'd Onions, fresh or chilled

	1995		1996		1997		1998		1999		2000		2001		Market chare		G.R. of (Q)
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	1995	2001	
Country	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	%	%	%
Kingdom of Jordan	573	67	217	14	818	87	3058	250	4527	380	1054	64	571	45	4093	680	-0.06
Kingdom of Saudi - Arabia	33704	4109	67333	5859	54962	4690	45515	2394	56940	4256	98298	7232	100999	7451	240743	120237	20.07
Lebanon	11482	1821	4350	664	16055	2794	12381	1809	16609	1610	20533	1798	23591	2263	82014	28085	12.75
Kuwait	11085	1296	10322	958	6407	567	7107	563	5472	399	7669	457	7245	335	79179	8625	-6.84
Greece	8746	1374	3667	543	3338	517	12130	1863	2564	512	7103	1401	9187	1091	62471	10937	0.82
Russian federation	4255	673	600	90	2483	346	34199	4842	373	29					30393	0	-100.00
United Kingdom	2325	766	1675	475	1171	336	1419	614	1669	278	940	219	1864	439	16607	2219	-3.62
Germany	4586	816	1190	179	1466	373	1870	310	70	11	32	6	570	75	32757	679	-29.36
France	5887	1025	196	31	233	169	4298	1069	2089	193	57	5	603	48	42050	718	-31.60
United Arab Emarates	18372	2593	4859	533	700	61	1054	131	1284	136	2405	99	170	7	131229	202	-54.18
Qatar	3275	403	816	91	242	18	630	30	635	97	789	55	433	12	23393	515	-28.63
Others	11289	2281	8784	1460	16076	2853	26877	4925	13562	1577	8906	1045	21124	2446	80636	25148	11.01
Total	115579	17224	104009	10897	103951	12811	150538	18800	105794	9478	147786	12381	166357	14212	825564	198044	6.26

Source: Compiled and computed from: CAPMAS, Egypt

Annex Table (1): Cont'd Strawberries , fresh

	1995		1996		1997		1998		1999		2000		2001		Market chare		G.R. of (Q)
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	1995	2001	
Country	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	%	%	%
Kingdom of Saudi - Arabia	524	308	253	100	372	188	437	195	249	89	303	49	215	33	299	3583	-13.80
Kuwait	59	18	49	12	91	18	101	22	71	17	61	11	91	12	34	1517	7.49
Qatar	14	5	15	4	24	10	32	10	83	11	36	5	84	15	8	1400	34.80
Others	120	71	109	62	113	50	157	84	451	220	430	123	850	259	69	14167	38.58
Total	717	402	426	178	600	266	727	311	854	337	830	188	1240	319	410	20667	9.56

Source: Compiled and computed from: CAPMAS, Egypt

Annex Table (1): Cont'd Haricot , fresh or chiled

	1995		1996		1997		1998		1999		2000		2001		Market chare		G.R. of (Q)
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	1995	2001	
Country	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	%	%	%
Kingdom of Saudi - Arabia	305	103	206	47	344	55	207	41	85	10	228	34	39	13	3	0	-29.02
Kuwait	111	30	80	19	123	26	89	20	57	11	36	4	23	5	1	0	-23.08
Romania	175	50							3	0.3			6	1	2	0	-43.00
United Kingdom	634	181	347	101	326	75	1070	311	627	180	793	159	524	105	5	4	-3.13
Belguim	2205	608	355	92	631	137	288	80	93	27	288	49	98	20	19	1	-40.48
Germany	1444	492	768	205	394	106	433	225	215	60	181	57	329	64	13	3	-21.85
Switzerland	198	56	322	90	127	28	317	69	135	28	224	49	203	39	2	2	0.42
France	722	205	432	124	455	109	321	77	279	49	488	99	86	23	6	1	-29.86
Netherlands	1421	1270	3133	928	598	137	719	227	238	72	511	165	531	183	12	4	-15.13
Others	4093	518	1875	371	2118	474	1993	517	2066	510.7	3135	734	6333	2337	36	49	7.55
Total	11308	3513	7518	1977	5116	1147	5437	1567	3798	948	5884	1350	8172	2790	98	64	-5.27

Source: Compiled and computed from: CAPMAS, Egypt

Annex Table (1): Cont'd Oranges, fresh

	1995		1996		1997		1998		1999		2000		2001		Market chare		G.R. of (Q)
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	1995	2001	
Country	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	%	%	%
Kingdom of Saudi - Arabia	6079	1931	6319	1879	120988	44485	148058	39193	99349	23435	152981	31253	178228	31838	1434	8046	75.60
Bulgaria											10	3			0	0	
Russian federation	11528	3477	12436	3899	19117	5957	5862	2332			513	118	12806	2931	2719	578	1.77
United Kingdom	7907	2227	12379	4005	9711	2849	11201	2846	7605	1956	68029	2005	10170	2519	1865	459	4.28
United Arab Emarates	3958	1296	5728	2230	31572	8454	31961	8654	20589	5379	35950	7522	20795	5292	933	939	31.85
Others	12473	4045	16736	5315	34908	10501	20545	7764	70328	20439	-23312	8777	35863	8042	2942	1619	19.25
Total	41945	12976	53598	17328	216296	72246	217627	60789	197871	51209	234171	49678	257862	50622	9893	11642	35.35

Source: Compiled and computed from: CAPMAS, Egypt

Annex Table (1): Cont'd Grapes fresh

	1995		1996		1997		1998		1999		2000		2001		Market chare		G.R. of (Q)
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	1995	2001	
Country	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	Ton	1000$	%	%	%
Kingdom of Saudi - Arabia	12	4	25	3.5	41	15	56	17	5	1	35	10	51	19	1	1	27.27
State of Kuwait	202	41	437	110	326	66	214	59	289	71	322	40	480	54	18	11	15.52
United Kingdom	424	194	521	685	274	376	281	315	304	297	1336	626	2215	750	37	49	31.72
Germany	44	28	36	9	17	5	0.05	0.07	15	2	24	8	110	29	4	2	16.50
Netherlands	71	22	49	62			8	7	152	50	722	385	586	171	6	13	42.16
Qatar	4	1	17	4	38	9	25	13	27	5	15	3	35	9	0	1	43.55
Others	385	176	219	38.5	134	27	194.95	94.93	99	25	412	116	1075	262	34	24	18.67
Total	1142	466	1304	912	830	498	779	506	891	451	2866	1188	4552	1294	100	100	25.92

Source: Compiled and computed from: CAPMAS, Egypt

Annex Table (2) Foreign investment in food processing (private sector)

Subsector	1996		1997		1998		1999		2000	
	000LE	%	000LE	%	000LE	%	000LE	%	000LE	%
Processed Meat & Fish	4464	405	13404	25.2	428	0.93	22291	17.6	2918	2.9
Milk Processing	0		0		2038	6.7	11100	19.7	17402	10.2
Grain mills, flour prod. & livs. tock Fodder	0		0		5	0.03	135	0.39	23	0.07
Other food processing industries	16442	37.5	68934	8.1	9479	3.3	3807	7.6	80211	43.3
Beverages	4926				273	0.3	15335	11.2	8986	20.4
Total food processing	25832	92.2	82238	8	12223	2.2	52668	12.9	109540	20.6
Total manufacutring	242427	27.7	396606	10.7	247648	4.9	397323	12.9	405000	21.8
Share of the food % processing in Total manufuctring	10.7	56	20.8	79.8	4.9	45.8	13.3	100.8	27.0	94.4

Percentage to total investment.

Source: Compiled and Computed from: CAPMAS, Annual Bulletin of Industrial

Annex Table (3): Foreign investment in food processing (public sector)

Subsector	1996/97		1997/98		1998/99		1999/2000		2000/01			
Proceesed Meat & Fish	11675	40.5	3444	14.5	11632	23.9			3379	17.8	2186	11.6
Milk Processing												
Grain mills, flour prod. & livs. Fodder	11711	11.9	35581	39.5								
Other food processing industries			44210	12.7	9793	6.8	10918	21.2				
Beverages	420	18.2	13219	32.3					1987	71.4	2173	25.2
Total food processing	23806	12.7	96454	19.2	21425	10918	10918	7.3	5372	1.6	4359	2.2
Total manufacutring	2199033	44.7	2065089	31.2	1211214	818612	818612	26.4	3115404	43	1099532	38.5
Share of the food % processing in Total manuf.	1.1	28.9	4.7	61.8	1.8	1.3	1.3	27.1	0.2	4.2	0.4	5.9

Source: Compiled and Computed from: CAPMAS, Annual Bulletin of Industrial statistics.