

CHAPTER XIII

AGRICULTURE

1. MAIN DEVELOPMENTS

In 1975/76¹ the real growth of agricultural product and output continued at the relatively rapid rate which has characterized this sector since the beginning of the 70's, about 7.8 percent, and 6.5 percent, respectively (see Table XIII-1). Compared with last year, a certain slowdown in the real growth rate of the agricultural product was recorded, while total agricultural output increased at a similar rate to last year; in crop farming, where the product component of output is higher, there was a considerable slowdown in growth during 1975/76, while in livestock farming, where the product component is lower, the real growth rate rose. The decelerated growth of crop farming output (see Table XIII-6) reflects the standstill in the output of citrus, and the drought which hit agriculture for the second year running. This has both a direct effect, on the output of unirrigated crops, and an indirect one, on the increase of water input for irrigated crops (see Table XIII-8).

The relatively fast growth, in real terms, of agricultural output and produce in 1975/76 is mainly due to an accelerated growth in the output of livestock farming, which grew by about 10 percent (at constant producer prices), after an average annual increase of about 6.5 percent between 1969/70 and 1973/74, and by about 5 percent last year (see Table XIII-6). The substantial increase in the real supply of livestock products was not wholly absorbed this year by the domestic market, although there was a significant reduction of relative prices in this market due to subsidies. This was because of a lower population growth rate and a real drop in per capita disposable income, on the one hand, and completing the substitution for imported milk-powder, as well as the halt in substituting for frozen beef imports, on the other hand. These factors, together with the aforementioned growth of supply, caused an extraordinary increase in the export of livestock products (see Tables XIII-3 and XIII-4), and a parallel growth of stocks of some of these products.

The rapid real growth of product and output in recent years was due to two simultaneous processes:

a. A breakthrough in crop farming exports, and changes in supply factors (mainly greater efficiency in water use) permitted an expansion of output in this branch which exceeded the increase in domestic demand. This expansion was aided by a government policy of stimulus directed towards production for export (preferred financing terms; a

¹ In this chapter all the data refer to agricultural years, which begin in October and end in September.

TABLE XIII-1
CURRENT ACCOUNT OF AGRICULTURE, 1974/75 AND 1975/76

	Value at current prices	Annual increase or (-) decrease					
				Quantity		Price	
		Average 1969/70-	1974/75 ^a	1974/75 ^a	1975/76	1974/75 ^a	1975/76
		(IL million)		(percent)		(percent)	
Total output at producer prices	8,607.7	11,965.7	6.4	6.2	6.0	47.9	31.1
Less: agricultural intermediates	712.3	895.6	4.3	-1.5	-5.1	37.4	32.5
Agricultural output at producer prices	7,895.4	11,070.1	6.6	7.0	7.0	48.9	31.0
Less: subsidies on output	674.8	1,132.1	6.8	9.5	9.8	79.0	52.8
Agricultural product at market prices	7,220.6	9,938.0	6.7	6.9	6.7	46.5	28.9
Less: purchased input	3,702.9	5,090.1	5.7	2.8	5.8	67.4	30.0
Gross agricultural product at market prices	3,517.7	4,847.9	7.7	10.4	7.6	30.0	28.0
Less: depreciation	591.2	838.2	6.9	6.1	6.7	46.8	32.9
Net agricultural product at market prices	2,926.5	4,009.7	7.7	11.1	7.8	27.2	27.1
Plus: Subsidies on output	674.8	1,132.1	6.8	9.5	9.8	79.0	52.8
Net agricultural product at producer prices	3,601.3	5,141.8	7.6	10.9	8.2	34.3	32.0
Percent change in value							
Net agricultural product at producer prices	3,601.3	5,141.8	42.8				
Plus: drought and war compensation	21.2	50.5	138.2				
Total income from agriculture	3,622.5	5,192.3	43.3				
Less: interest and rent	350.0	475.0	35.7				
Less: wages of hired labor	710.0	1,001.5	41.1				
Income of farm owners from agriculture	2,562.5	3,715.8	45.0				

NOTE: The rates of change were calculated from unrounded figures.

^a Revised figures.

SOURCE: Central Bureau of Statistics.

marketing system that reduces the farmer's risk in producing for export by guaranteeing minimum prices) and a decent profitability in export for most exportable crops. As a result, in the period under discussion a real growth rate of more than 20 percent per year became possible in crop farming exports, excluding citrus.

b) In livestock farming there was a parallel process of import substitution, which permitted the rapid expansion of production supply beyond the growth rate of domestic demand. The possibilities for expanding exports profitable to the national economy in this branch are relatively limited, comprising a narrow range of specific products. On the other hand, the factors of production do not impose any strict limitation for a rapid expansion in this branch. At the beginning of the 70's there were drastic changes in world prices, including those of livestock products. At the price levels prevailing then, it seemed possible to substitute for the import of meat and milk powder. This process was encouraged by granting easy financing terms for investments needed in order to expand supply, by raising quotas or canceling them, and by intervention in the market process through governmental price fixing. Thus production quotas for dairy farming were canceled, while those for poultry were greatly increased. A process of rapid growth began in these branches, which was made possible, from the point of view of demand, by fixing the prices of the principal livestock products (both local and imported) and from the point of view of supply, by the flexibility which characterizes rapid expansion in these branches. Meanwhile the international prices of livestock products returned to their previous relative level, and the process of substituting for imports became unprofitable for the national economy. Nevertheless, the rapid expansion in the supply of livestock products continued. In 1974/1975 it was still possible to absorb most of the additional supply in the domestic market by reducing the relative price of these goods by means of government subsidies (see Table XIII-10). However, in 1975/76, because of the acceleration in the growth rate of supply, on the one hand, and the slowing down of population growth and the drop in real disposable per capita income, on the other hand, not all of the real increase of supply was absorbed in the local market, despite an additional lowering of relative prices through further subsidization. As a result, both exports and stocks of these goods grew.

The relatively rapid growth of crop farming is a positive process, mainly reflecting a fast increase in the agricultural export of this branch, which is profitable for the national economy, at reasonable dollar prices. The continuation of this process can be expected, for the capacity to expand supply has not yet been fully exhausted, and the transition process to more efficient utilization of water is still at its height. In addition, air transport prices of agricultural products were substantially reduced towards the end of 1976, and this will permit a future increase in the variety of crops intended for export and in the export volume of existing crops.

In contrast to this, the rapid growth in the real supply of livestock farming, seen from a national economic point of view, is an undesirable development; with the relative

TABLE XIII-2
TOTAL AGRICULTURAL OUTPUT BY ECONOMIC DESTINATION, 1974/75 AND 1975/76
(at current producer prices)

	Value		Annual increase or (-) decrease					
			Quantity		Price			
	1974/75 ^a	1975/76	Average 1969/70-	1974/75 ^a	1974/75 ^a	1975/76	1974/75 ^a	1975/76
	(IL million)		(percent)		(percent)			
Output marketed								
Direct domestic consumption	2,943.2	3,565.3	6.4	7.6	-5.8	47.0	28.5	
Industry	2,312.9	3,680.7	12.7	3.2	22.6	43.0	29.8	
Direct exports	2,094.8	3,121.6	8.6	11.0	9.6	60.4	35.9	
Total	7,350.9	10,367.6	6.9	7.0	7.6	49.2	31.1	
Output retained on farms								
Own consumption	286.3	375.3	2.6	2.5	2.3	45.6	28.2	
Capital goods	253.5	321.9	10.2	14.9	-2.4	43.3	30.1	
Agricultural raw materials	712.3	895.6	4.3	-1.5	-5.1	37.4	32.5	
Total	1,252.1	1,592.8	4.3	2.3	-2.9	40.4	31.0	
Crops destroyed	4.7	5.3	-	-4.7	-16.7	31.7	32.9	
Grand total	8,607.7	11,965.7	6.4	6.2	6.0	47.9	31.1	

^a Revised figures.

NOTE: Rates of change have been calculated from unrounded figures.

SOURCE: Central Bureau of Statistics.

decrease in the international prices of these products, the cost of import substitution became very high in terms of saved-dollar prices. Therefore the policy was altered, and the first signs of this change were already evident in 1974/75 and 1975/76, though they are not yet substantial: in 1974/75 the process of replacing imported foreign beef with poultry was halted, and in 1975/76 production quotas were restored in dairy farming. This trend also affected investments: in 1975/76 there was a decrease of investment in agricultural building intended mainly for cattle and poultry.

Inputs purchased from other sectors increased in 1975/76 at a rate similar to the annual average in the years 1969/70 – 1974/75, but more rapid than last year's rate (see Tables XIII-1 and XIII-8). The higher real growth rate compared to 1974/75 resulted mainly from an accelerated increase in the inputs of fodder, water, pesticides and veterinary preparations. The prices of purchased inputs increased in 1975/76 at a rate similar to producer price increases (Table XIII-1), so that in contrast to last year, when a significant worsening in the terms of trade of agriculture took place, this year the terms of trade remained stable.

As a result and due to the fact that the rapid increase in the rate of support for a subsidized output unit continued (see Tables XIII-1 and XIII-10), producer prices of net agricultural product increased at a faster rate than the price increase in the economy as a whole, and the value of the net product for the producer grew by about 43 percent.

The general income from agriculture even rose at a slightly higher rate because drought compensations increased, and in addition there was a moderate rise in interest payments, rent and wages of hired labor; thus in 1975/76 the income of farmers from agriculture grew by 45 percent (see Table XIII-1). This may partially explain the fact that in 1975/76 there was an increase in the number of employed in agriculture; which only affected the number of Israeli workers. It is possible that this increase reflects a transfer of Israeli workers to agriculture due to the economic slowdown in other sectors of the economy and the continuation of the rapid growth in agriculture, accompanied by a significant rise in income in this sector.

A similar development took place during the 1966-67 recession (see the chapter on Agriculture in the Bank of Israel Report for 1966).

2. OUTPUT DESTINATIONS

1975/76 was characterized by a decline in real output retained on farms, and the continuation of the relatively rapid real growth rate of marketed output (see Tables XIII-2 and XIII-3). The decrease of output retained on farms reflects not only the effect of drought on the output of intermediate goods, but also the decline in output of production assets in all agricultural branches, except for afforestation (Table XIII-5).

The continuation of the relatively rapid real growth in marketed output was made possible due to the accelerated increase in the output of livestock farming, which offset

the decelerated growth of marketed output of crop farming. In the latter, the slowdown was expressed in a drop in marketing to industry and in slower growth of exports. The drop in marketing to industry was concentrated mainly in three products: wheat — due to the effects of the drought; cotton — because of the directing of a greater part of output to exports (producer prices in the export of cotton are higher than in the local market); and vegetables for industry.

The slowdown in the marketing of crop farming for export reflects the standstill in citrus exports. Without citrus, the real growth of exports in crop farming (15 percent) was faster than last year, but lower than the average annual growth rate of exports in this branch during the period 1969/70–1974/75 (more than 20 percent). This should not be seen as a change to a slower trend: for water utilization is still in the process of being made more efficient, as has already been mentioned, and the agreement for lowering the cost of air transport of agricultural export cargoes should lead to further expansion in this area.

In addition, prices received by the agricultural exporter in the last two years were higher than those of the output marketed to the domestic market (for the domestic market producer, in the years 1974/75 and 1975/76, 30 and 37 percent respectively, and for export — 41 and 51 percent, respectively). It can be assumed that this development will also help to continue the trend of export expansion.

The slowdown in the export of crop farming, excluding citrus, was mainly concentrated in vegetable exports, which showed almost no growth at constant prices (Table XIII-4).

In the domestic market for direct consumption there was a real growth of about 10 percent, continuing the trend of last year (see Table XIII-3). However, this growth was not accompanied by a decrease of relative prices as it was last year. This can be partially explained by the growth components of supply, for 70 percent of the increase was contributed by the vegetable branch, and the rest by the output of olives.

The yield of vegetables for this destination (in tons) showed almost no growth, and all the real growth reflects drastic changes in the supply composition of the various vegetables. Apparently most of the increase in olives went into storage and only a small part to current consumption (due to alternation).²

In the marketed output of livestock farming there was, in 1975/76, as already mentioned above, a considerable acceleration of growth (Table XIII-3); most livestock products contributed to this increase (see Table XIII-6). The marketed output of this branch is mainly intended for the domestic market, either directly or after industrial processing. The domestic prices of these goods are under supervision and fixed by the government,

2 In fertile years, a growth of several hundred percent is recorded, and most of the crop goes into storage, which is used for current consumption in the following year, when crops are meager.

which also determines the extent of subsidy. In 1975/76 the subsidies for livestock products increased at a very considerable rate, after a still more rapid increase the previous year (see Table XIII-10).

TABLE XIII-3
**MARKETED AGRICULTURAL OUTPUT
 BY ECONOMIC DESTINATION, 1974/75 AND 1975/76**
 (at current producer prices)

	Annual increase or (-) decrease					
	Value		Quantity		Price	
	1974/75 ^a	1975/76	1974/75 ^a	1975/76	1975/76	1975/76
	(IL million)		(percent)			
Crops						
Direct domestic consumption	1,160.6	1,687.5	10.0	9.5	32.8	
Industry	1,007.5	1,309.3	-1.0	-2.0	32.5	
Direct export	2,019.8	2,928.4	13.1	5.9	37.0	
Total	4,187.9	5,925.2	8.1	5.0	34.8	
Livestock						
Direct domestic consumption and industry	3,088.0	4,249.3	6.4	8.5	26.8	
Direct export	75.0	193.1	-17.3	111.6	21.7	
Total marketed	3,163.0	4,442.4	5.5	11.0	26.6	
Total agricultural output marketed	7,350.9	10,367.6	7.0	7.6	31.1	

^a Revised figures.

NOTE: Rates of change have been calculated from unrounded figures.

SOURCE: Central Bureau of Statistics.

This brought about a considerable drop in the relative prices of livestock products in the domestic market (where prices of livestock output rose in 1975/76 by about 18 percent; producer prices by about 27 percent and the Consumer Price index by about 30 percent).

TABLE XIII-4
DIRECT AGRICULTURAL EXPORT,^a 1974/75 AND 1975/76
(at current producer prices)

	Annual increase or (-) decrease							
	Value		Quantity		Price			
	1974/75 ^b	1975/76	Average 1976/70- 1974/75 ^b	1974/75 ^b	1975/76	1974/75 ^b	1975/76	
	(IL million)			(percent)			(percent)	
Field crops and industry	350.5	669.2	17.1	-4.5	23.5	38.3	54.6	
Vegetables, potatoes, melons	137.2	234.3	21.9	22.7	1.0	43.5	69.2	
Noncitrus fruit	125.1	205.3	20.0	23.4	15.7	56.2	41.9	
Eggs	34.4	97.8	2.7	-10.8	142.4	67.0	17.4	
Meat	15.2	48.2	4.8	-8.1	134.9	37.0	34.7	
Fish	3.4	8.8	13.9	-51.9	91.8	36.0	34.4	
Flowers, seedlings, ornamental plants, vegetable seeds, etc.	128.4	181.4	35.2	52.8	6.8	32.6	32.2	
Livestock, miscellaneous	22.0	38.3	4.8	-33.3	50.2	34.2	16.0	
Total, excluding citrus	816.2	1,483.3	12.9	7.5	24.0	41.4	46.6	
Citrus	1,278.6	1,638.3	5.9	13.9	0.5	75.4	27.5	
Total, including citrus	2,094.8	3,121.6	8.6	11.0	9.6	60.4	35.9	

a Includes exports to administered areas.

b Revised figures.

NOTE: Rates of change have been calculated from unrounded figures.

SOURCE: Central Bureau of Statistics.

Despite the real drop in consumer prices for these products, the increase of supply was not completely absorbed in the domestic market in 1975/76 (see above). The marketing supply surplus was directed to exports and to stockpiling³ and thus direct exports of livestock products grew at an extraordinary rate (see Tables XIII-3 and XIII-4). As mentioned above, this type of export should not be encouraged because it is essentially unprofitable for the economy, and part of it (e.g. edible eggs) is sold at prices which do not even cover variable costs.

3. MAIN SUBBRANCHES

A. LIVESTOCK

1. Cattle

In 1975/76 the real growth rate of livestock output rose considerably, both in milk and beef production (Table XIII-6), in contrast to last year and to the average in the years 1969/70 to 1974/75. In previous years too the real growth rate of milk production was relatively high, and was wholly absorbed by the domestic market, since the additional supply was also used to substitute for the supplementary import of milk powder. In 1975/76 the process of import substitution ended, and part of the growing supply increased stocks. The background to this process is the changes that took place in the world prices of milk powder and butter at the beginning of the 70's, and in the situation of the domestic market at that time, when domestic supply lagged behind domestic demand.

In this situation the quotas which were in effect in this branch were lifted, and farmers were granted subsidized financing in order to encourage them to expand production. This process continued until 1975/76, although the prices of milk powder and butter in the world market had by then already decreased to a level which did not justify the continuation of expansion.

It should be emphasized that this is a subsidized branch, and that milk prices are under supervision. The decline in relative prices through larger milk subsidies made possible the further growth of supply during the past two years and its absorption in the domestic market. From a macroeconomic point of view this expansion is not worthwhile, because of the very high price of the saved-dollar involved in the substitution for imported milk powder (about 30-40 percent of domestic production).

In 1976 the production quota agreements which had been lifted several years before were reimposed. By the quota system a producer whose production exceeds the quota receives only the value obtained from the sale without the subsidy. These arrangements are fairly effective,⁴ since the raw milk has to undergo industrial processing, and it is

³ Stockpiling was mainly in butterfat, edible eggs, and frozen poultry.

⁴ It may be profitable for efficient dairy farmers to go a little above the quota, calculating that the market return will cover their variable costs.

TABLE XIII-5
OUTPUT OF AGRICULTURAL CAPITAL GOODS, 1974/75 AND 1975/76
(at producer prices)

	Annual increase or (-) decrease							
	Value		Quantity		Price			
	1974/75 ^a	1975/76	Average 1969/70-	1974/75 ^a	1974/75 ^a	1975/76	1974/75 ^a	1975/76
	(IL million)				(percent)		(percent)	
Orchards	67.2	88.7	23.1	16.0	-1.5	30.7	34.0	
Livestock	64.0	69.4	30.7	17.2	-9.7	34.2	20.3	
Land reclamation and conservation, drainage, natural pasture, etc.	76.6	78.7	-5.6	24.6	-22.7	57.3	32.9	
Afforestation	45.7	85.1	6.5	-2.7	40.7	57.0	32.3	
Total	253.5	321.9	10.2	14.9	-2.4	43.3	30.1	

^a Revised figures.

NOTE: Rates of change have been calculated from unrounded figures.

SOURCE: Central Bureau of Statistics.

difficult to evade organized marketing. The quota system has already begun to be felt in the first months of 1976/77: milk production grew at a much slower rate than in the same period in 1975/76.

The increase in meat output from the dairy farms reflects the slowdown in milk production: after a decline last year, supply grew this year by about 14.5 percent (Table XIII-6). The farmers, knowing that the branch was about to return to a quota system based on actual production, avoided removing from the dairy herd cows that were usually sent to the stockyards after several milking seasons. As a result, the meat supply from the dairy herd dropped in 1974/75, and the rapid growth in milk output in 1974/75 and 1975/76 was made possible. With the reintroduction of quotas into the branch more cows were removed from the dairy herd, and the supply of meat from this branch increased. A similar phenomenon occurred in 1975/76 (see the chapter on Agriculture in the Bank of Israel Report for 1966).

The decrease of investment in livestock inventories (see Table XIII-5) is also explained against this background: the increase in slaughtering of cows from the dairy herd caused a decline in the growth of stocks in this branch.

2. Poultry

After years of an average annual growth of about 4 percent in the supply of edible eggs, the growth rate more than doubled in 1975/76 (Table XIII-6). The domestic market could not absorb all the additional supply despite the drop in the relative prices of edible eggs (due to an increase of subsidies). The surplus was directed to export, at prices which did not even cover the variable costs, and to an increase of stocks in storage. Surplus production also continued in the first months of 1976/77.⁵

There is no full answer as to why there is no effective control on the extent of over-production in this branch: it operates under production quotas, and prices are supervised and fixed by the government. In this branch it is relatively easy to bypass the organized marketing, and the profitability of doing so is connected with the weight of subsidy in price. Producers of edible eggs above the quota are fined for the excess, in addition to forfeiting the subsidy. Nevertheless, there were significant excesses in 1975/76; the explanation may be that in certain regions, especially hilly areas, producers exceed the quota in the hope that the excesses will later be accepted as approved quotas. Due to the lack of alternative agricultural production activities in these areas, it may be worthwhile, in the long run, for producers to exceed quotas, even if this leads to a certain loss in the short run.

5 In the first quarter of 1976/77 organized marketing grew by 16 percent, while domestic consumption from this marketing dropped by 5 percent against the same quarter in 1975/76. The actual drop in domestic consumption may be smaller or may not have occurred at all. It is easy to bypass organized marketing of edible eggs and to market them directly to consumers, and in this way avoid paying fines for exceeding quotas.

TABLE
CURRENT AGRICULTURAL OUTPUT^a BY
(at current

	Value	
	1974/75 ^b	1975/76
	(IL million)	
Livestock		
Poultry		
Eggs	755.1	971.8
Meat	1,143.9	1,601.3
Miscellaneous	27.2	44.1
Total	1,926.2	2,617.2
Cattle		
Milk	846.2	1,253.7
Meat	329.4	460.7
Miscellaneous	30.0	46.8
Total	1,205.6	1,761.2
Other livestock		
Milk	91.6	123.3
Meat	185.6	228.9
Fish	148.9	220.8
Miscellaneous	26.4	31.9
Total other livestock	452.5	604.9
Total livestock	3,584.3	4,983.3
Crops		
Citrus	1,452.4	1,910.4
Other fruit	812.2	1,198.0
Vegetables	549.7	772.8
Melons	111.0	137.5
Potatoes	154.0	225.6
Cereals and legumes	414.9	458.0
Industrial crops	845.5	1,385.9
Fodder	182.1	239.0
Flowers, seedlings, ornamental plants	140.7	190.1
Other crops ^c	107.4	143.2
Total crops	4,769.9	6,660.5
Total current output	8,354.2	11,643.8

a Marketed output, on-farm consumption, intermediate goods (agricultural raw materials and crops destroyed.

b Revised figures.

c Includes straw, green manure, forest products, citrons and vegetable seeds.

TYPE OF FARMING, 1974/75 AND 1975/76
 producer prices)

Average 1969/70- 1974/75 ^b	Annual increase or (-) decrease			Price (percent) 1974/75 ^b 1975/76	
	Quantity		1975/76		
	1974/75 ^b	(percent)			
3.9	4.2	9.2	62.8	17.8	
12.3	7.3	9.0	48.7	28.4	
-0.2	-12.8	32.4	16.5	22.6	
8.9	5.8	9.4	53.4	24.2	
7.1	8.8	13.0	60.1	31.2	
1.0	-4.4	14.6	35.4	22.1	
2.4	-12.8	6.0	14.6	47.2	
4.7	3.6	13.2	51.2	29.0	
-0.1	3.9	3.8	41.6	29.7	
4.6	5.7	0.8	45.5	22.4	
1.1	-2.6	10.6	44.8	34.1	
5.9	3.4	3.0	37.7	17.0	
2.2	2.7	4.8	44.0	27.6	
6.4	4.7	10.1	51.4	26.3	
4.9	6.3	0.3	70.6	31.2	
9.0	8.0	12.3	43.6	31.3	
8.3	23.6	1.5	7.8	38.5	
2.0	6.2	7.1	54.0	15.6	
8.0	7.1	7.1	85.8	36.8	
10.1	-11.2	-17.9	52.4	34.5	
3.8	2.2	12.4	41.9	45.8	
-0.6	0.4	-8.7	32.2	43.7	
41.9	45.9	9.0	26.0	24.0	
12.3	0.7	4.0	40.6	28.3	
6.5	6.7	3.4	45.6	35.0	
6.4	6.0	6.3	48.0	31.1	

NOTE: Rates of change have been calculated from unrounded figures.

SOURCE: Central Bureau of Statistics.

TABLE XIII-7
CITRUS OUTPUT BY ECONOMIC DESTINATION, 1974/75 AND 1975/76
(at current producer prices)

	Value		Annual increase or (-) decrease				
	1974/75 ^a	1975/76	Quantity		Price		
			Average 1969/70- 1974/75 ^a	1974/75 ^a	1975/76	1974/75 ^a	
	(IL million)		(percent)			(percent)	
Direct export	1,278.5	1,638.3	5.9	13.9	0.5	75.4	27.5
Industry ^b	89.5	132.0	2.2	-39.5	(26.0)	42.1	(17.0)
Private consumption ^b	78.0	133.6	-0.1	8.6	(-32.8)	46.9	(155.0)
Total industry and private consumption ^b	167.5	265.6	-	-	-1.4	-	69.8
On-farm consumption	6.4	6.5	2.2	-	1.5	-	-
Crops destroyed	-	-	-	-	-	-	-
Total	1,452.4	1,910.4	4.9	6.3	0.3	70.6	31.2

a Revised figures.

b 1. The changes in quantity and price of output for private consumption and industry have little meaning in 1975/76, due to a change in the system of measurement. The Central Bureau of Statistics attributes equal producer prices to both designations. As a result, the quantity of private consumption tends downward while the price tends upward, and in the case of industry, these tendencies are reversed.

2. Private consumption includes private sales.

NOTE: Rates of change have been calculated from unrounded figures.

SOURCE: Central Bureau of Statistics.

The real growth rate in table fowl showed a renewed rise in 1975/76 after a certain slowdown in the previous year. As already mentioned, this branch has been expanding since the beginning of the 70's due to the rise in world meat prices. Increased production quotas were approved for the producers, and easy financing terms aided a rapid expansion of poultry production. The drop in world prices of frozen meat caused the extent of poultry production to be higher than need be relative to these prices. This was due to the enormous subsidy on consumer poultry prices and the retention of the high price of imported meat. Because of this the rapid growth in the supply of poultry was completely absorbed by the domestic market, satisfying the increase in demand and gradually replacing imported frozen meat. Last year there was a change in this trend, aided by a reduction in the price of imported frozen meat, and its consumption began to grow; in 1975/76 this process continued, but at the same time there was a renewal in the growth of the supply of various kinds of poultry. As a result there was a very rapid rise in poultry exports (mainly turkey meat), and a significant stockpiling of frozen poultry. The domestic market did indeed absorb a larger quantity of the supply, but only after a considerable increase of the massive support in this branch, which caused a relative drop in market prices.

B. CROPS

1. Citrus

In 1975/76 there was a standstill in the growth of real production of citrus, after considerable growth the year before. The 1974/75 increase is explained by a larger part of output having been directed to export, while the yield in tons actually decreased by 11 percent. In 1975/76 there were no significant changes in the allocation of citrus among the different markets, and the yield remained the same as the year before.

The area under citrus has remained stable since 1968/69, while the yield reached its height in 1973/74. In the period of 1969/70 to 1974/75 there was an average annual increase of about 5 percent at fixed consumer prices (Table XIII-7). This increase is partly owing to a growth in yield, as young citrus plantations reached full productivity, and partly due to changes in the allocation of citrus to different destinations (export, industry and to be sold as fresh fruit in the domestic market).

In recent years this branch has been undergoing a change in its internal composition; the share of grapefruit in planted areas grew while the planted areas of oranges declined, in accordance with anticipated changes in demand. Later, it became clear that there probably had been an overexpansion of grapefruit, and this process was stopped. It seems that this branch has reached a relative balance, both in size and composition, at least so long as there is no change in the existing pattern of demand for citrus abroad. Therefore non-growth in this branch can be expected in the coming year, and possibly even a reduction in its scope; orchards are now being uprooted even in some of the areas best suited to citrus, due to the urbanization process.

TABLE XIII-8
INPUT OF MATERIALS AND SERVICES IN AGRICULTURE^a, 1974/75 AND 1975/76

	Annual increase or (-) decrease							
	Value		Quantity		Price			
	1974/75 ^b	1975/76	Average 1969/70-	1974/75 ^b	1974/75 ^b	1975/76	1974/75 ^b	1975/76
	(IL million)		(percent)		(percent)			
Fodder	1,686.4	2,246.8	6.7	3.9	6.1	63.6	25.6	
Water	254.9	464.1	0.6	2.5	9.3	94.0	66.6	
Packing materials	376.7	452.9	11.4	14.0	3.6	70.9	16.1	
Fertilizers	139.2	210.2	3.9	9.0	13.6	73.8	33.0	
Transportation	277.7	357.9	8.5	4.9	3.1	49.3	25.0	
Spare parts, repairs, tools	213.3	240.2	7.6	19.1	-13.5	46.3	30.2	
Fuel, lubricants, electricity	190.6	274.8	1.6	4.3	5.1	117.6	37.1	
Pesticides and veterinary preparations	268.9	395.6	0.1	-16.4	18.8	73.0	23.8	
Insurance and government services	191.5	278.8	5.9	10.9	4.4	62.0	39.4	
Miscellaneous	103.7	168.8	10.8	7.0	6.1	21.1	53.5	
Total purchases from other sectors	3,702.9	5,090.1	5.7	2.8	5.8	67.4	30.0	
Wages of hired labor	710.0	1,001.5	—	—	—	—	—	
Interest and rent	350.0	475.0	—	—	—	—	—	
Intermediate goods	712.3	895.6	4.3	-1.5	-5.1	37.4	32.5	
Depreciation	591.2	838.2	6.9	6.1	6.7	46.8	32.9	
Grand total	6,066.4	8,300.4	—	—	—	—	—	

a Excluding labor and capital of farm owners.

b Revised figures.

SOURCE: Central Bureau of Statistics.

2. Other Fruit

In 1975/76 there was a certain rise in the real growth rate of this branch, both in contrast to last year and to the average annual increase in the years 1969/70 to 1974/75 (see Table XIII-6).

The main part of this rapid growth is explained by the enormous increase (more than 300 percent) in the olive crop. The yields of this branch are subject to drastic fluctuations owing to alternation. Excluding olives, growth was more moderate, about 5.5 percent.

About 83 percent of the output of this branch in 1975/76 (at current prices) went to the domestic market, and the rest to export. The home market receives mainly deciduous fruit, and export – mostly avocados.

A relatively rapid growth rate has characterized this branch in recent years (see Table XIII-6), not only because of the rapid growth of exports (whose weight is relatively small in the total output of this branch), but also because the output for the domestic market increased at fairly rapid rate. Since the area planted with other fruit showed a relatively low cumulative growth rate between 1967/68 and 1974/75 (only 6 percent), the rise in real output is mainly the result of a real increase of output per unit of planted area. This mainly reflects far-reaching changes in the internal composition of various fruit plantations: changes in the proportional weight of each fruit in the internal composition, in the geographical transfer of various orchards to much more suitable agroclimatological zones, and in agricultural alternatives, as well as trade with the administered areas. This process is the reverse of that which occurred in the 50's and 60's, which were characterized by hurried planting of various types of orchards all over the country. The more recent adaptation of the various types of fruit made possible a rapid increase in the real output of this branch in the past few years.

This branch is one of the most likely to be given a meaningful push towards increasing the export share of its output, due to the agreement concerning price reduction for air transport of agricultural export cargos, which was reached at the beginning of 1976/77. For years attempts have been made to export various types of fruit to European markets, but transportation was a limiting factor. The reduction of air transport costs, which is a necessary condition for the possible expansion of this branch, makes feasible the export of the early fruit of different varieties of deciduous fruits and table grapes, which ripen in Israel earlier than in Europe, and which can only be marketed for a short period (two to three weeks) at the beginning of the season. Regular sea transport reduces the time advantages before the ripening of early fruit in the countries of destination or in exporting countries competing in this market.

3. Vegetables, Potatoes and Melons

The average annual growth rate of this branch in the last few years was 7.8 percent (see Table XIII-6). The weight of exports in the branch (1975/76 at current prices)

TABLE XIII-9
IRRIGATED LAND AND WATER INPUT, 1953/54 TO 1975/76

Year	Irrigated land	Water input	Quantity of water per dunam	Index of quantity of water per dunam		Growth of irrigated land
	(thousands of dunams)	(millions of m ³)	(m ³)	Rainy years	Dry years	(percent)
1953/54	760	660	868	100	—	16.9
1954/55	890	760	854	—	100	17.1
1955/56	956	830	868	100	—	7.4
1956/57	1,100	830	755	87	—	15.1
1957/58	1,185	1,000	844	—	99	7.7
1958/59	1,240	990	798	—	93	4.6
1959/60	1,305	1,060	812	—	95	5.2
1960/61	1,360	1,025	754	87	—	4.2
1961/62	1,426	1,125	789	—	92	4.9
1962/63	1,472	1,140	774	—	91	3.2
1963/64	1,462	1,025	701	81	—	-0.7
1964/65	1,510	1,095	725	84	—	3.3
1965/66	1,542	1,265	820	—	96	2.1
1966/67	1,588	1,115	702	81	—	3.0
1967/68	1,616	1,265	783	—	92	1.8
1968/69	1,662	1,235	743	—	87	2.8
1969/70	1,720	1,340	779	—	91	3.5
1970/71	1,720	1,245	724	83	—	—
1971/72	1,765	1,275	722	83	—	2.6
1972/73	1,760	1,295	736	—	86	-0.3
1973/74	1,755	1,160	661	76	—	-0.3
1974/75	1,830	1,230	672	—	79	4.3
1975/76	1,870	1,344	719	—	84	2.2

SOURCE: Central Bureau of Statistics.

reached more than 20 percent. Far reaching changes are constantly taking place in the composition of these exports, changes which reflect constant adaptation of supply to the changing composition of demand in destination markets and in the supply of competing countries. The growth of exports of this branch should also experience a renewed upswing due to the air transport agreement mentioned above: it will be possible to grow and to export various vegetables that were not worth producing for export at the previous price of air transport. It can now be assumed that the quantity of vegetables grown for export will increase.⁶

4. Industrial Crops

This branch is composed of three main crops: cotton (74 percent of the output value of the branch), peanuts (12 percent) and sugar beets (about 8 percent), and several crops of minor importance (only about 6 percent of the output).

Expansion of this branch is limited mainly due to the water supply constraint; in the period 1969/70 to 1974/75 it grew at an average annual rate of only 4 percent (see Table XIII-6). In 1975/76 the branch developed at a much higher rate (see Table XIII-6), due to rapid growth in the three main crops mentioned above.

Cotton, which is the main crop of the branch, can be either marketed to the domestic market or exported. In recent years export prices which the farmer receives have been higher than those in the domestic market, while the extent of supplying to the domestic market is determined by formal agreements. In addition, there is a very strong tendency on the part of the farmers to increase the share of exports in marketing. In 1974/75 exports took about half of the value of fiber output, while in 1975/76 this figure increased to 60 percent. Because of the high profitability of the branch in recent years, additional expansion of cotton fields is to be expected.

5. Cereals and Legumes

This branch is composed mainly of wheat and barley and is subject to drastic fluctuations, since these are mostly unirrigated crops. In 1975/76 their real output (Table XIII-6) dropped at a considerable rate due to the drought.

⁶ The Central Bureau of Statistics has changed its system of estimating the output of the vegetable branch this year. In the past an average price was generally attributed to every type of vegetable, according to the average of the prices the farmer received in various destinations. Beginning this year all arrangements concerning the sale of each kind of vegetable are recorded according to the different prices the farmer received in each destination. This brought about drastic differences between the output growth due to rise in quantity, and output growth due to price rises. As a result of this change, comparisons of the differences in this branch between 1975/76 and previous years have only a limited meaning.

TABLE XIII-10
AGRICULTURAL SUBSIDIES, 1974/75 AND 1975/76

	Value		Annual change		
	1974/75 ^a	1975/76	Value	Quantity	Price ^b
	(IL million)		(percent)		
Eggs	144.1	240.2	66.7	9.8	51.8
Poultry	176.4	296.3	68.0	7.6	56.1
Milk	283.3	498.1	75.8	12.9	55.7
Beef	9.9	15.6	57.6	14.8	37.3
Mutton	1.5	2.5	66.7	2.8	62.2
Fish	2.2	1.0	-54.5	8.6	-58.1
Vegetables, potatoes and melons	18.2	24.8	36.3	4.0	31.1
Other fruits	17.0	23.6	38.8	13.0	22.8
Tobacco	—	—	—	—	—
Peanuts	0.1	—	—	—	—
Domestic wheat	22.1	30.0	35.7	-10.7	52.0
Total output subsidies	674.8	1,132.1	67.8	9.8	52.8
Fodder	209.8	246.6	17.5	6.1	10.7
Water	71.2	104.0	46.1	9.3	33.7
Total input subsidies	281.0	350.6	24.8	6.9	16.7
Drought compensation	21.2	50.5	—	—	—
Total subsidies	977.0	1,533.2	56.9	—	—

a Revised figures.

b The change in prices represents the change in subsidy rate per output unit.

SOURCE: Ministry of Agriculture.

6. Raw Fodder

The output of this branch consists entirely of intermediate inputs for livestock farming, mainly cattle. In recent years there has been a clear tendency to reduce output, though only at a moderate rate (Table XIII-6). In 1975/76 there was a sharp drop, in real terms, partly due to the continuation of this trend, but mainly because of the dependence upon the amount of rainfall: the drought which continued throughout this year caused a drop in output of the branch greater than the long-term downward trend. This long-term trend is apparently a partial reflection of the transition which has been going on in recent years in dairy farming, from the *moshav* sector to the *kibbutz* sector. In the *kibbutz* sector the feeding habits of dairy cattle differ slightly from those in the *moshav* sector, and the concentrated food components (purchased fodder) being higher than the unprocessed, which is mainly raw fodder. There has also been an increase in the past few years in the tendency to use various types of food remainders as a substitute for raw fodder, whose alternative price — in terms of the water needed for its growth — is very high.

4. INPUTS

In 1975/76 inputs purchased from other sectors grew, in fixed prices, at a rate similar to the average growth in the period 1969/70 to 1974/75 (Table XIII-8), but more than double the rate of 1974/75. This acceleration can be explained mainly by the real increase of the following inputs: concentrated fodder, water, pesticides and veterinary preparations. The acceleration in the increase of purchased fodder inputs is a result of the drought continuing from last year, and of the considerable acceleration in livestock output for which this input is intended. The rapid growth of water input (about 4 times last year's rate) is mostly due to the drought and partly to an increase of irrigated areas (2 percent, see Table XIII-9). In contrast, in 1975/76 there was a slowdown in inputs of transport and packing material, probably connected with the standstill in citrus exports (for which these inputs are high) and with the fall in crop output resulting from the drought (where transport input is high).

The prices of inputs purchased from other sectors grew in 1975/76 at a much slower rate than last year, and in contrast to last year, at a slightly slower rate than output prices; as a result, the terms of trade of agriculture did not worsen as they did last year. The moderate price increases for purchased fodder, packing materials, transport, pesticides and veterinary preparations, all contributed to the moderate increase of input prices, although the relatively rapid increase in the price of water for the farmer continued. However, even its present price does not yet reflect the real cost of water production. This is reflected in the great increase of subsidy for this input which exceeded its real growth (see Table XIII-10).

The labor input, as it is measured in terms of man-hours in the manpower surveys, grew in 1975/76 by more than one percent against the backdrop of a long-term downward trend in agriculture over a considerable number of years. The number of workers employed in agriculture in 1975/76 also reflects this trend. When the workers are classified as either Israelis or workers from the administered areas, it can be seen that the number of the latter has continued to drop (the rate was moderate in 1975/76, but quite sharp in 1974/75), while growth in the number of workers was concentrated entirely among Israelis.⁶

⁷ It is impossible to know if there is any significance in the deviation from the labor input trend in agriculture: manpower surveys are estimates which are subject to relatively large sampling errors at the sector level. It is possible that since the entire deviation from the downward trend is due to Israeli workers, this implies that these workers are returning to agriculture due to the slowdown in the economic activity of the other sectors. A similar process took place at the beginning of the recession during the 60's.