

**CHAPTER X**  
**AGRICULTURE**

1. MAIN DEVELOPMENTS

REAL GROSS agricultural product was down 3.6 percent in 1972/73, after advancing 13 percent in the previous year, while agricultural output held steady after a sizable gain in 1971/72. The product decline was mainly due to unusually adverse climatic conditions—winter drought and frost—which affected all crops. This also explains the downturn in the product as contrasted with the stabilization of output, for value added is higher in crop than in livestock farming.

**Table X-1**  
**CURRENT ACCOUNT OF AGRICULTURE, 1971/72<sup>a</sup> AND 1972/73**  
(IL million, at current prices)

	Value		Percent increase or decrease (-) in 1972/73		
	1971/72	1972/73	Value	Quantity	Price
1. Total output at producer prices	3,113.5	3,766.9	21.0	-0.3	21.3
2. Less: Agricultural intermediates	248.3	333.7	34.4	-0.7	35.3
3. Agricultural output at producer prices	2,865.2	3,433.3	19.8	-0.2	20.1
4. Less: Subsidies on output <sup>b</sup>	146.4	233.4	59.4	5.1	51.6
5. Agricultural output at market prices	2,718.8	2,199.9	17.7	-0.5	18.3
6. Less: Purchased input	1,196.8	1,438.2	20.2	6.1	13.2
7. Gross agricultural product at market prices	1,522.0	1,761.7	15.8	-5.7	22.8
8. Less: Depreciation	221.7	274.2	23.7	5.1	17.7
9. Net agricultural product at market prices	1,300.3	1,487.5	14.4	-7.5	23.7
10. Plus: Subsidies on output <sup>b</sup>	146.4	233.4	59.4	5.1	51.6
11. Net agricultural product at producer prices	1,446.7	1,720.9	18.9	-6.3	26.9
12. Plus: Drought compensation, etc.	15.0	65.0	333.3		
13. Total income from agriculture	1,461.7	1,785.9	21.7		
14. Less: Wages of hired labor	346.3	400.8	15.7		
15. Less: Interest and rent	110.0	125.0	13.6		
16. Income of farm owners from agriculture	1,015.4	1,260.1	25.3		

NOTE: Shortly before the Hebrew edition of the *Annual Report* went to press the data in Table X-11 were revised, but lack of time prevented the revision of the corresponding data in Tables X-1, X-3, and X-5. However, the revisions do not affect the analysis or the conclusions.

<sup>a</sup> Revised figures.

<sup>b</sup> The change in quantity reflects the real change in subsidized output; the change in price reflects the change in the average subsidy rate per unit of subsidized output.

After a notable increase in 1971/72, livestock output expanded very little in the year reviewed. This reflected a change of trend in the subbranches. Whereas poultry-meat accounted for most of the output gain in the two preceding years, in 1972/73 milk production was the main source of growth while poultry-meat production hardly increased. This change was economically quite significant, since the cost of the dollar saved in the production of tradable dairy products (in terms of the cost of inputs) is relatively high. Poultry-meat production, on the other hand, is advantageous to the economy, since pricewise it is a good substitute for imported frozen meat. It is important to note that the expansion of livestock output largely hinges on the Government's policy, since the latter controls production through its subsidy and quota program; the development of this branch in the year reviewed can, in fact, be largely attributed to the steps taken by the Government.

Producer prices went up faster than the consumer price index. This is explained by the rise in domestic market prices in response to reduced supplies, the higher prices commanded abroad in the year reviewed, and the cost-induced increases in controlled prices. Despite their strong advance, the prices received by farmers still did not fully reflect the rise in world prices of farm tradables or their real cost to the economy.

The increase in both the producer and consumer prices of those products which are supplemented by imports or exported points up the isolation, as far as prices are concerned, of the local agricultural economy from world market developments. In the past two years the world prices of feed, wheat, cotton and sugar went up much faster than those paid by Israeli farmers for these commodities and exceeded local production costs. On the other hand, the prices of dairy tradables in Israel are way above the international market level, but this did not stop the Government from awarding dairymen a 20 percent price hike. As regards sugar, it costs less to produce it domestically than to buy it abroad; nevertheless, the price of sugar beet was not upped by more than the percentage rise in production costs, with the result that the irrigated sugar beet area was cut back. Purchased inputs were up 6 percent in real terms in the year reviewed, compared with 3 percent in 1971/72, with the acceleration being mainly due to larger outlays on feed and water because of the drought. In 1971/72 there had been only a mild rise in purchased inputs, owing to the substitution of crop residues for purchased feed and a reduced water consumption because of ample rainfall. In 1972/73 input prices trailed behind output prices. A large percentage of the inputs were purchased in the first half of the agricultural year, i.e. in the last quarter of 1972 and the first quarter of 1973, and consequently were affected relatively less by the rapid upswing in prices.

The labor input—as measured by manpower surveys and by family surveys of the administered areas—was down 5 percent in 1972/73, after a 9 percent rise the year before. This was mainly due to a drastic change in nonhired farm

labor. In 1971/72 manpower survey data showed an inordinately and inexplicably high rate of increase in the input of such labor. In this connection it should be noted that manpower survey data for a given point in time are likely to have a large sampling error and hence should be accepted with caution. The average increase for the two-year period 1971/72 and 1972/73 was actually in line with the long-run trend.

Farm owners' income from agriculture rose 25 percent in 1972/73, surpassing the previous year's 18 percent advance. This constitutes a real increase despite the 5 percent drop in net product at constant producer prices. The sizable nominal income gain stemmed from three main sources: (a) the higher prices fetched in all markets as a result of short supply and mounting prices abroad; (b) the relatively mild rise in input prices; and (c) a much heavier subsidization of production—subsidy payments per unit of subsidized output were up 51.6 percent, and there was also a big rise in drought and frost compensation payments (see Table X-10).

Two main factors explain the heavier subsidization of output: first, the Government's policy of compensating farmers for rising production costs (including some of the additional costs incurred in the previous year); and second, its desire to keep consumer prices down. The increase in compensation payments for damage from natural causes was due, of course, to the drought and frost. It is important to note in this connection that compensating farmers

Table X-2

INDICATORS OF AGRICULTURAL DEVELOPMENT, 1962/63 TO 1972/73

(percent annual real change)

	Average		1970/71	1971/72	1972/73
	1962/63- 1971/72	1967/68- 1971/72			
Total output	5.9	5.5	9.6	8.6	-0.3
Purchased input	4.9	7.0	10.4	3.3	6.1
Gross agricultural product	6.5	6.2	10.1	12.9	-3.6
Total investment in agriculture	2.7	10.8	1.8	13.1	-10.7
Gross capital stock <sup>a</sup>	4.1	4.4	4.0	3.8	3.3
Number of employed <sup>b</sup>	-1.9	-0.1	2.1	6.9	-5.3

<sup>a</sup> At the end of the calendar year.

<sup>b</sup> Including workers from the administered areas. The annual change in the average number of workers during the decade 1962/63-1971/72 and that during the five-year period 1967/68-1971/72 were calculated according to calendar-year data for 1963-72 and 1968-73 respectively. The changes in 1969/70-1971/72 were calculated according to data for agricultural years. All estimates were calculated according to the old sectoral classification of the Central Bureau of Statistics.

SOURCE: Based on Central Bureau of Statistics data, except for the changes in the capital stock, which were calculated according to estimates of A. L. Gaathon (of the Bank of Israel) and CBS data.

for drought and frost damage results in distortions in resource allocation, since they continue to grow certain crops in areas vulnerable to such factors as long as the compensation payments guarantee them at least some income and they themselves run little risk of incurring a loss.

## 2. OUTPUT DESTINATIONS

Marketed output at current producer prices rose in 1972/73 by 18.5 per cent, about the same rate as in the previous year (see Table X-3). In real terms, the level edged down one percent because of the frost and drought. The decline occurred entirely in exports, whereas sales for direct local consumption and to industry inched up by 0.8 and 1.5 percent, respectively.<sup>1</sup>

**Table X-3**  
**TOTAL AGRICULTURAL OUTPUT, BY ECONOMIC DESTINATION,**  
**1971/72 AND 1972/73**

(IL million, at current prices)

	Value		Percent increase or decrease (-) in 1972/73 <sup>b</sup>		
	1971/72 <sup>a</sup>	1972/73	Value	Quantity	Price
<b>Output marketed</b>					
Direct domestic consumption	1,095.4	1,333.4	21.7	0.8	20.7
Industry	764.3	964.2	26.2	1.5	24.3
Direct exports	778.5	830.0	6.6	-8.2	16.2
Total	2,638.2	3,127.5	18.5	-1.7	20.6
<b>Output retained on farms</b>					
Own consumption	114.0	140.0	21.9	0.7	21.1
Capital goods	103.2	117.9	14.3	0.5	13.7
Agricultural raw materials	248.3	333.7	34.4	-0.7	35.3
Total	465.5	591.6	26.9	-0.1	26.8
<b>Value of crops destroyed</b>	9.9	47.8	384.3	369.6	3.1
Grand total	3,113.5	3,766.9	21.0	-0.3	21.3

<sup>a</sup> Revised figures.

<sup>b</sup> Rates of change have been calculated from unrounded figures.

SOURCE: Central Bureau of Statistics.

<sup>1</sup> Most of the livestock sold to industry ends up in the local market in the form of products resembling those marketed for direct domestic consumption, so that the differentiation between these two destinations is sometimes purely statistical. It would therefore be more meaningful to make the distinction between domestic marketing (either directly or after industrial processing) and export. As regards crops, the distinction between direct sales to the domestic market and those to industry is more meaningful, since processing transforms crops more than it does livestock, so that fresh and processed products are not completely substitutable.

## (a) *Crops*

The marketed output of crops expanded by 14.6 percent at current producer prices, with prices rising 21 percent and quantities contracting 8.1 percent. The latter reflected a 9.3 percent drop in exports and more moderate declines of 1 and 3.5 percent in sales for direct local consumption and to industry respectively.

### 1. *Exports*

The steep real decline in exports was largely due to the frost and drought. The winter drought hit all crops and left smaller quantities available for overseas marketing, while the frost affected primarily the export crops—citrus, avocados, bananas, flowers, and winter vegetables. The main cause of the decrease in citrus was frost damage to the Shamuti orange crop, which accounts for more than 40 percent of total citrus exports.

**Table X-3A**  
**MARKETED OUTPUT OF CROPS, BY ECONOMIC DESTINATION,**  
**1971/72 AND 1972/73**

(IL million, at current producer prices)

	Value		Percent increase or decrease (-) in 1972/73		
	1971/72	1972/73	Value	Quantity	Price
Direct domestic consumption	475.7	578.3	21.6	-1.0	22.8
Industry	348.0	477.5	24.4	-3.5	28.8
Direct exports	762.3	761.2	4.8	-9.3	15.6
<b>Total</b>	<b>1,586.0</b>	<b>1,817.0</b>	<b>14.6</b>	<b>-8.1</b>	<b>24.7</b>

**Table X-3B**  
**MARKETED OUTPUT OF LIVESTOCK PRODUCTS, BY ECONOMIC DESTINATION,**  
**1971/72 AND 1972/73**

(IL million, at current producer prices)

	Value		Percent increase or decrease (-) in 1972/73		
	1971/72	1972/73	Value	Quantity	Price
Domestic	1,000.1	1,241.7	24.2	3.8	19.6
Direct exports	52.2	68.7	31.7	7.1	23.0
<b>Total</b>	<b>1,052.3</b>	<b>1,310.4</b>	<b>24.5</b>	<b>4.0</b>	<b>19.8</b>

Noncitrus export volume was down 9.2 percent (see Table X-4), owing to a decline in bananas, a more sluggish increase in cut flowers and avocados because of frost, and a drop in industrial crops and in cereals and pulses sold to the administered areas because of drought.

Cotton was responsible for the adverse swing in industrial crops, for several reasons: lower production, the arrangement ensuring the supply of fiber to the local textile industry, and the ban on cottonseed exports for fear of a world oilseed shortage. Overseas sales of vegetables, potatoes, and melons far surpassed the previous year's volume, moving up 18.6 percent in physical terms as against 10.6 percent 1971/72. Since international prices went up faster than those fetched in the home market, growers marketed a larger share of their output abroad. Potatoes were the pacesetter here, soaring 122 percent, with domestic sales holding steady.

**Table X-4**  
**DIRECT AGRICULTURAL EXPORTS,<sup>a</sup> 1971/72 AND 1972/73**  
(IL million, at current prices)

	Value		Percent increase or decrease (-) in 1972/73 <sup>c</sup>		
	1971/72 <sup>b</sup>	1972/73	Value	Quantity	Price
Field crops	89.5	83.3	-6.9	-37.9	49.9
Vegetables, potatoes, melons	50.6	78.3	54.7	18.6	30.5
Noncitrus fruit	29.1	31.4	7.8	-19.4	33.8
Eggs	20.1	17.5	-13.2	-39.1	42.6
Meat	19.5	34.7	77.8	57.8	12.6
Fish	5.6	6.6	19.0	-1.1	20.3
Flowers, seedlings, ornamental plants, and vegetable seeds	43.1	47.1	9.2	4.6	4.3
Misc. livestock and livestock products	7.0	10.0	43.0	5.3	35.8
Total, excl. citrus	<b>264.5</b>	<b>308.8</b>	<b>16.8</b>	<b>-9.2</b>	<b>28.7</b>
Citrus	514.0	521.1	1.4	-7.7	9.9
Total, incl. citrus	<b>778.5</b>	<b>830.0</b>	<b>6.6</b>	<b>-8.2</b>	<b>16.2</b>

<sup>a</sup> Including exports to the administered areas.

<sup>b</sup> Revised figures.

<sup>c</sup> Rates of change have been calculated from unrounded figures.

SOURCE: Central Bureau of Statistics.

The prices received by exporters were up 16 percent. Relative to the prices obtained in the other market destinations, this is a rather modest rise, given the decline of the IL against European currencies, a mild 3.3 percent increase in the export dollar exchange rate, and accelerating inflation in Europe. The sluggishness of the rise is explained by the moderate 10 percent advance in citrus prices and the rather low 5 percent increase in the prices obtained for flowers (because of their frost-impaired quality).

Other agricultural exports fetched much higher prices in the year reviewed, bringing up the average for all noncitrus exports to 30 percent. In industrial crops the advance was due to the world scarcity of both natural and synthetic fibers and the shortage of oilseeds, including groundnuts. The higher prices commanded by vegetables, potatoes, and melons cannot be ascribed to any special economic developments, but were due to the unfavorable climatic conditions suffered by Israel's competitors.

The rise in noncitrus fruit prices reflected an increase in avocados—due to brisker demand and a stable supply (Israel is the leading exporter of this fruit)—and a decline in the share of bananas.

These changes boosted the profitability of noncitrus farm exports, but apparently those crops which are most affected by production constraints—industrial crops (water limitations) and vegetables (a scarcity of labor)—benefited most from the strong advance of prices.

## 2. *Domestic consumption*

The output value of crops sold in the home market went up 21 percent at current producer prices, following a 21.6 percent rise in prices and a 1 percent decline in quantities.

The prices received by growers rose faster than the average for all retail food prices. The prices for fruit and vegetables, which account for the bulk of the produce marketed locally, are determined by the free play of market forces;<sup>2</sup> here the retail prices outstripped producer prices, widening the spread between the two.

Noncitrus fruit accounted for most of the rise in producer prices. This is explained by the reduction of fruit supplies from Israel and the sharp contraction of fruit and vegetable supplies from Judea and Samaria. In contrast to previous years, these areas had no surplus fruit or vegetables available for marketing in Israel in 1972/73. They were more affected by the drought than Israeli farmers, since agriculture in the administered areas is relatively less developed and more dependent on the weather.

Producer prices of vegetables also rose more rapidly than the consumer price index despite increased quantities. This can apparently be attributed to some substitution of vegetables for fruit and the shortage of vegetables in Judea and Samaria, which made it necessary to buy from Israel.

## 3. *Industry*

The value of crops sold to industry was up 24 percent at current producer prices, with prices advancing 29 percent and volume falling off. The latter

<sup>2</sup> Vegetables and fruit are not marketed under conditions of perfect competition, for producers are organized in cartels (production and marketing boards). In 1972/73 prices were good, so that there was no need to withdraw surplus produce from the market.

was caused by a sharp decline in the quantities of cereals and pulses available for industry (owing to the drought) and a 27 percent fall in sales of non-citrus fruit, mainly olives (because of the yield cycle of this crop—i.e. a good year generally follows a poor one). Industry absorbs the surplus olives, with the marketing cartel practicing a policy of price discrimination as between the various destinations. Since there were no surplus olives this year, no sales were made to industry.

Sales of industrial crops to industry expanded, an increase in cotton more than offsetting a decline in other crops, particularly sugar beet. Output of the latter fell off mainly because unirrigated acreage was cut back (the drought had little effect on this crop). The volume of vegetables and potatoes marketed to this destination also rose as a result of the contracts signed with canneries at the beginning of the season and the consequent planting of additional acreage. Vegetables grown for processing were affected only slightly by the drought and not at all by the frost. The higher prices obtained by farmers in this market are explained primarily by the 53 percent increase in the prices of cotton (fiber and seeds). But the producer prices of other industrial crops also outstripped the rise in industrial output prices. In part this can be put down to the agreements reached, with Government intervention, between cotton and wheat growers and industry; however, as stated previously, the increases did not match those in the world market.

The higher prices paid by industry for vegetables can be ascribed to the need to compete for supplies with the domestic fresh produce market. The prices paid for citrus were up only 5 percent, as there are no other competitors for the poorer-grade fruit, and sales to this destination are designed to prop up the price of fruit marketed for direct domestic consumption.

#### (b) *Livestock output destinations*

Sales of livestock products to the local market were up 24 percent, with prices rising 20 percent and quantities by 3.8 percent, as against 4.7 percent in 1971/72. The product mix of marketed output underwent a change in the year reviewed: whereas in 1971/72 poultry-meat and milk posted real advances of 14 and 5 percent respectively while sales of eggs and beef fell off, in the year surveyed milk sales rose by an appreciable 10 percent, eggs and beef moved up 5 percent, and poultry-meat production slowed considerably—sales for local consumption held steady, with all additional supplies being diverted to the export market.

Producer prices of those livestock products which account for the bulk of domestic sales—eggs, milk, beef, and poultry-meat—rose by about 20 percent. The consumer prices of eggs and milk, which are controlled, hardly changed in 1972/73; the higher prices received by farmers was due to heavier Government subsidization. The growth in egg and milk supplies matched the in-

cremental demand, so that there was no need to import more milk powder to make up the shortfall in local production; eggs too were in good supply throughout most of the year. This market equilibrium for milk and eggs, which was attained in spite of the much larger quantities sold in the year reviewed, can be attributed to the fact that consumer prices were kept at the previous year's level. Given the general price rise in the economy, especially for meat, this implies a decline in the relative price of milk and eggs. In 1971/72 per capita egg consumption fell 6 percent despite a drop in its relative price, but that year poultry-meat prices advanced only moderately and apparently substituted to some extent for eggs.

Farmers obtained a 20 percent higher price for meat, with both poultry and beef moving up at similar rates (the subsidy on poultry production was cut). While the price of locally produced meat is determined by the market, there is some Government intervention in its pricing, since the Government imports all frozen meat, sets its price, and supplies all demand at this price; consequently, the price of local meat is established in relation to that of imported frozen meat. In addition, there is a guaranteed minimum price.

In 1970/71 and 1971/72 retail frozen meat prices were raised, while poultry-meat supplies were expanded by 21 and 14 percent respectively. The price increases allowed the much larger supply of poultry-meat to be absorbed with only a mild drop in price (compared with the consumer food price index). Imported meat prices were upped again in 1972/73, but in contrast to the previous two years, the supply of local meat hardly increased.<sup>3</sup> As a result of this, and also because of the more buoyant demand for meat (the income elasticity of which is high), the market prices of local meat rose 20 percent and real consumption of frozen meat by twice the previous year's rate—12 as against 6 percent.

The cost of frozen meat to the consumer went up by less than the rise in its international market price since the Government subsidized it more heavily; at the same time, this kept the price of locally produced meat from rising still further.

Exports of livestock and livestock products were up 7 percent in quantitative terms, after a 34 percent gain in 1971/72. Sales of table eggs abroad are made at a loss to both the economy and the farmer; in the main they consist of eggs produced in excess of the quotas. In 1972/73 exports of this item shrank to a quarter of the previous year's figure, and even this small volume was the result not of deviations from production targets but of the fulfillment of contracts entered into at a time when there was surplus production. Excluding eggs, exports of livestock products soared in 1972/73 by 34 percent, as against 26 percent the year before. Most of the increment consisted of poultry products (goose livers), which accounted for about half of total live-

<sup>3</sup> The reasons for the slowdown in poultry-meat production are given in section 3(a).

**Table X-5**  
**OUTPUT OF AGRICULTURAL CAPITAL GOODS, 1971/72 AND 1972/73**  
(IL million, at current prices)

	Value		Percent increase or decrease (-) in 1972/73 <sup>b</sup>		
	1971/72 <sup>a</sup>	1972/73	Value	Quantity	Price
Orchards	25.8	31.9	23.6	14.5	7.9
Livestock	37.1	38.6	4.1	-13.4	20.3
Land reclamation and conservation, drainage, natural pasture, etc.	21.8	25.2	15.3	2.2	12.8
Afforestation	18.5	22.3	20.6	6.8	12.9
<b>Total</b>	<b>103.2</b>	<b>117.9</b>	<b>14.3</b>	<b>0.5</b>	<b>12.8</b>

<sup>a</sup> Revised figures.

<sup>b</sup> Rates of change have been calculated from unrounded figures.

SOURCE: Central Bureau of Statistics.

stock production and exports. Overseas poultry-meat sales were more than half as large as in the previous year, while those of milk cows and poultry breeding materials (hatching eggs and chicks) were also much higher. The notable increase in the latter items is significant, since the know-how and reputation element in such products is a very weighty factor, with the sensitivity of demand to price changes being small in comparison with that of other export commodities.

### 3. OUTPUT BY TYPE OF FARMING

#### (a) *Livestock*

The real output of livestock products expanded by 3 percent in 1972/73, compared with 5.1 percent the year before (see Table X-6). This was the second consecutive year of faltering growth.

In 1970/71 and 1971/72 table fowl production was the source of the notable real output gain. It was stepped up in response to the Government's policy of enlarging poultry-meat production quotas with the object of substituting this item for imported frozen meat. The output of poultry-meat slowed down from 21 and 14 percent in 1970/71 and 1971/72 respectively to only 3.3 percent in the year reviewed. Milk production, on the other hand, went up 10 percent, partly offsetting the deceleration in poultry-meat.

These trends in branches where production is largely determined by Government policy is a little surprising considering developments abroad. The world market price of frozen meat continued to move upward in 1972/73, while

those of milk powder and butter retreated. Furthermore, the cost of the dollar saved in milk production in Israel ranged from IL 8 to IL 12; however, it should not be inferred from this that Israel ought to discontinue the production of milk. Fluid milk for drinking and cultured milk products are not tradables, and therefore demand has to be met from local production; however, hard cheeses and butter are tradable, and these could be imported and more milk powder used in their production.

As already mentioned, the prices received by livestock growers went up 20 percent, following the raising of the producer prices of Government-controlled items—milk and eggs—and the increase in the market price of poultry-meat and beef. Output prices outpaced input prices, with a consequent rise in profitability. In the two preceding years the changes in the terms of trade (i.e. in the output-input price ratio) depressed profitability. The improvement began to be felt by poultrymen only in the second quarter of the agricultural year; this was too late to affect production in 1972/73, but it will probably leave its mark in the coming year.

### 1. *Cattle farming*

The real output of cattle farming expanded by 8 percent in 1972/73, reflecting a gain of 10 percent in milk production and of 5 percent in beef output.

In the case of milk the advance was due to the accelerated expansion of dairy herds in the kibbutzim, which more than offset the decline in moshavim.<sup>4</sup> The expansion in the kibbutzim is explained by the fact that the Milk Production and Marketing Board suspended production quotas for a three-year period and allowed dairymen to step up production as much as they wished (when the quotas will be reinstated, they will be fixed according to the volume of output at the time); it was not in response to rising profitability in 1972/73 (see the discussion of this in Chapter X in the Bank of Israel *Annual Report* for 1972). The expansion of herds in the kibbutz sector is indicative of the comparatively high profitability of dairy farming in these settlements because of economies of scale.

Some of the moshavim are liquidating their herds because of the dent in profitability in 1970/71, while those that are carrying on with dairying are enlarging their herds, thereby increasing the efficiency and hence the profitability of this branch.

The growth of meat production is explained by the greater expansion of herds in 1971/72 than in the year reviewed, which resulted in a larger number of calves being available for slaughter.

<sup>4</sup> Kibbutzim are communal or collective villages, and the moshav is a cooperative smallholders village.

## 2. Poultry

In poultry farming real output edged up 2 percent in 1972/73, compared with 8 percent the year before. This mild gain reflected a 3 percent rise in meat production and zero growth in egg output. Producer prices were up 21.3 percent, exceeding the increase in feed prices, the poultrymen's main

**Table X-6**  
**CURRENT AGRICULTURAL OUTPUT,<sup>a</sup> BY TYPE OF FARMING,**  
**1971/72 AND 1972/73**

(IL million, at current producer prices)

	Value		Percent increase or decrease (-) in 1972/73 <sup>c</sup>		
	1971/72 <sup>b</sup>	1972/73	Value	Quantity	Price
<b>Livestock</b>					
Poultry	630.3	777.9	23.4	1.8	21.3
Eggs	239.2	290.4	21.4	-4.8	22.0
Meat	382.4	427.9	23.7	3.3	20.0
Miscellaneous	8.6	14.6	69.7	-0.1	71.3
Cattle	389.4	501.9	22.9	8.0	19.4
Milk	233.4	307.4	31.7	10.1	19.6
Meat	140.5	180.3	28.3	4.8	22.4
Miscellaneous	15.5	23.2	49.9	4.3	43.8
Other livestock	190.1	222.4	17.0	0.2	16.8
Milk	30.7	37.5	22.3	-0.7	23.1
Meat	74.1	86.7	17.1	2.5	14.3
Fish	75.8	84.3	11.3	-1.4	12.8
Miscellaneous	9.5	13.8	45.2	-1.9	48.2
Total livestock	1,209.8	1,511.2	24.9	3.5	20.7
<b>Crops</b>					
Citrus	632.4	696.7	10.2	2.4	7.6
Other fruit	323.5	379.9	17.4	-9.8	30.2
Vegetables	229.0	279.0	21.8	5.8	15.2
Melons	38.0	60.0	57.7	-21.3	100.5
Potatoes	41.6	58.7	40.9	16.5	40.9
Cereals and pulses	150.1	162.0	8.0	-17.8	31.4
Industrial crops	224.0	300.1	34.0	-8.6	46.5
Fodder	79.0	98.0	23.9	-3.8	28.8
Flowers, seedlings, and ornamental plants	52.7	54.2	12.4	8.9	3.2
Miscellaneous <sup>d</sup>	30.5	44.0	45.6	-7.1	56.8
Total crops	1,800.8	2,137.8	18.7	-2.8	22.2
Total current output	3,010.5	3,649.0	21.2	-0.3	21.5

<sup>a</sup> Marketed output, on-farm consumption, and intermediate goods (agricultural raw materials).

<sup>b</sup> Revised figures.

<sup>c</sup> Rates of change have been calculated from unrounded figures.

<sup>d</sup> Includes straw, green manure, forest products, citrons, and vegetable seeds.

SOURCE: Central Bureau of Statistics.

current input. The insignificant response of output to this development is rather surprising.

Farmers received 20 percent more for eggs in 1972/73; this increase was greater than that in input prices, making up for part of the decline in profitability in the two preceding years. Nevertheless, laying flocks were reduced for the second consecutive year because of the higher production costs. This rendered the output quotas more effective—production was, in fact, close to the targets.<sup>5</sup> Sales in the home market went up 5 percent, at the expense of exports. As stated earlier, the small export of eggs in 1972/73 was in fulfillment of obligations contracted in previous years, and was not made from surplus output.

The uptrend in table fowl production slackened in 1972/73 despite its increased profitability. This contrasts with the picture in the previous two years, when output swelled even though profitability tailed off. Production quotas were not to blame for the deceleration of output in the year reviewed, since the quotas were initially increased and subsequently suspended.

Despite the adverse swing in profitability, it apparently paid farmers to step up production in 1970/71 and 1971/72, for the guaranteed minimum prices under the quota system exceeded the market prices and were high enough to ensure a fair return; the expansion of poultry output, in fact, matched the increase in production quotas. However, profitability sank to a new low toward the end of 1971/72 and the first quarter of 1972/73, erasing for all intents and purposes the economic value of the quotas.<sup>6</sup> In other words, farmers were not assured a fair return on the investment required for increasing production, and consequently output was not enlarged. Under such conditions, the raising of production quotas and their subsequent lifting had very little effect, especially as there was no Government commitment to enlarge the quotas in the future in line with the farmers' expanded capacity.

#### (b) *Crops*

The frost and drought depressed crop yields by 2.8 percent in the year reviewed (see Table X-6). This followed a 9.8 percent gain in 1971/72, which was achieved thanks to very favorable climatic conditions and which (except for flowers) was not planned. Despite frost damage, the output of those crops which require a relatively small water input, such as potatoes, vegetables, and flowers, expanded.

<sup>5</sup> Output in excess of quotas is not subsidized; hence an increase in the margin between market prices and production costs renders the quota constraint more effective.

<sup>6</sup> The economic value of the quota is the price which the farmer is prepared to pay for an increase in his quota. In other words, only if profits are much higher than he would normally obtain by adhering to the quota would he feel justified in making the additional investment entailed by the quota increase.

Output prices rose 22 percent—7.1 percent more than nonfeed input prices. The improvement in the terms of trade outweighed the physical decline in output: the value of output at current producer prices moved slightly ahead of nonfeed inputs—18 vs. 17 percent.

### 1. Citrus

Citrus output expanded by 2.4 percent in constant-price terms, after holding steady in 1971/72. The contraction of the Shamuti crop because of the winter frost was responsible for the sluggish growth of output in the year reviewed, as other varieties posted moderate increases.

Prices received overseas went up slightly faster than the average for all markets, while those fetched for fruit for direct domestic consumption declined. All varieties commanded better prices abroad, with the exception of grapefruit, which drifted down 1.5 percent. The biggest increases were scored by Shamuti oranges and lemons. The higher export prices mainly reflected the decline of the Israeli pound against European currencies and a small 3.3 percent rise in the export exchange rate; the rise in world prices was only a minor factor. Italy and Morocco were also hit by adverse climatic conditions during the year, and consequently the quantity of fruit marketed in Europe by all the citrus exporting countries did not measure up to expectations. In view of this, the mild advance in citrus prices<sup>7</sup> holds considerable import for the future of this branch. The differential movement of input and output prices shaved off 15 percent from gross per dunam returns.

Table X-7

#### CITRUS OUTPUT, BY ECONOMIC DESTINATION, 1971/72 AND 1972/73

	Quantity ('000 tons)		Value at current producer prices (IL million)		Percent increase or decrease (-) in 1972/73 <sup>b</sup>		
	1971/72 <sup>a</sup>	1972/73	1971/72 <sup>a</sup>	1972/73	Value	Quantity	Price
Direct export	859.0	776.9	514.0	521.1	1.4	-7.7	10.0
Industry	570.9	626.3	69.8	78.9	13.0	7.4	5.2
Domestic consumption <sup>c</sup>	94.4	93.5	42.9	41.1	-4.2	-1.0	-3.2
On-farm consumption	28.5	30.0	5.7	6.0	1.1	1.1	—
Value of crops destroyed	—	161.9	—	49.5	—	—	—
Total	1,552.8	1,688.6	632.4	696.7	10.2	2.4	8.4

<sup>a</sup> Revised figures.

<sup>b</sup> Rates of change have been calculated from unrounded figures.

<sup>c</sup> Including private sales.

SOURCE: Central Bureau of Statistics.

<sup>7</sup> Excluding Shamuti oranges.

The declining profitability trend is spurring growers to switch to grapefruit, which is far more profitable than other citrus fruits and is still one of the best paying crops in all agriculture (the slight drop in profitability expected in 1973/74 does not essentially alter this fact). In addition, greater emphasis is being placed on easy-peeling and early-growing grapefruit in order to avoid the fierce competition during the main season.

## 2. *Industrial crops*

Industrial crop output fell 9 percent quantitywise, after a 6 percent gain in 1971/72. Though the drought was partly responsible for this decline, it does not fully explain it. Most of the industrial crops are grown under irrigation and hence are not very vulnerable to a shortage of rain. To be sure, the drought did have some effect, as it forced farmers to overdraw their water quotas, but it was not felt to any great extent. The contraction of the sugar beet crop was due to the 11 percent cutback in acreage because of low profitability. Cotton production fell below the 1971/72 level; this was due to a decline in dryfarmed cotton fields because of the scanty winter rainfall and the fact that the per dunam yield in 1971/72 was above average for some unknown reason.

Producer prices of industrial crops were up 46 percent, reflecting the higher prices obtained for cotton and the rising world market price of groundnuts.

## 3. *Vegetables, potatoes, and melons*

The 4 percent output advance under this head matched the previous year's figure. The melon crop shrank 21 percent following a 4.5 percent drop in prices in 1971/72; the reduced supply caused prices to more than double. Vegetable and potato production expanded by 6 and 16 percent respectively in response to the strong price rise the year before. Farmers received 21 percent more for potatoes thanks to the excellent prices fetched abroad, which spurred them to divert more of the output from the home to the overseas market.

The high prices obtained in European markets for these crops were exceptional and can be attributed to a combination of adverse natural conditions in Europe, which reduced yields. Prices are expected to retreat in the current year (1973/74).

## 4. *Other fruit*

Output of other fruit was down 10 percent in real terms, after gains of 11 and 23 percent in 1970/71 and 1972/73 respectively. However, the decline did not signify a reversal of the general trend, as it occurred in only two items—pears and olives, which account for a good part of the output. In both cases the drop was due to the yield cycle of the crop, which was aggravated by the drought. Stone fruit, bananas, and grapes were hit both by the winter

frost and by the khamsin weather in the fruiting period. The apple crop expanded because of the beneficial effect of the frost and the fact that new orchards located in the northern, higher apple-yielding areas of the country began to bear fruit this year. Despite the frost, other crop yields increased as a result of new plantings, especially of avocados.

The prices obtained by the growers averaged 30 percent higher, with all crops showing increases, especially those whose output fell off. The movement of domestic market prices was consistent with the assumed inelasticity of demand for such produce. In 1971/72 the output increment was absorbed with a sharp dip in prices relative to those of GNP, even though prices of vegetables (which are a close substitute for fruit) outpaced GNP prices that year. The 1972/73 decline in output had an opposite effect: the price increases of certain fruits cannot be explained solely by reference to their demand and income elasticities; and the extent of the rise was out of all proportion to the general advance of prices in the economy. To cite two examples, a 13 percent fall in the output of stone fruit sent their prices soaring 94 percent, while prices of table grapes jumped 82 percent in response to a mere 5 percent reduction in output. These inordinately steep increases can be partly ascribed to the much smaller yields obtained this year in Judea and Samaria, which apparently forced these areas to buy fruit in Israel instead of selling their surpluses to it, as in previous years. Another reason for the higher prices commanded in 1972/73 was the better quality of the crops in comparison with the previous year, especially in the case of stone fruit.

#### 5. *Cereals and pulses*

After two years of bumper yields the real output of cereals and pulses fell off in 1972/73 because of the drought, but was still higher than in 1970/71. This is explained by the increased output of wheat (the main crop in this category) following the introduction of new varieties. Another reason is that even though this was generally a dry year, rainfall in the southern part of the country, the country's leading wheat-growing area, was above average.

Although wheat is the principal unirrigated crop, it has also been incorporated into the irrigated crop program, chiefly in order to improve the crop rotation from the soil nutrition aspect. Had the increase in the world market price of wheat been relayed to local farmers, this would have made it competitive with most irrigated industrial and fodder crops, including cotton grown on marginal areas.

#### 4. INPUT

Inputs purchased from other sectors were up 6 percent at constant prices in 1972/73, as against 3.3 percent in the previous year. Whereas in 1971/72 the growth of inputs trailed behind that of output, in the year reviewed the

relationship was reversed. The reduced water consumption and concentrated feed purchases in 1971/72 because of the year's abundant rainfall kept the rise in purchased input down to modest proportions; during the year reviewed there was a heavier consumption of these two items because of drought, and this explains why inputs rose faster than output. The adverse climatic conditions were also responsible for the 78 percent real increase in pesticides and veterinary preparations, after they had held virtually steady in the previous year.

Purchased input rises in dry years because of the need to increase irrigation and to buy more feed for cattle farming to make up for the shortfall in fodder crops. The consumption of other inputs—such as the “services and Government” item and spare parts, repairs, and tools—is connected with the size of the cultivated area and is not directly related to changes in output.

**Table X-8**  
**INPUT OF MATERIALS AND SERVICES IN AGRICULTURE,<sup>a</sup> BY SOURCE,**  
**1971/72 AND 1972/73**

(IL million)

	Value at current prices		Percent increase or decrease (-) in 1972/73 <sup>c</sup>		
	1971/72 <sup>b</sup>	1972/73	Value	Quantity	Price
<b>Purchases from other sectors</b>					
Feed	511.6	643.7	25.8	9.9	14.5
Water	82.8	104.2	25.9	10.8	13.6
Packing materials	139.9	149.1	6.5	-5.3	12.5
Fertilizers	48.4	55.1	13.8	1.2	12.4
Transportation	99.6	110.0	10.4	-2.6	13.4
Spare parts, repairs, and tools	75.2	91.7	21.9	5.0	16.1
Fuel, lubricants, and electricity	37.9	40.9	8.0	0.3	7.7
Pesticides and veterinary preparations	109.4	123.4	12.7	3.0	9.4
Insurance and Government services	60.6	72.9	20.4	6.1	13.4
Miscellaneous	31.4	47.2	50.3	38.2	8.6
<b>Total</b>	<b>1,196.8</b>	<b>1,438.2</b>	<b>20.2</b>	<b>6.1</b>	<b>13.2</b>
Wages of hired labor	346.3	400.8	15.7		
Interest and rent	110.0	125.0	13.6		
Intermediate goods	248.3	333.7	34.4	-0.7	35.3
Depreciation	221.7	274.2	23.6	5.0	17.6
<b>Grand total</b>	<b>2,123.7</b>	<b>2,446.9</b>	<b>15.3</b>		

<sup>a</sup> Excluding labor and capital of farm owners.

<sup>b</sup> Revised figures.

<sup>c</sup> Rates of change have been calculated from unrounded figures.

SOURCE: Central Bureau of Statistics.

**Table X-9**  
**WATER INPUT IN AGRICULTURE, 1967/68 TO 1972/73**

	Unit	Average for dry years <sup>a</sup>	Average for rainy years <sup>b</sup>	1967/68	1968/69	1969/70	1970/71 <sup>c</sup>	1971/72	1972/73
Irrigated area	'000 dunams	—	—	1,645	1,662	1,727	1,735	1,765	1,760
Quantity of water	million m <sup>3</sup>	1,176	1,135	1,265	1,235	1,330	1,335	1,255	1,406
Water consumption per dunam of irrigated area									
Actual consumption	m <sup>3</sup>	781	716	769	743	770	769	711	799
Index (1963/64=100)		112.0	102.2	109.9	106.1	110.0	109.9	101.6	114.2

<sup>a</sup> Dry years—1958/59, 1959/60, 1961/62, 1962/63, 1965/66, 1967/68, 1968/69, and 1969/70.

<sup>b</sup> Rainy years—1960/61, 1963/64, 1964/65, 1966/67, 1970/71, and 1971/72.

<sup>c</sup> Revised figures.

SOURCE: Central Bureau of Statistics.

Transport outlays rose in 1972/73, which is rather surprising considering the more than 60,000-ton decrease in the output of cereals and pulses and the smaller industrial crop yields this year.

Purchased input prices rose 14.2 percent, after advancing 16.5 percent the year before. Compared with the increase in agricultural output and GNP prices, this is a mild increase. It can be partially attributed to the fact that the bulk of the concentrated feed was purchased by the Government in the first half of 1972, before cereal and soybean prices began to shoot up, and was sold to farmers at a price well below the going international market price. In addition, some inputs are subsidized (feed, water, and fertilizers were subsidized until April 1973). The advance in purchased input prices was also moderated by the uneven distribution of purchases over the year. Since fertilizers, pesticides, seeds, and spare parts, repairs, and tools are bought mainly during the first part of the agricultural year, farmers were relatively less affected by the intensification of inflation during the second half of 1971/72.

The input price index rose by 22 percentage points in the year reviewed, with most of the increase being recorded in the final quarter (July to September). In the first part of 1973/74 concentrated feed prices were running 50 percent higher than in the previous year.

Input of agricultural intermediates was down 10 percent in real terms, after rising 11 percent in 1971/72. The decline encompassed all noncitrus crop branches, which registered lower figures because of the drought and frost. In addition, some of the wheat may have been used to feed livestock because of the low (controlled) producer price of the commodity, although this was not reported officially.

The labor input contracted 5 percent in 1972/73, after an exceptional 9 percent rise the year before (for which no economic explanation can be offered); this reflected an increase in both hired labor from the administered areas and nonhired Jewish labor. The input of labor from the administered areas rose by a further 11.5 percent in 1972/73, while nonhired labor decreased by 9 percent, after a 7.6 percent increase in 1971/72. As already mentioned, manpower survey data must be treated with some reservation since sampling errors tend to be rather high. The figures for the past two years accord with the long-run trend for agriculture, which shows a decline in nonhired labor.

The main source of the greatly expanded input of hired labor from the administered areas was, as in the previous year, the Gaza Strip. The larger number of workers from there may have been due primarily to the tranquil security situation, but the improved statistical reporting, with more workers being covered than in the past, probably also played a part. Labor from the administered areas substitutes to some extent for Israeli workers, whose numbers dropped for the second consecutive year. The latter development is

explained by the lower wages paid workers from the administered areas, the fact that Israelis are not attracted to farming, and the geographical inconvenience of the available work.

## 5. INCOME

The income of farm proprietors from agriculture rose 25 percent in 1972/73, compared with 18 percent in the previous year (see Table X-1). The large sampling error in the manpower survey data on the number of self-employed rules out their use in calculating nonhired workers' income from farming (the survey figure would give an average increase of 38 percent). Basing the calculation on a 2 percent decline in the number of farm owners (the long-run trend) gives a nominal 28 percent increase in average income and a 5 percent rise relative to the average gain for all employed in the economy.

**Table X-10**  
**AGRICULTURAL SUBSIDIES, 1971/72 AND 1972/73**  
(IL million, at current prices)

Item or type of subsidy	Value		Percent increase or decrease (-) in 1972/73 <sup>b</sup>		
	1971/72 <sup>a</sup>	1972/73	Value	Quantity	Price
Citrus sold to industry	10.1	10.9	7.9	-9.3	16.4
Eggs	24.2	49.0	98.8	0.2	99.2
Poultry	35.3	15.6	47.0	2.9	-48.8
Cow's milk	64.5	130.9	90.7	9.0	75.0
Sheep's milk	—	0.7	—	1.3	—
Beef	0.3	0.0	-0.3	-0.4	0.1
Mutton	0.5	0.8	77.7	-1.8	80.9
Fish	1.5	7.1	365.6	-1.4	371.8
Vegetables and potatoes	3.4	11.9	248.9	3.9	235.8
Wine grapes	1.2	—	—	-4.1	—
Other fruit	5.0	6.1	22.1	-9.8	35.4
Groundnuts	0.1	0.1	-60.0	-26.3	45.8
Tobacco	0.3	0.3	15.7	17.2	39.6
Total output subsidies	<b>146.4</b>	<b>233.4</b>	<b>59.4</b>	<b>5.1</b>	<b>51.6</b>
Fodder	36.1	62.6	73.3	10.4	56.9
Water	20.0	35.0	75.0	12.2	55.9
Fertilizer	3.4	2.1	-36.4	0.2	-36.6
Total input subsidies	<b>42.8</b>	<b>50.6</b>	<b>67.7</b>	<b>10.4</b>	<b>51.8</b>
Drought compensation, etc.	15.0	65.0	333.3	—	—
Total subsidies	<b>198.7</b>	<b>322.8</b>	<b>80.2</b>	—	—

NOTE: A change in quantity reflects the real change in subsidized output. A change in prices reflects the change in the average subsidy rate per unit of subsidized output or input.

<sup>a</sup> Revised figures.

<sup>b</sup> Rates of change have been calculated from unrounded figures.

SOURCE: Ministry of Agriculture.

The income advance of the previous year was due to the greatly expanded product, even though input prices moved up faster than output prices. In 1972/73 an opposite situation obtained, the change in the input-output price ratio in favor of the farmer compensating for the real 5 percent contraction of the net product.

Market prices of the net agricultural product rose 23.7 percent. Total agricultural support payments—subsidies and compensation for natural damage—increased by an appreciable 56 percent, bringing up their weight in total income originating in agriculture from 20 percent in 1971/72 to 25 percent.

Direct subsidies on agricultural output continued to rise strongly—by 74 percent, after a 30 percent increase the year before. All the increment was accounted for by milk products and eggs, while other commodities were subsidized a little less heavily. However, not all milk product and egg price supports can be regarded as a Government transfer payment to farmers, for had it not been for Government intervention, the market price would have been higher than the present retail price. Since milk products can be imported at less than the local producer price, the Government protects domestic production by controlling imports.

All the 18 percent increase in input subsidies was for water, while those on feed and fertilizer were reduced in line with the Government's policy of shifting from an input to a final product subsidization in order to achieve a more efficient factor utilization. The larger water subsidy is a little surprising given the need to economize in its use. But the subsidy apparently has no significant effect on the consumption of water, as the use of this input is restricted through a quota system, so that its value to the farmer is greater than the cost of producing it or the price charged the farmer.

Compensation payments for frost and drought damage, excluding payments to citrus growers, amounted to IL 65 million in 1972/73, compared with IL 15 million the year before. These payments accounted for 24 percent of the additional income earned by farmers in 1972/73, to which must be added the IL 51 million paid to citrus growers in compensation for frost damage.

It should be noted that farmers' payments to the farm risks insurance fund do not reflect the degree of differential risk between the various crops and regions, with the consequence that such crops as bananas are planted in regions where the probability of frost is high.

## 6. INVESTMENT AND CAPITAL STOCK

Real gross investment in agriculture declined 11 percent in 1973, reversing the unbroken rising trend that got underway in 1967. The downturn can be partly attributed to the October war, but the investment data for the first nine months of the year also point to a turnabout. Most of the decline was in farm buildings, spending on which fell off 37.5 percent in real terms. Besides

**Table X-11**  
**ESTIMATED GROSS INVESTMENT IN AGRICULTURE, 1972-73**  
(IL million, at current prices)

	Value		Percent increase or decrease (-) in 1973		
	1972 <sup>a</sup>	1973	Value	Quantity	Price
Orchards	26.0	32.5	25.0	-2.2	28.0
Livestock	28.7	38.6	34.1	12.0	20.3
Farm installations <sup>b</sup>	103.8	81.9	-21.1	-37.5	26.2
Machinery and equipment	136.4	177.2	29.9	4.7	24.1
Land reclamation and conservation, drainage, natural pasture, etc.	34.8	40.5	16.4	-9.0	27.9
Total investment in agriculture	<b>329.7</b>	<b>370.7</b>	<b>12.4</b>	<b>-10.7</b>	<b>25.9</b>
Afforestation	18.5	20.2	9.2	-14.4	27.6
Total investment in agriculture and afforestation	<b>348.2</b>	<b>390.9</b>	<b>12.3</b>	<b>-10.9</b>	<b>26.0</b>
Water projects	77.9	83.6	7.3	-17.2	29.6
Total investment in agriculture, afforestation, and water projects	<b>426.1</b>	<b>474.5</b>	<b>11.4</b>	<b>-12.1</b>	<b>26.7</b>

NOTE: Data on investment from agricultural output relate to the end of agricultural years; other data relate to the end of calendar years. Shortly before the Hebrew edition of the *Annual Report* went to press the data in this table were revised, but lack of time prevented the revision of the corresponding data in Tables X-1, X-3, and X-5. However, the revisions do not affect the analysis or the conclusions.

<sup>a</sup> Revised figures.

<sup>b</sup> Farm buildings, fish ponds, and local irrigation networks.

SOURCE: Central Bureau of Statistics.

the war, there were two other reasons for this sharp drop: (a) a standstill in the output of the poultry branch and the second consecutive year of declining profitability in flower cultivation, both of which accounted for much of the previous year's investment; (b) the conclusion in 1972 of a water-saving techniques project financed by the World Bank. The drought apparently led to a smaller investment in both citrus and noncitrus orchards, with no new investment being made during the war period.

The percentage increase in livestock numbers was smaller than in the previous year, but was still fairly high. In 1972 there had been an extraordinary real growth of 120 percent in this item, stemming from the desire to secure larger production quotas in the future.<sup>8</sup>

<sup>8</sup> See the discussion of this in the section on cattle farming in both this and in the previous *Annual Report*.

Table X-12

GROSS STOCK OF FIXED ASSETS IN AGRICULTURE,<sup>a</sup> 1972-73

(IL million, at current prices)

	Value		Percent increase or decrease (-) in 1973 <sup>b</sup>		
	1972	1973	Value	Quantity	Price
Orchards and farm installations <sup>c</sup>	4,755.8	6,320.0	32.9	2.7	29.4
Machinery and equipment	865.2	1,131.7	30.8	5.4	24.1
Livestock <sup>d</sup>	515.2	657.4	27.6	6.2	20.3
<b>Total</b>	<b>6,136.2</b>	<b>8,109.1</b>	<b>32.2</b>	<b>3.3</b>	<b>28.0</b>

NOTE: The data are for the end of calendar years, except for investment from agricultural output (orchards and livestock), which are for the end of agricultural years.

<sup>a</sup> Excluding land and financial assets.

<sup>b</sup> Rates of change have been calculated from unrounded figures.

<sup>c</sup> Farm buildings, local irrigation networks and water projects, afforestation, land reclamation and conservation, drainage, natural pasture, etc.

<sup>d</sup> Excluding broilers and fish.

SOURCE: Based on estimates of A. L. Gaathon (Bank of Israel) and Central Bureau of Statistics data.

The real gross capital stock in agriculture expanded at a slightly lower rate than in 1972—by 3.3 as against 3.8 percent. But this should not be considered as indicative of any change in trend; rather it represents the adjustment of the capital stock to the previous year's investment.