CHAPTER XIII

AGRICULTURE

1. Main Developments

Real net agricultural product rose at a rapid pace—by 10 percent in 1973/74[1] after having declined by 4 percent in 1972/73 (see Table XIII-1). This large increase was made possible by favorable weather conditions, the high precipitation, and a minimum of natural disasters: these led to a rise of 7 percent in the output of crops.

In 1972/73 the drought and frost caused a decline of 3 percent in the output of crop farming, and despite the rise in product of the livestock branches agricultural product decreased, since the crop branches have a high value added. In 1973/74 the livestock branches rose more rapidly than in the previous year, and thus contributed to the acceleration in the increase of the product. The rise in the rate of growth was especially high in poultry farming, as a result of the improvement in profitability, the temporary abolition of quotas in the meat branch, and the raising of quotas for laying hens. Current output of cattle farming also rose, but this was at the expense of investment in this branch.

The rise in agricultural product occurred in spite of the outbreak of war (in the first quarter of the agricultural year) and the call-up of large numbers of reservists in the second quarter of the agricultural year. There were three main reasons for this development: (a) The war broke out in a season when the principal work consists of preparation of the land, work that entails a relatively small labor input; (b) The institutional and social structure of Israeli agriculture, which ensures mutual aid in the moshavim, flexibility in the allocation of manpower in the kibbutzim, and the mobilization of young people for work in both of these sectors, in addition to regional cooperation; (c) The minorities' sector was practically unaffected during the period of the war. True, its weight of 5 percent (in 1972/73) is not high, but it is significant in a number of branches (in vegetables, for instance, its weight comes to 12 percent).

Producer prices in agriculture rose at a more rapid rate than those in other sectors

[1] The 1973/74 agricultural year began in October 1973 and ended in September 1974.

of the economy.[2] The rapid rise in prices encompassed most agricultural branches, and was particularly striking in vegetables, industrial crops, cereals and pulses, and milk. Citrus and flowers, on the other hand, showed proportionately lower price rises, owing to the recession in the export markets.

The rise in the prices of industrial crops and cereals and pulses resulted, inter alia, from the substantial increase in producer prices on products subject to control—wheat, sugar beet, and cotton (for the domestic market)—following a considerable increase in prices in 1972/73. These price increases narrowed somewhat the gap between the producer prices and the world price for these products (see Table XIII-3).

Purchased inputs were up only 2.5 percent in real terms (see Table XIII-8). This moderate increase was due to the reduced use of purchased fodder as a result of the large increase in grain fodder and a decline of 17 percent in the use of water. The input prices rose more rapidly than did the prices of agricultural output, so that there was a worsening in agriculture's terms of trade: product prices rose more slowly than did the Consumer's Price Index. The labor input—as measured by manpower surveys and by family surveys in the administered areas—continued to decline, after a substantial drop the year before. Part of the decrease had its origin in the first quarter of the agricultural year, when war conditions prevailed, but the trend continued in the other quarters too (see the discussion under the heading "Labor Input").

Farm owners' income from agriculture rose by 53 percent in nominal terms; relative to the Consumer's Price Index (which serves as a measure of purchasing power), this was a real increase of 14 percent. This rise stemmed not only from the real growth in product and the rise in market prices of output but also from the great increase in the amount of support given to milk producers and the compensation for natural disasters and the war.

The large upswing in income embodies considerable divergence in the profitability trends of the various branches. This divergence is particularly important when it comes to crops, for it determines the allocation of water—a factor of production that is limited in quantity—among the various crops. The large increase in the profitability of grains, sugar beet, and cotton after their prices were brought in line with world prices, as against a decline in the profitability of citrus, will lead, it may be assumed, to a more proper allocation of water and land among the various branches from the viewpoint of profitability for the country's economy (see the discussion in the following section).

[2] As price rises are expressed in the various indexes: the Consumer's Price Index, the Index of GNP Prices, etc. (In the period parallel to the agricultural year, the Consumer's Price Index rose by 33.7 percent and product prices by 28 percent.)

Table XIII-1

CURRENT ACCOUNT OF AGRICULTURE, 1972/73 AND 1973/74

(IL million, at current prices)

	Value		Percent change in quantity			Percent change in prices		
			Average 1968/69–1972/73	Annual increase or decrease (–)		Average 1968/69–1972/73	Annual increase or decrease (–)	
	1972/73	1973/74		1972/73	1973/74		1972/73	1973/74
Total output at producer prices	3,756.7	5,516.2	5.4	–0.3	6.9	9.9	21.3	37.3
Less: Agricultural intermediates	327.2	516.0	4.2	–0.7	11.5	12.7	35.3	41.4
Agricultural output at producer prices	3,429.4	5,800.3	5.5	–0.2	6.4	9.7	20.1	37.0
Less: Subsidies on output	225.0	337.1	3.9	5.1	8.6	14.3	51.6	40.5
Agricultural output at market prices	3,204.4	4,663.2	5.6	–0.5	6.4	9.5	18.3	36.7
Less: Purchased input	1,451.2	2,132.0	5.7	6.1	2.1	9.6	13.2	43.9
Gross agricultural product at market prices	1,753.2	2,531.2	5.6	–5.7	10.8	9.6	22.8	31.2
Less: Depreciation	272.0	380.8	7.1	5.1	4.8	10.8	17.7	33.2
Net agricultural product at market prices	1,480.2	2,150.4	6.4	–7.5	11.0	9.5	23.7	39.9
Plus: Subsidies on output	225.0	337.1	3.9	5.1	6.6	14.3	51.6	40.5
Net agricultural product at producer prices	1,705.2	2,487.5	5.1	–6.3	11.0	9.9	26.9	31.4
	Percent change in value from 1972/73 to 1973/74							
Net agricultural product at producer prices	1,705.2	2,487.5	45.9					
Plus: Drought compensation	26.1	50.4	93.1					
Total income from agriculture	1,731.3	2,537.9	46.6					
Less: Wages of hired labor	409.8	507.0	23.7					
Less: Interest and rent	125.0	200.0	60.0					
Income of farm owners from agriculture	1,196.5	1,830.9	53.0					

SOURCE: Central Bureau of Statistics. The rates of change were calculated from unrounded figures.

2. World Prices and Their Effect on Agriculture

In the summer of 1972 an extremely rapid rise in the prices of grains and other agricultural products began in the world markets. This was especially true of wheat, cotton, rice and fodder, whose prices more than doubled. Israeli agriculture did not share in this development (see Table XIII-3): producer prices of grains and sugar are controlled by the Government and were not raised. In order to understand the great change that took place in the summer of 1972, we must quickly review the main developments of the years that preceded it. In the period 1950-71 the prices of the basic agricultural products were stable, and they declined relative to the prices of other products, both agricultural and non-agricultural. The level of stocks in the United States (which possessed the largest stocks of grains in the world) declined slightly in absolute terms, so that relative to the world level of consumption this constituted a significant drop in the level of stocks.

This was the situation when an unusual phenomenon occurred in 1972: most of the production areas of grains and rice throughout the world, and in the Soviet Union in particular, were hit by natural disasters. The Soviet Union over-reacted by making excessive purchases in the United States and other world markets. (Later on, it sold part of its grain purchases.) The purchases of the Soviet Union brought the level of stocks down to the lowest point in twenty years—a drop that should be seen against the background of a higher level of consumption. Along with the rapid rise in the prices of grains there was a sharp upswing in the prices of the raw material, owing to the high level of economic activity in Western countries and to large Japanese purchases for stocks (Japan bought merchandise for stocks in order to reduce the pressure for the revaluation of the yen because of surplus reserves). This rise in prices also included the raw materials from agriculture, notably cotton. In 1973 and the first half of 1974 an atmosphere of shortage of foodstuffs and raw materials for industry prevailed, causing price rises far above the level of long-range equilibrium (i.e., the long-range increase in production), and encompassed not only grains but also sugar, oil seeds, and other products.

In Israel, price controls apply to a good many of these products. There was practically no increase in the producer prices of wheat, other grains, and sugar beet in 1972. It can be seen from Table XIII-3 that the imputed rate of exchange for these products was much lower than the dollar rate for the Israeli exporter. The prices of the agricultural inputs from imports for concentrated fodder (composed of many products), also rose appreciably. A distortion was thus created in the price picture faced by the Israeli producer as against that faced by the economy.

For the national economy the profitability of producing wheat, sugar, and grains for fodder increased, while there was a decrease in the profitability of producing

milk and eggs; for the producer, however, the exact opposite was true and, indeed, the allocation of resources was different. Thus it came about that in 1973/74 the area planted to sugar beet was reduced to 50 percent of that of the preceding year, and even the areas planted to wheat declined somewhat, while dairy farming expanded.

Table XIII-2

IMPLICIT EXCHANGE RATES FOR ISRAELI AGRICULTURE, 1969-74[a]
(IL per $)

	1969	1970	1971	1972	1973	1974
Wheat	6.64	5.24	6.98	5.17	2.57	4.31
Cotton fiber	2.33	2.99	3.61	9.26	4.46	5.27
Sorghum	5.31	5.80	6.31	7.45	6.88	5.52
Meat (edible parts)	3.57	3.59	4.04	3.83	3.92	3.44
			Rate of the dollar to the producer			
	3.85	4.03	4.62	5.10	5.26	5.71

[a] Price to the local producer in IL divided by the world price expressed in dollars.
SOURCE: 1974 — UNCTAD, *Commodity Price Bulletin, 1974.*
Other years — Price index in UN *Commodity Year-Book, 1974.*

Table XIII-3

RELATIVE INDEX OF THE IMPLICIT EXCHANGE RATE FOR THE ISRAELI FARMER COMPARED WITH THE RATE FOR THE ISRAELI EXPORTER, 1969-74

	1969	1970	1971	1972	1973	1974
Wheat	1.72	1.30	1.51	1.01	0.49	0.75
Cotton fiber	0.61	0.74	0.78	0.64	0.85	0.92
Sorghum	1.38	1.44	1.37	1.46	1.31	0.97
Meat (edible parts)	0.93	0.89	0.87	0.75	0.75	0.60

[a] See note [a] to Table XIII-2.
SOURCE: See sources of Table XIII-2.

Examination of Table XIII-3 indicates clearly that as the 1972/73 agricultural year approached there was room for adjusting local producer prices to world prices.

In fact, however, this adjustment was made only with the approach of 1974/75. From the description of the development of prices it may be gathered that the price level in the years 1972-74 is not a long-term price level, i.e., one that reflects production costs. Indeed, a downward trend in the prices of agricultural products and cotton began in the second half of 1974.

This development should serve as a warning against hasty price adjustment, particularly if this adjustment entails new investments or early replacement of existing investments. This applies to perennial crops such as plantations, and to the livestock branches. It would appear that when a sudden and rapid increase takes place in the prices of agricultural products, price adjustments should be made while the trend of the increase is studied: is it temporary or permanent? As for adjustments with long-term implications for crops, on the other hand, it is well to examine to what extent the production costs of the main producers has risen, and the anticipated long-run price ratio.[3]

3. Output Destinations.

(a) *Crops*

The real marketed output of crops expanded by 8 percent in the year under review. The rise stemmed from a real increase in supply. Producer prices on the marketed output rose by 35 percent. Most of the additional output went to industry and to export, the crops whose output increased being industrial crops and pulses.

The rises in producer prices for the different destinations was not uniform, as a consequence of the considerable divergence in the price rises of the crops and in their weight in the destinations. The prices received by the producer from marketing to industry rose as a result of the increase in the prices of grains, sugar beet, and cotton for the domestic market. The rapid rise in prices for domestic consumption stemmed from the decline in supply. Export prices rose slightly as a result of the increase in transport costs. The latter had an adverse effect on the export prices of flowers and citrus.

[3] There is room for further considerations, such as the policy of the Common Market—whether it involves the creation of production surpluses owing to the protection of producers. This will find expression in the prices in the commodity exchanges (the prices of dairy products are an example). As for sugar, there are agreements between the large producing countries and the main importing countries, and the price fixed in these agreements is likely to involve production surpluses, which will flow to the exchanges. Marginal production and demand will then be at prices considerably lower than those fixed in the price agreements. Such a situation has existed during most of the period the agreement has been in force.

Table XIII–4

TOTAL AGRICULTURAL OUTPUT, BY ECONOMIC DESTINATION, 1972/73 AND 1973/74

(IL million, at current producer prices)

	Value		Percent change in quantity			Percent change in prices		
			Annual increase or decrease (–)			Annual increase or decrease (–)		
	1972/73	1973/74	Average 1968/69–1972/73	1972/73	1973/74	Average 1968/69–1972/73	1973/74	1973/74
Output marketed								
Direct domestic consumption	1,323.8	1,919.0	6.7	0.8	3.2	9.1	20.7	40.5
Industry	965.8	1,555.6	11.5	1.5	11.5	10.5	24.3	44.5
Direct exports	829.6	1,168.4	5.2	–8.2	14.1	10.5	16.2	23.4
Total	**3,119.2**	**4,643.0**	**5.5**	**–1.7**	**8.7**	**9.8**	**20.6**	**37.0**
Output retained on farms								
Own consumption	139.8	201.4	2.5	0.7	2.2	9.8	21.1	41.0
Capital goods	117.9	154.0	3.3	0.5	9.7	8.5	13.7	34.6
Agricultural raw materials	327.3	516.0	4.3	–0.7	11.5	12.8	35.3	41.4
Total	**585.0**	**871.4**	**3.4**	**–0.1**	**6.4**	**11.0**	**26.8**	**40.0**
Value of crops destroyed	52.5	1.8	—	—	—	—	—	—
Grand total	**3,756.7**	**5,516.2**	**5.4**	**–0.3**	**6.9**	**9.9**	**21.3**	**37.4**

NOTE: Rates of change have been calculated from unrounded figures.
SOURCE: Central Bureau of Statistics.

1. Direct domestic consumption

The output prices of crops sold directly for private consumption went up appreciably as a result of stability in the volume of sales. This stability derives from a decline in the supply of vegetables, stone fruit, and citrus, while there was a moderate rise in the supply of other crops. The prices of stone fruit and of vegetables rose considerably, as a consequence of the decrease in supply. Citrus prices rose by less than the average, and it appears that the decline in the market resulted from the channeling to industry of the fruit not up to export standards, in order to protect the prices in the home market.

The rise in the prices of direct domestic consumption reflects mainly the rise of prices in the markets, for the Government hardly intervenes in the marketing; it is a result of the decline in per capita supply, on the one hand, and the inflexibility of demand for fruit and vegetables, on the other.

2. Industry

The value of crops sold to industry was up 45 percent, the real increase amounting to 11 percent and price rises to 32 percent

A good part of the output sold to industry consists of strictly industrial crops:cereals and pulses, cotton, sugar beet, etc. The prices of these crops are not immediately affected by the forces of supply and demand in the domestic market. The prices of some of them are fixed by the Government. with others, the price is fixed with regard to the price level in the world market. This latter group includes vegetables, citrus, and other fruit; these are partially affected by the forces of the market (generally there is a lag of one year). The output prices of the first group rose by more than 50 percent, the increase encompassing most of the products without regard to the volume of sales (rise or decline). The higher prices of cotton were a result of the rising price for exports, which affects the price to the mills. The prices of wheat and sugar beet followed the increase in the controlled price fixed by the Government (an analysis of the price increases for wheat and sugar beet will be found in the section on industrial crops).

In the second group, the higher prices of vegetables resulted from agreements of the previous year and from heavy demand. The volume of vegetable sales to industry rose despite the decrease in total vegetable output. In the wake of the increased vegetable sales to industry, the prices of "other fruit" rose at a lower rate than the increase in the Consumer's Price Index. Citrus prices likewise declined in absolute terms (owing to sales that deviated from the agreement between the manufacturers and the grove owners).

3. Exports

Exports recorded a substantial real gain, while prices rose to a lesser extent than in the other output destinations. Both the real and price changes, however, displayed considerable variance (see Table XIII-4). Part of the rise in producer prices is attributable to the increase in the rate of the export dollar, while the remainder stemmed from the market forces applicable to each product. Most of the real increase in volume derived from the doubling of cotton exports, which resulted from good yields and a decline in domestic demand. There was also a substantial rise in the export of "other fruits", thanks to good yields in the avocado plantations. Vegetable exports declined, owing to the adverse effect of the war on the preparation of fields and apparently also to a manpower shortage. Citrus exports rose only moderately, on account of hailstorm and the difficulties created by the war in transporting the fruit to the ports and difficulties in the ports themselves. The moderate rise in the export prices to the exporter was largely due to the increase in transport prices, particularly air transport. In 1973/74, the latter constituted one third of the c.i.f. price of export products, as against 10 percent the year before. The transport prices for agricultural exports are considerably higher than those paid by exporters abroad.

(b) *Livestock output destinations*

1. Domestic market

The value of livestock output was up 8.5 percent in real terms, while producer prices rose by 38.5 percent. The latter increase was greater than that in the Consumer's Price Index, partly owing to an increase in Government supports.

Consumer prices of the main products in this group are under the Government's direct or indirect control. (The prices of milk and eggs are controlled, while the price of meat is affected by the price fixed by the Government for the frozen meat it imports.) The price for the domestic market is largely exogenous, and market forces influence mainly the quantity consumed. For this reason our discussion will concentrate on the real changes resulting from the increase of the prices of these products. Consumer prices of milk and eggs were raised in January 1974 by over 60 percent, when part of the subsidies for these products was abolished.[4] This increase is twice the average rise of the Consumer's Price Index in 1973/74. Nevertheless,

[4] At the beginning of the 1973/74 agricultural year the supports for dairy products and eggs were raised. Part of this increment was abolished in January and passed on to the consumer price.

Table XIII–5

DIRECT AGRICULTURAL EXPORTS,[a] 1972/73 AND 1973/74

(IL million, at current producer prices)

	Value		Percent change in quantity			Percent change in prices		
			Annual increase or decrease (–)			Annual increase or decrease (–)		
	1972/73	1973/74	Average 1969/70–1972/73	1972/73	1973/74	Average 1969/70–1972/73	1972/73	1973/74
Field crops	83.9	255.1	3.7	–37.9	97.0	17.0	49.9	54.5
Vegetables, potatoes, melons	78.3	78.1	26.3	18.6	–16.5	8.2	30.5	19.5
Noncitrus fruit	30.5	53.0	8.2	–19.4	45.8	6.2	33.8	19.3
Eggs	17.5	19.5	7.1	–39.1	35.0	17.3	42.6	–1.8
Meat	34.6	33.5	18.2	57.8	–32.8	6.2	12.6	25.0
Fish	6.6	5.1	81.3	–1.1	–43.6	10.9	20.3	48.9
Flowers, seedlings, ornamental plants, and vegetable seeds	47.1	63.4	19.8	4.6	24.2	7.1	4.3	8.4
Misc. livestock and livestock products	10.0	18.0	10.1	5.3	53.2	12.6	35.8	17.4
Total, excluding citrus	**304.7**	**525.7**	**8.5**	**–9.2**	**31.2**	**10.5**	**28.7**	**31.4**
Citrus	521.1	639.8	3.7	–7.7	4.4	14.3	9.9	17.5
Total, including citrus	**829.6**	**1,165.5**	**4.4**	**–8.2**	**14.4**	**10.2**	**16.2**	**23.4**

[a] Including exports to the administered areas.
SOURCE: Central Bureau of Statistics.

there was an 8 percent increase in the sales of domestically produced eggs, most of the increase being concentrated in the second half of the year, after prices were raised. It is possible that the decline in real income also led to the substitution of eggs for meat (the demand for meat is highly elastic with respect to income, while that for eggs is only slightly so, and perhaps even negative). In 1972/73 the relative price of eggs declined, but there was nevertheless a drop in consumption. It appears that in that year the rise in income led to the substitution of meat for eggs, while in 1973/74 the opposite occurred. While the demand for liquid milk was affected only slightly by the price increase, it seems that there is higher sensitivity to price with respect to other dairy products. Sales continue to expand as a result of the growth in production. This expansion took place at the expense of the import of butter and powdered milk, and it was also expressed in the increase in the stocks of domestically-produced butter. Indeed, it appears that in 1974/75 the Government will be forced to return to a policy of fixing production quotas in this branch.

Sales of domestic meat were up 13 percent in real terms, following a moderate rise in 1972/73. The rise in producer prices was 34 percent. Part of the increase reflects the market prices and part the higher Government support. The higher sales applied to most types of domestic meat, but were particularly striking with respect to other meat (31 percent); poultry sales rose by 12 percent. (The reasons for the increased demand are explained below.) As against the rise in sales of domestic meat, sales of imported meat dropped by 31 percent.

Meat sales are determined by a number of external factors, on both the supply and the demand sides. As for supply: (a) The Government fixes the price of imported beef and supplies all demand at this price. The price of frozen meat was raised by 52 percent in November 1973, and in March 1974 it was reduced by 10 percent. (b) The amount of poultry offered for sale is largely determined by developments in the preceding year, and the supply of beef from the milk herd depends on developments with respect to the profitability of milk production. The supply of domestic meat rose in the course of 1973/74, mostly in the second half of the year. (c) During the year the Consumer's Price Index rose at a rapid pace, so that the relative price of imported beef declined. It is particularly important to bear in mind that at the end of January 1974 subsidies were cut and the consumer prices of many food products rose considerably

On the demand side the external factors are the changes in real disposable income and in population.[5] The sensitivity of the demand for meat in relation to changes in income was relatively high, and real income declined slightly in the period under review.

[5] The population surveyed increased by 3 percent in 1974.

The market developments were in line with the changes in the external factors that have been mentioned: in the first half of the agricultural year the price of frozen beef was raised and the increase in output of locally produced meat had not yet reached large proportions; indeed, the prices of domestic meat rose considerably, especially those of broilers. In the second half of the year, as we have noted, the price of imported beef was reduced by 10 percent, and there was a significant increase in the volume of sales of domestic meat, causing a decrease in meat prices, particularly of broilers. The latter dropped below the guaranteed price, so that the Government had to make up the difference.

2. Export of livestock products

Export of livestock products declined by 14 percent in real terms, as prices rose by 30 percent. The decline applied to most export components, with the export of goose livers and poultry hit especially hard. The drop appears to have been due to the economic situation in the importing countries. The French demand for liver declined, and the value of the French franc also dropped in relation to the dollar. The export of cows rose only slightly, since meat prices in Israel were high and it was not profitable to export.

4. Output by Type of Farming

(a) *Livestock*

Real current output of livestock products expanded by 6.8 percent in 1973/74, compared with a rise of only 3 percent the year before (see Table XIII-6). Table fowl accounted for half of the increase, but egg-laying and beef sales also rose considerably in comparison with the previous year. The trend of expansion in the output of livestock products was not uniform throughout the year. In the first half of the year there was a rapid rise in milk sales, while the increase in poultry production was lower than the annual average recorded for 1973/74. In the second half of the agricultural year the rapid rise in milk production was checked, while the output of poultry increased at a rapid rate. This development reflected the decline in the profitability of milk production in the course of the year (see "Cattle Farming" below) and the ripening of investments in the poultry branch .

The prices received by livestock growers rose at a slower rate than input prices, so that the terms of trade worsened somewhat. This development was particularly striking in "other livestock", whose main output is meat; the output prices of these

Table XIII–6

OUTPUT OF AGRICULTURAL CAPITAL GOODS, 1972/73 AND 1973/74

(IL million, at current prices)

	Value		Percent change in quantity			Percent change in prices		
			Annual increase or decrease (–)			Annual increase or decrease (–)		
	1972/73	1973/74	Average 1968/69–1972/73	1972/73	1973/74	Average 1968/69–1972/73	1972/73	1973/74
Orchards	31.8	44.3	0.0	14.5	3.2	7.6	7.9	34.8
Livestock	38.6	40.7	45.9	–13.4	–21.2	13.7	20.3	38.8
Land reclamation and conservation, drainage, natural pasture, etc.	22.3	29.9	2.4	2.2	–1.0	6.9	12.8	35.6
Afforestation	25.2	39.1	–10.6	6.8	15.5	7.9	12.9	34.4
Total	**117.9**	**154.0**	**3.3**	**0.5**	**–3.0**	**8.3**	**12.8**	**34.6**

SOURCE: Central Bureau of Statistics.

branches were adversely affected by the great increase in poultry sales in the second half of the agricultural year.

1. Poultry

Real output in poultry farming rose by 6 percent after a moderate increase of 2 percent the year before. Most of the increase stemmed from an 11 percent rise in poultry output. Output of eggs rose by 4 percent, after two years of contraction in output, so that it too contributed to the acceleration in the increase of output.

Expansion of egg output resulted from the increase of quotas. Last year it was explained here[6] that owing to the increase in the subsidy the gap between the market price and the producer price widened, so that output quotas were effective; the contraction of laying hens in the previous years as done at the expense of production above the quota.

There was an uptrend in table fowl production, after only a moderate increase the year before. This resulted from a change in the profitability trend in 1972/73. From the middle of 1972/73 the downward trend in profitability in this branch changed, and an upswing began. This trend continued to May 1974. The improvement in profitability, which was also accompanied by Government encouragement in the form of low-interest loans, led to considerable investment in the branch and to a large increase in output. The latter, as noted, went beyond the increase in demand, so that the prices of table fowl declined to a level lower than the guaranteed price. Producer prices, which up to May were above the minimum level, declined to that level, which did not cover production costs. The latter rose rapidly and substantially during the year: the price of fodder, which is the main input here, rose by 42 percent. This development led to a sharp decline in profitability at the end of 1973/74. On the one hand, production costs rose, while on the other hand, prices declined; in addition, producers had to keep the birds beyond the fattening period in order to prevent a collapse of prices.[7] The decline in profitability in this branch came at a period in which world meat prices were decreasing, so that some curtailment of the growth of output may have been desirable for the economy.

[6] See Bank of Israel, *Annual Report 1973*, p. 265.

[7] Poultry marketing is executed through the Poultry Board, which regulates the marketing and diverts surpluses to cold storage. Towards the end of 1973/74 the Board did not have enough room to store the entire surplus and issued instructions not to market birds even when they reached the age at which the additional meat produced by a unit of food was so small as to be unprofitable.

2. *Cattle farming*

Real current output of cattle farming expanded by 7 percent during the year (see Table XIII-6), as compared with a rise of 8 percent in 1972/73. The falling off in the rate of increase reflects a moderate rise in milk sales (5 percent, as against 10 percent the year before), while meat sales increased rapidly at the expense of increasing the herd. It should be kept in mind that calves from the dairy herd can be kept on the farm in order to increase the milk-producing herd or can be sent to the abatoir. In the year under review the increase in the size of dairy herd was less than the year before, so that more calves were sold on the market (see Table XIII-5: livestock).

On the average, producer prices rose commensurate with the rise in input prices, so that the profitability of the branch did not decline relative to the year before, and may even have risen.[8] When we examine the change in the profitability of the branch in the course of the year, in contrast to the average change in comparison with the previous year, we find a striking downward trend in profitability in the second half of the year.

The development of the cattle branch in 1973/74 and in the two preceding years is largely explained against the background of the economies of scale that exist in this branch, the suspension of production quotas by the Milk Production and Marketing Board beginning 1971/72, and the existence of two different production groups: large herds (concentrated mainly in the kibbutzim) and small herds (found mainly in the moshavim). In 1971/72 and 1972/73, there was a great increase in the large herds and only a moderate increase in the small herds. This development took place at a time when production quotas were not in force and the level of profitability had stabilized.

In 1973/74 many cowsheds were liquidated because the terms of trade of the branch worsened during the year. Reduction of the production would have brought profitability down still more. The large cowsheds, on the other hand, continued to expand raidly, and the expansion of the production unit enabled the producers to compensate themselves to some extent for the worsening of the terms of trade. The deceleration in the rate of milk sales was a result of the contrasting development in the two groups.

The Government encouraged the expansion of production in the framework of

[8] The index of producer input and output prices in the cattle branch rose at a more rapid rate than the Consumer's Price Index. In this situation, if the value of the output was greater than that of the input before the change in prices, real income from the branch would rise even if the rate of profit per output unit did not change.

Table XIII–7

CURRENT AGRICULTURAL OUTPUT,[a] BY TYPE OF FARMING, 1972/73 AND 1973/74

(IL million, at current producer prices)

	Value		Percent change in quantity			Percent change in prices		
			Annual increase or decrease (–)			Annual increase or decrease (–)		
	1972/73[b]	1973/74	Average 1968/69–1972/73	1972/73	1973/74	Average 1968/69–1972/73	1972/73	1973/74
Livestock								
Poultry	777.9	1.182.7	7.4	1.8	11.7	9.3	21.3	36.1
Eggs	290.4	435.9	1.9	–4.8	10.1	11.6	22.0	36.3
Meat	472.9	730.3	10.8	3.3	12.9	7.8	20.0	36.8
Miscellaneous	14.6	16.5	4.8	–0.1	4.0	14.6	71.3	8.7
Cattle	510.9	778.7	3.9	8.0	5.9	8.4	19.4	43.9
Milk	307.4	494.1	6.0	10.1	4.9	7.1	19.6	53.2
Meat	180.3	254.7	0.6	4.8	6.3	11.6	22.4	32.8
Miscellaneous	23.2	29.9	3.3	4.3	15.1	10.4	43.8	12.1
Other livstock	222.4	311.1	1.7	0.2	–2.6	12.0	16.8	43.6
Milk	37.5	62.3	–1.3	–0.7	–0.1	12.5	23.1	66.1
Meat	86.7	120.6	3.5	2.5	3.5	13.2	14.3	34.4
Fish	84.3	105.5	2.8	–1.4	–13.7	10.5	12.8	45.0
Miscellaneous	13.9	22.7	1.2	–1.9	22.1	72.6	48.2	34.0
Total livestock	**1,511.2**	**2,272.5**	**5.2**	**3.5**	**7.6**	**9.5**	**20.7**	**39.7**

Crops								
Citrus	696.7	800.9	3.9	2.4	−1.6	10.0	7.6	16.8
Other fruit	367.4	554.4	7.6	−9.8	17.4	10.2	30.2	28.5
Vegetables	279.0	412.4	9.1	5.8	−7.4	8.5	15.2	59.6
Melons	60.0	67.9	1.5	−21.3	−1.8	23.4	100.5	15.4
Potatoes	58.7	79.2	9.1	16.5	−2.9	10.6	40.9	46.5
Cereals and pulses	162.0	306.4	11.2	−17.8	15.2	10.9	31.4	64.1
Industrial crops	302.3	579.8	2.9	−8.6	23.4	15.4	46.5	55.4
Fodder	97.9	137.2	0.1	−3.8	3.6	12.2	28.8	35.1
Flowers, seedlings, and ornamental plants	59.2	75.4	32.4	8.9	21.5	4.5	3.2	4.9
Miscellaneous[b]	44.4	75.9	13.8	−7.1	19.5	16.6	56.8	43.0
Total crops	**2,127.6**	**3,089.5**	**5.8**	**−2.8**	**6.9**	**10.3**	**22.2**	**35.8**
Total current output	**3,638.8**	**5,362.0**	**5.5**	**−0.3**	**7.2**	**10.0**	**21.5**	**37.5**

NOTE: Rates of change have been calculated from unrounded figures.
[a] Marketed output, on-farm consumption, and intermediate goods (agricultural raw materials).
[b] Includes straw, green manure, forest products, citrons, and vegetable seeds.

the World Bank loan for agriculture. It may be that the approved expansions went beyond the scope of the framework of the loan (or of that part earmarked for kibbutzim, which accounted for the bulk of the expansion), for it turned out that there were cases in which expansions were approved but the promised loan was not forthcoming.

The concentration of production in the large herds improves production efficiency, but it appears that production in Israel cannot yet compete with the world prices of butter and milk powder (these being exportable dairy products; liquid milk is not exportable, and there is no comparing powdered milk with fluid milk). This statement is doubly significant against the background of the rising prices of purchased fodder and the drop in the prices of butter and powdered milk owing to the surpluses in Europe (this situation of production surpluses in Europe is more or less permanent, as a result of the policy of the Common Market to protect producers there).

(b) *Crops*

Real output of crops expanded by 7 percent, after a 3 percent drop in 1972/73. The favorable climatic conditions explain the growth this year, just as the frost and drought in 1972/73 accounted for the decline in output then. In fact, most of this year's increase was in crops dependent on the weather: cereals and lentils and industrial crops. In addition, olive output expanded this year. There is a yield cycle in this branch, and output this year rose more than sixfold. Output in the citrus and vegetables branches declined, on account of the war and for other reasons (see the discussion below).

Output prices rose to an unusual degree, with great divergence between branches. Citrus prices rose by only 17 percent, so that profitability dropped considerably, and the income deriving from this branch declined even in nominal terms. On the other hand, profitability increased greatly in grains, cotton, and vegetables. This development is of special significance, for it should be kept in mind that the increase in the output of crops is limited by the quantity of water and land. These factors of production are distributed on the basis of quotas, so that their allocation is not an economic one. Increased profitability of crop branches directly increases the value of the restriction and encourages a more proper allocation as between producers. The great variety in profitability among the various crops stems largely from the raising of producer prices of products under control and their adjustment to world prices, thus leading to a better allocation, from the point of view of the economy, of the factors of production as between the various crops.

Table XIII-8

CITRUS OUTPUT, BY ECONOMIC DESTINATION, 1972/73 AND 1973/74

	Value at current producer prices (IL million)		Percent change in quantity			Percent change in prices		
			Annual increase or decrease (–)			Annual increase or decrease (–)		
	1972/73[a]	1973/74	Average 1968/69–1972/73	1972/73	1973/74	Average 1968/69–1972/73	1972/73	1973/74
Direct export	521.2	639.8	6.9	–7.7	4.4	11.3	10.0	12.5
Industry	78.9	104.1	10.7	7.4	18.6	9.6	5.2	11.1
Domestic consumption[a]	41.1	48.9	3.3	–1.0	–8.1	9.0	–3.2	29.5
On-farm consumption	6.0	6.4	1.8	1.1	6.5	0.1	—	—
Value of crops destroyed	49.5	1.8	—	—	—	—	—	—
Total	**696.7**	**801.0**	**3.9**	**2.4**	**–1.7**	**10.1**	**8.4**	**16.8**

NOTE: Rates of change have been calculated from unrounded figures.
[a] Including private sales.
SOURCE: Central Bureau of Statistics.

1. Citrus

Real output of citrus dropped by 2 percent in 1973/74 (see Table XIII-7).[9] This decrease is attributable to the decline in the output of varieties of grapefruit and lemons and to the lack of increase in the output of Shamuti and late strains. The drop in grapefruit output stems partly from the change in the output destination (from export to industry), owing to transport difficulties and hail damage.

Output prices to the producer rose only moderately, owing to a sharp drop in prices of output destined for industry and an only moderate rise in export prices. The decline in the prices paid by industry was due to the great increase in the quantities sold to this destination. And the only slight rise in export prices is attributable to the large increase in transport costs, which greatly widened the gap between the price at the entrance to the Israeli port and that in the country of destination.

On the other hand, production costs rose at a rate similiar to the general price rise in the economy, so that the profitability of the branch was hit hard. The year before there had also been a decline in profitability in the citrus branch, though a much more moderate one. The cumulative decline in profitability in the last two years led to a situation in which many marginal areas did not cover their current costs in 1973/74. For a number of years now marginal citrus areas, and Shamuti in particular, have not yielded a return commensurate with the investment, and have been unable to compete with alternative crops. The cultivation of these areas is executed by maintenance companies, and they are not interested in discontinuing cultivation so long as the costs are covered. The grove owners, some of whom do not engage in farming, are apparently not aware of the alternative value of water to land, and so they too take no action. It may be that the fact that costs were not covered this year and that no substantial change in profitability is to be expected will lead to the uprooting of marginal areas, a step that would be to the economy's advantage.

2. Other orchards

Real output of other fruit rose by 1.7 percent. The real output occurred mainly in the olives branch, where output rose by 6 percent on account of the yield cycle.[10] Apart from the olives branch, the real increase recorded was only 2 percent. This moderate rise is attributable to the contraction of the areas planted to pome fruit

[9] Real output is the value of the output of the branch at the prices of the previous year when the prices of the output destinations differ. Hence, a switch from one destination to another is expressed in a real change.

[10] The yield of olive crops is high one year and low in the following year.

(their output had also declined the year before) and to the damage to the banana crop caused by frost.

The prices of non-citrus fruits lagged behind the price rises for output in other branches. The divergence in the price increases was also considerable. The prices of pome fruit, wine grapes, and bananas rose sharply as a result of lower supply. The prices of other fruits rose only slightly owing to the increase of supply, both from Israeli agriculture and from agriculture in the administered areas.

3. Vegetables, potatoes, and melons

Output under this head declined by 6 percent in real terms in 1973/74 following the moderate rise of 4 percent the year before. It appears that the decrease in the volume of output derived partly from the effects of the war, since the main decline occurred in the first three quarters of the agricultural year, whereas in the last quarter of the year there was stability in the output of vegetables and a large increase in that of potatoes. Apart from the effects of the war it seems that there is a trend towards the stabilization of output owing to a shortage of manpower, since these crops involve difficult toil. In the years 1971/72 and 1972/73 output rose but little despite the price increase, both in relation to the prices of agricultural output and to input prices. Moreover, the output prices of these crops rose to a much greater extent than the Consumer's Price Index, so that even if input prices had risen at a rate identical with the rise in output prices there would have been an increment of real income to the grower. Producer prices of vegetables rose by 37 percent this year, and of potatoes by 46 percent, indicating that the profitability of these crops continued to grow.

4. Cereals and pulses

Real output of these branches rose rapidly in 1973/74 after a decline in the preceding year. In both years the development can be explained against the background of climatic conditions: an abundance of precipitation in 1973/74 and drought in 1972/73. Output of wheat, which is the chief crop in this group, rose by only 9 percent despite abundance of precipitation. This moderate rise in output apparently stemmed from inadequate fertilization. Wheat prices to the farmer in the cultivation period were low (towards harvest time they rose), and it may be that the low prices did not warrant added fertilization. The areas planted to wheat requiring auxiliary irrigation also contracted somewhat—this, too, apparently as a result of the low price being offered at sowing time.

5. Industrial crops

Industrial crop output rose by 22 percent in real terms in 1973/74, following a decline the year before. The increase stemmed from favorable climatic conditions for cotton and groundnuts, and it was these crops that contributed the bulk of the increased output. Producer prices were up 42 percent, and the price rise encompassed most industrial crops. Particularly striking was the 72 percent increase in the producer price of sugar beet (the price of this crop is fixed by the Government). Government policy in the preceding years was to curtail this crop, since the cost of producing sugar domestically, extracted from beets, was higher than world prices. In 1972/73, owing to an increase in world sugar prices, sugar production from beets became exceedingly profitable, particularly when account is taken of surplus productive capacity in Israel. In 1972/73 and the beginning of 1973/74 world sugar prices were not yet reflected in the price of sugar beet, and the areas planted to sugar beet, and the output, were only about one fifth of the sugar producing capacity of the two factories in Israel. In the middle of the 1973/74 agricultural year it was decided to raise substantially the producer price of sugar beet, and in the beginning of 1974/75 a further price rise was decided on, with the result that the gap between the price of beets to the grower and to the economy was greatly narrowed (this price increase led to an increase in the area planted to sugar beet in 1974/75, and the productive capacity of the sugar factories will apparently be exploited to the full).

Export prices of cotton and groundnuts rose in line with the rise in their prices abroad. Cotton yields for export are sold, in part, in advance, so that despite the drop in world cotton prices at the end of the agricultural year, cotton exports enjoyed high prices.

5. Labor Input in Agriculture

In 1973/74 there was a further decrease in the number of agricultural man/hours. The decrease applied mainly to hired labor from Israel (21 percent), the man/hours of nonhired labor declining by only 2 percent. There was no change in the number of man/hours of hired workers from the administered areas. The drop in the number of man/hours was apparently due to the influence of the war on the scope of employment in the first two quarters of the agricultural year, particularly during the period of the war itself, when both the number of hired workers and the average number of hours per worker decreased enormously. The 2 percent decline in the number of persons employed in agriculture is in line with the long-term trend, but in view of the exceptional decrease recorded in 1972/73 it was reasonable to expect that in 1973/74, were it not for the war, stabilization of the number of workers

would be achieved.

The branch composition of the rise in output offers a partial explanation of the drop in the number of workers. The output of vegetables declined and that of citrus remained stable. These two crops employ a good share of the total workers in agriculture. The decline in employment attributable to these two crops was offset in part by the rise in the output of other fruits. The increase in the output of field crops entails practically no increase in labor input, it being dependent on the cultivated area. The livestock branches which employ about 25 percent of total agricultural workers, enjoy economies of scale. Increased cattle output is a concomittant of the shift to larger herds, in which the labor input per unit of output is comparatively low. The efficiency of table fowl production also is a function of size. In summation, it is worth noting that owing to the large sampling error in the estimates of manpower surveys for a point of time, conclusions based on data for one year should be avoided. The data for 1973/74 are in harmony with the trend of recent years from two aspects: the increase in the number of workers from the administered areas, on the one hand, and the decrease in the number of workers from Israel, on the other. Similarly, the moderate decline in total man/hours is in line with the trend of the last five years (with the exception of 1971/72, when the number of man/hours increased, only to be followed by a sharp drop the following year, thus returning to the long-term trend).

6. Purchased Inputs

Inputs purchased from other sectors rose by 45 percent in 1973/74. Most of the increase derived from higher input prices (which rose by 41 percent), while the real increase in the use of inputs was only 3 percent, as against 6 percent the year before. The moderate increase took place against a background of high precipitation in 1973/74. The deceleration in the rise in fodder purchases— an increase of only 3 percent, whereas the output of the livestock branches rose by 7 percent—was made possible by the increased output of roughage and the residues of other crops. The use of water declined by 17 percent thanks to the rainy year, but another factor was the stricter adherence to water quotas.

Input prices rose to an unprecedented degree. Part of the increase was a result of the price rises in 1972/73, since agriculture purchases most of its inputs in the first half of the year. In the middle of 1973/74 the prices of agricultural inputs were raised substantially; some of these had immediate effect, while others will be expressed in input prices in 1974/75. The great increases in input prices also contributed to a deceleration in the increase in the use of purchased inputs. This is particularly striking with respect to the use of fertilizers, where there was a decline

Table XIII-9
INPUT OF MATERIALS AND SERVICES IN AGRICULTURE,[a] 1972/73 AND 1973/74

(IL million)

	Value at current prices		Percent change in quantity			Percent change in prices		
			Annual increase or decrease (–)			Annual increase or decrease (–)		
	1972/73	1973/74	Average 1968/69–1972/73	1972/73	1973/74	Average 1968/69–1972/73	1972/73	1973/74
Feed	655.3	998.0	6.3	9.9	3.6	10.7	14.5	47.0
Water	104.2	128.2	0.7	10.8	–7.3	7.4	13.6	48.7
Packing materials	144.9	192.3	7.5	–5.3	5.2	9.9	12.5	26.1
Fertilizers	55.2	73.5	4.1	1.2	–9.0	3.9	12.4	46.2
Transportation	126.9	170.8	8.0	–2.6	1.3	8.7	13.4	32.9
Spare parts, repairs, and tools	91.7	118.5	3.5	5.0	4.5	12.1	16.1	23.7
Fuel, lubricants, and electricity	38.5	86.0	1.5	0.3	8.0	12.5	7.7	106.7
Pesticides and veterinary preparations	112.7	178.8	9.4	3.0	7.8	8.7	9.4	47.2
Insurance and Government services	74.7	105.8	5.8	6.1	5.6	7.8	13.4	34.1
Miscellaneous	47.2	80.7	11.6	38.2	–0.4	7.7	8.6	70.3
Total purchases from other sectors	**1,451.3**	**2,132.0**	**5.7**	**6.1**	**2.0**	**9.8**	**13.2**	**41.0**
Wages of hired labor	409.8	509.8	—	—	—	—	—	—
Interest and rent	125.0	125.0	—	—	—	—	—	—
Intermediate goods	327.3	516.0	4.2	–0.7	11.5	12.9	35.3	41.4
Depreciation	272.8	380.8	7.1	5.0	4.8	10.7	17.6	33.1
Grand total	**2,586.2**	**3,663.6**	—	—	—	—	—	—

[a] Excluding labor and capital of farm owners.
SOURCE: Central Bureau of Statistics.

of 9 percent, though part of this decrease is attributable to a shortage of nitrogenous fertilizer.

7. Income

Agricultural income rose by 47 percent in 1973/74. This large increase was made possible by the real growth in product. The rise in output prices was on a par with the rise in the Consumer's Price Index, so that the increase in income in terms

Table XIII-10

AGRICULTURAL SUBSIDIES, 1972/73 AND 1973/74

(IL million, at current prices)

	Value		Percent increase or decrease (–) in 1973/74[a]		
	1972/73	1973/74	Value	Quantity	Price
Eggs	48.9	62.9	28.6	10.1	16.8
Poultry	15.6	21.2	35.9	12.9	20.4
Cow's milk	113.3	225.1	9.3	4.9	–5.9
Sheep's meat	0.8	1.0	25.0	–0.8	26.0
Fish	7.1	7.8	9.9	–13.7	23.3
Vegetables and potatoes	13.0	4.5	–65.4	–2.2	–63.6
Other fruits	6.1	10.1	63.9	17.3	39.7
Miscellaneous	0.1	0.1	—	—	—
Tobacco	0.3	0.4	33.3	–29.3	88.5
Wheat	19.8	4.1	–79.3	13.1	81.7
Total output subsidies	**225.0**	**337.1**	**49.8**	**6.6**	**40.5**
Fodder	12.5	103.3	1,366.4	103.0	—
Water	35.0	43.2	23.4	–17.0	—
Fertilizer	2.1	—	—	—	—
Total input subsidies	**49.6**	**226.5**	**356.7**	—	—
Drought compensation	26.1	50.4	—	—	—
Total subsidies	**300.7**	**614.0**	**204.0**	—	—

[a] A change in prices is the change in the subsidy rate per unit of subsidized output or input.
SOURCE: Ministry of Agriculture.

of purchasing power (deducting the Consumer's Price Index) is similar to the real increase in product. The rise in product price to the producer reflects the worsening of the terms of trade: input prices rose more than output prices (42 percent as against 37 percent). The income of farm proprietors rose by 53 percent. This large increase in proprietors' income as compared with the increase in total agricultural income stems from the fact that total wage payments rose by only 24 percent. In terms of purchasing power, the income of farm proprietors rose by 14 percent, while the increase in the income of the hired worker (taking into account the decline in the number of hired workers) lagged behind the rise of prices in the economy, which was similar to the development in the other sectors of the economy.

The substantial change in the distribution of income is explained by the fact that the input of hired labor is small in those crops which contributed most to the real increase in product and in which the change in output and intput prices operated to increase appreciably the value added. The reference is to industrial crops and to cereals and lentils, where income constitutes a return for nonhired labor, capital, land, and water. Dairy farming, which likewise contributed to the rise in income, is restricted, at least in the short run, by capital, and employs mainly nonhired labor. In other words, here too income is a return for factors of production owned by the farm proprietors. An exception is vegetable-growing, which employs hired labor and whose contribution to the increase in income was considerable.

8. Investment in Agriculture

Investment in agriculture rose by 5 percent, in real terms, in 1974. The year before had witnessed a decline in the level, owing to the war situation in the last quarter of the year. The increase in investment was higher than the average of the last five years, but if the war year is deducted growth was similar to the trend in previous years. The development of investment was not uniform. That in farm buildings [11] increased greatly as a result of the allocation of considerable credit to the development of flower hothouses (which increased by 118 percent) and to the continued development of cowsheds. There was no expansion of cattle farming, the resultant of two contrasting developments: the rapid growth of this branch in the kibbutzim and the liquidation of cowsheds in the moshavim. The latter was not recorded as early discards, whereas the kibbutz increases were included in the measurement of investment growth.

[11] Farm buildings and hothouses; does not include orchards or internal irrigation systems (in Chapter VIII the section headed "Structures" includes all of these components)

Table XIII-11

ESTIMATED GROSS INVESTMENT IN AGRICULTURE, 1973–74

(IL million, at current prices)

	Value		Percent increase or decrease (–)		
	1973[a]	1974	Value	Quantity	Price
Orchards	35.0	47.8	36.8	–3.2	41.3
Livestock	41.6	40.6	–2.4	–26.5	32.8
Farm installations[b]	96.8	147.2	52.1	2.0	49.1
Machinery and equipment	210.2	313.6	49.2	8.7	37.3
Land reclamation and conservation, drainage, natural pasture, etc.	46.6	71.5	53.3	6.4	44.1
Total investment in agriculture	**430.2**	**620.7**	**44.3**	**3.2**	**39.8**
Afforestation	22.7	31.7	39.8	–3.1	44.3
Total investment in agriculture and afforestation	**452.9**	**652.4**	**44.1**	**2.9**	**40.0**
Water projects	97.0	106.3	9.6	–24.0	44.2
Total investment in agriculture, afforestation, and water projects	**549.9**	**758.7**	**38.0**	**–4.5**	**44.5**

[a] Revised figures.
[b] Farm buildings, fish ponds, and local irrigation networks.
SOURCE: Central Bureau of Statistics.

Investment in equipment increased in line with the five-year average, after a similar rise the year before. The increase reflects the expansion of the cotton branch and of the other field crops, the expansion of the livestock branches, and the increased purchase of equipment on the part of the minorities sector.

The output of the capital assets declined in real terms owing to the liquidation of the cowsheds in the moshavim, so that despite the expansion of cattle farming in the kibbutzim, a sharp drop occurred in the rate of increase of the livestock inventory. Investment in orchards rose, mainly as a result of avocado planting, and the substitution of new strains of citrus fruit, thus offsetting the reduction in the total area under citrus and stone and pome fruit.

Government investment in waterworks declined, owing to reductions in the development budgets. This curtailment should also be seen against the background of

the full exploitation of the conventional water sources (the topmost water, Lake Kinneret, etc.). Additional water will have to come from expensive sources, such as desalination and further development of artificial rain.

Table XIII-12

GROSS STOCK OF FIXED ASSETS IN AGRICULTURE,[a] 1973–74

(IL million, at current prices)

	Value		Percent increase or decrease (–)		
	1973[b]	1974	Value	Quantity	Price
Orchards and farm installations[c]	6,095.4	9,182.4	50.6	3.1	46.1
Machinery and equipment	988.0	1,448.4	46.6	6.8	37.3
Livestock[d]	202.8	989.0	40.7	6.0	32.8
Total	**7,786.2**	**11,619.8**	**49.2**	**3.8**	**43.7**

NOTE: Rates of change have been calculated from unrounded figures.
[a] Excluding land and financial assets.
[b] Revised data.
[c] Farm buildings, local irrigation networks and water projects, afforestation, land reclamation and conservation, drainage, natural pasture, etc.
[d] Excluding broilers and fish.
SOURCE: Based on estimates of A. L. Gaathon (Bank of Israel) and Central Bureau of Statistics data.