CHAPTER XI

AGRICULTURE

1. Main Developments

The real agricultural product declined in 1965/66,[1] continuing the trend of the previous year. At constant producer prices, the figure edged down by 1.5 percent, after having fallen to a similar extent in 1964/65 (see Table XI–1).

The decrease in the real product over the last two years was the outcome of both natural conditions and the declining trend in the product growth rate discernible since the end of the fifties. As regards the former factor, agriculture was hit by drought in 1965/66, following a year of favorable weather. But while the weather was good in 1964/65, average yields failed to match the record levels attained in 1963/64 in most types of farming or crops.[2]

The effect of the drought was felt mainly in intermediate goods, leading to an increase in the purchased input. Total output (including intermediate goods) expanded at a low rate in real terms, but agricultural output (which excludes intermediate goods) expanded somewhat faster than in the previous year—4 percent as against 2 percent. The real purchased input was up by 10 percent in 1965/66, as compared with 3 percent in 1964/65. The decline in the real agricultural output growth rate, which began in the late fifties (see Diagram XI–1), was due partly to the slower expansion of domestic demand for agricultural commodities (production for export likewise increased more slowly, encountering many difficulties) and to the declining profitability of agricultural production as a result of supplies expanding faster than demand.

Throughout most of the fifties, output expanded rapidly as a result of the policy of preventing agricultural imports in order to maintain a high price level for local produce. This, together with the accelerated growth of the population,[3] created a big demand for farm products, and output expanded as rapidly as factor limitations permitted.[4] After several years during which

[1] The reference throughout this chapter is to agricultural years beginning in October and ending in September.

[2] The decline in the agricultural product in 1964/65 was apparently also due in part to deliberate cutbacks in production after producer prices had fallen in 1963/64 because of the rapid growth of supplies.

[3] During the period 1950–59 the population increased at an average annual rate of 7.0 percent, whereas during the years 1960–66 the figure declined to 3.5 percent.

[4] During these years there were unexploited reserves of land and water, while the labor force grew rapidly. Thus the expansion of output mainly reflected the pace at which agricultural production was organized—the establishment of new settlements, their equipment, and the training and adaptation of the settlers to farming.

Table XI–1

CURRENT ACCOUNT OF AGRICULTURE, 1964/65 AND 1965/66

	Value at current prices (IL million)		Percent increase or decrease (–) from 1964/65 to 1965/66		
	1964/65[a]	1965/66	Value	Quantity	Price
1. Total agricultural output at producer prices	1,424.4	1,481.3	4.0	1.3	2.6
2. Less: Agricultural raw materials	152.4	131.5	–13.7	–16.5	3.4
3. Agricultural output at producer prices	1,272.0	1,349.8	6.1	3.6	2.5
4. Less: Subsidies on output	111.3	91.2	–18.1	—	—
5. Agricultural output at market prices	1,160.7	1,258.6	8.4	3.6	4.6
6. Less: Purchased input	460.9	525.0	13.9	10.3	3.2
7. Gross agricultural product at market prices	699.8	733.6	4.8	–0.1	4.9
8. Less: Depreciation	95.2	106.3	11.6	8.6	2.8
9. Net agricultural product at market prices	604.3	627.3	3.8	–1.5	5.3
10. Plus: Subsidies on output	111.3	91.2	–18.1	—	—
11. Net agricultural product at producer prices	715.9	718.5	0.4	–1.5	1.9
12. Plus: Drought compensation	0.2	13.8	590.0	—	—
13. Total income from agriculture	716.1	732.1	2.3	—	—
14. Less: Wages of hired labor[b]	160.8	171.7	6.8	–9.5[c]	18.0
15. Less: Interest and rent	45.8	48.0	4.8	—	—
16. Income of farm owners from agriculture	509.5	512.6	0.6	—	—

NOTE: Percentage changes have been calculated from unrounded figures.

[a] Revised figures.

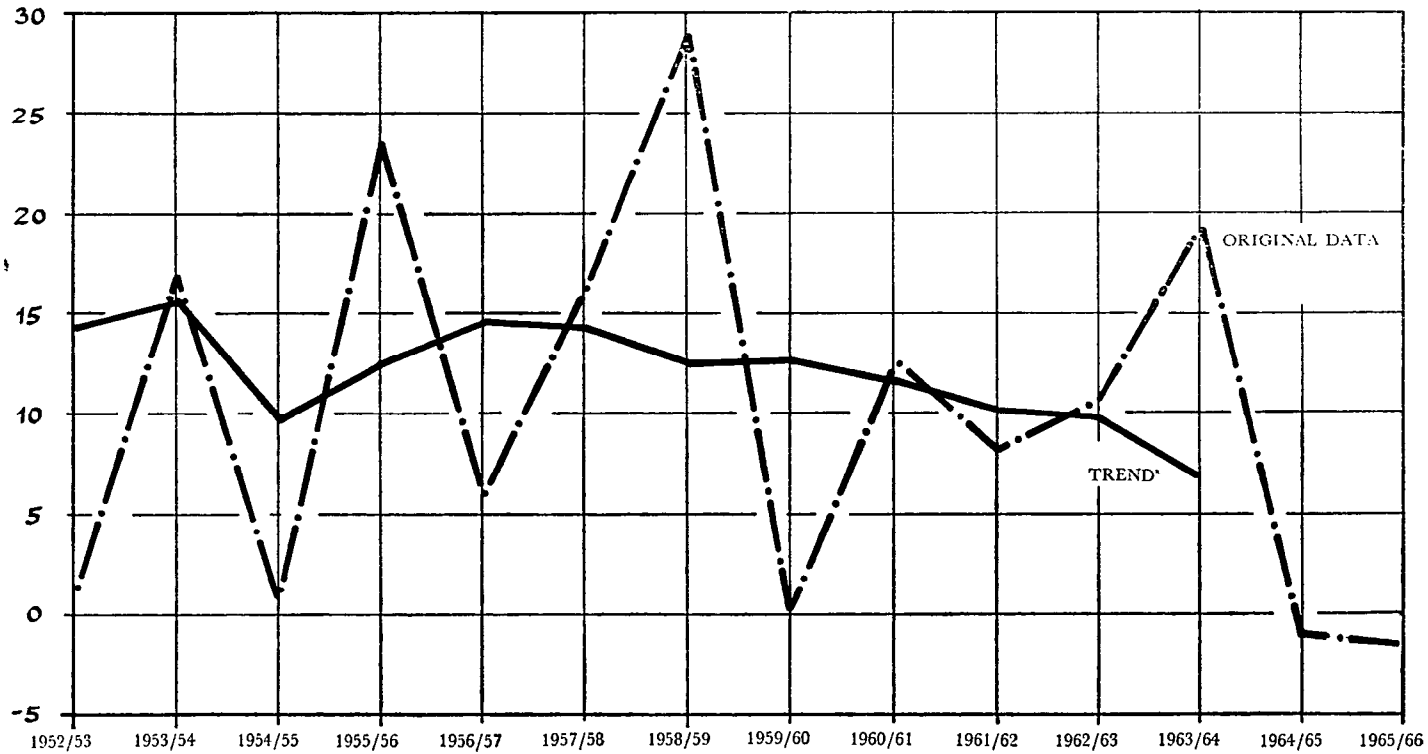
[b] Bank of Israel estimates of the agricultural wage bill are IL 29 million less than those of the Central Bureau of Statistics. The difference is due to different methods of estimation. According to CBS data, farm owners' income declined in 1965/66 by about IL 7 million, or 1.4 percent.

[c] Input of standard work-days (8 hours) of hired labor.

SOURCE: Lines 1 and 2—Table XI–2 below; 4 and 12—Table XI–10; 6—Table XI–7; 8—Central Bureau of Statistics; 14—Bank of Israel; 15—estimate based on interest payments of the agricultural sector as obtained from a Bank Leumi le-Israel sample.

Diagram XI–1

REAL CHANGES IN AGRICULTURAL PRODUCT, 1952/53 TO 1965/66



[a] Calculated as a five-year moving average.

the growth of supply outstripped that of demand, the profitability of agricultural production began to fall off, despite the continued advance in productivity. Following the decline in profitability at the end of the fifties, output growth began to slow down. The deceleration was the combined result of a drop in farm employment, the smaller volume of investment in the sector, and administrative measures—encouraged and organized by the Government—restricting production by means of quotas. At the same time, as already pointed out, domestic demand for agricultural produce weakened in consequence of the slower growth of the population, and perhaps also because of the declining propensity to consume these goods as real incomes rose.

In the light of these developments, agricultural output might have been expected to increase to only a modest degree in the last two years. However, the expansion was even less than in recent years, when increases ranged from 5 to 7 percent per annum. The low growth rate was apparently not connected with the slower growth of demand during the last two years as a result of the more moderate increase in the population and in per capita income, for two reasons: First, demand for food is unlikely to decline appreciably when incomes rise more slowly, owing to the low income elasticity of demand for this item. Secondly, the character of agricultural production, its organizational and marketing structure, and Government intervention in the fixing of prices do not permit supplies to adjust quickly to changes in demand. In most types of farming a relatively long period is required for such adjustment. The explanation of the decline in agricultural output during the last two years must therefore be sought mainly in the extraordinarily big expansion of output during 1963/64 and in the drought of 1965/66.

Producer prices went up by only some 2.5 percent in 1965/66, after rising by nearly 7 percent the year before. The marked deceleration was due to the slower rise in prices of marketed output (1.8 percent as against 6.5 percent approximately in 1964/65) a development connected with the expansion of supplies to the domestic market, as well as to the smaller rise in the prices of output sold abroad. The latter advanced only 3.3 percent in 1965/66 (as compared with 11.6 percent in the previous year), mainly because of the more sluggish increase in the prices fetched by citrus—2.8 percent as against 13.5 percent in 1964/65.

Consumer prices rose by only some 4–5 percent during the year, in contrast to more than 12 percent in 1964/65. The slower rise in the market prices of output sold for domestic consumption was largely due to the expansion of supplies,[1] after a sharp contraction in 1964/65. Most products contributed to the growth of supply, and in some cases, especially vegetables and fruit, this was accompanied by a fall in the price. On the other hand, the prices of

[1] The total supply to the domestic market was about 4 percent larger in 1965/66, while that per capita expanded by about 1 percent only.

beef, milk, eggs, fish, and citrus rose. This can be attributed in part to Government intervention in the fixing of prices (milk and eggs), and in part to smaller supply (beef). The continued rise of prices, although at a slower rate and despite bigger supplies, reflects the growth of domestic demand for farm products, and it was connected with the increase in incomes during the year. Nevertheless, the slow expansion of the population in 1966 doubtless tended to check the advance of prices by moderating the growth of demand.

Overall productivity—i.e. total output per unit of total input (including capital and labor)—edged down by approximately 1 percent in 1965/66, after decreasing to a similar extent the year before. Factor productivity—i.e. gross product per unit of capital and labor—declined by over 1 percent during the year reviewed, after falling by some 2 percent in 1964/65. This drop in productivity over the last two years stands out all the more when it is recalled that in previous years there had been an average rise of 6 to 7 percent per annum. At this stage, the change in trend cannot be fully explained, though it is apparently attributable in part to the influence of natural conditions. Another reason may be the lower rate of capital utilization. The latter development was connected partly with the contraction of output in certain types of farming (some farmers curtailed production because of the quota restrictions), which resulted in the reduced utilization of installations. Apparently it was also a by-product of the growing tendency toward specialization typical of Israeli agriculture in recent years.[1] In addition, there was some slowing down in the acquisition of farm skills by the new settlements following their rapid progress in the first years.

The drought of 1965/66 led to a more rapid expansion of real purchased input (10 percent as against 3 percent in 1964/65). Most of the increase occurred in fodder and water (see Table XI–7), but the bigger purchases of fodder were apparently due also to other factors, the most important of which was the contraction of grain stocks.

The total labor input, calculated according to production norms, held steady in 1965/66.[2] However, the structure of the agricultural labor force, reflected

[1] A more detailed analysis of agricultural productivity will be found in the section dealing with inputs.

[2] There is a difference between the labor input as calculated according to production norms and that according to the manpower surveys of the Central Bureau of Statistics, which is calculated on the basis of direct measurements. The calculation based on production norms shows that the labor input did not change in 1965/66, while manpower survey data point to a decline of approximately 3 percent. The difference is not statistically significant and may be due to sampling errors in the manpower survey data. In 1964/65 the manpower surveys showed a rise of about 5 percent, whereas the calculations based on norms showed a decrease of approximately 3 percent. Accordingly, if an average is taken for the last two years, there is no significant difference between the two sources. The calculation of farm productivity cited in this chapter is based on production norms, while the changes in the composition of the labor input (i.e. the changes in the ratio

by the ratio between hired and nonhired workers, changed appreciably, the weight of the latter rising owing to the dismissal of farm hands. This contrasts with the trend of recent years, during which the number of nonhired agricultural workers had moved steadily downward. This change can be ascribed to the fact that many settlers, who during the boom years took on outside nonfarm jobs yielding a higher income, were dismissed from their jobs and returned to their farms, replacing some of the hired labor who had been taken on in their stead.

Total farm income increased in 1965/66 by only 2.3 percent, after advancing by 6.5 percent in 1964/65. The sharp decline in the growth rate was due to a slower rise of producer prices together with a decrease in the real product. The smaller percentage growth of total income in 1966, while outlay on wages, interest, and rent continued upward, resulted in an increase of only 0.5 percent in the net income of farm owners from agriculture.

Net farm income per nonhired worker apparently declined, since the number of such workers increased while income remained virtually unchanged.

The amount of direct farm price supports expanded slightly in 1965/66 (see Table XI–10). There was a substantial increase in factor subsidies and in drought compensation payments. On the other hand, subsidies on output were cut drastically. The reduction of the latter—for the second consecutive year—was much more severe in 1965/66, owing partly to the Government's policy of abolishing subsidies and partly to the smaller output of subsidized products. As regards investment, the downtrend in the real volume continued in 1965/66, affecting both public development projects and investment in farms. Accordingly, there was a further slowdown in the expansion of the real capital stock, both gross and net (see Table XI–12); however, it should be noted that the increase in discards and depreciation likewise affected the growth rate.

The year reviewed saw a noticeable improvement in the terms of agricultural financing as regards the availability of both short- and long-term credit. The outstanding institutional farm debt increased by IL 160 million, as compared with some IL 120 million in 1965 (see Table XI–13). Long-term borrowing accounted for about IL 135 million of the increment, as against approximately IL 95 million in 1965. The entire credit increment thus consisted of long-term loans, with all supplying institutions contributing to the higher figure.

As a result of the much larger expansion of long-term institutional credit in 1966 and the further decline in gross investment in farms, institutional financing exceeded long-term uses by more than IL 20 million (see Table XI–14). The existence of surplus long-term funds from external sources

between hired workers and nonhired agricultural labor) are based on manpower survey data.

frees farmers from the need to utilize their own means (including depreciation funds) to finance farm investments, enabling them to divert these resources to other purposes, such as the reduction of their noninstitutional debts.

Incremental short-term credit totalled IL 27 million in both 1965 and 1966. In 1966 two-thirds of this amount was granted under the agricultural production financing program,[1] as compared with only half in 1965 (see Table XI–15). Other short-term credit was granted by banks from their own resources subject to the ordinary liquidity requirements, and was proportionately smaller in 1966, accounting for one-third of the increment as against half the year before. This reflects a considerable improvement in short-term financing terms, as credit under the agricultural production financing program is granted at a lower interest rate than ordinary bank credit.

2. Output

(a) *Value of output*

The total farm value of agricultural output, at current producer prices, increased by only 4 percent in 1965/66, as compared with more than 7 percent in 1964/65, and totalled IL 1,480 million.

At constant prices, output expanded somewhat faster than in the previous year—1.3 percent as against less than 1 percent. These growth rates are lower than those achieved during the years 1959/60 to 1963/64, when they averaged about 13 percent per annum. This development is attributable, as already mentioned, to the influence of natural conditions and the long-run declining trend in the expansion of real agricultural output.

Producer prices were only 2.5 percent higher in 1965/66, after having risen by some 7 percent the year before. Prices of marketed output moved up more slowly, whereas those of output retained on the farm advanced at approximately the same rate in both years.

(b) *Destination of output*

The real growth of marketed output was appreciably larger in 1965/66, totalling IL 52 million, or 4.6 percent, as against less than 3 percent in the previous year. Output retained on the farm continued downward, even more rapidly than in 1964/65. Accordingly, the weight of marketed output within total output rose in real terms from 79 percent in 1964/65 to 82 percent. Approximately 40 percent of the increment was exported, about 35 percent was sold locally for direct consumption, while the remainder was supplied to industry.

[1] The agricultural production financing program consists of controlled credit exempt from the liquidity regulations, rediscounts, and credit from funds run jointly by the banks and the Government.

Table XI-2

TOTAL AGRICULTURAL OUTPUT, BY ECONOMIC DESTINATION, 1964/65 AND 1965/66

(IL million)

	Value at current prices		Percent increase or decrease (–) from 1964/65 to 1965/66		
	1964/65[a]	1965/66	Value	Quantity	Price
Output marketed[b]					
Direct local consumption	530.3	557.4	5.1	3.7	1.4
Industry[c]	350.6	368.0	5.0	3.6	1.4
Export	252.2	281.4	11.6	8.0	3.3
Total	1,133.1	1,206.8	6.5	4.6	1.8
Output retained on farms					
Own consumption	72.5	81.0	11.7	4.3	7.1
Capital goods	66.4	62.0	–6.7	–14.6	9.3
Agricultural raw materials	152.4	131.5	–13.7	–16.5	3.4
Total	291.3	274.5	–5.8	–10.9	5.7
Grand total	1,424.4	1,481.3	4.0	1.3	2.6

[a] Revised figures.
[b] Including IL 6.2 million worth of output destroyed in 1964/65, and about IL 7 million worth in 1965/66.
[c] All industrially processed commodities sold in both the local and export market.
SOURCE: Central Bureau of Statistics.

In the domestic market, the increase was reflected by a growth of approximately 4 percent in supplies, accompanied by a much slower rise in producer prices—about 1 percent only, as against some 6 percent in 1964/65. Quantities were larger in vegetables, fruit, poultry-meat, cow's milk, and eggs. On the other hand, the supply of beef contracted. The slower rise of prices was connected with the above-mentioned expansion of supplies to the domestic market after a decline of some 4 percent in 1964/65. In some items the growth of supply was even accompanied by a fall in price; this applies mainly to vegetables, fruit, and poultry-meat. In contrast, prices of milk, eggs, beef, and fish were higher than in 1964/65; this was due partly to Government intervention in the fixing of prices (as in the case of milk and eggs), and partly to the reduction of supplies (in the case of beef).

Output sold for industrial processing was up approximately 4 percent in 1965/66, about the same rate as in the previous year. The continued growth was due to the larger output of cotton, groundnuts, and other industrial crops, as well to the much bigger quantity of surplus vegetables diverted to industry. On the other hand, output of wheat and sugar beet fell off slightly, and the supply of citrus to industry was reduced.

The real increase in output sold abroad was appreciably slower in 1965/66, totalling only 8 percent as compared with 17 percent in 1964/65. This development can be attributed to citrus exports, which advanced only 9 percent as against 16 percent in 1964/65, and to edible eggs, which showed a much smaller figure following the contraction of output. On the other hand, the real increase in other agricultural products accelerated: exports of cotton expanded by 30 percent, groundnuts by 45 percent, and bananas by 25 percent; there were also substantial gains in miscellaneous vegetables and flowers (in some items the growth totalled several hundred percent). The smaller shipments of eggs, together with the rapid expansion of other agricultural exports (exclusive of citrus), brought up the value-added component of agricultural exports other than citrus, as the import component of egg production is higher than that of other farm products. The effective exchange rate for agricultural exports others than citrus averaged about IL 4 per dollar in 1965/66, compared with approximately IL 4.50 the year before. The decline was due to the changed composition of the exports, which were executed at different effective exchange rates—vegetables, flowers, and fruit at the relatively low rate of about IL 3.30 per dollar, industrial crops at about IL 4, and eggs at an even higher rate. The increased sale of items at a relatively low exchange rate and the curtailment of egg shipments combined to reduce the effective exchange rate for agricultural exports other than citrus.

Export prices rose by only some 3.5 percent in 1965/66, after advancing by about 11.5 percent in the preceding year. The lower rate was due to the relatively small increase in the producer prices of exported citrus—less than 3 percent as compared with more than 13 percent in 1964/65.

Output retained on the farms declined in 1965/66 by approximately 11 percent in real terms, after a decrease of 8 percent in 1964/65. The faster decline in the year reviewed is explained by the smaller output of intermediate goods owing to the drought. The output of capital goods continued downward in 1965/66, though more slowly (see Table XI–6).

(c) *Output, by type of farming*

1. Livestock

Real output of livestock and livestock products expanded at a slightly faster rate in 1965/66—3.2 percent as compared with less than 1 percent in 1964/65 (see Table XI–3). The acceleration was due to the larger output of milk and poultry-meat. On the other hand, output of beef and eggs fell off.

(i) Cattle farming

Milk production expanded more rapidly in 1965/66 than in the previous year—by 7.5 percent as against 4.3 percent (see Table XI–4). This can be

ascribed to the increased profitability of dairy farming and to farmers' expectations that production would again be restricted through the imposition of quotas. Profitability began to advance in 1964/65, when milk prices (which are fixed by the Government) were raised that year, and they were raised again in 1965/66. The expansion of milk production in the year reviewed was made possible by the enlarging of milch herds. In 1964/65, on the other hand, because of the time required to expand milch herds, the growth of milk production was reflected by a marked rise in the average yield per cow, achieved because of an increase in the fodder input rather than in the size of the herds. In 1965/66 the average yield per cow rose by only 2 percent, even though producer prices were raised again. This small percentage increase must be attributed to the rapid rise in the number of cows, less care being exercised in the selection so as to ensure a higher average yield. Besides the rise in profitability, dairy farming was stepped up in 1965/66 also because farmers were permitted to reach the production quotas set by the Planning Authority for 1970/71 before the expiration of the five-year plan.[1] They

Table XI–3

CURRENT AGRICULTURAL OUTPUT,[a] BY TYPE OF FARMING, 1964/65 AND 1965/66

(IL million)

	Value at current prices		Percent increasse or decrease (–) from 1964/65 to 1965/66		
	1964/65[b]	1965/66	Value	Quantity	Price
Livestock					
Poultry	274.3	289.3	5.4	3.0	2.4
Cattle	210.9	223.6	6.0	1.3	4.7
Other	87.6	102.3	16.8	8.6	7.5
Total	572.8	615.2	7.4	3.2	4.0
Crops					
Citrus	237.5	264.4	11.3	7.0	4.1
Other fruit	157.4	159.7	1.4	8.5	–6.5
Vegetables and potatoes	123.5	135.3	9.4	11.2	–1.5
Field crops and misc.	266.8	244.7	–8.2	–12.6	5.0
Total	785.2	804.1	2.4	1.3	1.1
Total current output	1,358.0	1,419.3	4.5	2.1	2.4

[a] Marketing, on-farm consumption, and intermediate goods (agricultural raw materials).
[b] Revised figures.
SOURCE: Central Bureau of Statistics.

[1] The five-year agricultural development plan covering the years 1966/67 to 1970/71 inclusive.

were quick to fill the quotas, fearing that after the creation of surpluses, quotas for 1967/68 would be fixed in accordance with the level of output in 1966/67.

Producer prices of milk were raised in 1965/66, the increase being passed on to the consumer. Retail prices of milk and dairy produce averaged some 15 percent higher in the year reviewed, in part owing to the abolition of a certain percentage of the milk subsidy previously paid, farmers being compensated by a higher market price. The raising of consumer prices led to a smaller percentage increase in the consumption of milk and milk products as compared with 1964/65. This mainly affected milk products, but also milk, per capita consumption of the latter even declining somewhat. The rapid expansion of supply relative to demand resulted in a big milk surplus

Table XI-4

AGRICULTURAL OUTPUT, BY COMMODITY, 1964/65 AND 1965/66

(IL million)

	Value at current prices		Percent increase or decrease (–) from 1964/65 to 1965/66		
	1964/65[a]	1965/66	Value	Quantity	Price
Current ouput					
Livestock					
Eggs	130.5	133.8	2.5	–4.8	7.6
Meat	252.9	263.1	4.1	3.8	0.2
Milk	134.9	153.7	13.9	7.5	6.0
Fish	33.8	44.3	31.2	14.4	14.7
Miscellaneous	20.7	20.3	–2.0	–0.2	–1.9
Total	572.8	615.2	7.4	3.2	4.0
Crops					
Citrus	237.5	264.4	11.3	7.0	4.1
Other fruit	157.4	159.7	1.4	8.5	–6.5
Potatoes	22.4	23.8	6.1	–4.6	11.2
Vegetables	101.0	111.4	10.3	14.7	–3.8
Grains and pulses	124.5	92.7	–25.5	–29.2	5.1
Industrial crops	101.8	110.0	8.1	6.8	1.3
Miscellaneous	40.6	42.1	3.7	–10.4	15.7
Total	785.2	804.1	2.4	1.3	1.1
Total current output	1,358.0	1,419.3	4.5	2.1	2.4
Output of capital goods	66.4	62.0	–6.7	–14.6	9.3
Total output	1,424.4	1,481.3	4.0	1.3	2.6

[a] Revised figures.
SOURCE: Central Bureau of Statistics.

in 1965/66. It was used partly as a substitute for powdered milk (down 32 percent), and partly to increase stocks of local butter.

Beef output fell off by nearly 8 percent in 1965/66, after declining in the previous year, although to a lesser extent. The decrease in 1965/66 was due mainly to the aforementioned expansion of milch herds, which considerably reduced the supply of meat from this source. However, the supply from other sources was also smaller, apparently because of the reduction of beef-steer herds in 1964/65.[1]

The contraction of fresh beef supplies, which was accompanied by a moderate rise of approximately 4 percent in prices, caused much of the demand to shift to imported frozen meat. Consequently, the import and consumption of frozen meat expanded considerably in 1965/66, at an even faster rate than the year before. The moderate rise in fresh beef prices, despite the sharp contraction of supply, is presumably explained by the growing tendency to consume frozen meat owing to its improved quality, and the fact that consumers have gotten used to this commodity, which is relatively new in the Israeli market.

(ii) Poultry farming

The real output of poultry farming expanded in 1965/66 by approximately 3 percent, after remaining virtually unchanged in the preceding year. The latter development was due to the smaller output of poultry-meat and a very small rise in the output of edible eggs, whereas in 1965/66 production of poultry-meat was considerably larger but that of eggs declined.

The smaller supply of poultry-meat and the higher prices of fresh beef in 1964/65 caused an appreciable rise in poultry-meat prices that year, and as a result poultry-meat production was expanded by more than 11 percent in 1965/66. Despite the considerable increase in poultry-meat supplies during the year reviewed, prices slipped by less than 2 percent. This is mainly ascribable to the withdrawal of "surpluses" from the market in order to build up a stock of processed fowls (which was kept in cold storage until 1966/67), and to the changed composition of supplies: that of laying hens, which is cheaper than average, was reduced proportionately to the contraction of egg output, while the supply of broilers and turkeys, which are relatively expensive, expanded at an above-average rate.

Egg production became less profitable in 1964/65,[2] both in absolute terms

[1] Beef is supplied from cows and fattened calves from the dairy herd and steers. Available data do not differentiate between fattened calves and steers, so that it is difficult to establish the exact reason for the decline in the number of calves. In 1964/65 the number of steers decreased by 13 percent, and hence it may be assumed that the production capacity of this herd declined in 1965/66.

[2] According to data from the Institute of Farm Income Research (The Profitability of Poultry Farming in 1964/65, Tel Aviv, August 1966), the profitability of egg production was the lowest of all subbranches of poultry-farming (hatching, poultry-meat, and eggs) on large farms, and average on family farms.

(owing to the decline in the average producer price) and relatively (because of the higher prices of poutry-meat). Consequently, egg output fell off by some 7 percent. The downtrend began in the last months of 1964/65—in the case of some producers it was accompanied by a switch to broilers—but its effects were fully felt in 1965/66. The contraction of output is reflected in the smaller export of eggs, whereas domestic demand for this item even rose during the year reviewed. As egg prices in Israel are higher than those obtainable abroad, and since retail prices in the domestic market are fixed, so that the absorption capacity of this market is limited, whenever output exceeds the capacity of the local market, "surpluses" are created which are channelled to export. Thus, during periods of production cutbacks, the marketing bodies prefer to limit exports rather than supplies to the local market.

Producer prices of eggs were raised twice during the year reviewed: the first time in April 1966, and the second time with the introduction of differential prices for the summer months, intended to extend the production season. The higher prices resulted in a larger quantity of hatching eggs for the 1966/67 season. Consumer prices were changed only toward the end of 1965/66, when the egg subsidy was partially abolished and farmers were compensated by higher prices in the domestic market. This rise had not yet depressed consumption by the end of the year reviewed.

2. *Crops*

The output of crops increased in real terms by 1.3 percent in 1965/66, compared with about 4.5 percent the year before. Grains and pulses were down 30 percent owing to the drought, while other crops showed further gains.

(i) Citriculture

The real output of citriculture increased more slowly than in 1964/65—7 percent approximately as against over 9 percent (see Table XI–5). The continuation of the upward trend was due to the extension of the fruit-bearing area by some 10 percent, to bigger yields from young groves, and to favorable weather conditions. On the other hand, the average yield of older groves decreased. The profitability of citriculture declined in 1965/66 owing to the sharp rise in production costs, which was accompanied by a relatively slow advance in prices, and to the decline in the average yield per dunam.[1] The lower profitability was reflected by a decrease in the return on operating capital from 8–9 percent in 1963/64 and 1964/65 to 7 percent.[2] The average

[1] The data cited above are from the "Citrus Sector Accounts, 1962/63–1965–66—Output, Input, Income and Profitability", Special Publication No. 224 of the Central Bureau of Statistics, Jerusalem.

[2] Operating capital includes land at an imputed value of IL 500 per dunam.

yield per unit of fruit-bearing area came to 2.7 tons per dunam for all varieties of citrus fruit, compared with approximately 2.9 tons in 1964/65. The decline occurred in all varieties and for the second consecutive year, despite the fact that the proportion of groves of only partially fruit-bearing age (6 to 8 years) decreased during this period, while the proportion of fully fruit-bearing groves rose. The lower yields can be partly ascribed to the fact that a large percentage of the groves which began to bear fruit in recent years were planted on marginal land.

Table XI-5

CITRUS OUTPUT, BY ECONOMIC DESTINATION,[a] 1964/65 AND 1965/66

	Quantity in 1965/66 ('000 tons)	Value at current prices (IL million)		Percent increase or decrease (–) from 1964/65 to 1965/66[c]		
		1964/65[b]	1965/66	Value	Quantity	Price
Direct export	580.0	193.9	217.8	12.3	9.3	2.8
Industry	214.7	18.0	17.7	–1.4	–4.9	3.6
Direct domestic consumption	73.4	14.8	17.7	19.1	3.3	15.2
On-farm consumption and private sales	35.5	9.4	11.1	18.5	2.7	15.4
Intermediate goods	1.0	1.4	0.1	–94.2	–94.8	12.0
Total	904.6	237.5	264.4	11.3	7.0	4.1

[a] The value of citrus output refers to its value at the first point of delivery—i.e. the port in the case of export, and the wholesale market in the case of fruit for domestic consumption. In previous years the Central Bureau of Statistics defined its value as that on entering the packing house, and hence it included haulage costs to the first point of delivery.
[b] Revised figures.
[c] Calculated from unrounded figures.
SOURCE: Central Bureau of Statistics.

Producer prices of citrus went up by some 4 percent in 1965/66, after a rise of about 12 percent the year before. The continued uptrend was due to the much higher prices fetched in the domestic market, whereas those received on overseas consignments moved up relatively little despite the considerably higher prices paid in export markets. The rise in the market prices of exported citrus is attributable to the poor harvest of deciduous fruit in Europe, to the slower expansion of supplies from other citrus exporting countries, and to the larger demand from Eastern Bloc countries. The prices received by growers went up to a smaller extent because of the dearer cost of export services.

Most of the incremental supply of citrus in 1965/66 was accounted for by grapefruit and lemons, whereas the supply of Shamuti oranges expanded more slowly than in 1964/65 and that of late-ripening oranges fell off. These de-

velopments resulted in the provision of much larger quantities of grapefruit and lemons to all markets, accompanied by a decline in their price.

The higher price of Shamutis in the overseas market and the higher percentage of fruit suitable for shipment abroad led to the export of about 70 percent of the total Shamuti crop, as compared with 65 percent in 1964/65. Domestic marketing of Shamutis consequently contracted by about 15 percent in the case of direct local consumption, and by 10 percent for industrial processing. This was accompanied by an appreciable advance in the domestic price.

(ii) Other fruit

The output of other fruit, at constant price values, increased by 8.5 percent in 1965/66, following a decline of nearly 5 percent in the preceding year due to smaller average yields and the reduction of the net fruit-bearing area.

Deciduous fruit supplies were about 8 percent larger in 1965/66. Increases were also recorded in subtropical species and bananas. The quantity of avocados was up 70 percent owing to the considerable extension of the fruit-bearing area. Banana production gained 28 percent, as the plantations recovered from the frost which hit them in 1963/64 and resulted in much smaller yields in the following year. Output of table grapes was down by a substantial 17 percent, as vineyards continued to be uprooted. The growth of fruit supplies in 1965/66 was accompanied by a fall of 6.5 percent in their average price, following a rise of 12 percent in the previous year due to the contraction of supplies. The biggest decreases during the year reviewed were in bananas and most of the deciduous varieties. Table grapes and plums became more expensive, owing to the reduction of their supply and despite the expanded production of other fruit.

(iii) Industrial crops

Real output of cotton was over 15 percent larger in 1965/66. This rapid growth was due to a 25 percent increase in the irrigated area, though the average yield per dunam fell off because of the use of marginal land and because of greater damage from pests. The tendency to expand cotton growing in Israel, which has been in evidence for several years and partly reflects the deliberate contraction of other crops because of factor limitations,[1] can be ascribed to the high profitability of this crop. The expansion of cotton acreage in 1965/66 was chiefly at the expense of that under sugar beet.[2] The sugar

[1] Mainly land and water.

[2] According to data of the Institute of Farm Income Research, the profit per dunam of sugar beet averaged about IL 3, while that for irrigated cotton during the same year came to nearly IL 87. The return on the farmer's own labor per man-day averaged IL 14 in the case of sugar beet and as much as IL 98 in the case of irrigated cotton. These data are fairly representative of the difference in profitability between cotton and sugar beet production.

Table XI–6

OUTPUT OF AGRICULTURAL CAPITAL ASSETS, 1964/65 AND 1965/66

(IL million)

	Value at current prices		Percent increase or decrease (–)		
	1964/65[a]	1965/66	Value	Quantity	Price
Livestock	2.1	4.5	111.0	100.4	5.3
Orchards	38.4	31.8	–17.0	–22.3	6.8
Total output of capital assets on farms	40.5	36.3	–10.3	–15.8	6.6
Afforestation	16.1	15.0	–7.0	–18.0	13.4
Miscellaneous[b]	9.8	10.7	9.0	–4.0	13.5
Total output of capital assets in public development projects	25.9	25.7	–1.0	–12.7	13.5
Total output of capital assets	66.4	62.0	–6.7	–14.6	9.3

NOTE: Percentage changes have been calculated from unrounded figures.
[a] Revised figures.
[b] Including land reclamation and conservation, drainage, pastures, etc.
SOURCE: Central Bureau of Statistics.

beet area was reduced because of the decreased profitability of this crop in 1964/65, when yields declined because of unfavorable weather conditions.

(iv) Vegetables

After a decline of more than 12 percent in vegetable supplies (excluding potatoes) in 1964/65, which was accompanied by an appreciable rise of nearly 19 percent in producer prices, production was stepped up in 1965/66 by about 15 percent, as a result of the extension of the cultivated area and favorable weather conditions during the winter of 1965/66. This big increase depressed producer prices by 4 percent—a small decline compared with the growth of supplies. It should be noted in this connection that most of the additional supplies were put on the market in winter—when prices are higher than in the summer—and that demand is apparently more elastic for winter than for summer vegetables. The increasing tendency to raise vegetables in seasons which up to a few years ago were regarded as marginal for this purpose thus continued in 1965/66, though this year it was aided by favorable weather conditions. This trend represents an important technological advance in that

it enables output to be expanded without seriously affecting profitability, since prices, as already mentioned, are less elastic in winter. Moreover, it increases the chances of stepping up vegetable exports in seasons when prices in Europe are particularly high because of smaller supplies.

Potato acreage was cut by 11 percent in 1965/66, following a decline of some 2.5 percent in producer prices the year before. Despite the reduced area sown, the potato crop was only 4.5 percent smaller than in 1964/65, yields per dunam rising mainly because of favorable weather conditions during the winter of 1965/66.

(v) Grains

Unirrigated crop yields fell off considerably as a result of the drought. This was reflected by a 30 percent drop in wheat output, while the output of barley declined by as much as 70 percent, and that of sorghum by more than 80 percent. The area sown with these crops was cut by over 40 percent in 1965/66; the reduction was entirely in summer grains, while the area under winter grains (which are sown before the rains) was even enlarged slightly.

3. Input

(a) *Changes in input*

Input purchased from other sectors (i.e. excluding capital and labor) rose rapidly in 1965/66 in real terms—by 10.3 percent as against some 3 percent the year before (see Table XI–7). The higher rate was due chiefly to the substantial rise of 17 percent in fodder purchases, following a decrease of approximately 2 percent in the preceding year. Water consumption continued upward at a fairly fast rate—9 percent as against some 8 percent in 1964/65. Most of the additional input of purchased fodder and water in 1965/66 must be ascribed to the drought, which followed a rainy year.[1]

Whereas in 1964/65 the water input, at constant prices, increased mainly because of the extension of the irrigated area, in 1965/66 the principal factor was the drought, while the irrigated area expanded more slowly—by 1.6 percent as against some 6 percent in 1964/65 (see Table XI–9). This was reflected by a rise in average water consumption from 712 cu. meters per dunam in 1964/65 to 761 cu. meters. However, the figure for 1965/66 (a dry year) was similar to that for 1960/61 (a rainy year), and 20–30 cu. meters lower than in

[1] If the input of purchased fodder and water is deducted from the total purchased input in the years 1964/65 and 1965/66, the percentage increase in the latter in the year reviewed would be smaller than in 1964/65. This deduction would eliminate the effect of the drought on the growth of the purchased input in 1965/66, though only approximately, since not all of the incremental expenditure on fodder was due to the drought, while the drought also affected the input of seeds and fertilizers. This is explained in the body of the report.

Table XI–7

INPUT OF MATERIALS AND SERVICES IN AGRICULTURE, BY SOURCE, 1964/65 AND 1965/66

(IL million)

	Value at current prices		Percent increase or decrease (–) from 1964/65 to 1965/66		
	1964/65[a]	1965/66	Value	Quantity	Price
Purchases from other sectors					
Fodder	183.3	216.0	17.8	17.1	0.7
Fertilizers	28.0	30.8	10.0	–0.7	10.8
Seeds	3.8	2.6	–31.6	–31.6	—
Pesticides and veterinary preparations	16.6	18.1	9.0	5.0	3.8
Water	46.8	56.7	21.1	9.2	11.0
Packing materials	55.1	61.9	12.3	10.2	2.0
Transportation	42.3	46.8	10.6	6.4	4.0
Spare parts, repairs, and small tools	33.2	34.5	3.9	0.9	3.0
Fuel and electricity	17.6	18.8	6.8	1.7	5.0
Services	12.5	13.9	11.2	11.2	—
Taxes	15.3	16.5	7.8	7.8	—
Miscellaneous	6.4	8.4	31.2	18.8	10.5
Total	460.9	525.0	13.9	10.3	3.2
Other inputs[b]	454.2	457.2	0.7	–7.1	8.4
Total input	915.1	982.5	7.4	1.7	5.5

[a] Revised figures.
[b] Lines 2, 8, 14, and 15 in Table XI–1.
SOURCE: Central Bureau of Statistics.

1961/62 and 1962/63 (which were also dry years). This can be attributed to the big improvement in irrigation methods in recent years, which has resulted in a much more economical use of water per dunam. This economy was achieved during the period reviewed despite larger crop yields and the mildly advancing trend in the share of orchards, which require relatively more water per dunam, in the total irrigated area.

The severity of the water limitation, at the existing prices, stimulated the

development of more economic methods of irrigation,[1] and thus helped to reduce the average per dunam input of this productive factor. The raising of the price by 10 and 11 percent during the last two years also acted in this direction.

The year reviewed saw the extended application of the graded fines system,[2] which presumably led to the more economic utilization of water and its more efficient allocation between settlements, regions, and growers, and thus also between the different crops.

The increase in the input of purchased fodder in 1965/66, which in real terms totalled 17 percent, was due chiefly to the smaller domestic output of grain fodder because of the drought. But besides the drought, which was the predominant factor, there were others stimulating the consumption of this input:

1. In 1964/65 no stock of grain fodder was accumulated, while that from the previous year was used for feeding livestock in 1964/65. This was reflected by a decline in locally produced fodder stocks in 1965/66 as compared with 1964/65.

2. Demand for fodder increased in 1965/66 owing to the larger number of heads of livestock.

3. The rise in water prices in the last two years apparently resulted in a preference for concentrated feed over green fodder, since prices of concentrated feed (i.e. purchased fodder) have not risen since 1962.

4. For the past several years farmers have preferred to grow wheat at the expense of barley, owing to the difference in their relative prices in the domestic market.

Purchases of pesticides likewise expanded more rapidly during the year reviewed (see Table XI–7), because of the much greater incidence of diseases and pests.

The stability in fertilizer consumption, after an increase of 15 percent in the preceding year, was due to the reduction of the unirrigated crop area because of the drought, and also to the 11 percent increase in fertilizer prices. The 29 percent decrease in the quantity of seeds used in 1965/66 must also be attributed mainly to the drought, which led to a drastic reduction of the area under sum-

[1] At the present prices of water for agricultural purposes, the allocated quantity constitutes an effective limitation, since at this tariff demand exceeds the supply from existing resources. This has given rise to an internal price structure on the individual farm or settlement which exceeds the price actually paid for water. This price structure, which reflects the marginal output value of water for the different crops competing for the limited quantities of water available, is thus a factor stimulating the more rational use of this item.

[2] Under this system the producer is allowed to deviate from the water quota allocated him, subject to the payment of fines which are progressively larger the greater the amount by which the quota is exceeded. This system is thus tantamount to the fixing of differential prices for water, in accordance with the quantity purchased, and it makes possible the more efficient allocation of this productive factor.

Table XI–8

WATER INPUT IN AGRICULTURE, 1958/59 TO 1965/66

	Unit	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66
Irrigated area	Thousands of dunams	1,235	1,305	1,360	1,415	1,470	1,465	1,550	1,580
Quantity of water	Millions of m^3	990	1,060	1,025	1,125	1,140	1,020	1,103	1,202
Quantity of water per dunam of irrigated area	M^3	802	812	754	795	776	696	712	761
Rainy (+) or	Index	100	101	94	99	97	87	89	95
dry (–) year		—	—	+	—	—	+	+	—

SOURCE: Central Bureau of Statistics.

mer grains. The input of packing materials continued upward in 1965/66—by approximately 10 percent, which was somewhat smaller than in 1964/65 (14 percent). The greater use of packing materials over the last two years despite the stability of output is explained by the changes in the destination of output, reflecting in particular the expansion of agricultural exports. The slower increase in the use of packing materials during the year reviewed paralleled the slower growth of exports.

The number of man-hours worked, calculated according to production norms, did not change in 1965/66 and was similar to the labor input in 1964/65.[1] However, it should be noted that this was the first year since 1958/59 in which the labor input did not decrease, and this despite the fact that there was only a slight growth in real output. This is explained by the change in the crop program in 1965/66, reflected in the higher relative share of labor-intensive crops (such as fruit and vegetables) and the smaller share of capital-intensive crops (such as field crops).

The structure of agricultural employment—i.e. the ratio between the number of hired and nonhired workers—underwent a marked change in 1965/66, the proportion of the former declining and that of the latter rising. This development stemmed from the return to agricultural work of many farm owners, especially in the cooperative smallholders' settlements and in the Arab sector, who during the boom years had worked outside their farms. With the depression in the labor market, some of them returned to agricultural employment, replacing part of the hired help. The number of wage earners declined by approximately 9 percent, after having increased in 1964/65. The raising of agricultural wages by about 18 percent during the year under review was undoubtedly a contributory factor.

The extension of the cultivated area continued in 1965/66 (see Table XI–9), although rather more slowly. The total cultivated area increased by 1 percent, as compared with 2 percent in 1964/65, while the deceleration in the case of the irrigated area was even more pronounced—2 percent approximately as against 6 percent in 1964/65. The much slower expansion of the irrigated area reflects the seriousness of the water limitation, which was aggravated in the year reviewed because of the drought.

(b) *Productivity*

Total and factor productivity both declined for the second consecutive year. This is especially striking in view of the prolonged average annual increase of 6–7 percent.

At this stage, the decline cannot be fully explained, but it was apparently due in part to weather conditions. In 1965/66 this was reflected by the effect of the drought, particularly as it followed a year of favorable weather. In 1964/65

[1] See note [2], p. 263.

Table XI-9

THE CULTIVATED AREA,[a] 1964/65 AND 1965/66

	1964/65[b]		1965/66		Percent increase or decrease (–)	
	Thousands of dunams	Percent of total cultivated area	Thousands of dunams	Percent of total cultivated area	From 1964/65 to 1965/66	From 1958/59 to 1965/66
Unirrigated land[c]						
Field crops	2,267	54.4	2,290	54.3	1.0	–8.2
Vegetables and potatoes	20	0.5	20	0.5	—	17.6
Orchards[d]	211	5.1	210	5.0	–0.5	–11.4
Miscellaneous	122	2.9	120	2.8	–1.6	66.7
Total	2,620	62.9	2,640	62.6	0.8	–8.0
Irrigated area						
Citrus	452	10.8	455	10.8	0.7	51.7
Other fruit[d]	214	5.1	216	5.1	0.9	45.9
Field crops	518	12.4	535	12.7	3.3	14.5
Vegetables and potatoes	212	5.1	220	5.2	3.8	12.8
Fish ponds	61	1.5	61	1.4	—	32.6
Miscellaneous	93	2.2	93	2.2	—	12.0
Total	1,550	37.1	1,580	37.4	1.9	27.4
Grand total	4,170	100.0	4,220	100.0	1.2	2.7

[a] Area sown.
[b] Revised figures.
[c] Including partially irrigated land.
[d] The data for orchards exclude uprooting in recent years.
SOURCE: Central Bureau of Statistics.

most crop yields declined from the record levels achieved in the previous year. However, it is difficult to believe that weather conditions alone can affect productivity to such an extent that it decreases, as there have been many years of drought in this country without productivity declining. The drop in productivity in 1965/66 may have been due to weather conditions combined with the lower rate of capital utilization. There was apparently also some deceleration in the acquisition of farm skills and in the acclimatization of settlers in the newer villages, following their rapid progress during their first years on the land. The capital utilization rate has fallen in recent years, partly because of the establishment of production and marketing boards for individual branches—the most important of these boards saw their main task as the deliberate contraction of production—and partly owing to the accentuated tendency toward

specialization which has characterized local agriculture for the last several years.[1]

The lower rate of capital utilization is reflected in the various livestock branches, especially in cattle and poultry farming, and is connected with the existence of unused structures and equipment. In auxiliary enterprises, such as sorting and packing houses, fodder mills, etc., there was also a decline in capital utilization. These enterprises are classified as part of the agricultural sector as long as they are operated by the individual settlement; when they operate on a regional basis, they are classified as industrial concerns. In recent years the establishment of regional enterprises has accelerated, so that there has been a growing underutilization of capital among enterprises of the type classified as agricultural.

The changes that occurred in fruit farming also affected measured productivity.[2] This was reflected by the increased uprooting of certain varieties of trees because of declining profitability; the latter was due to a sharp drop in some of the prices after the accelerated planting during the fifties had led to substantially larger supplies.

4. Incomes

Income originating in agriculture increased in 1965/66 by IL 2.5 million, or only 0.5 percent, as compared with IL 46 million in 1964/65 and IL 56 million in 1963/64. In 1964/65 the growth was due to the higher price of the net product, which was accompanied by a decline in the real product. The real product continued to shrink in 1965/66, but prices rose to a lesser extent than in the previous year, so that income expanded very little. Total farm income was up IL 16 million, owing to the payment of IL 14 million in drought compensation. No drought compensation was paid in 1964/65, when total

[1] The trend toward specialization, reflected by the operation of fewer branches in the individual farm, the expansion of production units, and regional specialization based on the relative advantages of each region, is accompanied by the partial idleness of the existing stock of capital assets, owing to the immobility of some of them. This results in the discarding of assets before they are fully depreciated. Consequently, specialization may reduce measured productivity, at least temporarily. Comprehensive data on this point are not available, but there are several indicators. In cattle farming, for instance, this trend is reflected by a decline in the number of herds from 392 in 1963/64 to 375 in 1965/66, accompanied by an increase in the average number of heads of cattle per herd—in cooperative farming from 87 in 1960/61 to 128 in 1964/65. In new moshavim, the number of cattle farmers decreased by 25 percent between 1962/63 and 1965/66. In poultry farming, specialization has led to the underutilization of structures in the central part of the coastal plain and in new settlements throughout the country, except for the hill regions and some of the Negev settlements, where the branch is undergoing expansion and hence investment in poultry runs is continuing.

[2] The premature uprooting of orchards was not reflected by a corresponding decline in the gross capital stock, since the imputed depreciation rates were evidently lower than the rates at which the assets actually depreciated.

Table XI-10

AGRICULTURAL SUBSIDIES, 1964/65 AND 1965/66

	IL million		Percent increase or decrease (–) from 1964/65 to 1965/66		
	1964/65[a]	1965/66	Subsidy	Physical output[b]	Subsidy per unit of output
Eggs	25.0	24.0	–3.7	–8.3	5.0
Poultry	5.5	1.7	–69.6	10.2	–72.4
Cow's milk	32.8	29.7	–9.4	9.4	–17.2
Beef	1.2	2.4	100.0	–7.5	116.2
Ewe's milk	0.3	—	–100.0	5.0	–100.0
Fish	2.4	0.5	–79.2	–25.0	–72.3
Cotton	14.7	7.6	–48.4	15.5	55.3
Vegetables and potatoes	13.0	9.2	–29.0	21.6	–58.4
Fruit	2.3	2.8	21.7	11.3	9.3
Groundnuts	2.1	2.4	14.3	—	14.3
Sugar beet[c]	5.6	5.3	–5.4	–5.4	—
Tobacco	0.3	0.5	56.3	12.0	39.6
Wheat	4.3	4.0	–7.0	–30.6	34.0
Miscellaneous	0.4	0.3	–25.0	—	—
Subsidies by the Jewish Agency's Settlement Department	1.4	0.8	–42.9	—	—
Total subsidies on output	111.3	91.2	–18.1	2.7	–20.3
Fodder	19.2	25.5	33.1	21.0	10.0
Water	13.2	15.1	14.6	9.0	5.1
Fertilizers	2.9	3.0	3.4	0.3	3.1
Total factor subsidies	35.3	43.6	23.5	14.8	7.6
Drought and frost compensation payments	0.2	13.8	590.0	—	—
Total subsidies	146.8	148.6	1.2	—	—

NOTE: Percentage changes have been calculated from unrounded figures.

[a] Revised figures.

[b] Eggs, poultry, cow's milk, vegetables and potatoes, and fruit—according to their organized marketing value; beef, ewe's milk, groundnuts, and tobacco—according to output value; cotton—according to the value of fibers; fish—according to the output value of the fishponds; wheat—according to the quantity purchased by the Government.

[c] At the rate of IL 20 per gross ton.

SOURCE: Ministry of Agriculture, Jewish Agency, and Ministry of Finance.

income increased by IL 43 million. The net income of farm owners rose in 1965/66 by approximately IL 3 million, or a mere 0.6 percent, compared with IL 28 million, or about 6 percent, the year before.

This small growth can be attributed to the continued rise in interest, rent, and wage payments, which were IL 13.5 million larger during the year reviewed. Despite the decline of some 9 percent in the number of hired workers, the wage bill continued upward owing to an 18 percent rise in average hourly wages.

Average farm income per nonhired worker apparently fell in 1965/66, as the number of such workers increased by over 4 percent while net income hardly went up.

Direct subsidies were enlarged by IL 1.8 million in 1965/66, reaching IL 148.6 million (see Table XI–10). However, there was a change in their composition, subsidies on output declining appreciably and factor subsidies and drought compensation payments rising.

Subsidies on output contracted by IL 20 milion, or some 18 percent. This was due partly to the policy of abolishing subsidies and allowing producers to charge higher prices, as in the case of milk, fish, and cotton, and partly to the smaller volume of output, as in the case of eggs,[1] sugar beet, and wheat.

Beef, groundnuts, tobacco, and fruit were more heavily subsidized in 1965/66. In the case of beef, the increase stemmed from the institution of guaranteed minimum prices in the second half of the year; in the case of fruit, it was the result of declining prices following the growth of supplies,[2] while in respect of tobacco the reason was the Government's policy of encouraging this crop with a view to expanding output.

Factor subsidies were up 23.5 percent, after rising by approximately 36 percent in 1964/65. However, in 1964/65 the increment was due to the larger subsidy per unit of productive factor, whereas in 1965/66 most of the rise resulted from the much bigger input of water and purchased fodder because of the drought. It should be noted that in the case of purchased fodder the subsidy per unit of input was also enlarged in 1965/66, owing to the dearer cost of this item abroad.

5. Investment and Financing

(a) *Investment and capital stock*

Gross investment, at current prices, in farms and public development projects was approximately the same as in 1964/65 (see Table XI–11). At constant

[1] As regards eggs, the subsidy was largely abolished in favor of higher market prices toward the end of 1965/66, so that this will be fully reflected only in 1966/67.

[2] A joint fund financed equally by the Government and growers is responsible for the payment of minimum fruit prices. The expansion of fruit supplies, which was accompanied by falling prices and the growth of "surpluses", resulted in the heavier subsidization of this item.

prices, there was a decrease of some 5 percent, compared with one of approximately 10 percent the year before. The slower decline in the year reviewed is attributable to public development projects, where real investment in 1965/66 was down by only 3.5 percent, as against a drop of 16 percent in the previous year. Investment in farms, on the other hand, fell off more precipitately in the year reviewed—by 6 percent as against 2 percent in 1964/65.

Table XI–11

ESTIMATED GROSS INVESTMENT IN AGRICULTURE, 1964/65 AND 1965/66

(IL million)

	Value at current prices		Percent increase or decrease (–) from 1964/65 to 1965/66		
	1964/65[a]	1965/66	Value	Quantity	Price
Investment in farms					
Orchards	38.4	31.8	–17.2	–22.3	6.8
Livestock	2.1	4.5	111.0	100.4	5.3
Farm installations[b]	28.2	27.4	–2.8	–2.8	—
Machinery and equipment	45.8	47.5	3.7	0.2	3.5
Total	114.5	111.2	–2.8	–6.2	3.6
Investment in public development projects					
Water projects	74.6	75.6	1.3	–0.9	2.2
Miscellaneous[c]	30.8	31.6	2.7	–10.3	14.5
Total	105.4	107.2	1.7	–3.6	5.5
Grand total	219.9	218.4	–0.7	–5.0	4.5

NOTE: Percentage changes have been calculated from unrounded figures.
[a] Revised figures.
[b] Farm buildings, fishponds, and local irrigation networks.
[c] Afforestation, land reclamation and conservation, natural pasture, experimental farms, etc.
SOURCE: Central Bureau of Statistics.

The contraction of real investment in farms on the one hand, and the increase in depreciation and discards on the other, further depressed the real growth rate of the agricultural capital stock (see Table XI–12): the gross stock increased by 2.6 percent as compared with about 4 percent in 1964/65, while the net stock grew by only 0.5 percent, after expanding by approximately 3 percent the year before. Real gross investment equalled depreciation in most items, so that there was virtually no real increase in the net stock of capital assets. In machinery and equipment, net investment (i.e. after depreciation) was 1.5 percent lower than in 1964/65.

Table XI–12

STOCK OF CAPITAL ASSETS IN AGRICULTURE,[a] 1965–66

(IL million, at current prices)

	Gross capital stock					Net capital stock				
	Value		Percent increase or decrease (–)			Value		Percent increase or decrease (–)		
	1965[b]	1966	Value	Quantity	Price	1965[b]	1966	Value	Quantity	Price
Fixed assets										
Orchards	917.5	987.2	7.5	3.4	4.4	649.4	681.0	4.9	0.5	4.4
Farm buildings, irrigation networks, and local water projects	912.1	947.0	3.8	1.8	2.0	570.8	582.7	2.1	0.1	2.0
Machinery and equipment	319.9	341.4	6.7	5.0	1.6	170.8	171.2	0.2	–1.4	1.6
Livestock[c]	289.7	309.1	6.7	1.4	5.2	289.7	309.1	6.7	1.4	5.2
Total	2,439.2	2,584.7	6.0	2.6	3.3	1,680.7	1,744.0	3.8	0.4	3.4
Current assets										
Current inventories[a]	342.4	356.6	4.1	2.2	1.9	342.4	356.6	4.1	2.2	1.9
Grand total	2,781.6	2,941.3	5.7	2.6	3.1	2,023.1	2,100.6	3.8	0.7	3.1

[a] Excluding land and financial assets (cash, deposits, securities, rights, receivables, etc.).
[b] Revised figures.
[c] Excluding broilers and fish.
[d] Estimate for the end of the agricultural year; other data are for the end of the calendar year.

SOURCE: Fixed assets—A. L. Gaathon (unpublished data); current assets—Bank of Israel estimates based on research of M. Hayat *Estimated Current Capital Stock and Demand for Working Capital in Israeli Agriculture, 1963/64,* published by the Ministry of Agriculture, November 1963.

Real investment in orchards dropped sharply in 1965/66—by 22 percent, compared with a decrease of about 9 percent in the previous year. The more rapid decline can be ascribed to the situation prevailing in this branch in recent years: since supplies are a function of the size of existing orchards, and since demand has been expected to rise only moderately, more stringent curbs have been placed on planting, thus making it less profitable to circumvent these restrictions because of the anticipated fall in prices.

Real gross outlay on machinery and equipment has not expanded since 1963/64, after having increased by an average of 7 percent per annum during the years 1960–64. This development can apparently be attributed to the standstill in the volume of agricultural production during the last two years, and in 1965/66 it was also connected with the changes that took place in the labor input.[1] It may also have been connected with the fact that 1965/66 was a dry year, since unirrigated crops, which are hit hardest by a drought, are capital-intensive primarily in machinery and equipment.[2]

Real investment in livestock was doubled in 1965/66, this being connected with the accelerated expansion of cattle farming during the year.[3] Gross outlay on farm installations, at constant prices, continued to decline, but much more slowly—by less than 3 percent compared with 23 percent the year before. This item includes farm buildings, local irrigation network, and fishponds. Investment in farm buildings was up by 4.5 percent, that in irrigation networks dropped by 12.5 percent, and no new investment was made in fishponds, for the second year running.

The lack of investment in fishponds in the last two years was due to the creation of surpluses in this branch after a substantial rise in fish prices and a big increase in supplies from other sources. The smaller investment in irrigation networks (which is also reflected by the slower extension of the irrigated area) was due to limitations in the supply of water, a problem that was aggravated in 1965/66 by the drought. The larger expenditure on farm structures was apparently connected with the accentuated tendency toward specialization,[4] which entails further investments of this type.

(b) *Institutional liabilities*

The outstanding institutional farm debt rose by IL 160 million in 1966, as compared with some IL 120 million in 1965 (see Table XI–13). The increment consisted entirely of long-term loans, whereas short-term credit expanded at approximately the same rate as in the previous year.

[1] See the discussion in the section on inputs.

[2] Investment in machinery and equipment was affected by drought in previous years as well: in 1962 and 1963, which were dry years, this item contracted, while in 1961 and 1964, which were rainy years, it expanded considerably.

[3] This is discussed in detail in section 2(c) above.

[4] A detailed discussion of this point will be found in section 3(b) above.

OUTSTANDING INSTITUTIONAL FARM DEBT, 1965–66

(IL million)

	1965		1966		Increase over 1965			
	Excl. linkage increments	Incl. linkage increments	Excl. linkage increments	Incl. linkage increments	Excl. linkage increments		Incl. linkage increments	
					IL m.	%	IL m.	%
Long-term[a]	1,258.5	1,272.3	1,392.9	1,397.4	134.4	10.7	125.1	9.8
1. To the Jewish Agency[b] To financial institutions[c]	943.5	943.5	1 ,014.8	1,014.8	71.3	7.6	71.3	7.6
2. Israel Bank of Agriculture Of which:	163.0	176.8	186.0	190.5	23.0	14.1	18.7	7.7
3. From own resources	*98.3*	*107.3*	*105.5*	*108.7*	*7.2*	*7.3*	*1.4*	*1.3*
4. From Govt. deposits	*64.7*	*69.5*	*80.5*	*81.8*	*15.8*	*24.4*	*12.3*	*17.7*
5. Agricultural funds and agricultural financial institutions[d]	83.8	—	111.0	—	27.2	32.5	—	—
6. Other financial institutions	24.9	—	26.0	—	1.1	4.4	—	—
7. To banks—from Government deposits	15.3	—	25.6	—	10.3	67.3	—	—
8. To other institutions[e]	28.0	—	29.5	—	1.5	5.3	—	—
Short-term[f]	240.3	242.8	267.4	269.3	27.1	11.3	26.5	10.9
9. To banks—from own resources[g]	220.7	223.2	246.7	248.6	26.0	11.8	25.4	11.4
10. To banks— from Government deposits	19.6[h]	19.6[h]	20.7[h]	20.7[h]	1.1	5.6	1.1	5.6
Total institutional debt	1,498.8	1,515.1[i]	1,660.3	1,666.7[i]	161.5	10.8	151.6	10.0

[a] Including some short-term credit which cannot be separated owing to insufficient data.
[b] See Bank of Israel Annual Report for 1964, p. 254, Table XI–14, note [c]. Data are for fiscal years.
[c] As defined in Chapter XVII, "Financial Institutions".
[d] Some of the financial resources of these institutions (especially the funds of the settlement movements) constitute equity capital of the agricultural sector. This amount has not been deducted from the balance of the sector's debt to these institutions.
[e] Gmul Ltd., social insurance funds, and insurance companies.
[f] Including some long- and medium-term credit which cannot be separated because of insufficient data. On the other hand, short-term credit from the Israel Bank of Agriculture is included with long-term credit.
[g] Including Bank of Israel rediscounts totalling IL 2.2 million in 1965 and IL 18.0 million in 1966.
[h] Including IL 5 million in credit from Government deposits for citriculture.
[i] Obtained by adding together amounts including linkage increments and amounts excluding linkage increments in columns where the sign (–) appears.

SOURCE: Line 1—Reports of the Jewish Agency and the Zionist Organization; lines 2, 3, and 4—Bank of Israel; lines 5, 6, and 7—Chapter XVII, "Financial Institutions", and Chapter XVIII, "Social Insurance Funds and Insurance Companies"; line 8—Bank of Israel (the method of calculation is described in the appendix to the Bank of Israel Annual Report for 1964—in Hebrew only); line 9—Bank of Israel; line 10—Bank of Israel and Ministry of Agriculture.

Table XI-14

SOURCES AND USES OF FUNDS IN AGRICULTURE, 1962-66

(IL million)

	1962	1963	1964	1965	1966
A. External sources					
1. Increase in long-term institutional credit	58.9	79.9	117.0	96.1	134.4
2. Increase in short-term institutional credit	17.2	-5.5	31.5	27.3	27.1
3. Total identified sources of external funds	76.1	74.4	148.5	123.4	161.5
B. Uses					
4. Gross investment in farms during year[a]	110.5	105.0	143.3	114.5	111.2
5. Increase in value of current inventories	25.2	54.6	18.4	31.5	14.2
6. Total identified uses	135.7	159.6	161.7	146.0	125.4
C. Surplus of identified external sources over identified uses					
7. Surplus of external funds (3-6)	-59.6	-85.2	-13.2	-22.6	36.1
8. Surplus of long-term external funds (1-4)	-51.6	-25.1	-26.3	-18.4	23.2
9. Surplus of short-term external funds (2-5)	-8.0	-60.1	13.1	-4.2	12.9
D. Internal sources[b]					
10. Imputed depreciation	63.2	71.3	83.9	95.2	106.3
11. Total external and internal sources of funds (3+10)	139.3	145.7	232.4	218.6	267.8
E. Surplus of total sources over total identified uses					
12. Surplus of all funds (6-11)	3.6	-13.9	70.7	72.6	142.4
13. Surplus of long-term funds (8+10)	11.6	46.2	57.6	76.8	129.5

[a] The data for previous years have been revised

[b] Owing to lack of data on the share of incremental farm assets financed from internal sources, it has been assumed to be equal to imputed depreciation. This assumption tends to formulate normative principles of behavior as regards own financing, which in actual fact may not, of course, have been equal to imputed depreciation.

SOURCE: Credit—Table XI-13; depreciation—Table XI—1; current inventories—Table XI-12.

Table XI–15

OUTSTANDING BALANCE OF SHORT-TERM CREDIT TO AGRICULTURE,[a] 1965–66

(IL million)

	1965		1966		Percent increase or decrease (–) from 1965 to 1966			
					End of year		Anual average	
	End of year	Annual average[b]	End of year	Annual average	IL m.	%	IL m.	%
(1) Directed credit (exemptions from liquidity requirements and Bank of Israel rediscounts)[c]	122.7	103.0	139.4	116.9	16.7	13.6	13.9	13.5
(2) From resources of banking institutions and Jewish Agency (not exempted from liquidity requirements)[d]	11.4	11.2	12.3	11.8	0.7	7.9	0.6	5.4
(3) From Government deposits for working capital credits	14.6	14.4	15.7	15.2	1.1	7.5	0.8	5.6
(4) Total credit under agricultural production financing program[e]	148.7	128.6	167.4	143.9	18.7	12.6	15.3	11.9
(5) Other credit from banks' own resources[f]	91.6	77.8	100.0	96.9	8.4	9.2	19.1	24.5
(6) Total short-term bank credit	240.3	206.4	267.4	240.8	27.1	11.3	34.4	16.7
(7) Of which: From banks' own resources subject to liquidity requirements[g]	98.0	86.7	107.3	103.7	9.3	9.5	17.0	19.6

[a] Balances do not include linkage increments. Short-term credit from the Israel Bank of Agriculture has also been excluded, except for the balance exempted from the liquidity requirements and which has been included under direct credit.
[b] The calculation of the annual averages is explained in the appendix to the Bank of Israel Annual Report for 1964 (in Hebrew only).
[c] Including the Israel Bank of Agriculture.
[d] The participation of banks (other than the Israel Bank of Agriculture) in joint funds of the Government and the Jewish Agency's Settlement Department for working capital loans within the framework of the liquidity regulations.
[e] Joint program of the Bank of Israel and the Ministry of Agriculture.
[f] Including the joint fund of the banks and the Government for financing citriculture, which totalled IL 13 million (of which the Government's share is IL 5 million).
[g] Lines (2) and (5) less the Government's share in the fund for financing citriculture (see note [f]).

SOURCE: Line 1—Bank of Israel; lines 2 and 3—estimates based on Ministry of Agriculture data; lines 5 and 6—Bank of Israel.

The debt to the Jewish Agency, which carries a very low rate of interest,[1] increased in 1966 by IL 70 million, or about half the total increment of long-term borrowing. The share of liabilities to the Jewish Agency within the total long-term institutional farm debt declined somewhat in 1966, but it still came to over 70 percent. The relative drop was due to the faster growth of the other component items.

There was a conspicuous expansion of credit granted from Government deposits—by IL 27 million as contrasted with about IL 8 million in 1965. The rapid growth of long-term credit, together with the further decline in investment in farms, resulted in an excess of nearly IL 20 million in external sources of long-term financing over identified uses in 1966 (see Table XI–14). In previous years there was a negative balance, arising from the fact that the in-

Table XI–16

AVERAGE ANNUAL BALANCE[a] OF DIRECTED CREDIT, BY DESTINATION, 1965–66

Destination	1965		1966		Increase or decrease (–) from 1965 to 1966	
	IL m.	%	IL m.	%	IL m.	%
Field crops and vegetables[b]	51.5	40.0	57.3	39.8	5.8	11.3
Citriculture	15.4	12.0	13.2	9.2	–2.2	–14.3
Livestock, livestock products, and fodder[c]	11.7	9.1	11.2	7.8	–0.5	–4.3
Other inventories and miscellaneous[d]	6.4	5.0	6.1	4.2	–0.3	–4.7
Undefined[e]	43.6	33.9	56.1	39.0	12.5	28.7
Total	128.6	100.0	143.9	100.0	15.3	11.9

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

[a] For method of calculating the average outstanding balance of directed credit and the definition of such credit, see the appendix to the Bank of Israel Annual Report for 1964 (in Hebrew only).

[b] Credit for cotton, unirrigated crops, groundnuts, potatoes, tobacco, sugar beet, exportable vegetables, and other agricultural exports.

[c] Credit for imports of fodder, local fodder cultivation, production of alfalfa meal, livestock farming (cattle, sheep, and poultry), imports of poultry products, imports of breeding materials, and credit to fisheries.

[d] Credit for canned foodstuffs (fruit, vegetables, and fish), for alcohol and wine production, etc.

[e] Credit to purchasing organizations, companies, farms, and individuals; for the production and storage of seeds; to victims of drought; credit through the various funds, etc.

[1] The rate of interest on liabilities to the Jewish Agency, calculated by dividing total loan repayment receipts by the outstanding debt to the Jewish Agency, was less than 1 percent in 1966—about the same rate as in 1965.

cremental farm assets were partly financed from internal sources, including depreciation, or by short-term borrowing. The creation of a surplus of long-term external funds, the outcome of a policy of converting loans received on unfavorable terms into more convenient credit, reflects a considerable improvement in the financing position of agriculture in 1966. However, it has also made possible the use of part of these funds for other purposes—either directly, or

Table XI-17

PARTIAL CAPITAL ACCOUNT OF AGRICULTURE, 1965–66

(IL million)

	1965[a]	1966	Increase or decrease (–)	
			IL m.	%
Assets				
(productive, net of depreciation and at replacement prices)				
Fixed assets				
1. Orchards, farm buildings, irrigation networks, and local water projects	1,220.2	1,263.7	43.5	3.6
2. Machinery, equipment, and livestock	460.5	480.3	19.8	4.3
3. Subtotal	1,680.7	1,744.0	63.3	3.8
Current assets				
4. Current inventories	342.4	356.6	14.2	4.1
5. Subtotal	2,023.1	2,100.6	77.5	3.8
6. Other assets[b]	—	—	—	—
Liabilities[c]				
7. Institutional debt—mainly long-term	1,272.3	1,397.4	125.1	9.8
8. Institutional debt—mainly short-term	242.8	269.3	26.5	10.9
9. Total institutional debt	1,515.1	1,666.7	151.6	10.0
10. Other liabilities[d]	—	—	—	—
11. Equity capital	—	—	—	—

[a] Revised figures.
[b] Private land, land amelioration, and financial assets (cash, deposits, receivables, rights, shares, etc.).
[c] Including linkage increments totalling IL 16.3 million in 1965 and IL 6.4 million in 1966.
[d] Supplier credit, sundry creditors, and other noninstitutional credit.
SOURCE: Assets—Table XI-12; institutional debt—Table XI-13.

indirectly by allowing farmers to allocate their own resources to other uses. An indicator of this is the fact that short-term institutional credit expanded in 1966 to almost the same extent as in 1965, whereas the incremental current capital stock was only about half of incremental short-term credit.

Short-term institutional credit expanded by nearly IL 27 million in both 1965 and 1966 (see Table XI–15). The composition of the increment underwent a change, reflecting an improvement in the terms of such credit, the proportion of credit granted under the agricultural production financing program[1] reaching approximately two-thirds in 1966, as compared with about half in 1965. This credit is easier, as it bears a lower rate of interest than that given by banks within the ordinary liquidity framework.

The destination of directed credit (see Table XI–16) showed some changes as compared with 1965. The weight of credit for unspecified purposes moved up from 34 to 39 percent in 1966. The share of citriculture declined from about 12 percent in 1965 to 9 percent; however, this should not be regarded as a worsening in citriculture's financing position, as it has access to additional sources of directed credit, some of which were expanded in 1966.[2] There was also a slight decline in the proportion provided for fodder and livestock. The weight of credit for field crops and vegetables remained at approximately 40 percent, though the average annual volume expanded by IL 6 million, mainly because of the bigger output of cotton. The increase in directed credit for unspecified purposes occurred in all component items, such as credit to purchasing organizations and companies and through various funds.

[1] See the note on p. 265.

[2] The joint fund of the banks and the Government for financing citriculture was considerably expanded in 1966.