

CHAPTER XI

AGRICULTURE

1. MAIN DEVELOPMENTS

AGRICULTURAL PRODUCTION in 1964/65¹ showed a considerable change from the trend of the last few years. Despite the complete absence of frost or drought, the real agricultural product declined by 2.5 percent (see Table XI-1), after having advanced by 17.4 percent in 1963/64 and an average of 13 percent per annum between 1959/60 and 1963/64. The poorer performance during the year reviewed was due to the slower expansion of inputs, coupled with a drop in productivity. There was no increase in total agricultural output, whereas in the previous year it had grown by 13 percent and from 1959/60 to 1963/64 by an average of 8 percent per annum. Excluding citrus, output fell off by about 2 percent.

The slower rise in inputs—3 percent as against 8 percent in the preceding year—was due in part to the diminished profitability of several branches in 1963/64. This led to a reduction in egg hatching for purposes of poultry production and in the planted area of the principal vegetables, as well as to the large-scale uprooting of orchards. The last-mentioned development, in turn, caused a sharp drop in the fruit-bearing area of certain crops, and a net decrease in that of all fruit except citrus.² The slowdown also reflected the declining trend in farm investment, which has been discernible since 1957/58 and has depressed the capital stock growth rate, especially in livestock and fruit farming (see Diagrams XI-1 and XI-2). The smaller investment can be ascribed primarily to domestic marketing limitations.³ The lower percentage increase in investment and capital stock in these two branches has been reflected by a slower expansion of output. It should be noted, however, that their output is also influenced by other inputs, weather conditions, etc.

Factor productivity, i.e. the gross product per unit of capital and labor, declined by some 2 percent, after having risen by 8 percent in 1963/64. Total

¹ From October 1, 1964 to September 30, 1965.

² A detailed estimate of the net increase in the fruit-bearing area, excluding citrus, appears in the Appendix (in Hebrew only).

³ This was reflected in the relatively slow growth in the demand for food, which constitutes the bulk of agricultural production, and was due to the low income and price elasticities of this item. When supply expands more rapidly than demand (at constant prices), a sharp decline in both prices and profits follows.

productivity—total output per unit of total input (inclusive of capital and labor—also edged down somewhat, following an advance of 7 percent the year before. This decline stands out all the more when viewed in the light of the average annual increase of 6–7 percent which persisted for a number of years. Only a partial explanation can be given at this stage: the lower utilization of livestock structures following a drop in meat output, and the smaller

Table XI-1

CURRENT ACCOUNT OF AGRICULTURE, 1963/64 AND 1964/65

	Value at current prices (IL million)		Percent increase or decrease (–) from 1963/64 to 1964/65		
	1963/64 ^a	1964/65	Value	Quantity	Price
1. Total agricultural output at producer prices	1,319.8	1,411.2	6.9	0.1	6.8
2. Less: Agricultural raw materials (intermediate products)	145.7	154.9	6.3	0.5	5.8
3. Agricultural output at producer prices	1,174.1	1,256.3	7.0	0.2	6.8
4. Less: Subsidies on output	102.3	97.8	–4.4	—	—
5. Agricultural output at market prices	1,071.8	1,158.5	8.1	0.1	8.0
6. Less: Purchased input	425.6	451.0	6.0	2.9	2.9
7. Gross agricultural product at market prices	646.2	707.5	9.5	–1.5	11.2
8. Less: Depreciation	83.9	95.2	13.5	7.3	5.8
9. Net agricultural product at market prices	562.3	612.3	8.9	–3.2	12.5
10. Plus: Subsidies on output	102.3	97.8	–4.4	—	—
11. Net agricultural product at producer prices (national income originating in agriculture)	664.6	710.1	6.8	–2.5	9.5
12. Plus: Drought compensation	2.6	0.2	–92.3	—	—
13. Total income from agriculture	667.2	710.3	6.5	–2.5	9.2
14. Less: Wages paid to hired labor	150.3	160.8	7.0	1.5	5.4
15. Less: Interest and rent	41.3	45.9	11.1	—	—
16. Income of farm owners from agriculture	475.6	503.6	5.9	—	—

^a Revised figures.

SOURCE: 1 and 2—Table XI-3; 4 and 12—Table XI-11; 6—Table XI-8; 8—Central Bureau of Statistics; 14 and 15—Bank of Israel.

average yields of field crops and most fruits as compared with the record levels achieved in 1963/64. On the other hand, productivity in citriculture went up, average yields rising and the quality of the fruit improving.

Another factor depressing output during the year reviewed was the stricter enforcement of production quotas, following the institution of internal disciplinary machinery by the production boards. This made it less profitable to enlarge supply in excess of the quotas, especially as regards vegetables and the raising of broilers.

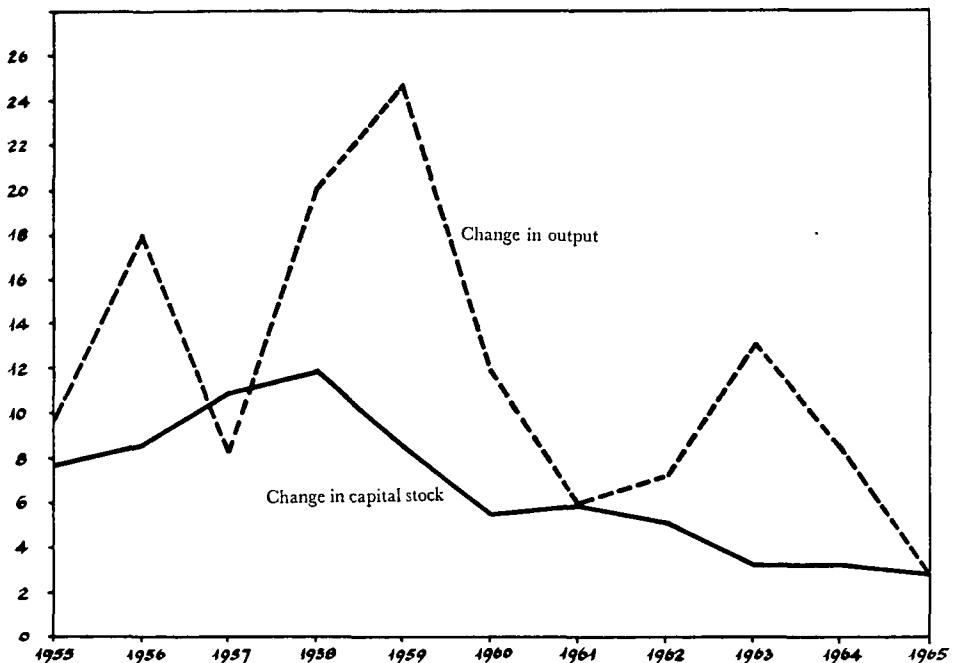
In contrast to the previous year, price developments in 1964/65 were favorable to agriculture. Output prices rose by 6.8 percent, compared with a 4 percent decline in 1963/64, and input prices (excluding labor, interest, and rent) went up by only 2.9 percent, after having remained unchanged in 1963/64. As a result, the value of the agricultural product increased by 9.5 percent, compared with a fall of 8 percent in the preceding year.

Net income of farm owners from agriculture—after deducting wages paid to hired labor, interest payments, and rent—reached IL 504 million, as com-

Diagram XI-1

REAL CHANGES IN OUTPUT AND CAPITAL STOCK IN FRUIT AND LIVESTOCK FARMING,* 1955-65

(percentages)



* Excluding poultry and fish; see note to Table XI-2.

Table XI-2

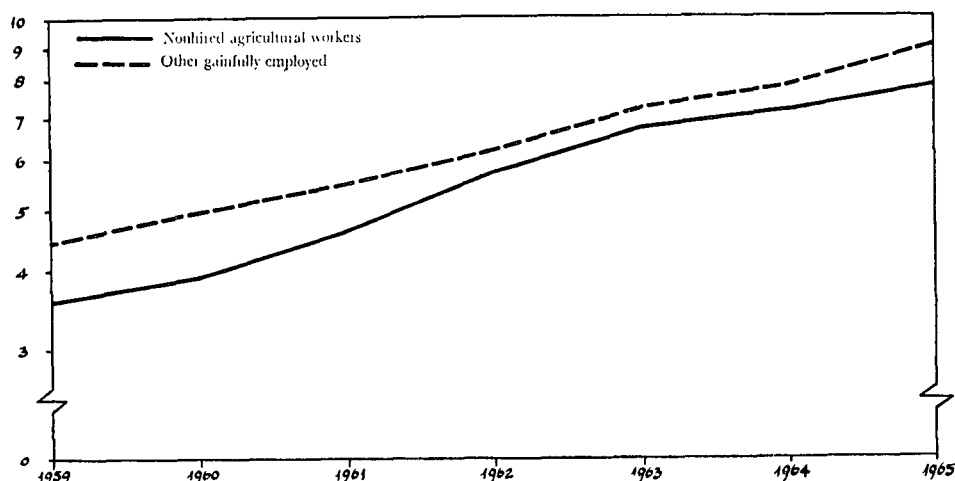
ESTIMATED INVESTMENT AND CHANGES IN CAPITAL STOCK AND OUTPUT IN LIVESTOCK AND FRUIT FARMING,^a 1955-65

Year	Annual investment (IL million, at 1965 prices)	Real change in capital stock (%)	Real change in output (%)
1955	45.4	7.8	9.7
1956	52.4	8.6	17.9
1957	69.9	10.9	8.2
1958	81.3	11.8	20.2
1959	68.7	8.5	24.6
1960	51.9	5.5	11.8
1961	56.0	5.9	5.9
1962 ^b	51.3	5.1	7.1
1963	38.7	3.2	13.1
1964	39.3	3.3	8.4
1965	34.0	2.7	-1.2
Average for 1955-65		6.7	11.4
Average for 1955-59		9.5	16.1
Average for 1960-65		4.3	7.5

^a Excluding capital stock and output in poultry and fish farming.

^b Since 1962 the value of uprooted orchards has been deducted from the annual investment in fruit farming. The estimated value of the uprooted areas is given in the Appendix to this Report (in Hebrew only).

Diagram XI-2

CHANGE IN AVERAGE INCOME PER NONHIRED AGRICULTURAL WORKER
RELATIVE TO THAT OF OTHER GAINFULLY EMPLOYED IN THE ECONOMY
(percentages)

Semi-logarithmic scale.

^a See notes to Table XI-12.

pared with IL 476 million in 1963/64. The increase thus came to IL 28 million, or 6 percent, as against 4 percent in the previous year.

Income per gainful nonhired agricultural worker rose by 9 percent, a little below the annual average of 13.7 percent since 1958/59. The gap between the income of this group and that of gainfully employed in the rest of the economy narrowed somewhat (see Table XI-12 and Diagram XI-2).

Real gross capital stock¹ increased by 4 percent in 1965, compared with some 6 percent in 1964 (see Table XI-14). The slower growth was due to the contraction of gross investment in orchards, irrigation networks, and local water projects. It was also reflected in the growth of the net capital stock, which expanded by only 3 percent, somewhat less than in 1964.

The outstanding institutional farm debt was up IL 123 million, compared with a rise of IL 144 million in 1964 (see Table XI-15). Long-term credit accounted for IL 96 million of the increment in 1965, as against IL 117 million in 1964. The relative decline is attributable to the smaller increment of long-term credit received from the Israel Bank of Agriculture and from the Jewish Agency. The latter's share in incremental long-term financing continued upward in 1965, exceeding two-thirds of the total. That of the financial institutions also grew considerably, but the Israel Bank of Agriculture accounted for only 4 percent of the increment, as contrasted with some 18 percent in 1964.

Despite the smaller growth of long-term capital, that supplied by institutional sources (IL 96 million) exceeded net farm investment in fixed assets by IL 61 million, as against IL 49 million in 1964 (see Table XI-16).

Incremental short-term financing from the banking system reached IL 27 million, as against some IL 32 million in 1964, and equalled the increase in current assets (see Table XI-6). Over half of the additional short-term credit was granted within the framework of exemptions from the liquidity regulations, in the form of rediscounts, and from the funds run jointly by the banks and the Government (see Table XI-17). The remainder was granted by banks from their own resources, subject to the ordinary liquidity regulations. Short-term credit from Government deposits did not expand.

Though the increase in liabilities exceeded net investment in agriculture, the ratio between total identified assets net of depreciation (at replacement prices) and total identified liabilities continued upward (see Table XI-19). This is ascribable to the rise of some 7 percent in asset prices and the fact that over two-thirds of the identified liabilities were not value-linked. Price increases thus leave farmers with capital gains (in the main unrealized), and bring up the above-mentioned ratio.

¹ Before deducting the value of orchards uprooted. For a more detailed explanation, see the section dealing with investments.

2. OUTPUT

(a) *Value of output*

The total farm value of agricultural output at producer prices advanced 6.9 percent to stand at IL 1,411.2 million. This growth rate was slightly smaller than that for 1963/64, and considerably below the 13 percent annual average for the years 1959/60 to 1963/64. Whereas in 1963/64 the increase was the resultant of a 13 percent rise in quantity and a 4 percent decline in prices, during the year reviewed it stemmed chiefly from higher prices and only to a small extent from a growth in quantity. This development was particularly conspicuous in livestock farming, where the 4 percent gain in output value was almost entirely due to advancing prices, whereas in 1963/64 there was a real rise of 9 percent and a price rise of about 2 percent.

Approximately 76 percent of the incremental output value in 1964/65 originated in citriculture and field crops, and the remaining 24 percent in livestock, orchards, and industrial crops.

In contrast to 1963/64, the growth of domestic demand for agricultural produce outstripped the expansion of supply. As regards export markets, the lower percentage increase in citrus supplies from countries competing with Israel caused prices to mount sharply. This was reflected by a 6.8 percent advance in the prices received by Israeli farmers for their output, as compared with a drop of 4 percent in 1963/64, when there was a large surplus of vegetables and fruit and a steep fall in export prices. At constant prices, total output did not increase, whereas in 1963/64 it had grown by 13 percent, and over the years 1959/60 to 1963/64 by an annual average of 8.5 percent. The slower rate of 1964/65 was due partly to the drop in profitability during the previous year, when declining output prices led to the uprooting of some orchards, the reduction of the area under the principal vegetables, and the contraction of poultry-meat production. In addition, some crop yields declined from the record levels attained in 1963/64, while the spread of poultry diseases caused many deaths and reduced output. The frost of 1963/64, which affected bananas, some citrus fruit, and subtropical species, brought down the output figure for these items during 1964/65.

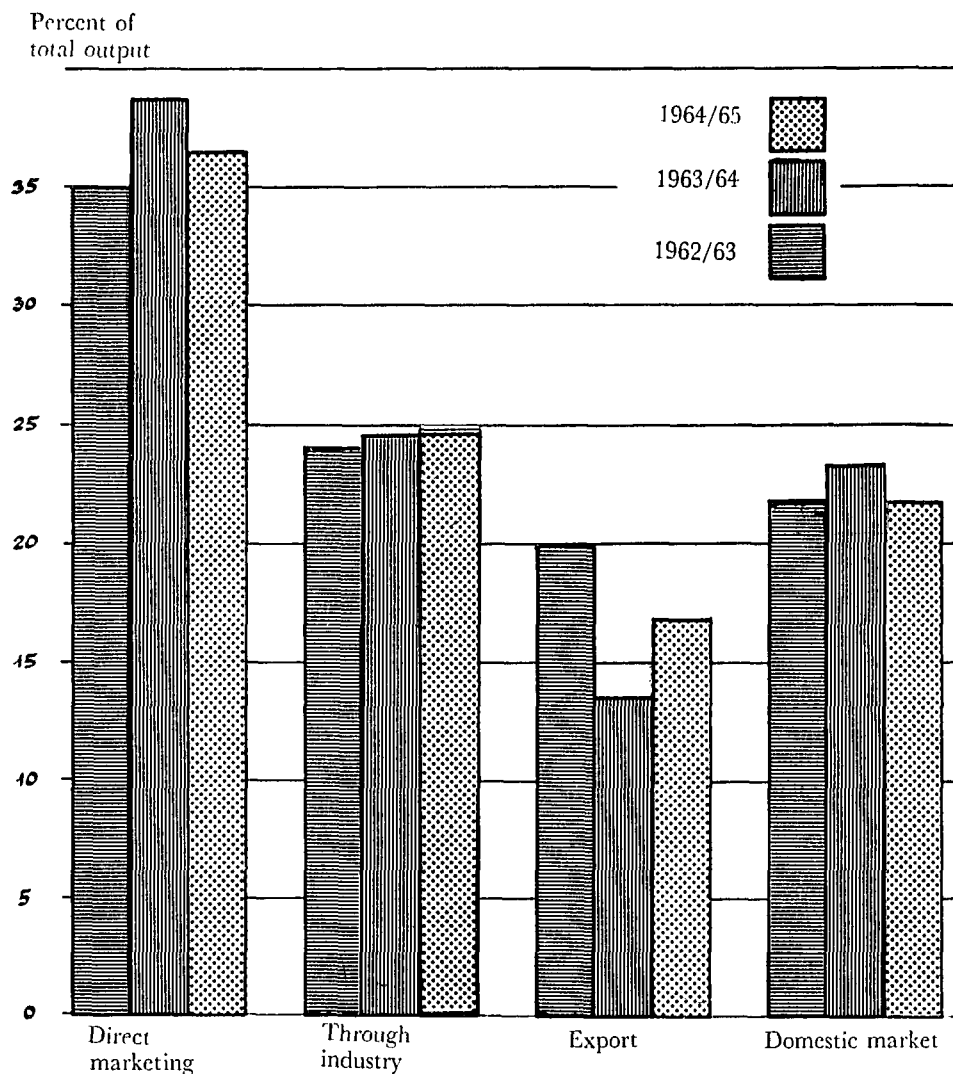
(b) *Destination of output*

Although the proportion of marketed output to total output went up, its real expansion in absolute terms slowed down considerably—2.7 percent as against an annual average of 10 percent from 1959/60 to 1963/64. In comparison with the previous year, there were marked changes in the destination of marketed output. Exports, which had gone down in 1963/64, showed a real increase of 17 percent, while the amount marketed for domestic consumption was about 0.4 percent smaller, in contrast to a 20 percent rise in 1963/64.

Diagram XI-3

DISTRIBUTION OF AGRICULTURAL OUTPUT, BY ECONOMIC DESTINATION,
1962/63 TO 1964/65

(percentages)



The contraction of domestic marketing was due to the smaller supply of all produce except citrus (most of which is sold abroad), and to the larger export of such items as vegetables and poultry breeding materials, despite their smaller output. The volume of marketing through industry went up, but not to the same extent as in 1963/64. This can be attributed to the decreases in meat production, vegetable surpluses, and the quantity of citrus supplied to

industry. In 1963/64 the amount of citrus sold to industry had been more than doubled, chiefly because that year's frost damage rendered a larger proportion of the crop unsuitable for export; in 1964/65, on the other hand, the improved quality of the fruit made it possible to increase exports, with a consequent reduction in the amount available for processing.

The value of agricultural exports rose by 31 percent, as compared with a drop of 25 percent in 1963/64. The better results during the year reviewed stemmed from an advance of 17 percent in volume and 12 percent in export prices. Of the total export increment of some IL 56 million, about 80 percent was accounted for by citrus, about 12 percent by poultry products, some 4 percent by vegetables and flowers, and the remainder by various other items. There was a striking real increase of 22 percent in agricultural exports other than citrus, which reached approximately IL 49 million at current prices.

Table XI-3
TOTAL AGRICULTURAL OUTPUT, BY ECONOMIC DESTINATION,
1963/64 and 1964/65
(IL million)

	Value at current prices		Percent increase or decrease (-) from 1963/64 to 1964/65		
	1963/64 ^a	1964/65	Value	Quantity	Price
Output marketed^b					
For local consumption					
Direct marketing	511.4	523.2	2.3	-3.6	6.1
Through industry ^c	320.2	347.2	8.4	4.7	3.5
Total	831.6	870.4	4.7	-0.4	5.1
For export	180.5	236.0	30.7	17.1	11.6
Total marketed output	1,012.1	1,106.4	9.3	2.7	6.4
Output retained on farms					
Own consumption	69.1	80.0	15.8	6.2	9.0
Capital goods	92.9	69.9	-24.8	-32.4	11.3
Agricultural raw materials (intermediate goods)	145.7	154.9	6.3	0.5	5.8
Total	307.7	304.8	-0.9	-8.2	7.9
Grand total	1,319.8	1,411.2	6.9	0.1	6.8

^a Revised figures.

^b Including IL 10.9 million worth of output destroyed in 1963/64 and about IL 4.0 million worth in 1964/65.

^c All industrially processed commodities sold in both the local and export markets.

SOURCE: Central Bureau of Statistics.

Export prices rose by 12 percent in 1964/65, after having fallen by 17 percent in 1963/64. The biggest gain was registered by citrus, which improved appreciably in quality and had to contend with only a moderately larger supply from competing countries.

Output retained on the farm was down 8 percent, owing to the smaller output of productive assets. These declined by 32 percent (as against an increase of 40 percent in 1963/64) since grain stocks did not expand whereas in the previous year there had been a big growth, and also because of the reduction of the area sown and of investments in drainage and land reclamation. Prices of capital goods rose by 11 percent, as against 6 percent in 1963/64.

The output of intermediate goods did not increase, whereas in 1963/64 it had gone up by 8 percent. This stagnation was due to the reduction of the areas under hay and fodder crops. Exerting an effect in the other direction were the bigger yields of hay, straw, and some fodder, as well as the increase in the area under certain crops whose residues are utilized as intermediate goods, such as sugar-beet tops, groundnut hay, etc. Moreover, the use of intermediate livestock products (such as milk for animal feeding) was expanded in 1964/65.

(c) Output, by type of farming

Real output of livestock and livestock products remained virtually stable in 1964/65 (see Table XI-4). This represented a conspicuous change in trend, for during the ten years 1955-64 the annual growth rate ranged from 8 to 30 percent, except for 1962/63 when it was only 2.8 percent. The nonincrease during the year reviewed was due to the decline in meat output (poultry, beef, and mutton), which was accompanied by a relatively moderate rise in that of milk, eggs, and sea fish. The decreased supply of beef was caused by the smaller number of calves imported for fattening; in the previous year such import was responsible for a large percentage of the total beef output.

The import of calves was virtually suspended in 1964/65. This, together with the natural limitations on the expansion of domestic meat output (which in the main is a function of the size of the milch herds) and the smaller import of live cattle for slaughter, reduced the total supply of fresh beef. This in turn sent the price of this item soaring, despite the greatly increased marketing of imported frozen meat.

The decline in poultry-meat output was largely due to the reduction of profitability in 1963/64 because of the lower prices received. This led to cutbacks in hatching at the beginning of 1964/65, and thus to a smaller supply of broilers. Added to this was the exceptionally large incidence of disease during the year.¹ Other contributory factors were the more stringent control of

¹ The diseases killed off a larger number of poultry and reduced the fattening period. This was reflected by a drop in the average weight per unit marketed.

production by the Poultry Council (which made it less profitable to exceed quotas, a practice which had become quite widespread) and the maintenance of the guaranteed poultry-meat price, despite an apparently big rise in production costs. In both cases the aim was to reduce the volume of subsidies, which increased considerably in the previous year. These steps proved effective, for the amount of subsidies paid during the year reviewed returned to the 1962/63 level.

The moderate growth of crop output as compared with the past few years is attributable to the decline in most yields from the record levels attained in the previous year. The larger harvest of those fruit crops registering gains during the year reviewed resulted from the extension of the fruit-bearing area. The area under vegetables and certain grains was considerably reduced, and this partly explains the contraction of their output. Moreover, average yields of most of these crops were smaller. On the other hand, both acreage and average yields were larger in citrus and cotton.

Citrus output was up about 10 percent as a result of the increases in the

Table XI-4
CURRENT AGRICULTURAL OUTPUT,* BY TYPE OF FARMING,
1963/64 and 1964/65

(IL million)

	Value at current prices		Percent increase or decrease(-) from 1963/64 to 1964/65		
	1963/64 ^b	1964/65	Value	Quantity	price
Livestock					
Poultry	262.4	270.0	2.9	0.5	2.4
Cattle	212.1	220.2	3.8	-0.2	4.0
Other livestock	82.3	88.4	7.4	2.9	4.4
Total	556.8	578.6	3.9	0.7	3.2
Crops					
Citrus	185.4	227.9	22.9	9.6	12.1
Other fruit	148.1	157.3	6.2	-5.3	12.2
Vegetables and potatoes	115.2	119.7	3.9	-8.7	13.8
Field crops and misc.	221.4	257.8	16.4	12.4	3.6
Total	670.1	762.7	13.8	4.2	9.2
Total current output	1,226.9	1,341.3	9.3	2.6	6.5

* Marketing, on-farm consumption, and intermediate goods (agricultural raw materials).

^b Revised figures.

SOURCE: Central Bureau of Statistics.

fruit-bearing area, average yields, and quality¹ (see Table XI-6). Citrus exports were 16 percent larger in physical terms, and since the prices fetched abroad went up by 13 percent, the value of direct exports advanced 31 percent. As regards citrus marketed in Israel, two separate price levels have been in existence for quite some time, the price of fruit sold to industry in the past being less than half of that of fruit sold for direct consumption. This disparity

Table XI-5
AGRICULTURAL OUTPUT, BY COMMODITY, 1963/64 AND 1964/65
(IL million)

	Value at current prices		Percent increase or decrease (-) from 1963/64 to 1964/65		
	1963/64 ^a	1964/65	Value	Quantity	Price
Current output					
Livestock					
Eggs	130.5	129.9	-0.5	0.5	-1.0
Meat	246.8	258.2	4.6	-1.6	6.3
Milk	126.8	135.6	6.9	4.3	2.5
Fish	32.5	33.7	3.7	0.7	3.0
Miscellaneous	20.2	21.2	4.9	—	—
Total	556.8	578.6	3.9	0.7	3.2
Crops					
Citrus	185.4	227.9	22.9	9.6	12.1
Other fruit	148.1	157.3	6.2	-5.3	12.2
Potatoes	23.6	24.2	2.5	5.0	-2.4
Vegetables	91.6	95.5	4.3	-12.2	18.8
Grains and pulses	135.2 ^b	124.1	-8.2	-13.6	6.3
Industrial crops	72.4	98.8	36.5	34.6	1.4
Miscellaneous	36.6	34.9	-4.6	-5.5	0.9
Total	692.9	762.7	10.1	0.8	9.2
Total current output	1,249.7	1,341.3	7.3	0.8	6.5
Output of capital goods	70.1^c	69.9	-0.3	-10.4	11.3
Total output	1,319.8	1,411.2	6.9	0.1	6.8

^a Revised figures.

^b Including a IL 22.8 million increase in stocks of grains and pulses, which in Table XI-7 are included with the output of capital goods.

^c Excluding the IL 22.8 million increase in stocks of grains and pulses.

SOURCE: Central Bureau of Statistics.

¹ An improvement in quality results in a higher proportion of exports and a real increase in output (i.e. in the value of output at constant prices), since export prices are appreciably higher than those obtained locally.

Table XI-6

CITRUS OUTPUT, BY ECONOMIC DESTINATION, 1963/64^a AND 1964/65

Destination	Quantity in 1964/65 (⁰ 000 tons)	Value at current prices (IL million)		Percent increase or decrease (-) from 1963/64 to 1964/65		
		1963/64	1964/65	Value	Quantity	Price
Direct export	526.6	142.7	187.2	31.2	15.7	13.3
Industry	223.2	17.8	15.3	-14.0	-7.9	-6.6
Direct domestic consumption	73.8	15.1	14.2	-6.0	-9.3	3.6
On-farm consumption and private sales ^b	34.5	7.8	9.9	26.9	-17.9	54.7
Intermediate goods and fruit destroyed	20.2	2.0	1.3	-35.0	-25.0	-13.3
Total	878.3	185.4	227.9	22.9	9.6	12.1

^a Revised figures.

^b The big price jump here was due to the greatly increased proportion of private sales, which fetch a price considerably exceeding the value of citrus consumed by the growers.

SOURCE: Central Bureau of Statistics.

can be attributed only in small part to differences in the quality of the fruit; in the main it reflects the price discrimination between the two economic destinations caused by the monopoly status of the marketing organization and by the different demand conditions prevailing in the two markets. The latter factor made it possible in 1964/65 to raise the price of citrus for direct consumption by 4 percent while reducing its price to industry by 6 percent,¹ bringing up the price ratio between the two destinations to 3:1.

The fruit-bearing area under deciduous crops (including grapes) was reduced slightly in 1964/65, since the area uprooted exceeded that entering the fruit-bearing stage. The orchards liquidated were chiefly quinces, Japanese plums, and grapes. There was also a decrease in the average yield per dunam. Despite the restrictive influence of these factors, there was a 4 percent rise in the real output of deciduous fruit, owing to the increased proportion of the more expensive species, such as pears and apples, and the smaller proportion of the cheaper species, such as plums, grapes, and quinces.

The larger output of field crops stemmed from a 11 percent increase in acreage and a change in the crop program (see Table XI-10). However, the average yield of most crops declined. The revision of the crop program was reflected by the extension of the area under crops with a high output value per dunam, such as wheat and industrial crops, and the reduction of the area under

¹ The price changes shown in Table XI-6 reflect the differential prices received by the producer from the various domestic economic destinations, but not the differential prices received by the marketing organization, since there is some pooling of fruit prices.

crops with a low output value per dunam, such as barley, sorghum, and certain types of fodder. In continuation of the trend of the past few years, the area under wheat was enlarged, at the expense of that under barley, since the latter is less profitable. The doubling of the unirrigated cotton area, which was accompanied by a considerable increase in the irrigated area, was made possible by the abundant rainfall and its favorable distribution during the winter. For the same reason, and owing to the larger amount of credit advanced per dunam, the unirrigated sugar beet area was trebled as compared with 1963/64. The irrigated sugar beet area was also considerably enlarged, but the average yield of roots and sugar per dunam was smaller than in 1964, since weather conditions were unfavorable for all root crops. The area under groundnuts was extended by 50 percent following the raising of the guaranteed price and the provision of more controlled credit for cultivation and storage purposes.

Owing to the relatively high prices fetched by potatoes in 1963/64, acreage was enlarged by 9 percent the following year. The average yield, however, declined, so that the total supply increased by only 5 percent. Only 2 percent more was supplied to the domestic market for consumption, since exports were

Table XI-7

OUTPUT OF AGRICULTURAL CAPITAL GOODS, 1963/64 AND 1964/65

(IL million)

	Value at current prices		Percent increase or decrease (-) from 1963/64 to 1964/65		
	1963/64 ^a	1964/65	Value	Quantity	Price
Livestock	2.4	2.1	-12.5	-17.1	5.5
Orchards	38.1	38.4	0.8	-8.8	10.5
Increase in stocks of intermediate goods	22.8	—	—	—	—
Total output of capital goods on farms	63.3	40.5	-36.0	-41.9	10.2
Afforestation	15.2	17.6	15.8	2.0	13.5
Land reclamation and conservation	10.3	8.5	-17.5	-25.2	10.4
Drainage, pasture, misc.	4.1	3.3	-19.5	-29.3	13.8
Total output of capital goods in public develop- ment projects	29.6	29.4	-0.7	-11.8	12.6
Grand total	92.9	69.9	-24.8	-32.4	11.3

NOTE: The data in this table do not tally with those in Table XI-13 because of the use of different sources.

^a Revised figures.

SOURCE: Central Bureau of Statistics.

trebled, while the surplus withdrawn from the market was double that of 1963/64. Despite the much bigger subsidy payment, the increased supply depressed producer prices by 2.4 percent.

Production of vegetables, olives, and bananas declined in 1964/65. The 12 percent decrease in vegetable output (see Table XI-5) was due to a number of factors: lower profitability in 1963/64, caused by sagging producer prices in the wake of record surpluses; the reduction of guaranteed minimum prices for the principal vegetables during the peak of the 1963/64 season; and stricter control by the Vegetable Board over the planted area in order to prevent deviations from the fixed production quotas. As a result, the area under the main vegetables was reduced by rates ranging from 7 to 20 percent. The producer prices of vegetables advanced 19 percent, after having fallen by 1 percent in 1963/64.

Olive output was down 47 percent from the record level of the previous year. Yields here display sharp fluctuations, a good year generally being followed by a poor one.

Banana plantations had not yet recovered in 1964/65 from the damage caused by frost the year before. Average yields fell, causing a sharp drop in supply and a 48 percent rise in the price paid to growers.

3. INPUT

(a) *Changes in input*

Input increased much more slowly during the year under review, owing partly to production cutbacks in certain branches and partly to lower yields. The extension of the cultivated area consequently slowed down as compared with 1963/64. The composition of the planted area also changed—that under crops requiring a relatively high input decreased, while the output of capital goods was reduced (see Table XI-7). As a result, the real increase in total purchased input from other sectors (excluding hired labor and capital) came to 2.9 percent (see Table XI-8), as compared with some 7 percent in 1963/64.

Total labor input, estimated on the basis of production norms, was down 3 percent.¹ This was the net outcome of a 4 percent decline in the input of nonhired agricultural labor and a 1.5 percent rise in that of hired labor.² There were decreases in vegetables and fodder, including that raised on irrigated soil, following the reduction of the cultivated area, particularly of labor-intensive

¹ The estimate based on norms for the calendar year shows a decrease of only 1 percent in the labor input of 1964/65. The difference between the estimate for the agricultural year and that for the calendar year stemmed from the delay in the start of the citrus harvest in November–December 1964 as compared with the previous year.

² The change in labor input by type of employed is based on Bank of Israel estimates. See Chapter IX, "Population, Labor Force, and Employment".

crops such as tomatoes, cucumbers, and onions. The number of man-days worked in orchards was also somewhat smaller, owing to the slight decline in the fruit-bearing area and poorer average yields.

Table XI-8
INPUT OF MATERIALS AND SERVICES IN AGRICULTURE, BY SOURCE,
1963/64 AND 1964/65

(IL million)

	Value at current prices		Percent increase or decrease (—) from 1963/64 to 1964/65		
	1963/64 ^a	1964/65	Value	Quantity	Price
Purchases from other sectors					
Fodder	186.6	184.1	-1.4	-2.1	0.8
Fertilizers	23.2	27.7	19.4	15.1	3.7
Seeds	4.2	4.6	9.5	-3.9	13.9
Pesticides and veterinary preparations	16.5	16.6	0.6	0.6	—
Water	39.4	46.8	18.8	8.1	9.9
Packing materials	46.3	55.0	18.8	14.0	4.2
Transportation	28.5	31.3	9.8	5.0	4.6
Spare parts, repairs, and small tools	31.5	33.2	5.4	0.9	4.5
Fuel and electricity	16.6	17.6	6.0	6.0	—
Services	10.4	12.5	20.2	13.5	5.9
Taxes	15.3	15.3	—	—	—
Miscellaneous	7.1	6.3	-11.3	-11.3	—
Total	425.6	451.0	6.0	2.9	2.9
Other inputs^b	421.2	456.8	8.5	3.2	5.1
Total input	846.8	907.8	7.2	3.1	4.0

^a Revised figures.

^b Lines 2, 8, 14, and 15 in Table XI-1.

SOURCE: Central Bureau of Statistics.

The 2.1 percent decline in the input of purchased fodder can be ascribed to the big decrease in meat production, which requires a relatively large amount of fodder.

The expanded output and export of citrus necessitated a larger outlay on packing materials and transportation services. The input of fertilizers increased by 15 percent, as against 2 percent in 1963/64, partly because of a 6 percent expansion of the irrigated area (which requires relatively more fertilizer than unirrigated land), and partly because of the maturing of young orchards and

Table XI-9
WATER INPUT IN AGRICULTURE, 1958/59 TO 1964/65

	Unit	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65
Irrigated area	Thousands of dunams	1,235	1,305	1,360	1,415	1,470	1,465	1,555
Quantity of water	Millions of m ³	990	1,060	1,025	1,125	1,140	1,020	1,103
Quantity of water per dunam of irrigated area	M ³	802	812	754	795	776	696	709
Rainy (+)	Index	100	101	94	99	97	87	88
or dry (-) year		—	—	+	—	—	+	+

SOURCE: Central Bureau of Statistics.

Table XI-10
CULTIVATED AREA,^a 1964/65

	Thousands of dunams	Percent of total cultivated area	Percent increase or decrease (—)	
			From 1963/64 to 1964/65	From 1958/59 to 1964/65
Unirrigated land^b				
Field crops	2,290	54.7	—	-8.2
Vegetables and potatoes	28	0.6	—	64.7
Orchards ^c	208	5.0	-4.6	12.2
Miscellaneous	109	2.6	0.9	-10.7
Total	2,635	62.9	-0.4	-8.2
Irrigated land				
Citrus	420	10.1	3.7	42.3
Other fruit ^c	220	5.2	3.7	48.6
Field crops	550	13.1	11.3	17.5
Vegetables and potatoes	215	5.1	5.4	10.3
Fish ponds	59	1.4	—	28.2
Miscellaneous	91	2.2	—	9.6
Total	1,555	37.1	6.1	25.9
Grand total	4,190	100.0	1.9	2.1

^a Area sown.

^b Including partially irrigated land.

^c The data for orchards exclude uprooting in recent years.

SOURCE: Central Bureau of Statistics.

the abundant rainfall, which necessitated a greater use of nitrogenous fertilizers in particular.

Total water consumption was 8.1 percent larger, and that per dunam of irrigated area—2 percent (see Table XI-9). The increase in the water input and the extension of the irrigated area (see Table XI-10) were made possible by the bigger output of the National Water Carrier. The larger water input per dunam can be partly ascribed to the maturing of young orchards, the higher average temperature during the summer months of 1964/65 as compared with the previous year, and the change in the composition of irrigated crops, reflected by a rise in the proportion of water-intensive crops such as fruit. Although water rates were raised by 10 percent, the direct water subsidy was doubled. This was chiefly due to the larger proportion of water supplied from the National Water Carrier, which is heavily subsidized. This subsidy accounted for over 28 percent of the farm sector's total water input in 1964/65, as against some 17 percent the year before.

The doubling of the direct subsidy, which constitutes only part of the total

subsidy,¹ encourages the use of water to an extent that is uneconomic and widens the gap between demand and the quantity which can be supplied by the existing waterworks at the current price. This makes it necessary to continue the strict rationing of water by administrative means, a measure that prevents the efficient allocation of this productive factor among growers, agricultural settlements, regions, and the different types of farming.

(b) *Productivity*

Factor productivity—expressed by the ratio between the growth of real gross product and the increase in the real input of capital and labor²—declined by 1.5 percent in 1964/65, after advancing by 8 percent in the previous year³ and by an average of 7.1 percent per annum from 1950 to 1959. Total productivity—expressed by the ratio between the real increase in total output and the real increase in total input (materials, services, capital, and labor)—decreased by 1 percent, as compared with a rise of 7 percent the year before. It is difficult to fully account for the decline in 1964/65, since there were neither particularly unfavorable natural factors nor other identifiable reasons for it. One of the causes may have been the diminished utilization of farm structures for fattening cattle and poultry following the drop in meat output. Other possible factors may have been the lower average yields of root crops, grains, and pulses, as well as the lower yields of most types of deciduous fruit and olives following the record harvest of 1963/64. Moreover, there were smaller yields of bananas and some crops of secondary importance, which were harmed by the frost of the previous year and had not fully recovered by 1964/65.

In contrast to the above-mentioned declining yields, gains were registered in citrus, certain field crops, and milk (per cow).

4. INCOMES

(a) *Aggregate farm income*

Income originating in agriculture increased by IL 46 million, compared with IL 52 million in 1963/64, and totalled IL 710 million. The growth rate

¹ In 1965 the indirect water subsidy exceeded the direct subsidy. Of the total amount budgeted for 1966 (IL 33 million), direct subsidies amounted to IL 15 million, while the remaining IL 18 million was for the estimated capital expenditure of waterworks which are not covered by income from the sale of water at the current price.

² For detailed definitions and methods of calculation, see the Appendix to the Bank of Israel Report for 1963 (in Hebrew only).

³ Measured on the basis of input norms. This estimate shows a decline of 3 percent in the labor input, while according to the Central Bureau of Statistics manpower surveys it increased by 5 percent. If calculated according to CBS data, the decline in productivity came to 5-6 percent.

was 6.8 percent, as against 8.5 percent in 1963/64. Whereas the rise in 1963/64 was due to the physical expansion of output (producer prices fell), in 1964/65 it was due to the higher prices received. Consequently, the slower expansion of the real product in 1964/65 (2.5 percent as against 17 percent the year before) was not reflected by a corresponding decline in the farm income growth rate.

Changes in output and input prices were favorable to agriculture during the year reviewed. Owing to the contraction of supplies, output prices rose faster than input prices. As already mentioned, this was the decisive factor in the growth of incomes. The price of the net product rose by 9.5 percent, as compared with a decline of 7.5 percent in 1963/64. The rise in the price of the agricultural product resulted from a 6.8 percent advance in the prices received by the farmers and a smaller rise in the price of the total input—4 percent. The price of the purchased input, exclusive of labor and capital, went up by only 2.9 percent.

Total farm income, including drought compensation payments (which were smaller than in the previous year), increased by IL 43 million, compared with IL 42 million in 1963/64. The 6.5 percent growth rate was approximately the same as in 1963/64.

Realized net income¹ rose by IL 51 million, or 13 percent, after having decreased by IL 14 million in 1963/64, and totalled IL 434 million (IL 383 million in 1963/64). That realized net income rose faster than total income was due to the larger proportion of output marketed and the smaller weight of capital goods in total production.

Price supports were enlarged by IL 1 million to stand at IL 129 million (see Table XI-11). There was a change in their composition, however: those on output contracted by some IL 5 million, and compensation payments for frost and drought damage by IL 2.4 million; on the other hand, factor subsidies were IL 8 million greater. The smaller amount paid on output was due to the cutting of the rate per unit of output on certain products, under the Government's policy of reducing the subsidization of output while permitting market prices to rise.

Price supports were pared primarily on eggs, poultry, beef, fruit, tobacco, and fish. The water subsidy was increased by about IL 7 million and totalled over IL 13 million. As already mentioned, this was due to the growth of consumption in areas where water is expensive, and which was made possible by the larger output of the National Water Carrier. There was also a substantial increase in the fodder subsidy following the raising of the rate by 17 percent. The larger subsidy granted on vegetables was intended to encourage exports and to cut farmers' losses on their potato surpluses. But the amount of subsidies

¹ Realized net income is the net income of farmers less imputed income from the output of capital goods and the increase in inventories.

paid on vegetable surpluses was smaller, owing to the decline in the volume of surpluses and the lowering of the guaranteed minimum prices at the peak of the season. Virtually no compensation was paid for drought or frost damage during the year reviewed.

The total volume of price supports constituted 18 percent of aggregate income originating in agriculture, as compared with some 19 percent in 1963/64. The weight of subsidies within total income of farm owners edged down from 27 percent in 1963/64 to 26 percent in 1964/65. It should be stressed

Table XI-11
AGRICULTURAL SUBSIDIES, 1963/64 AND 1964/65
(IL million)

	1963/64 ^a	1964/65	Percent increase or decrease (-)		
			Subsidies	Physical output	Subsidy per unit of output
Eggs	27.0	25.0	-7.4	2.2	-9.4
Poultry	7.0	5.5	-21.5	-1.4	-20.4
Cow's milk	31.8	32.8	3.1	5.9	-2.6
Beef	3.4	1.2	-64.7	-5.9	-62.5
Ewe's milk	0.4	0.3	-25.0	-14.5	-12.3
Fish	2.5	2.3	-8.0	0.6	-8.5
Cotton	10.7	10.3	-3.7	31.2	-26.6
Vegetables and potatoes	11.0	11.6	5.5	-2.7	8.4
Fruit	4.0	2.3	-42.5	-4.0	-40.1
Groundnuts	0.6	1.2	100.0	20.8	65.6
Tobacco	1.5	0.3	-80.0	73.6	-88.5
Wheat	1.4	3.6	157.1	17.0	119.7
Subsidies by the Jewish Agency's Settlement Department	1.0	1.4	40.0	—	—
Total subsidies on output	102.3	97.8	-4.4	2.0	-6.3
Fodder	13.7	15.1	10.2	-5.5	16.6
Water	6.6	13.2	100.0	8.1	85.1
Fertilizers	2.6	2.9	11.5	9.7	1.6
Total factor subsidies	22.9	31.2	36.3	1.4	34.4
Drought and frost compensation payments	2.6	0.2	-92.3	—	—
Total subsidies	127.8	129.2	1.1	—	—

^a Revised figures.

SOURCE: Ministry of Agriculture, the Jewish Agency, and reports of the Accountant General.

that not all of the amount paid should be regarded as aid to agriculture, since the subsidies also keep down the prices to the consumer. On the other hand, the direct subsidies do not fully reflect the extent of Government aid to agriculture; other Government measures have also helped to bring up farmers' incomes, including protection against competing imports, low taxation of items destined for agriculture, easy credit terms, and the like.

(b) *Factor shares of income*

Average hourly wages in agriculture were 5.4 percent higher during the year reviewed. Since the input of hired labor was up 1.5 percent, the sector's wage bill increased by 7 percent to stand at IL 161 million, as against IL 150 million approximately in 1963/64.¹ Interest and rent payments rose by about IL 5 million, reaching IL 46 million. Total interest payments of the agricultural sector are low even in relation to the size of the sector's institutional debt alone; the main reason is that interest is still not being collected on most of the debt to the Jewish Agency, pending the signing of contracts with the settlers for the consolidation of their farms. Income of farm owners rose in 1964/65 by IL 28 million, as compared with IL 17 million the year before, and totalled IL 503.6 million. The growth rate—5.9 percent—was thus slightly faster during the year reviewed. The rise in income from agriculture per gainful nonhired worker came to 9 percent, a lower rate than that for gainfully employed in the rest of the economy (see Table XI-12).

The growth of nonhired agricultural workers' income in recent years stemmed from increases in capital input, productivity, and prices; in the last six years these factors were responsible for an annual average rise of 13.7 percent (as compared with 12.0 percent in income for gainfully employed elsewhere in the economy).

The ratio between income from agriculture per nonhired gainfully employed and that per gainfully employed in other sectors dropped to 87 percent in 1964/65, as compared with 91 percent in 1963/64 and 80 percent in 1958/59.² A distinct improvement in this ratio, from the standpoint of agriculture, occurred only twice during this period—in 1962 and 1963. In the last two years the

¹ These data differ from those cited in Chapter X, "Wages", since the latter relate to calendar years.

² These figures must be accepted cautiously for, owing to insufficient data, they are understated in one respect and probably overstated in another. (a) The ratio has a downward bias in that the profits of the public sector have not been deducted from the incomes of gainfully employed in other sectors, and also because the figure on gainfully employed in other sectors includes only civilians. (b) The ratio is computed on the basis of adjusted net national income, which is smaller than the combined product of all economic sectors. Consequently, the product per gainfully employed used for the purpose of calculating income per gainfully employed in agriculture has an upward bias, and hence the ratio may also be overstated.

Table XI-12

**GROWTH OF FARM INCOME COMPARED WITH AVERAGE INCOME
IN REST OF THE ECONOMY, 1959-65^a**

(percentages)

	1959 to 1960	1960 to 1961	1961 to 1962	1962 to 1963	1963 to 1964	1964 to 1965	Annual average, 1959-65
Total farm income at producer prices	7.6	13.8	13.4	20.3	7.0	6.9	11.5
Income of farm owners from agriculture	10.2	18.4	15.9	21.9	3.3	5.9	12.6
Average farm income per gainful nonhired agricultural worker	6.7	18.7	25.3	17.4	5.4	9.0	13.7
Average income per gainfully employed in other economic sectors	7.8	12.6	11.6	17.0	7.9	14.9	12.0
	1959	1960	1961	1962	1963	1964	1965
Average farm income per gainful nonhired agricultural worker as a percent of average income per gainfully employed in the rest of the economy	79.7	78.8	83.1	93.3	93.6	91.4	86.6

NOTE: A detailed table and explanation of the method of calculation will be found in the Appendix to this Report (in Hebrew only).

^a The difference between the rates of change cited here and those appearing in the Bank of Israel Report for 1964 is due to the use of calendar-year data on farm income in order to render them more comparable with the data for other economic sectors.

ratio moved down, despite the decline in the number of nonhired gainfully employed in the sector.

The downtrend in the labor input of farm owners and family members has been evident for some years. Although no reliable data on its extent are available, it appears to be the result of several simultaneous developments:

(1) There has been a relative expansion of nonfarm activities in kibbutzim, which apparently has siphoned off manpower from agriculture. However, this has not prevented the continued expansion of production, thanks to the investment in mechanization and farm equipment, as well as to the accelerated introduction of other technological improvements designed to economize on manpower.

Table XI-13

ESTIMATED GROSS INVESTMENT IN AGRICULTURE, 1963/64 AND 1964/65
(IL million)

	Value at current prices		Percent increase or decrease (-) from 1963/64 to 1964/65		
	1963/64 ^a	1964/65	Value	Quantity	Price
Investment in farms					
Orchards	38.1	38.4	0.8	-8.8	10.5
Livestock	2.4	2.1	-12.5	-17.1	5.5
Farm buildings	33.9	27.2	-19.8	-23.3	4.6
Machinery and equipment	54.9	62.1	13.1	10.5	2.3
Intermediate products inventory	22.8	—	—	—	—
Total	152.1	129.8	-14.7	-18.9	5.2
Investment in public development projects					
Water projects	82.3	70.9	-13.9	-17.4	4.3
Afforestation, land reclamation, drainage, experimental farms, natural pasture, etc.	31.1	30.9	-0.6	-11.6	12.4
Total	113.4	101.8	-10.0	-15.8	6.6
Grand total	265.5	231.6	-12.8	-17.6	5.8

^a Revised figures.

SOURCE: Central Bureau of Statistics.

On family farms, especially in the vicinity of population and employment centers, the intensified demand for labor in recent years has induced a shift from agricultural work to other occupations outside the settlement. This trend, particularly pronounced in moshavim inhabited by new immigrants, has enabled the remaining settlers to increase their employment and income by exploiting the land and water rights of those leaving agriculture.

These two developments have created a number of social and economic problems. Those who no longer work in agriculture are receiving rent for their water and land rights, which had been granted them by public institutions on the strength of their engaging in farming. Inequalities—both within individual cooperative settlements and between one settlement and another—are growing, especially as regards the quantity of productive factors at the disposal of settlers actually engaging in agriculture. Conflicts have arisen between those who continue to farm and those who do not, over the provision of farm services within the settlement. Nevertheless, these difficulties have generally been ac-

accompanied by a rise in average living standards and in productivity. The present tendency in the public institutions is to solve these problems by legislation which could permit the removal from the moshavim of settlers no longer working in agriculture.

5. CAPITAL AND FINANCING

(a) *Investments in agriculture*

Gross investment in agriculture and public development projects connected with this sector declined in 1964/65 by IL 34 million, or 13 percent (see Table XI-13); in real terms, the decrease was 18 percent. This was due to the nonexpansion of inventories, after a rise of IL 23 million in 1963/64, and to the smaller volume of work connected with the National Water Carrier, the first stage of which was completed in 1963/64. Capital outlay on the Carrier contracted by IL 11 million, after having declined by some IL 40 million in 1963/64.

Investment in farms was down 19 percent, following a real increase of 30 percent in 1963/65;¹ this can be attributed to the expansion of inventories and the larger outlay on machinery and equipment.

Real gross investment in fruit farming declined by 9 percent, and taking into account the accelerated uprooting of orchards—by 24 percent. This development was reflected in the slower expansion of the gross capital stock, which showed a real rise of only 4.6 percent, as compared with an annual average of over 9 percent during the period 1955/56 to 1959/60 and 6 percent from 1960/61 to 1963/64. The declining growth trend in the gross stock of capital assets in this branch has been in evidence since 1957/58, and is largely due to the excess supply in the local market, which has reduced profitability in most fruits. For the same reason, investment in livestock is also small, totalling IL 2.1 million in 1964/65, the same as in the preceding year. This investment added less than 1 percent to the gross value of livestock (see Table XI-14), this too being roughly the same as in 1963/64. The reduced investment in livestock in recent years partly explains the smaller outlay on farm buildings, the real volume of which decreased by 25 percent in 1964/65 to stand at IL 14 million. Another reason for the downtrend in this item is the centralization of certain activities which in the past were performed by each agricultural settlement separately but today are carried out on a regional or district basis, such as the milling of fodder, grain storage, and

¹ The decline in gross investment in farms in 1964/65 may not fully reflect the slower growth of productive farm assets, since some orchards were uprooted before they were fully depreciated because of their reduced profitability. According to a rough estimate, the accelerated uprooting of orchards has totalled some IL 19 million since 1961/62, and as much as IL 6.6 million in 1964/65, alone.

Table XI-14

STOCK OF CAPITAL ASSETS IN AGRICULTURE,^a 1964-65

(IL million, at current prices)

	Gross stock of capital assets					Net stock of capital assets				
	1964 ^b	1965	Percent increase or decrease (-)			1964 ^b	1965	Percent increase or decrease (-)		
			Value	Quantity	Price			Value	Quantity	Price
Fixed assets										
Orchards	806.4	927.6	15.0	4.6	9.9	586.0	658.5	12.4	2.3	9.9
Farm buildings, irrigation networks, and local water projects	879.2	966.9	10.0	2.6	7.2	555.8	605.9	9.0	1.7	7.2
Machinery and equipment	360.6	406.8	12.8	9.0	3.5	221.3	247.2	11.7	7.9	3.5
Livestock ^c	265.2	279.8	5.5	0.8	4.7	265.2	281.1	6.0	1.2	4.7
Total	2,311.4	2,581.1	11.7	3.8	7.6	1,628.3	1,792.7	10.1	2.5	7.4
Current assets										
Current inventories ^d	310.9	337.6	8.6	3.8	4.6	310.9	337.6	8.6	3.8	4.6
Grand total	2,622.3	2,918.7	11.3	3.8	7.2	1,939.2	2,130.3	9.9	2.8	6.9

^a Excluding dwellings, household assets, 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, whereas other data refer to calendar years.SOURCE: Fixed assets—A. L. Gaathon (unpublished data); current assets—Bank of Israel estimates based on M. Hayat, *Estimated Current Capital Stock and Demand for Working Capital in Israeli Agriculture, 1963/64*, published by the Ministry of Agriculture, November 1963.

Table XI-15

OUTSTANDING INSTITUTIONAL FARM DEBT, 1964-65

(IL million)

	1964		1965		Increase or decrease (-)			
	Excl. linkage increments	Incl. linkage increments	Excl. linkage increments	Incl. linkage increments	Excl. linkage increments		Incl. linkage increments	
					(IL m.)	(%)	(IL m.)	(%)
Long-term*	1,162.4 ^b	1,176.6 ^b	1,258.5	1,272.3	96.1	8.3	95.7	8.2
1. To the Jewish Agency ^c To financial institutions: ^d	877.5 ^b	877.5 ^b	943.5	943.5	66.0	7.5	66.0	7.5
2. Israel Bank of Agriculture	158.9	173.1	163.0	176.8	4.1	2.6	3.7	2.1
Of which:								
3. From own resources	97.1	106.1	98.3	107.3	1.2	1.2	1.2	1.1
4. From Govt. deposits	61.8	67.0	64.7	69.5	2.9	4.7	2.5	3.7
5. Agricultural funds and agricul- tural financial institutions ^e	70.9	—	83.8	—	12.9	18.2	—	—
6. Other financial institutions	15.7 ^b	—	24.9	—	9.2	58.6	—	—

7. To banks—from Government deposits	10.2	—	15.3	—	5.1	50.0	—	—
8. To other institutions ^f	29.2 ^b	—	28.0	—	-1.2	-4.1	—	—
Short-term ^e	213.0 ^b	215.6 ^b	240.3	242.8	27.3	12.8	27.2	12.6
9. To banks—from own resources ^b	193.8 ^b	196.4 ^c	220.7	223.2	26.9	13.9	26.8	13.6
10. To banks—from Government deposits	19.2 ¹	19.2 ¹	19.6 ¹	19.6 ¹	0.4	2.1	0.4	2.1
Total institutional debt	1,375.4	1,392.2 ¹	1,498.8	1,515.1 ¹	123.4	9.0	122.9	8.8

^a Including some short-term credit which cannot be separated owing to insufficient data.

^b Revised figures.

^c See Bank of Israel Report for 1964, p. 254, Table XI-14, note ^c. Data are for the fiscal year.

^d As defined in Chapter XVII, "Financial Institutions".

^e 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.

^f Gmul Ltd., social insurance funds, and insurance companies.

^g 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.

^h Including Bank of Israel rediscounts totalling IL 0.9 million in 1964 and IL 2.2 million in 1965.

¹ Including IL 5 million in credit from Government deposits for citriculture.

² 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, 4, and 9—Bank of Israel; lines 5, 6, and 8—Chapter XVII, "Financial Institutions", and Chapter XVIII, "Social Insurance Funds and Insurance Companies"; line 7—Bank of Israel (the method of calculation is described in the Appendix to the Bank of Israel Report for 1964—in Hebrew only); line 10—Bank of Israel and Ministry of Agriculture.

the like.¹ Investment in machinery and equipment, on the other hand, was considerably expanded, reaching IL 62.1 million in 1964/65. Most of the increase can be attributed to the larger outlay on labor-saving equipment, following the decline in the relative price of equipment as compared with wages during the last two years—a rise of 4 percent only in contrast to 22 percent in hourly farm wages.

Investment in public development projects decreased by approximately 10 percent in nominal terms and 16 percent in real terms, owing to the smaller outlay on the National Water Carrier as well as on drainage, land reclamation, and afforestation. Aggregate farm investment in 1964/65 enlarged the gross stock of fixed assets, which is an indicator of the sector's productive capacity, by less than 4 percent, and the net capital stock (i.e. less depreciation) by only 2.8 percent—a slightly lower rate than in 1963/64. Despite the nonexpansion of agricultural output during the year reviewed, the stock of current assets increased at about the same rate as the fixed capital stock—by about 4 percent—though much more slowly than in the previous year (12 percent). This rise is attributable to the increased output of branches requiring a relatively large amount of current assets, such as citrus and livestock, and the reduced output of branches requiring a small amount of current assets, such as vegetables and field crops.

(b) *Institutional liabilities*

The outstanding institutional farm debt (including linkage increments) rose by 8.8 percent in 1965 to reach IL 1,515 million. Long-term liabilities amounted to IL 1,272 million, or approximately 84 percent of the total. About three-quarters of the long-term debt was owed to the Jewish Agency, which grants credit at a very low rate of interest;² 14 percent to the Israel Bank of Agriculture; and the remainder to various banking and financial institutions, insurance companies, and social insurance funds.

Short-term liabilities totalled IL 243 million, 12.6 percent more than in the previous year. The entire sum was owed to banking institutions, though part of it (as well as of the long-term debt) represents credit granted from deposits of the Government and other public authorities.

Linkage increments³ constituted some IL 16 million of the total outstanding debt, the same amount as in 1964. The nondecrease in these increments was

¹ When such investments are made on a district or regional scale, they are classified as industrial investment.

² The interest rate on liabilities to the Jewish Agency's Settlement Department, calculated by dividing total loan repayment receipts by the total debt to the Settlement Department, came to less than 1 percent in 1965.

³ See Bank of Israel Report for 1964, note on p. 253, which discusses the significance of the data on linkage increments. These increments arose on debts linked to the dollar at the time of the 1962 devaluation, but payment was deferred until 1965.

due to an arrangement whereby their payment was postponed until 1966 for certain types of borrowers. The rate of interest on institutional farm credit apparently edged down somewhat in 1965, since interest payments to the Jewish Agency were smaller despite the larger amount owed it. The weight of credit from the Jewish Agency, which bears the lowest rate of interest within the total debt, went up during the year reviewed; the average rate of interest on credit from other sources remained at the levels fixed by institutional agreements or by law, depending on the type of credit concerned, since there were no changes in the law or in these agreements in 1965. The cost of noninstitutional credit, which apparently does not constitute a large proportion of the sector's liabilities, rose appreciably in 1965.

The increase in institutional farm credit in 1965 totalled IL 123 million, as against IL 149 million the year before (see Table XI-15). Some 78 percent (IL 96 million) of the additional financing was in the form of long- and

Table XI-16
SOURCES AND USES OF FUNDS IN AGRICULTURE, 1962-65
(IL million)

	1962	1963	1964	1965
Sources				
1. Increase in long-term institutional credit	58.9	79.9	117.0	96.1
2. Imputed depreciation	63.2	71.3	83.9	95.2
3. Subtotal	122.1	151.2	200.9	191.3
4. Increase in short-term institutional credit	17.2	-5.5	31.5	27.3
5. Total identified sources of funds	139.3	145.7	232.4	218.6
Uses				
6. Gross investment in farms during the year	118.5	114.6	152.1	129.8
7. Increase in value of current inventories	25.2	54.6	18.4	26.7
8. Total identified uses	143.7	169.2	170.5	156.5
9. Surplus of funds (8-5) ^a	-4.4	-23.5	61.9	62.1
10. Surplus of long-term funds (6-3)	3.6	36.6	48.8	61.5
11. Surplus of short-term funds (7-4)	-8.0	-60.1	13.1	0.6

^a On the assumption that depreciation has been allocated from gross profits and that total uses did not exceed total identified uses.

SOURCE: Credit—Table XI-15; depreciation—Table XI-1; investments—Table XI-13; current inventories—Table XI-14.

Table XI-17

OUTSTANDING BALANCE OF SHORT-TERM BANK CREDIT TO AGRICULTURE,^a 1964-65

(IL million)

	1964		1965		Percent increase or decrease (-)			
	End of year	Annual average ^b	End of year	Annual average	End of year		Annual average	
					IL m.	%	IL m.	%
(1) Directed credit (exemptions from liquidity requirements and Bank of Israel rediscounts) ^c	109.2	90.2	122.7	103.0	13.5	12.4	12.8	14.2
(2) From resources of banking institutions and the Jewish Agency (not exempted from the liquidity requirements) ^d	11.0	11.2	11.4	11.2	0.4	3.6	—	—
(3) From Government deposits earmarked for working capital credits	14.2	14.3	14.6	14.4	0.4	2.8	0.1	0.7
(4) Total credit under agricultural production financing program ^e	134.4	115.7	148.7	128.6	14.3	10.6	12.9	11.1
(5) Other credit from banks' own resources ^f	80.4	75.8	91.6	77.8	11.2	13.9	2.0	2.6
(6) Total short-term bank credit	214.8	191.5	240.3	206.4	25.5	11.9	14.9	7.8
(7) Of which: From banks' own resources subject to liquidity requirements ^g	86.4	84.7	98.0	86.7	11.6	13.4	2.0	2.3

^a Balances do not include linkage increments. Short-term credit granted by the Israel Bank of Agriculture has also been excluded, except for some IL 1.5 million which is not subject to the liquidity requirements and which has been included under directed credit.

^b The calculation of annual averages is explained in the Appendix to the Bank of Israel Report, 1964.

^c Including the Israel Bank of Agriculture.

^d Participation of banks (other than the Israel Bank of Agriculture) in joint funds with the Government and the Jewish Agency's Settlement Department for granting 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 a IL 10 million joint fund of the Government and the banks for financing citriculture (the Government participates on a 1:1 basis).

^g Line (2) and line (6) less the Government's participation in the fund for financing citriculture (see note ^f).

SOURCE: Lines 1, 5, and 7—Bank of Israel; lines 2 and 3—estimate based on Ministry of Agriculture data.

medium-term credit. More than two-thirds of the incremental long-term credit was provided by the Jewish Agency, approximately 29 percent by various banking and financial institutions, and only about 4.5 percent by the Israel Bank of Agriculture.

In recent years the growth of long-term institutional credit has considerably exceeded the net investment in agriculture (see Table XI-16). Considerable importance attaches to this development for stabilizing and improving the financial structure of the sector, since many investments were financed in the past by short-term credit. The cumulative surplus of institutional long-term credit since 1962 totals IL 148 million, of which about IL 108 million accrued during the last two years.

However, the existence of this surplus does not necessarily mean that farmers have been resorting to short-term credit on a correspondingly smaller scale. This is because real depreciation has not been fully allowed for, and because some of the funds have been utilized for nonagricultural investments. Incremental short-term bank credit amounted to IL 27 million in 1965, as compared with some IL 32 million in 1964—an increase of 13 percent, or approximately the same as the expansion of current inventories during the year.

More than half of the incremental short-term credit in 1965 consisted of

Table XI-18

**AVERAGE ANNUAL BALANCE OF DIRECTED CREDIT,^a BY DESTINATION,
1964-65**

Destination	1964		1965		Increase or decrease (-)	
	IL m.	%	IL m.	%	IL m.	%
Field crops and vegetables ^b	41.4	35.8	51.5	40.0	10.1	24.4
Citriculture	12.3	10.6	15.4	12.0	3.1	25.2
Livestock, livestock products, and fodder ^c	13.2	11.4	11.7	9.1	-1.5	-11.4
Other inventories and miscellaneous ^d	6.1	5.3	6.4	5.0	0.3	4.9
Undefined ^e	42.7	36.9	43.6	33.9	0.9	2.1
Total	115.7	100.0	128.6	100.0	12.9	11.1

^a For the method of calculating the average outstanding balance of directed credit and the definition of such credit, see the Appendix to the Bank of Israel 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 the production of alcohol and wine, and for miscellaneous items.

^e Credit to purchasing organizations, companies, farms, individuals, for the production and storage of seed, to victims of drought, credit through the various funds, etc.

directed credit (see Table XI-17). All of the additional directed credit was granted outside the ordinary liquidity framework, the growth here being IL 13.5 million, or 12 percent. Directed credit from Government, banking, and Jewish Agency resources through the joint funds went up only very slightly.

Table XI-19
PARTIAL CAPITAL ACCOUNT OF AGRICULTURE, 1964-65
(IL million)

	1964 ^a	1965	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	1,141.8	1,264.4	122.6	10.7
2. Machinery, equipment, and livestock	486.5	528.3	41.8	8.6
3. Subtotal	1,628.3	1,792.7	164.4	10.1
Current assets				
4. Current inventories	310.9	337.6	26.7	8.6
5. Subtotal	1,939.2	2,130.3	191.1	9.9
6. Other assets ^b	—	—	—	—
Liabilities^c				
7. Institutional debt (mainly long-term)	1,176.6	1,272.3	95.7	8.2
8. Institutional debt (mainly short-term)	215.6	242.8	27.2	12.6
9. Total institutional debt	1,392.2	1,515.1	122.9	8.8
10. Other liabilities ^d	—	—	—	—
11. Equity capital	—	—	—	—
Balance sheet ratios				
12. (5/9)	1.39	1.41		
13. (3/7)	1.38	1.41		
14. (4/8)	1.44	1.39		

^a Revised figures.

^b Private land, land amelioration, and financial assets (cash, deposits, receivables, rights, shares, etc.).

^c Including linkage increments totalling IL 16.8 million in 1964 and IL 16.3 million in 1965.

^d Supplier credit, sundry creditors, and other noninstitutional credit.

SOURCE: Assets—Table XI-14; institutional debt—Table XI-15.

Nondirected credit from the banks' own resources was expanded by IL 11 million, or 15 percent, as compared with IL 6 million, or some 9 percent, in 1964.

The destination of directed credit underwent a marked change (see Table XI-18). That granted for unspecified purposes moved down from 37 to 34 percent of the average outstanding annual balance, although in absolute terms there was an increase. The biggest rise was in credit for field crops and vegetables, the share of which advanced from 36 to 40 percent. Most of the increase was in credit for cotton, groundnuts, and exportable vegetables, and was connected with the considerable extension of acreage and the doubling of the value of vegetable exports in 1965. The share allotted to citriculture likewise went up, owing to larger output and exports. On the other hand, the amount provided for livestock and fodder declined both relatively and absolutely, because of the reduction of the area under fodder and the smaller amount of cattle raised for meat.