CHAPTER XI

AGRICULTURE

1. Main Developments

The real agricultural product, calculated at producer prices, held steady in 1967/68,[1] after rising by 22 percent the year before. The price of the net agricultural product was up some 4 percent, after declining by just over 1 percent in 1966/67.

The much slower expansion of the net agricultural product in 1967/68 reflects a negligible real increase of 1 percent in total output. The latter was due to a number of factors: the relatively poor rainfall (1967/68 was a dry year), a decline in average fruit yields after a bumper year,[2] and the outbreak of Newcastle disease in the poultry branch. Consequently, it is difficult to tell whether 1967/68 signalled a return to the trend of recent years, when the real annual increase in the agricultural product fluctuated around 5 percent,[3] or whether it was of a nonrecurrent nature.

The stability of the real agricultural product in 1967/68 was accompanied by a rise of 4 percent in producer prices. The latter development reflects an increase of 6 percent in the price of agricultural output, which was partly offset by a rise of 8.5 percent in the price of the purchased input. The dearer cost of inputs was due primarily to the devaluation of the Israeli pound at the beginning of 1967/68.

The decrease in 1967/68 in real output of capital goods and intermediates brought up the weight of marketed output in total output, while that of output retained on the farm declined. Within total marketed output, the percentage sold for local consumption—both direct and indirect—declined, in line with the trend of the previous year. However, the proportion of output going to industry was higher in 1967/68.

The higher prices received by producers in 1967/68 in the home market can be mainly ascribed to the smaller output in certain branches, the slower growth in others, the heavier demand for certain products following the economic recovery in 1968, and the higher subsidy paid to compensate for the rise in fodder prices after the devaluation. The growth of national income in 1968 had a limited effect on the demand for agricultural produce: real food consumption per

[1] This chapter refers to agricultural years, beginning in October and ending in September.

[2] See Bank of Israel, *Annual Report 1967*, p. 273.

[3] See Bank of Israel, *Annual Report 1966*, Chapter XI.

Table XI–1

CURRENT ACCOUNT OF AGRICULTURE, 1966/67 AND 1967/68

(IL million)

	Value at current prices		Percent increase or decrease (–) from 1966/67 to 1967/68		
	1966/67[a]	1967/68	Value	Quantity	Price
1. Total output at producer prices	1,680.0	1,789.3	6.5	0.7	5.8[b]
2. Less: Agricultural intermediates	153.3	149.4	–2.5	–5.5	3.2
3. Agricultural output at producer prices	1,526.7	1,639.9	7.4	1.3	6.0
4. Less: Subsidies on output	103.6	109.5	5.7	0.5[b]	5.2[b]
5. Agricultural output at market prices	1,423.1	1,530.4	7.5	1.4	6.1
6. Less: Purchased input	580.3	647.2	11.5	2.9	8.4
7. Gross agricultural product at market prices	842.8	883.2	4.8	0.3	4.4
8. Less: Depreciation	109.8	120.3	9.6	3.4	6.0
9. Net agricultural product at market prices	733.0	762.9	4.1	–0.1	4.2
10. Plus: Subsidies on output	103.6	109.5	5.7	0.5[b]	5.2[b]
11. Net agricultural product at producer prices	836.6	872.4	4.3	0.0	4.3
12. Plus: Drought compensation, etc.	3.0	9.0	200.0	—	—
13. Total income from agriculture	839.6	881.4	5.0	—	—
14. Less: Wages of hired labor	201.0	208.0	3.5	—	—
15. Less: Interest and rent	54.0	58.0	7.4	—	—
16. Income of farm owners from agriculture	584.6	615.4	5.3	—	—

NOTE: Rates of change were calculated from unrounded figures.

[a] Revised figures.

[b] The change in quantity between 1966/67 and 1967/68 reflects the real change in subsidized output; the change in price reflects the change in the average subsidy rate per unit of subsidized output.

SOURCE: Lines 1 and 2—Table XI–2; lines 4 and 12—Table XI–8; line 6—Table XI–6; lines 8, 14, and 15—Central Bureau of Statistics.

capita rose to about the same extent as in 1967—2.4 as against 2.5 percent. The picture in 1966/67 was similar—the short recessionary period affected the demand for agricultural produce only very slightly,[1] and despite the decline in disposable income per capita, real per capita consumption of food rose by 2.5 percent.

That the annual changes in consumers' current incomes have such a slight bearing on local demand for agricultural produce is due primarily to the low income elasticity of demand for agricultural produce, the relatively slow reaction of consumers to temporary changes in current incomes, insofar as their demand for fresh agricultural produce is concerned, and the impact of agricultural imports on prices in the home market. As regards producer prices, there are additional factors mitigating the effect of changes in current incomes. First is the fact that the destination of output (i.e. to direct local consumption, industry,

[1] See Bank of Israel, *Annual Report 1967*, p. 270.

or direct export) can be adjusted in accordance with the various elasticities of demand. Secondly, the subsidization of about half of agricultural output moderates the effect of changes in market prices on producer prices. Thirdly, since approximately one-quarter of the marketed output is exported directly, it is affected only indirectly by developments in the local market.

The main result of the reduction or slower expansion of output in various branches of agriculture in the year reviewed was a better balance between the supply and demand for agricultural products—the elimination or reduction of surpluses—as well as the channelling of smaller quantities to low-profit destinations. At the same time, it should be noted that the prices of certain products rose, a development attributable to the growth of disposable per capita income.

The higher prices received in 1967/68 by farmers for produce marketed to industry, despite the physical increase, was mainly due to the fact that over half of the supply was from subsidized branches where the subsidy rates were raised.

The higher prices fetched for products exported directly is explained primarily by the devaluation of the Israeli pound and the raising of export incentives to citrus growers. The f.o.b. price of citrus, which accounts for approximately 80 percent of total agricultural exports, slipped more than 8 percent in 1967/68. The reasons for this are given below.

Purchases of inputs from other sectors rose more moderately in 1967/68 than in the previous year—by 3 percent as against 5 percent. This was due to surplus production in 1966/67 of grain fodder, the slower expansion of total agricultural output in 1967/68, the relatively small damage from pests, and the low rainfall. On the other hand, the last-mentioned factor resulted in a larger water consumption.

According to manpower surveys of the Central Bureau of Statistics, the number of persons employed in agriculture was down 5 percent from the preceding year, totalling approximately 102,000.[1] The number of nonhired agricultural workers (i.e. self-employed) declined by 3 percent to about 64,000, and the number of hired workers by 8 percent to some 38,000. Hence, in contrast to 1966/67, the weight of nonhired workers in total gainful farm employment probably increased in 1967/68. The total labor input, measured by the estimated average number of man-hours per week, apparently decreased by about 1 percent during the year reviewed: the figure for nonhired labor rose by 1 percent, while that for hired labor was apparently down 4 percent.

Overall and factor productivity remained virtually unchanged in 1967/68, and may even have dropped somewhat. This reflects the stability of both total output and total input. As already mentioned, undue significance should not

[1] This estimate should be treated with reserve. First of all, the sampling error is comparatively high; secondly, since the manpower surveys do not include inhabitants of the administered areas working on Israeli farms, the number is probably understated.

be attached to annual changes in these aggregates, but they should be regarded as merely indicative of trends.

Total farm income increased more slowly in 1967/68 than in the previous year—5 percent as against 17 percent. The deceleration chiefly reflects the slower growth of the net agricultural product, the price of which rose by 4 percent. Drought compensation and similar payments were about three times larger than in 1966/67, owing to the damage caused by drought, hail, and Newcastle disease.

Income of farm owners from agriculture likewise expanded more slowly—by 5 percent as contrasted with 27 percent in 1966/67. The 1967/68 increase was similar to that in total income from agriculture, as the agricultural wage bill went up very moderately. Net income per nonhired worker rose more rapidly than income of farm owners, since the number of such workers declined during 1967/68.

Direct farm subsidies were stepped up by 2 percent, compared with 4 percent in 1966/67. The increase resulted from the heavier subsidization of output, the volume of factor subsidies declining. Drought compensation and similar payments were substantially higher. In contrast to 1966/67, the larger subsidization of output stemmed from the revision of subsidy rates and not the expansion of output. The reduction of factor subsidies is explained by the Government's decision to switch from a system of factor subsidies to the subsidization of farm products.

Real gross investment in agriculture declined by 4 percent in 1967/68. Most of the decrease was in livestock, reflecting the much slower expansion of dairy herds following their accelerated growth in 1966/67. The downward trend in orchards, farm installations, and land reclamation and conservation continued in 1967/68, while expenditure on machinery and equipment was heavier in the year reviewed, after having contracted in 1966/67. The figure for afforestation also fell off, owing to the reduction of relief work because of the economic recovery in 1968.

The value of gross agricultural investment in 1967/68 was more or less the same as in the previous year, reaching some IL 162 millon. The stability in the year reviewed reflected a 5 percent rise in investment prices—all of it in farm structures and equipment.

The financial position of the farm sector improved in 1967/68. While investment was no larger than in 1966/67, the conversion of loans received on unfavorable terms into more convenient credit—a process that began in 1966/67—continued during the year reviewed. Consequently, the average rate of interest paid on outstanding long-term farm credit declined. The composition of short-term credit also improved. The outstanding balance of such credit was only 1 percent higher at the end of 1968, totalling some IL 449 million, but the relative share of directed credit (which is cheaper) rose. The outstanding

balance of directed credit at the end of 1968 was about IL 251 million, or approximately 56 percent of total outstanding short-term credit, as compared with some 45 percent in 1966/67. The outstanding balance of bill brokerage credit, which is the most expensive, was only IL 41 million at the end of 1968; this represented about 9 percent of total short-term credit, as against some 16 percent in 1966/67. Hence it follows that the average rate of interest paid by agriculture was lower in 1967/68 than in the previous year.

The biggest increase in outstanding directed credit during the year, was in that granted for field crops and vegetables. But there were also increases in citriculture, "other inventories and miscellaneous", and for undefined purposes. On the other hand, the figure for livestock fell off.

2. Output

(a) *Value of output*

Total agricultural output, at producer prices, edged up only 1.5 percent in real terms, compared with 14 percent the year before.

The total farm value of agricultural output rose by 7 percent, as contrasted with 14 percent in 1966/67, since producer prices increased by 6 percent after having remained stable during 1966/67.

There were two principal reasons for the slower growth of output in 1967/68: the unfavorable weather conditions relative to 1966/67, and deliberate cutbacks in production. Whereas 1966/67 was a particularly good year from the aspect of rainfall and other climatic conditions,[1] 1967/68 was a dry year, the impact of which was especially marked on field and industrial crops. The accelerated expansion of noncitrus fruit production in 1966/67 was responsible for the smaller output of this branch in 1967/68, while the incidence of Newcastle disease was the main cause of the contraction of poultry output. The expansion of cattle farming was also deliberately restrained, so as to keep production within the planned quotas. These factors affected total agricultural output—both marketed and that retained on the farms.

The rise in producer prices in 1967/68 was due primarily to the slower expansion (or contraction) of output, the 1967 devaluation, the recovery of the economy in 1968, and the higher subsidy rates paid to certain types of farming.

(b) *Destination of output*

Most of the real decrease in total agricultural output was in that retained on the farms—e.g. agricultural intermediates, the production of which contracted by 6 percent after advancing 15 percent in 1966/67 (see Table XI-2). The

[1] See Bank of Israel, *Annual Report 1967*, pp. 272–73

output of capital goods also fell off—by 25 percent—after gaining 24 percent in 1966/67.

In contrast, marketed output increased, but more slowly than in the previous year—3 percent in real terms as against 14 percent.

Output for direct domestic consumption was down more than 3 percent, compared with an increase of 6 percent the year before. It should be noted, however, that in meat and dairy products the bulk of the output sold to industry (dairies, slaughterhouses, and poultry abattoirs) is also consumed immediately, thus quickly affecting market prices. If this output is included with that marketed for direct consumption, it will be found that total output sold for direct consumption[1] did not decrease in physical terms, but rose by approximately 1 percent.

Output diverted to industry and direct export increased more slowly in real terms than in the previous year—8 as against 23 percent in the case of industry, and 8 as against 20 percent in the case of direct export.

Table XI–2

TOTAL AGRICULTURAL OUTPUT, BY DESTINATION, 1966/67 AND 1967/68

(IL million)

	Value at current prices		Percent increase or decrease (–) from 1966/67 to 1967/68[b]		
	1966/67[a]	1967/68	Value	Quantity	Price
Output marketed					
Direct local consumption[c]	605.9	631.8	4.3	–3.3	7.9
Industry	424.0	469.1	10.6	8.0	2.4
Direct export	342.1	399.9	16.9	7.8	8.4
Total	**1,372.0**	**1,500.8**	**9.4**	**3.0**	**6.2**
Output retained on farms					
Own consumption	76.5	80.4	5.1	–0.9	6.1
Capital goods	78.2	58.7	–24.9	–24.9	0.0
Agricultural raw materials (intermediates)	153.3	149.4	–2.5	–5.5	3.2
Total	**308.0**	**288.5**	**–6.3**	**–9.3**	**3.3**
Grand total	**1,680.0**	**1,789.3**	**6.5**	**0.7**	**5.8**

[a] Revised figures.
[b] Percentage changes have been calculated from unrounded figures.
[c] Including the value of output destroyed: IL 5.7 million in 1966/67 and IL 3.8 million in 1967/68.
SOURCE: Central Bureau of Statistics.

[1] Besides output defined in the national accounts as marketed for "local consumption", this definition also includes milk and meat sold to dairies and slaughterhouses and marketed locally after relatively little processing.

In general, the trends characterizing 1967/68 carried over through the year reviewed: The weight of direct domestic consumption in total marketed output decreased from 45 percent in 1966/67 to 41 percent, while the weight of industry edged up from 31 percent to 33 percent and that of direct export from 24 to 26 percent.

Producer prices of output supplied for direct domestic consumption rose by 7 percent in 1967/68, after declining by 2 percent the year before. This can be ascribed to the contraction of output in certain branches, the slower expansion in others, the heavier demand for meat following the rise in current incomes of consumers, and the heavier subsidization of branches marketing most of their output for direct domestic consumption. It should be noted in this context that an analysis of trends in terms of producer prices somewhat blurs the operation of the market mechanisms, owing to the pooling of prices (as between the various destinations) in many branches.

As already mentioned, real output channelled to industry was up 8 percent in 1967/68, reflecting the increased supply of meat (mainly beef) and citrus and the accelerated expansion of vegetable supplies. On the other hand, there was a decrease in noncitrus fruit and cereals. The larger return of growers from this destination chiefly reflects the higher prices received for output undergoing relatively little processing (meat and milk), as well as for wheat after being adjusted in line with the increased price of imported wheat after the devaluation. Citrus and vegetables, however, fetched lower prices in the year reviewed.

The expansion of output directly marketed abroad slackened noticeably in 1967/68, amounting to 8 percent as against 20 percent in 1966/67. The much slower growth rate can be ascribed to the smaller percentage rise in citrus exports and a sharp decline in eggs and bananas. On the other hand, there was a quantitative increase in overseas sales of vegetables and potatoes, flowers, seeds, and poultry-meat (goose livers, etc.). These items accounted for 8 percent of all output directly exported in 1967/68.

Prices received by producers from this destination were up 8 percent in 1967/68. Most of the gain was in citrus prices, a result of the devaluation and the raising of export incentives in 1967/68, which more than offset the 8 percent decline in prices fetched abroad.

The downward trend in real output retained on the farms, discernible since 1964/65, carried over through the year reviewed. Most of the decrease was in capital goods, which fell off by 24 percent after rising to about the same extent in 1966/67.

The quantity diverted to own consumption was 3 percent larger in 1967/68, compared with a rise of 2 percent the year before, while the output of agricultural intermediate products was down 6 percent, after increasing by 15 percent in the previous year. The decline was due mainly to the drought in the year reviewed.

Table XI-3

OUTPUT OF AGRICULTURAL CAPITAL GOODS, 1966/67 AND 1967/68

(IL million)

	Value at current prices		Percent increase or decrease (–) from 1966/67 to 1967/68[b]		
	1966/67[a]	1967/68	Value	Quantity	Price
Livestock	13.0	4.1	–68.5	–68.5	0.0
Orchards	27.0	21.1	–21.9	–21.9	0.0
Land reclamation and conservation, drainage, pastures, etc.	11.2	10.9	–2.7	–2.7	0.0
Afforestation	27.0	22.6	–16.3	–16.3	0.0
Total	**78.2**	**58.7**	**–24.9**	**–24.9**	**0.0**

[a] Revised figures.
[b] Percentage changes have been calculated from unrounded figures.
SOURCE: Central Bureau of Statistics.

(c) *Output, by type of farming*

1. Livestock

Real output of livestock and livestock products expanded by only 1 percent in 1967/68, as contrasted with 10 percent in 1966/67. The deceleration is explained primarily by the contraction of poultry output (see Table XI-4).

(i) Cattle farming

The real output of cattle farming rose at nearly the same rate as in 1966/67—8 percent as against 9 percent. But whereas in 1966/67 milk and meat showed similar growth rates (about 8 percent), in 1967/68 most of the increase in this branch was accounted for by meat (up 15 percent), while the real growth of milk output was smaller (4 percent).

The accelerated increase in beef output in 1967/68 was an outcome of the slower expansion of the dairy herd, the main source of beef supply. The latter development was due to the very rapid expansion of the herd in 1966/67.[1] It should be pointed out that dairy farming is subsidized, with the subsidies being granted on the basis of individual production quotas for milk. The marginal return on milk—from unsubsidized marketing—does not leave the average producer with a reasonable profit. The marked expansion of herds in 1966/67 often resulted in the milk supply reaching or exceeding the subsidized quotas, and this deterred many farmers from further enlarging their herds. But if the milk cattle herds are not expanded, this means that there is a larger supply of calves and heifers, as well as an increased slaughter of milk cows. The slower expansion

[1] See Bank of Israel, *Annual Report 1967*, p. 276.

Table XI–4

CURRENT AGRICULTURAL OUTPUT,[a] BY TYPE OF FARMING, 1966/67 AND 1967/68

(IL million)

	Value at current prices		Percent increase or decrease (–) from 1966/67 to 1967/68[c]		
	1966/67[b]	1967/68	Value	Quantity	Price
Livestock					
Poultry					
Eggs	154.2	145.7	–5.5	–12.3	7.7
Meat	161.7	195.9	21.1	0.5	20.5
Miscellaneous	7.9	7.7	1.7	1.7	0.0
Total	**323.8**	**349.3**	**8.0**	**–5.6**	**14.3**
Cattle					
Milk	144.3	156.0	8.1	3.7	4.3
Meat	87.4	99.8	14.1	15.0	–0.8
Miscellaneous	10.7	12.3	15.3	13.9	1.2
Total	**242.4**	**268.1**	**10.6**	**8.2**	**2.2**
Other livestock					
Milk	22.0	23.5	6.5	1.7	4.8
Meat	35.0	40.2	15.0	10.1	4.5
Fish	39.5	45.9	16.0	9.3	6.1
Miscellaneous	8.7	7.2	–16.5	–14.3	–2.6
Total	**105.2**	**116.8**	**11.0**	**6.0**	**4.7**
Total livestock	**671.4**	**734.7**	**9.4**	**1.2**	**8.1**
Crops					
Citrus	317.1	382.5	20.6	12.7	7.0
Other fruit	172.6	164.8	–4.5	–11.0	7.2
Vegetables	114.6	125.4	9.4	11.1	–1.6
Potatoes	22.8	28.5	25.0	18.0	5.9
Cereals and pulses	88.3	71.2	–19.3	–24.3	6.6
Industrial crops	120.1	124.8	4.0	5.2	–1.2
Miscellaneous	94.9	99.2	4.5	0.1	4.3
Total	**930.4**	**996.4**	**7.1**	**2.5**	**4.5**
Total current output	**1,601.8**	**1,730.6**	**8.0**	**2.0**	**6.0**

[a] Marketing, on-farm consumption, and intermediate goods (agricultural raw materials).
[b] Revised figures.
[c] Percentage changes have been calculated from unrounded figures.
SOURCE: Central Bureau of Statistics.

of the dairy herds also resulted in a smaller growth in the output of cow's milk in 1967/68, and a decrease in the value of the livestock inventory (see Table XI–3).

The real increase in the current output of cattle farming was accompanied by a 2 percent advance in producer prices—the combined result of a rise of 4 percent in the price of cow's milk and a decrease of 1 percent in beef prices. The larger return on cow's milk was due chiefly to the raising of subsidy rates in order to compensate farmers for the dearer cost of purchased fodder after the devaluation, and to a lesser extent to the changed pattern of dairy produce consumption.

Per capita consumption of hard cheeses, soft fat cheeses, and fermented milk increased in 1967/68, continuing the trend observed in 1966/67 (even though it was a recession year). But in contrast to 1966/67, when per capita consumption of drinking milk remained stable, the figure rose somewhat in the year reviewed, this too yielding the dairies a slightly larger return from marketing. Since processing costs went up while consumer prices of milk and milk products remained unchanged in 1967/68, the producer's return from marketing, after deducting production costs of dairy manufacture, was almost the same as in 1966/67.

Producer prices of beef fell only slightly in 1967/68 despite the much larger supplies; this is explained by the moderate rise of 2 percent in the price paid by the consumer, and also by the upward revision of subsidy rates to compensate farmers for the increased cost of fodder. The rise in the consumer price of beef, despite the larger quantity marketed, can be attributed to the jump in poultry-meat prices and the contraction of egg production; this led to the substitution of beef for poultry-meat and to the larger consumption of imported meat. The growth of current incomes apparently played a part in these developments.

(ii) Poultry farming

The real output of poultry farming fell off 6 percent in 1967/68, compared with an increase of 12 percent the year before. This was due to the 12 percent decline in egg output, following a rise of 15 percent in 1966/67, and the stable level of poultry-meat production, after a real increase of 9 percent in 1966/67.

These developments were mainly a result of the outbreak of Newcastle disease at the beginning of 1967/68, but the egg surpluses of 1966/67 and the consequent cutting of production quotas presumably also had a restrictive effect. It is noteworthy that at the end of 1967/68 eggs began to be imported in order to make up for the shortfall in domestic production.

Producer prices of poultry products rose by 14 percent in 1967/68, compared with only 1 percent in 1966/67. Eggs were up 8 percent, as against 2 percent in 1966/67, and poultry increased by 21 percent after holding steady in 1966/67. The higher return on eggs was partly due to the raising of the subsidy rate per egg in order to compensate for the dearer cost of feed and thereby keep con-

sumer prices down. Another factor was the 18 percent drop in egg exports, the return on which is very low. Their curtailment, one of the objectives of agricultural planning, was aided in 1967/68 by the smaller egg output. The consumer prices of eggs remained unchanged in 1967/68, while per capita consumption of this item (including imported eggs) declined by 4 percent, according to provisional estimates.

The larger return to the farmer on poultry-meat in 1967/68 can be ascribed primarily to the jump of 16 percent in the consumer price of this commodity, as well as to the higher subsidy rate paid. The rise in the consumer price was mainly due to the stability of poultry output, which resulted in a decrease in the quantity marketed per capita. Another contributory factor was the growth of disposable per capita incomes in 1968, which induced a heavier demand for commodities with a relatively high income elasticity of demand.

2. *Crops*

The real output of crops increased by 3 percent in 1967/68, as against 16 percent in the previous year. The deceleration is explained by the smaller real output of noncitrus fruit and field crops. Citrus output expanded at a lower rate in the year reviewed, and only vegetables and potatoes showed higher rates.

Producer prices were up 5 percent, with all crops except vegetables and potatoes contributing to the increase.

(i) Citriculture

As already mentioned, the output of this branch expanded more slowly than in 1966/67—13 percent in real terms as against 15 percent (see Table XI–5). The larger citrus output in 1967/68 stemmed from a 5 percent extension of the fruit-bearing area and a real rise of 7 percent in the average yield per dunam.[1] The variety recording the biggest quantitative growth in 1967/68 (in tonnage terms) was Valencia oranges, which soared 56 percent—the result of an 8 percent increase in the fruit-bearing area and a 44 percent gain in the average per dunam yield. Smaller rises were recorded for grapefruit, the fruit-bearing area expanding by 9 percent and the average yield by 8 percent, and for Shamuti oranges, the increases here being 4 and 6 percent respectively.

The much larger Valencia crop in 1967/68 was not reflected by a bigger percentage contribution to citrus exports, since the quantity supplied to industry was almost four times greater than in 1966/67, whereas total sales of citrus for processing were only 14 percent higher.

[1] Most of the economic analysis in this chapter was made in real, constant-price terms and not in tonnage terms. The 1967/68 increase in average yields per dunam, for instance, was larger in tonnage terms, totalling about 11 percent. The difference between the figure in tonnage terms and that at constant-price values stems from the fact that a higher proportion of the 1967/68 citrus crop was sold to industry, the least profitable destination.

Table XI-5

CITRUS OUTPUT, BY ECONOMIC DESTINATION, 1966/67 AND 1967/68

	Quantity ('000 tons)		Value at current prices (IL million)		Percent increase or decrease (–) from 1966/67 to 1967/68[a]		
	1966/67	1967/68	1966/67	1967/68	Value	Quantity	Price
Direct export	664.6	738.0	257.0	313.0	21.8	11.3	9.4
Industry	308.6	420.8	26.6	35.5	11.5	14.3	–6.9
Organized domestic marketing	72.6	69.6	20.3	20.3	0.0	–3.0	3.1
On-farm consumption and private sales	36.2	36.9	13.3	13.7	3.6	2.5	1.1
Total	**1,082.0**	**1,265.3**	**317.2**	**382.5**	**20.6**	**12.7**	**7.0**

[a] Percentage changes have been calculated from unrounded figures.
SOURCE: Central Bureau of Statistics.

The huge increase in sales of Valencias to the canneries can be ascribed to the exceptionally high proportion of low-grade fruit in the year reviewed. The percentage of culls in total citrus tonnage was up 8 percent in 1967/68 to stand at 42 percent. This figure, however, obscures the situation at the beginning of the 1967/68 season, when the percentage of Shamuti and grapefruit culls was among the lowest recorded during the last six years. The weekly figures on Shamuti culls during the first three months of the season averaged some 15 percent lower than during the 1966/67 and 1968/69 seasons, while grapefruit showed an even steeper decline, averaging about 25 percent lower. This apparently testifies to a certain flexibility in, or less stringent, quality control of the fruit, in accordance with the prices fetched in foreign markets. A final analysis of the causes of the smaller export prices of Israeli citrus in 1967/68 was not yet available at the time of writing this chapter, but presumably the lower quality of the fruit at the beginning of the season was at least partly responsible.

The quantity of fruit sold for direct domestic consumption through organized marketing channels was down 3 percent in 1967/68, after decreasing by 1 percent the year before. It is reasonable to assume that the rise in consumer prices during 1967/68 (this too in line with a trend that began in the previous year) did not help to increase per capita consumption of citrus.

Producer prices of citrus were up 7 percent in 1967/68, compared with 3 percent in 1966/67. The accelerated rise reflects the higher prices obtained for output marketed abroad—9 percent as against 2 percent in 1966/67—as well as the more moderate rise in the case of organized domestic marketing—3 as against 7 percent. Industry paid 7 percent less in 1967/68, after an increase of 4 percent in 1966/67. This destination was subsidized in the year reviewed to a total of IL 2.9 million, equivalent to an "incentive" of IL 7 per ton.

The higher prices obtained by growers for citrus marketed abroad in 1967/68, despite the decline of over 8 percent in f.o.b. prices, is explained by the larger local currency return after the devaluation of the Israeli pound, and by the revision of incentive rates. The exact reasons for the drop in f.o.b. prices are still uncertain, but the most important were apparently the lower quality of the fruit exported at the beginning of the season, the completion of the process of integrating the European Common Market (which eliminated the possibilities of price and market discrimination), the failure to adjust marketing policy to the new conditions, the deliberate delay in the shipment of fruit abroad, and the excellent noncitrus harvests in the export markets.

(b) *Other fruit*

Real output of noncitrus fruit in 1967/68 was down 13 percent, after expanding by 15 percent the year before. The decline was due to a number of factors: the fact that fruit yields naturally tend to fluctuate somewhat (a good year being followed by a poor year), the damage caused by hailstorms, and the reduction of the area under certain crops. The contraction of noncitrus fruit output was accompanied by a rise of 8 percent in producer prices, compared with a drop of 9 percent in 1966/67. The higher prices obtained by growers is explained by the smaller proportion of total output sold to industry, the contraction of surpluses, and a substantial decrease in unprofitable exports (bananas).

The biggest real decrease (58 percent) was recorded by olives. This is attributable to the fact that 1966/67 was an exceptionally good year—real output soared 98 percent—and, as already pointed out, a good harvest is usually followed by a poor one. Despite the much lower yield, the price to the producer was only 3 percent higher, as the marketing of this crop is well organized and fairly large stocks of processed olive products were available from 1966/67.

Real output of table grapes was down 18 percent in the year reviewed. This is explained by the further uprooting of unprofitable vineyards; in part it was also a reaction to the high yield of 1966/67. The banana crop was 13 percent smaller in 1967/68, mainly because of the reduction of plantations with a view to adjusting supply to demand. This was reflected by a quantitative decrease of 52 percent in banana exports during the year reviewed. Producer prices were up 31 percent in 1967/68; this was mainly due to the sharp curtailment of exports, the return on which is low, and to a lesser extent to the somewhat higher prices paid by consumers in the domestic market following a decline in the per capita supply.

The real decrease in deciduous fruit supplies came to 7 percent. This was primarily of a cyclical nature, following on the record yields of the previous year. Other factors were the heavy damage caused by hail and the unfavorable weather conditions during the first half of 1967/68, which resulted in lower yields.

In contrast to the decreases in other fruit, output of subtropical varieties was up 22 percent in the year surveyed. This was mainly due to the fact that new orchards reached the fruit-bearing stage. Producer prices of subtropical fruit edged up 1 percent during the year reviewed. This was the resultant of a drop of 3 percent in the prices of fruit marketed for domestic consumption (the supply of which expanded by 18 percent), and a 21 percent rise in export prices, caused partly by the higher f.o.b. return and partly by the devaluation and the various incentives offered.

(c) *Industrial crops*

Real output of industrial crops increased by 5 percent in 1967/68, compared with 8 percent in the previous year. The deceleration reflects the bigger percentage drop in groundnut production—18 percent in 1967/68 as contrasted with 4 percent in 1966/67. The downward trend is ascribable to the relatively low profitability of this crop to the grower, but it is doubtful whether it is necessarily of low profitability to the economy. Tobacco output fell off 14 percent, after rising by 13 percent in 1966/67. The scanty rainfall was the main cause of the decline.

Cotton output expanded at roughly the same rate as in 1966/67—15 percent in real terms. But in contrast to 1966/67, when the growth resulted from a greatly enlarged acreage, the increase in 1967/68 was mainly due to higher yields per dunam. The area under cotton, in terms of irrigated land,[1] was extended by 5 percent in 1967/68, while average per dunam yields rose by 11 percent. The latter development can be partly attributed to the increased share of the irrigated area in total cotton acreage, from 84 to 88 percent, as a result of the drought.

All of the incremental output of cotton fiber in 1967/68 was marketed locally, in large part replacing imports. Exports of fiber from the 1967/68 crop were roughly the same as in the preceding year.

The average farm price of the cotton crop (fiber and seed) was 1 percent lower in 1967/68, owing to the larger proportion of short fiber. No subsidies were paid in the year reviewed (these totalled some IL 10 million in 1966/67), as the price paid by industry for fibers remained unchanged, and that for cottonseed was raised by 29 percent to bring it into line with the world price.

The sugar beet crop was 15 percent smaller in 1967/68, after expanding by 3 percent the year before. In contrast to 1966/67, when acreage was extended by 11 percent, it was reduced by 9,000 dunams, or 31 percent, in 1967/68, the decrease affecting the irrigated and unirrigated areas almost equally. That output fell off even more than the area under sugar beet was due to the decline

[1] In cotton growing, one dunam of irrigated land is equal to two dunams of unirrigated land.

in average yields per dunam for the second consecutive year. In general, it may be said that sugar beet cultivation has been contracting since 1965/66.

The average price received by growers fell by 1 percent in 1967/68, after declining by 7 percent in 1966/67. The factors depressing the growers' return were the same in both years,[1] the major one being the lower sugar content of the beet, which more than offset the 2 percent rise in the base price.

Groundnut production has been declining since 1959/60. The area sown in 1967/68 was down 33 percent, and real output by 18 percent. An increase in average per dunam yields and the diversion of a larger proportion of total output to direct export explain the smaller decrease in real output at constant-price values.

(d) *Vegetables*

The real output of vegetables (excluding potatoes) rose by 11 percent in 1967/68, after remaining stable the year before. Whereas in 1966/67 a 3 percent drop in per capita supplies was accompanied by a rise of 5 percent in producer prices, in 1967/68 producer prices fell by only 2 percent, despite a 7 percent growth in per capita supplies.

The main cause of the comparatively moderate decrease in producer prices was the change in the economic destinations of output. Marketing for direct domestic consumption increased in 1967/68 by less than 1 percent in real terms, which means that the real per capita supply decreased by 3 percent. Consumer prices for most vegetables fell off, reducing the average consumer price of total vegetable output by 4 percent.[2]

Industry took 37 percent more vegetables (in real terms) during the year reviewed, while producer prices fell by 5 percent. The quantities shipped abroad were more than twice as great as in 1966/67, while the prices received by growers were only 1 percent lower.

In contrast to 1966/67, when real output of potatoes shrank 10 percent, there was an increase of 18 percent in the year reviewed. Consumer prices were up 7 percent in 1967/68; the rise in producer prices totalled 6 percent, compared with 18 percent in 1966/67. The subsidization of potatoes was about IL 1 million larger in 1967/68, and this may explain the 5 percent higher return to the farmer.[3]

[1] See Bank of Israel, *Annual Report 1967,* p. 286.

[2] The parallel decline in per capita consumption and consumer prices is somewhat surprising, and it may be due to a biased estimate. According to other sources of information, real per capita consumption of vegetables increased in 1967/68.

[3] The recorded increase in potato consumption despite the higher price paid by the consumer is also surprising. The consumer price of potatoes is not a free market price, and while it can go up, a real increase of 14 percent in per capita consumption of potatoes seems unreasonable. Other sources of information estimate that real per capita consumption held steady in 1967/68.

(e) *Cereals and pulses*

As already mentioned, cereals and pulses were most affected by the drought of 1967/68. The real output of this branch declined by 24 percent, after more than doubling in 1966/67. The biggest decrease was in barley (56 percent), while wheat and sorghum were down 21 and 14 percent respectively. The steeper decrease in barley production reflects the growing weight of non-Jewish agriculture in this branch, which is almost completely dependent on weather conditions. On the other hand, Jewish farmers are concentrating to an increasing extent on wheat, and the relative share of acreage under auxiliary irrigation is rising.

The area under barley was 11 percent smaller than in 1966/67, while that under wheat was extended by 9 percent. The increase in wheat acreage under auxiliary irrigation came to 75 percent. There was a similar development during the year reviewed in the cultivation of sorghum: the unirrigated area was reduced while the irrigated area was expanded, and output therefore declined by an average of only 14 percent. Real output of pulses was down 2 percent.

Producer prices of cereals and pulses were 7 percent higher in 1967/68, reflecting primarily the rise in the official price paid for wheat, which accounted for 75 percent of total output of cereals and pulses this year. After the devaluation, the price of local wheat was upped by IL 20 per ton, from IL 290 to IL 310. The higher price of wheat drove up the prices of other cereals.[1]

3. Input

(a) *Changes in input*

Inputs purchased from other sectors increased in 1967/68 by 3 percent in real terms, compared with 5 percent in the previous year. The deceleration was caused by several factors, of which the most important will be listed. The quantity of fodder declined owing to the large stocks left over from 1966/67—a good year for cereals, the chief component of purchased fodder. The 6 percent drop in the output of poultry farming, the slower expansion of milk production, and the stability in the size of the cattle herd (these branches are the main consumers of purchased fodder) likewise contributed to the slower growth of this input. The smaller percentage increase in agricultural output in 1967/68 was responsible for the slower increase of such inputs as transportation, packing materials, fuel, electricity, and services.

In the case of pesticides and veterinary preparations, the principal factor was the lower frequency and intensity of attacks by pests.

Water consumption was up 13 percent in 1967/68, owing primarily to the insufficient precipitation during the year. The irrigated area was expanded by 2 percent in 1967/68, while water consumption per dunam of irrigated land

[1] See the discussion in Bank of Israel, *Annual Report 1967*, p. 287.

Table XI-6

INPUT OF MATERIALS AND SERVICES IN AGRICULTURE,[a] 1966/67 AND 1967/68

(IL million)

	Value at current prices		Percent increase or decrease (–) from 1966/67 to 1967/68[c]		
	1966/67[b]	1967/68	Value	Quantity	Price
Purchases from other sectors					
Fodder	245.0	266.9	11.2	–4.0	15.9
Fertilizers	32.9	39.4	19.8	14.9	4.2
Seeds, etc.	3.6	4.2	16.7	11.1	5.0
Pesticides and veterinary preparations	21.7	24.2	11.5	4.0	7.1
Water	51.0	58.3	14.3	12.5	1.5
Packing materials	71.0	82.0	15.5	7.0	7.9
Transportation	52.6	54.6	3.8	2.9	0.9
Spare parts, repairs, etc.	36.0	44.1	22.5	16.7	5.0
Fuel and electricity	20.8	21.8	5.0	5.0	0.0
Services	16.2	17.3	6.8	4.9	1.8
Taxes	17.0	17.9	5.0	5.0	0.0
Miscellaneous	12.5	16.5	32.0	33.3	0.6
Total	**580.3**	**647.2**	**11.5**	**2.9**	**8.4**
Wages of hired labor	201.0	208.0	3.5	–3.8[d]	7.5[e]
Interest and rent	54.0	58.0	7.4	7.4	0.0
Total purchased input	**835.3**	**913.2**	**9.3**	**1.6**	**7.6**
Intermediate goods	153.3	149.4	–2.5	–5.5	3.2
Depreciation	109.8	120.3	9.6	3.4	6.0
Grand total	**1,098.4**	**1,182.9**	**7.7**	**0.8**	**6.9**

[a] Excluding capital and labor of farm owners.
[b] Revised figures.
[c] Percentage changes have been calculated from unrounded figures.
[d] The change in the average number of hours worked per week by hired labor, according to manpower surveys of the Central Bureau of Statistics. The estimate may be biased owing to the noninclusion in the manpower surveys of the inhabitants of the administered areas working in Israeli agriculture.
[e] The increase may reflect a change in the occupational structure of hired labor. See also note [d].
SOURCE: Central Bureau of Statistics.

was 11 percent higher. Of the total increase, 1 percent can be ascribed to the change in the crop program, and the remaining 10 percent to the scanty precipitation. The quantitative increase in purchases of spare parts in 1967/68 was due chiefly to the real decrease in this output in the previous year,[1] and to a lesser extent to the larger investment in machinery and equipment in 1967/68. The bigger input of fertilizers is explained by the fact that 1966/67 was a rainy

[1] See Bank of Israel, *Annual Report 1967*, p. 291.

year. In a dry year some of the fertilizer applied does not dissolve, and farmers are usually left with some supplies on their hands, since the area sown falls below that planned; the opposite occurs in a rainy year. As 1965/66 was a dry year, the percentage increase in fertilizer purchases in 1966/67 was relatively low, while the increase in this input in 1967/68, which followed a rainy year, was comparatively large.

Table XI-7

WATER INPUT IN AGRICULTURE, 1958/59 TO 1967/68

	Unit	Average for dry years[a]	Average for rainy years[a]	1966/67[b]	1967/68
Irrigated area	'000 dunams	—	—	1,615	1,640
Quantity of water	million m^3	1,139	1,065	1,115	1,254
Water consumption per dunam of irrigated area					
Actual consumption[c]	m^3	785	709	690	765
Index (1963/64=100)		115	104	101	112
Normative consumption, according to crop program[d]	m^3	689	690	689	698
Increase or saving (–) in water consumption due to changes in weather conditions					
Total[e]	million m^3	139	28	4	109
Annual	million m^3	59	–81	–165	105

[a] Dry years: 1958/59, 1959/60, 1961/62, 1962/63, 1965/66, and 1967/68; rainy years: 1960/61, 1963/64, 1964/65, and 1966/67.
[b] Revised figures.
[c] Weighted average.
[d] According to regional irrigation norms of the Agricultural Planning Center of the Ministry of Agriculture for the year 1965/66. The irrigation norms do not take into account the annual precipitation, and apparently relate to rainy years. The normative water consumption per dunam of irrigated area is a weighted average.
[e] The total increase or saving in actual water consumption compared with the estimated normative consumption. Part of the saving may conceivably be due to agrotechnical improvements, etc., but the data for recent years indicate that the contribution of such improvements, insofar as there were any, was of negligible proportions.
SOURCE: Central Bureau of Statistics and Bank of Israel.

The total input of labor—measured by the average annual number of man-hours per week by hired and nonhired workers (according to the Central Bureau of Statistics manpower surveys)—declined by 1 percent in real terms, compared with a drop of 3 percent in 1966/67. The total number of employed in the sector was down 5 percent to stand at roughly 102,000. The number of self-employed decreased by 3 percent to approximately 64,000, while the number

of hired workers fell by 8 percent to approximately 38,000. It should be pointed out that the sampling error of the manpower surveys is relatively great, and since they do not include the inhabitants of the administered areas working on Israeli farms, the estimates for 1967/68 are probably biased.

The structural change in agricultural employment, which began to manifest itself in 1965/66—namely, the tendency of farm owners who had taken on jobs outside the sector to return to farming, replacing hired labor—is revealed more clearly in the data on labor input as measured in terms of man-hours. Though there was very little change in the total number of hours worked in agriculture in 1967/68 (a rise of 1 percent), the input of hired labor, in terms of man-hours, apparently declined by 4 percent during the year reviewed. As already mentioned, this estimate may be overstated, and in actual fact the decrease may have been smaller.

(b) *Productivity*[1]

Total productivity of Israeli agriculture held steady in 1967/68, reflecting the stability of output and input, both of which rose by a mere 1 percent. Inputs purchased from other sectors and the input of capital increased by 3 percent in real terms, while the input of intermediate goods showed a quantitative decrease of 6 percent, and the labor input declined by 1 percent. If the labor input for 1967/68 is in fact underestimated, there may have been a slight decrease in total productivity in the year reviewed. The stability (or decline) in total productivity was apparently due to the sluggish expansion of output. Part of the input (that purchased from other sectors, labor, and capital) did not yield the expected output in 1967/68, owing to the drought and various diseases.

Factor productivity also remained stable in 1967/68. The decline in the labor input was offset by the increase in the capital input, so that there was virtually no change in total factors of production. The causes of the stability (or slight decline) in factor productivity were similar to those for total productivity.

Owing to the strong influence of natural factors on agricultural productivity, greater importance should be attached to trends than to annual changes. During the period 1965/66 to 1967/68, total productivity averaged 2 percent higher per annum, and factor productivity 5 percent.[2]

4. Incomes

Income originating in agriculture (i.e. the net agricultural product at producer prices) was about IL 26 million (4 percent) greater in 1967/68, compared

[1] A new series (see the appendix to this chapter).

[2] See the appendix to this chapter.

with a growth of about IL 135 million (or 19 percent) the year before. The increase in 1967/68 stemmed from a rise in net product prices, while the net product itself held steady. The main reason for the larger income in 1966/67 was the real growth of the net product, while its price decreased slightly—by 1 percent.

Total income from agriculture (including drought compensation and similar payments) increased by about IL 42 million, or 5 percent, compared with some IL 124 million, or 17 percent, in 1966/67. Drought compensation and similar payments were, at approximately IL 9 million, triple the previous year's figure. Besides drought, compensation was also paid in the year reviewed for damage from hail and Newcastle disease.

Income of farm owners from agriculture was up approximately IL 31 million, or 5 percent, in 1967/68, as contrasted with some IL 120 million, or 25 percent, the year before. That the 1967/68 growth rate was about the same as that for total income from agriculture can be ascribed to the moderate rise of 4 percent in wage payments to hired labor. Whereas the cost of agricultural credit (i.e. the interest rates paid) declined in 1967/68, rental fees were raised, so that the weighted average of interest and rent outlay remained unchanged in the year reviewed.

Average income per nonhired worker rose by 8 percent in 1967/68, owing to a drop of 3 percent in the number of self-employed.

Direct agricultural subsidies went up by IL 3 million to IL 161 million (see Table XI–8). Their distribution, however, underwent a change: subsidies on output increased by 6 percent to IL 110 million, while factor subsidies contracted by 18 percent to IL 42 million. Drought compensation and similar payments increased, as already mentioned, by IL 6 million; IL 2 million was paid in drought compensation, IL 3.5 million for hail damage, and another IL 3.5 million to cover losses to poultry farmers due to the outbreak of Newcastle disease.

The average price support per unit of subsidized output rose by 5 percent in 1967/68, after remaining unchanged the year before. The principal reasons for the higher figure were the compensating of farmers for the dearer cost of purchased fodder after the devaluation of the Israeli pound, deliberate and involuntary increases in subsidy rates (where the subsidy is granted on an aggregate rather than a unit basis, a real decrease in output results in a larger per unit subsidy rate), and the adjustment of the volume of subsidies to changes in international prices of various commodities.[1]

The outstanding change was the discontinuation of the cotton subsidy, which totalled IL 10 million in 1966/67. In 1967/68 it was decided that the branch

[1] In some commodities, such as sugar beet, molasses, soybean, etc., the size of the subsidy is calculated as the difference between the international price (c.i.f. Haifa) and that received by the Israeli producer.

Table XI-8

AGRICULTURAL SUBSIDIES, 1966/67 AND 1967/68

(IL million)

Item or type of subsidy	1966/67[a]	1967/68	Percent increase or decrease (–) from 1966/67 to 1967/68[b]		
			Total subsidy	Physical output or input	Subsidy per unit of output or input
Citriculture	2.2	2.9	31.8	43.2	–8.0
Eggs	22.4	22.7	1.3	–15.1	19.3
Poultry	7.6	5.0	–34.2	0.5	–34.5
Cow's milk	24.9	35.4	42.2	3.7	37.1
Beef	4.0	6.8	70.0	15.0	47.8
Fish	0.5	1.6	220.0	9.3	192.8
Cotton	9.7	—	—	—	—
Vegetables and potatoes	7.3	7.3	0.0	12.6	–11.2
Wine grapes	1.2	1.2	0.0	–6.0	6.4
Other fruit	3.0	4.3	43.3	–11.5	61.9
Groundnuts	1.9	1.9	0.0	–17.3	20.0
Sugar beet	6.0	7.1	18.3	–15.1	39.3
Tobacco	0.7	0.7	0.0	–14.0	16.3
Wheat	8.2	9.4	14.6	–21.1	45.0
Miscellaneous	0.2	—	—	—	—
Subsidies by the Jewish Agency's Settlement Department	3.8	3.2	–15.8	—	—
Total subsidies on output	**103.6**	**109.5**	**5.7**	**0.5[c]**	**5.2**
Fodder	35.3	20.9	–40.8	–6.0	–37.0
Water	13.2	17.0	28.8	12.5	14.5
Fertilizers	2.9	4.1	41.4	14.9	23.1
Total factor subsidies	**51.4**	**42.0**	**–18.3**	**–1.0[c]**	**–17.5**
Drought compensation, etc.	3.0	9.0	200.0	—	—
Total subsidies	**158.0**	**160.5**	**1.6**	—	—

[a] Revised figures.
[b] Percentage changes have been calculated from unrounded figures.
[c] Real change in total subsidized output or input.
SOURCE: Ministry of Agriculture, Jewish Agency, and Ministry of Finance.

could stand on its own feet, since the prices paid for fiber by industry remained unchanged, and the price of cottonseed was raised to bring it in line with the c.i.f. Haifa price of imported cottonseed after the devaluation. The usual incentives were granted for cotton exports.

The higher subsidy rates paid to poultry and cattle farmers (for eggs, milk, and beef) were mainly due to the dearer cost of purchased fodder after the devaluation. The subsidy on cow's milk was raised in order to cover increases

in various outlays, chiefly production costs of dairy manufacture. It should be noted that in the middle of 1967/68 it was decided to suspend the special subsidization of egg exports. The higher rates paid on noncitrus fruit, wine grapes, and tobacco reflect a real decline in their output, since these branches are subsidized on a global basis. The heavier subsidization of wheat was due to the raising of the official purchase price of this commodity in the middle of 1967/68. Since the rate paid on locally grown wheat has been fixed as the difference between the c.i.f. price of imported wheat plus inland freight and handling costs up to the mill and the official purchase price of local wheat plus the costs up to the mill, the raising of the official purchase price of local wheat was tantamount to raising the subsidy rate.

The higher subsidy rate on sugar beet was due to the fall in the international price of sugar in 1967/68. The rate paid to this branch is based on the relative share of sugar beet in the differential between the price of domestically produced sugar and that of imported sugar.

Total factor subsidies, as already mentioned, were trimmed substantially in 1967/68. The decrease was most marked in purchased fodder, the figure here dropping 41 percent as a result of the Government's decision to shift from a system of factor subsidies to the subsidization of farm products. The heavier subsidization of water and fertilizer is explained by the revision of unit subsidy rates and by the real increase in these two inputs. Subsidy rates were raised in order to keep producer prices stable and avert at least part of the increases that would otherwise have resulted from the devaluation.

5. Investment and Financing

(a) *Investment and capital stock*

Real gross investment in agriculture contracted by 4 percent, following a rise of 6 percent in 1966/67. Most of the decline was due to the change in the constant-price value of the livestock inventory, a reflection of the much slower expansion of the dairy herd. As explained in last year's Annual Report,[1] the estimated change may be biased.

Investment in orchards was down 22 percent, reflecting the continued adjustment of fruit supplies to demand. On the other hand, the cultivation of subtropical varieties was stepped up in the year reviewed from 930 to 2,600 dunams, owing to the growing demand for such fruit both in Israel and abroad.

In contrast to 1966/67, when gross outlay on farm machinery and equipment fell by over 7 percent in real terms, the year reviewed saw a rise of over 25 percent. The average annual amount spent on machinery and equipment during

[1] See Bank of Israel, *Annual Report 1967*, p. 294.

Table XI-9

ESTIMATED GROSS INVESTMENT IN AGRICULTURE, 1966/67 AND 1967/68

(IL million)

	Value at current prices		Percent increase or decrease (–) from 1966/67 to 1967/68[b]		
	1966/67[a]	1967/68	Value	Quantity	Price
Orchards	27.0	21.1	–21.9	–21.9	0.0
Livestock	13.0	4.1	–68.5	–68.5	0.0
Farm installations[c]	32.8	34.9	6.4	–0.6	7.1
Machinery and equipment	50.3	68.2	35.6	25.4	8.1
Land reclamation and conservation, drainage, natural pasture, etc.	11.2	10.9	–2.7	–2.7	0.0
Afforestation	27.0	22.6	–16.3	–16.3	0.0
Total	**161.3**	**161.8**	**0.3**	**–4.3**	**4.8**

[a] Revised figures.
[b] Percentage changes have been calculated from unrounded figures.
[c] Farm buildings, fish ponds, and local irrigation networks.
SOURCE: Central Bureau of Statistics.

the years 1966/67 and 1967/68 was close to the average since 1963/64. In view of the economic recession in 1966/67 and the recovery in 1967/68, it is reasonable to assume that in 1967/68 farmers made up for what they failed to invest in the preceding year.

The smaller investment in the year reviewed in land reclamation, etc. and in afforestation was due to the curtailment of relief work. Afforestation was cut back in 1967/68 by less than the extent to which it was expanded the year before. A partial explanation for this may perhaps be found in the employment of inhabitants of the administered areas on afforestation work in Israel.

At current prices, gross investment was virtually unchanged in the last two years, totalling IL 162 million in 1967/68 as against IL 161 million in 1966/67. The higher price of agricultural investment reflected by the above data was due to the dearer cost of farm installations, machinery, and equipment after the devaluation of the Israeli pound.

The real gross stock of fixed assets in this sector increased more slowly than in the preceding year—2 percent as against 3 percent. The continued decline in the capital stock growth rate is an outcome of the smaller volume of new investment and a rise in discards.

(b) *Financing*

The main sources of farm credit are the public sector and banking institutions. Like other sectors, agriculture also resorts to social insurance funds, insurance

Table XI-10

GROSS STOCK OF FIXED ASSETS IN AGRICULTURE,[a] 1967/68

(IL million, at current replacement values)

	Value		Percent increase or decrease (–) from 1967 to 1968[c]		
	1967[b]	1968	Value	Quantity	Price
Orchards	1,083	1,108	2.3	1.9	0.4
Farm installations[d]	1,722	1,825	6.0	2.6	3.3
Machinery and equipment	364	408	11.9	2.7	9.0
Livestock[e]	302	307	1.7	1.7	0.0
Total	3,471	3,648	5.1	2.3	2.7

[a] Excluding land and financial assets. Data on investments from agricultural output (orchards and livestock) are for the end of the agricultural year; other data are for the end of the calendar year.
[b] Revised figures.
[c] Percentage changes have been calculated from unrounded figures.
[d] Farm buildings, local water projects, irrigation networks, afforestation, land reclamation and conservation, drainage, natural pasture, etc.
[e] Excluding broilers and fish.
SOURCE: Based on estimates of A. L. Gaathon. For definitions and explanations, see A. L. Gaathon, *Capital Stock, Employment and Output in Israel, 1950–1959,* Bank of Israel, Special Studies No. 1, Jerusalem, 1961. The estimated net stock of fixed assets is presented in the appendix to this chapter.

companies, and private noninstitutional sources of funds—bill brokerage, suppliers' credit, and loans from special settlement and purchasing organizations.

Statistics on agricultural financing are deficient, as there are no reliable data on credit from private noninstitutional sources, and also because of conceptual problems with regard to public sector and bank credit. The various suppliers of credit do not use identical criteria for classifying credit by sector of destination; in fact, the definition used by a single institution may vary from year to year. Since the legal maximum debitory rate of interest on farm credit is lower than that charged other economic sectors, during periods of excess demand for credit there is a tendency to classify farm credit as that granted to other sectors, while the opposite is true when there is an excess supply of credit. For these reasons, it is almost impossible to distinguish between credit granted to agriculture and that to farmers, and consequently all credit data based on official statistics should be treated with reserve.

But there is little doubt that the financial position of Israeli agriculture improved in 1967/68. The value of gross agricultural investment was, as already stated, similar to that in 1966/67, while the conversion of debts, which was begun in 1966/67, continued during the year reviewed. In the light of these two

Table XI–11

OUTSTANDING SHORT-TERM CREDIT[a] GRANTED TO AGRICULTURE THROUGH BANKING AND FINANCIAL INSTITUTIONS, 1967–68

	1967[b]		1968		Increase or decrease (–) from 1967 to 1968	
	IL m.	%	IL m.	%	IL m.	%
Directed credit[c]						
Exemptions from liquidity requirements and Bank of Israel rediscounts	126.3	33.6	164.2	40.3	37.9	30.0
Working-capital credits from Government and Jewish Agency deposits	23.4	6.2	24.1	5.9	0.7	3.0
From resources of banking institutions, subject to liquidity requirements	48.2	12.8	62.3	15.3	14.1	29.3
Total credit under the agricultural financing program	**197.9**	**52.7**	**250.6**	**61.5**	**52.7**	**26.6**
Other credit						
Other credit from bank's own resources	119.0	31.6	96.6	23.7	–22.4	–18.8
Credit granted through financial institutions[d]	58.8	15.7	60.1	14.8	1.3	2.2
Total credit granted through banking and financial institutions	**375.7**	**100.0—84.5**	**407.3**	**100.0—90.8**	**31.6**	**8.4**
Bill brokerage[e]	69.0	15.5	41.3	9.2	–27.7	–40.1
Total short-term credit to agriculture	**444.7**	**100.0**	**448.6**	**100.0**	**3.9**	**0.9**

[a] Including linkage increments.
[b] Revised figures.
[c] The data on directed credit in this table differ from those presented in Chapter XV, since they include working-capital credits granted from earmarked Government and Jewish Agency deposits.
[d] An estimate of net outstanding farm credit granted by the financial institutions is presented in the appendix to this chapter.
[e] Assuming that the weight of outstanding bill brokerage credit to agriculture within total outstanding bill brokerage credit was the same in December as in June.

developments, it is plausible to assume that the average rate of interest paid on long-term farm debts declined in 1967/68.

The average rate of interest paid by the sector on short-term borrowed funds likewise declined in 1967/68. The outstanding balance of such credit went up by IL 4 million, or 1 percent, to stand at IL 449 million at the end of 1968 (see Table XI–11).

The weight of directed credit in outstanding short-term credit from banks and financial institutions, which carries the lowest rate of interest, moved up from 45 percent at the end of 1967 to 56 percent; the absolute sum totalled IL 251 million. The rise in the balance of directed credit at the end of 1968 came to IL 53 million, or 27 percent. Much of the increment was in credit granted within the framework of exemptions from the liquidity regulations. This type of credit plus Bank of Israel rediscounts totalled IL 164 million at the end of 1968—an increase of IL 38 million, or 30 percent, as compared with the end of 1967. Government and Jewish Agency deposits earmarked for working-capital loans expanded by only some IL 1 million, or 3 percent, while directed credit from the banks' own resources, which are subject to the liquidity requirements and are normally given in the form of participations in various funds, was expanded by IL 14 million, or 29 percent.

Other credit—i.e. credit granted from the resources of banking and financial institutions which is neither directed nor exempted from the liquidity requirements—was down IL 21 million, or 12 percent, at the end of 1968. Outstanding bill brokerage credit, which is the most expensive of all, is estimated at about IL 41 million—down IL 28 million, or 40 percent, from the end of 1967.

Table XI–12

OUTSTANDING DIRECTED CREDIT TO AGRICULTURE, BY DESTINATION, 1967–68

Destination[a]	1967		1968		Increase or decrease (–) from 1967 to 1968[b]	
	IL m.	%	IL m.	%	IL m.	%
Field crops and vegetables	51.7	26	80.9	32	29.2	56.5
Citriculture	50.1	25	65.6	26	15.5	30.8
Livestock, livestock products, and fodder	18.9	10	14.0	6	–4.8	–25.6
Other inventories and misc.	8.6	4	15.1	6	6.6	76.6
Unspecified[c]	68.7	35	74.9	30	6.3	9.2
Total	**198.0**	**100**	**250.5**	**100**	**52.7**	**26.6**

[a] For a more precise definition of the destinations, see previous Annual Reports.
[b] Percentage changes have been calculated from unrounded figures.
[c] Although this item is included in the agricultural financing program, there is no way of knowing whether it was in fact used for agricultural purposes.

The balance of directed farm credit rose, as already mentioned, by IL 53 million, or 27 percent, in 1968 (see Table XI–12). Most of the increment was in credit for field crops and vegetables: the sum provided for cotton growing was increased by IL 22 million, that for field crops by IL 3 million, and for exportable vegetables by IL 4 million. These increases are explained by the relative delay in the sale of the cotton output, the comparatively early cultivation of field crops, and the larger quantity of vegetables sold abroad.

The growth of IL 16 million in outstanding credit to citriculture reflects the heavier borrowing by this branch during the 1968/69 season. Outstanding credit for livestock, livestock products, and fodder contracted by some IL 5 million, or 26 percent. This reflects the reduction of stocks of dairy products and the storage of poultry products. The outstanding balance of credit for "other inventories and miscellaneous" was up approximately IL 7 million, reflecting the expanded export of subtropical fruit, minks, and onions. Credit for unspecified purposes totalled IL 6 million; the increase here was relatively the smallest (9 percent), with the consequence that the weight of this item within total directed credit fell from 35 percent at the end of 1967 to 30 percent.