

CHAPTER IX

AGRICULTURE

THE VALUE of agricultural output¹ in the year 1955/56² was estimated at IL.530 million at current prices, i.e. 24 per cent more than in the agricultural year 1954/55, and 36 per cent more than in 1953/54. The real increase in output was about 16 per cent as against 1954/55, and 23 per cent as against 1953/54.

The expansion was largely due to favourable weather conditions, which contrasted sharply with the drought of the preceding year.

The value of input, exclusive of interest payments, wages, rent and profits, increased by about 12 per cent at current prices, mostly as a result of real expansion, since prices remained virtually unchanged. The value of input as defined above, was estimated at IL.250 million.

Income from agriculture increased by about 36 per cent and was estimated at IL.280 million. If the rise in the consumer price index is discounted, income from agriculture was 28 per cent higher than in the preceding year.

The greatest expansion took place in the real output of raw materials for agriculture (33 per cent) and for industry (26 per cent). There was also a sizeable increase in the production of fruit, especially deciduous fruit, bananas and olives and in the output of meat, particularly poultry. But there was a steep decline in the output of capital assets, especially in the extension of the irrigation network.

Two factors were mainly responsible for the expansion of real output:

(1) The weather favoured the yield and area of crops, particularly of field crops. In 1954/55 the area under cultivation had been reduced and harvests had been damaged by the drought. In 1955/56, which was a good year, the relative expansion was therefore considerable.

(2) On meat production of every sort good profits were made compared with other products. More poultry was, therefore, being bred for meat (the time required for the production of poultry meat being shorter than that needed for the production of other kinds of meat and the area under fodder was expanded). The considerable proportion of animal products in agricultural production, and the relatively high profits made on some of them, have in

¹ Including agricultural raw materials and capital assets.

² The agricultural year 1955/56 began in October, 1955 and ended in September 1956. The span of other agricultural years cited in this chapter covered roughly the same months.

DIAGRAM IX-1
Gross Output in Agriculture,
1954/55-1955/56
(in million IL. and in percentages)

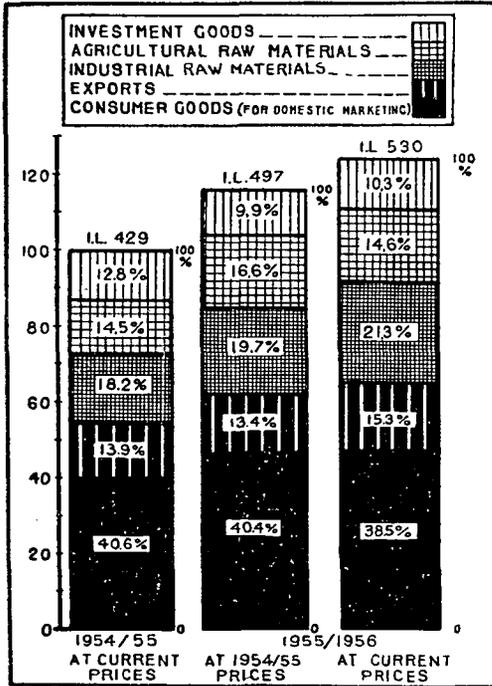
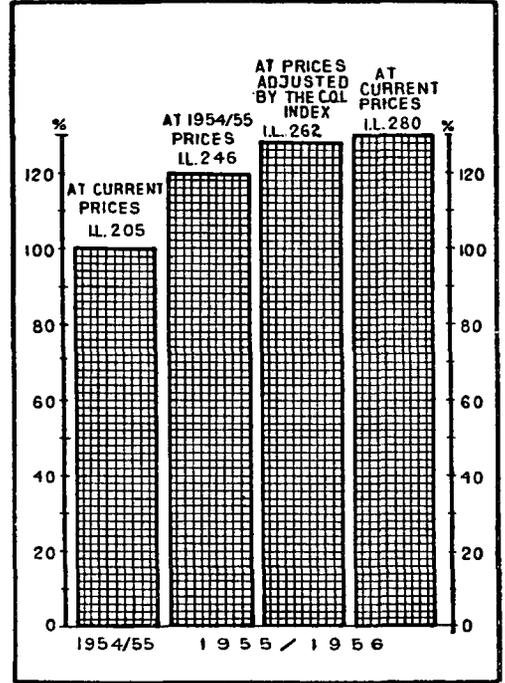


DIAGRAM IX-2
Income from Agriculture,
1954/55-1955/56
(in million IL. and in percentages)



recent years been responsible for a tendency to expand the cultivation of grains and fodder with the aim of forestalling possible dislocations arising from eventual difficulties in importing these commodities.

The large proportion of, and the good profits from, animal products were largely due to the protection afforded to them by restrictions on the import of similar goods. The protective policy was mainly motivated by three factors:

- (1) The shortage of foreign currency.
- (2) The necessity to safeguard a minimum supply of protein foodstuffs for emergencies.
- (3) The desire to help agriculture attract labour and particularly the wish to support new farm settlements.

However, the local costs of producing foreign currency income through exports or the reduction of imports were lower in the case of industrial raw materials or citrus than in the case of other fruits or animal products. Hence, the preference of the latter does not represent an efficient use of the available factors of production for the purpose of improving the balance of payments.

Notwithstanding the considerable growth of income from agriculture, far-

mers voiced the complaint that the burden of interest and repayment of loan capital had grown to a greater extent than net earnings. Since most of the loans received by farmers in the past had carried a low rate of interest and, moreover, had lost much of their real value with the rising price level, net incomes from productive investments presumably exceeded interest charges. But if the instalments of the principal exceeded amortization, the farmers had no choice but to forego part of their incomes and to reduce the level of their consumption; to avoid which many farmers acquired the habit of borrowing from banks or other sources. Since the short periods of additional credit were insufficient to bridge the gap between due dates of previous loans and the time when incomes increased as a result of investments, borrowing did not avert financial difficulties but led farmers to redeem one loan by another. As the gap between additional incomes and repayments widened every year, the demand for short-term credit was also growing. This did not mean that returns were diminishing in agriculture (incomes, on the contrary, increased considerably), but that the farmers were compelled to invest an increasing proportion of earnings in their farms.

The only remedy would be to synchronize instalments of loan principal with the returns from the investments.

Short-term agricultural credit from banking sources expanded by some 24 per cent in 1955/56, while input, at current prices, did not increase by more than 12 to 14 per cent. The larger production of industrial crops, especially cotton, apparently involved a relatively bigger increase in working capital requirements. But in 1955/56, as in previous years, at least part of the additional short-term credit on capital expenditure was used to finance new investments and to repay long-term debts.

TABLE IX-1
Gross Agricultural Output 1954/55 and 1955/56

| | <i>1954/55 at current prices</i> | | <i>Change, constant prices 1955/56 as against 1954/55 per cent</i> | <i>Change in prices 1955/56 as against 1954/55 per cent</i> | <i>1955/56 at current prices</i> | | <i>Change at current prices 1955/56 as against 1954/55 per cent</i> |
|--------------------------------------|----------------------------------|-----------------|--|---|----------------------------------|-----------------|---|
| | <i>IL. mill.</i> | <i>per cent</i> | | | <i>IL. mill.</i> | <i>per cent</i> | |
| Consumers Goods for the Local Market | 174.0 | 40.6 | +15.5 | + 1.6 | 204.2 | 38.5 | +17.4 |
| Exports | 59.9 | 13.9 | +10.7 | +22.0 | 80.9 | 15.3 | +35.1 |
| Raw Materials | 140.0 | 32.7 | +29.9 | + 5.7 | 190.1 | 35.9 | +35.8 |
| For Industry | 77.9 | 18.2 | +25.8 | +14.9 | 112.6 | 21.3 | +44.5 |
| For Agriculture | 62.1 | 14.5 | +32.7 | - 5.9 | 77.5 | 14.6 | +24.8 |
| Investment Goods | 55.1 | 12.8 | -11.0 | +11.8 | 54.8 | 10.3 | - 0.5 |
| <i>Total</i> | 429.0 | 100.0 | +15.7 | + 6.9 | 530.0 | 100.0 | +23.5 |

SOURCE: Calculations of the Bank of Israel.

1. OUTPUT

(a) *Real Output*

The largest real increase took place in the output of raw materials, especially those used for agricultural production ("intermediate products") the yields of which are extremely susceptible to weather conditions. Since 1954/55 was a year of drought and low yields, the relative increase in 1955/56 was considerable (see tables IX-1, IX-2).

The biggest increase in average yields in 1955/56 occurred, of course, in the case of field crops (hay, barley, and sorghum), while the yields of irrigated crops remained stable or improved but slightly. In fact, the entire real expansion in the output of agricultural raw materials, which totalled about 33 per cent, was due to higher average yields, rather than to the expansion of the cultivated area, which was only slight. The average yield of most crops improved considerably, even in comparison with 1953/54, which was not a year of drought.

The output of industrial raw materials increased by 26 per cent. The expansion was considerable with regard to all crops except tobacco, the production of which declined by nearly 40 per cent, owing to storage difficulties that had arisen in the previous year. The biggest increase was in the output of unirrigated oleaginous crops (especially sesame and sunflowers), which had suffered greatly in the drought of 1954/55. About half this increase was due to the higher average yield per dunam. There was also a sizeable increase in the output of cotton, due entirely to the larger area under this crop. The average yield per dunam declined because boll weevil had entirely destroyed the harvest of one-fifth of the cultivated area; in the spared fields, too, yields were lower than in previous years. Fewer groundnuts were produced in the year under review since producers had found it relatively more profitable to grow cotton or other crops. The average yield per dunam increased slightly. The larger output of sugar beet was entirely due to the extension of the area planted: when the new sugar refining plants started production in 1955/56, more farmers began to grow sugar-beet. But yields were relatively poor, although they exceeded those obtained in 1953/54, when part of this crop was still grown on unirrigated land.

The real increase in the production of soil-produced consumer goods was relatively less pronounced than that of raw materials, since the former are less dependent on weather conditions, and the drought of 1954/55 had affected them to a lesser degree. The increase in the output of vegetables by about 10 per cent was once again entirely due to the larger cultivated area. In the past two years, there had been an expansion of vegetable production in new agricultural settlements, which were less experienced than the old, and this had caused a slight decline in the average yields per dunam. The average yield of potatoes, however, increased considerably and total output rose despite the reduction of the area. The increase of the output of melons, water-melons and pumpkins by 18.5 per cent was essentially due to the extension of the area under these crops.

TABLE IX-2
Average Yields of Selected Crops, 1953/54-1955/56

| | Average yield per dunam, in tons | | | Change (per cent) | |
|---|----------------------------------|---------|--------|----------------------------------|----------------------------------|
| | 1953/54 | 1954/55 | 1955/6 | 1955/56 as against 1954/55 | 1955/56 as against 1953/54 |
| <i>Agricultural Raw Materials</i> | | | | | |
| Roughage and Silage (mainly irrigated) | 4.63 | 4.00 | 4.23 | + 5.8 | - 8.6 |
| Barley (unirrigated or under auxiliary irrigation) | 0.11 | 0.07 | 0.15 | +114.3 | +36.4 |
| Maize for Grain (mainly irrigated) | 0.21 | 0.31 | 0.31 | — | +47.6 |
| Sorghum for Grain (unirrigated) | 0.09 | 0.09 | 0.15 | + 66.7 | +66.7 |
| <i>Industrial Raw Materials</i> | | | | | |
| Wheat | 0.11 | 0.08 | 0.13 | + 62.5 | +18.2 |
| Cotton | 0.28 | 0.27 | 0.16 | - 40.7 | - 42.9 |
| Groundnuts | 0.37 | 0.37 | 0.39 | + 5.4 | + 5.4 |
| <i>Consumer Goods</i> | | | | | |
| Potatoes | | 1.60 | 1.80 | + 12.5 | |
| Citrus Fruit ^a | | 2.80 | 3.30 | + 17.9 | |
| Grapes ^b | | 0.25 | 0.29 | + 16.0 | |
| Deciduous Fruit ^b | | 0.16 | 0.26 | + 62.5 | |

^a Based on the area of fruit-bearing citrus groves, amounting to about 135,000 dunams.

^b The increase in the average yield is due to the production of new orchards and vineyards.

SOURCE: Calculations of the Bank of Israel, based on data furnished by the Central Bureau of Statistics.

The absence of reliable livestock statistics makes it impossible to estimate the extent to which the changes in the output of animal products were due to better yields. The 8 per cent rise in the output of milk seems to have been due equally to the higher yield per cow (especially in new agricultural settlements, where yields were relatively low), and to the larger number of milch cows.

The biggest expansion in animal products was in the output of meat. The marketing of beef and mutton increased by 11 per cent, owing to the relatively high prices of meat, which stimulated production. The expansion was effected through more breeding of cattle and calves for meat, and a more selective retention of the stock of milch-cows. The output of poultry meat was expanded to a much greater extent, and the marketing of poultry meat rose by about 44 per cent as compared with 1954/55. The total quantity of meat marketed increased by 33 per cent. The lack of statistical data makes it impossible to determine to what extent this was due to the deliberately larger production of fowl for meat, or to what extent it was brought about by a reduction in the

number of laying hens. No clear picture of the increase in egg production can be obtained from the available statistics. Data of organized marketing indicate a decline of about 5 per cent, but the frequent fluctuations in egg prices caused a varying volume of unorganized marketing, especially in 1955/56.

The output of pond fish increased slightly during the year under review, but the yield per dunam of pond declined, owing to the hard winter. There was a decline in the catches of sea fish, despite considerable additions of new fishing vessels, a decline which was mainly due to the repeated interference with Israel fishermen off the Turkish coast. At the beginning of 1956/57, sea fishing expanded considerably; trawling, in particular, revived somewhat with the re-opening of the fishing areas off the Turkish coast and—after the Sinai campaign—the opening of new fishing-grounds off Southern Palestine. Coastal fishing declined somewhat, but pelagic fishing was expanded. The catch in Lake Liberias and Lake Huleh was greater, owing to the introduction of improved fishing methods.

The addition to capital assets (at production costs, except in the case of livestock where calculations are based on the price meat) declined steeply in 1955/56, owing chiefly to the smaller expansion of the irrigated area, possibly in view of the favourable weather. There was also a certain decline of investment in orchards (except citrus groves). But there was an increase in the stock of beef cattle and milch cows.

No substantial change was registered in investments in afforestation and soil conservation. These were made within the framework of unemployment relief works, which were allotted a budget much the same as during the preceding year. However, the higher wages were tantamount to a reduction of the real value of the budget appropriation.

(b) *Agricultural Prices*

The prices obtained by farmers for their products were on the average 7 per cent higher in 1955/56 than in 1954/55, as shown in table IX-3. The movement of these prices was not identical with the changes in retail prices, which varied with marketing costs and subsidies.

The largest increase is estimated to have occurred in the prices of capital goods, on account of the rise in wages.

Prices of agricultural output sold to other economic sectors (including citrus exports, and excluding agricultural raw materials) rose by 10 per cent. If citrus is excluded, prices increased by only 4 per cent.

The steepest rise took place in the prices of exported citrus fruit, although it varied according to the different varieties. The most important variety—Shamouti oranges—rose, on the average, by 27 per cent in price. This was due chiefly to the small supplies of Spanish citrus fruit to the European markets, following the destruction by frost of a sizeable proportion of the Spanish crop.

Prices obtained by producers of beef and mutton increased on the average

by more than 20 per cent, while the quantities marketed expanded by about 26 per cent. The amount of poultry meat supplied to the market increased by 44 per cent, which caused its price to decline by approximately 7 per cent. The quantity of imported beef marketed also increased; the rise in the price of fresh meat must therefore have been due to a very much larger demand for it. Prices of fish rose, chiefly because the supply of imported fish was adjusted to the fluctuations in the local catch, with the object of maintaining the level of the fishermen's earnings.

Prices received by the producers of vegetables, fruit, melons, water-melons and pumpkins remained on the average, unchanged as compared with 1954/55, despite strong seasonal fluctuations.

The average price of eggs rose, mainly as a result of the Government subsidy following the abolition of the subsidy on fodder. The prices and the output of eggs and poultry meat fluctuated strongly throughout the year. Poultry farmers have the choice of increasing output of either of these products, and movements in their prices in the course of the year need therefore, not be regarded

TABLE IX-3
*Changes in the Average Prices of Agricultural Output
Received by Producers, 1955/56 as against 1954/55
(in per cent)*

| | | |
|---|-------|-------|
| <i>Consumer Goods</i> | | + 6.8 |
| Vegetables, Fruit, Melons and Pumpkins | + 0.4 | |
| Animal Products | + 3.5 | |
| Citrus Fruit for Export | +22.7 | |
| Miscellaneous | - 3.3 | |
| <i>Raw Materials</i> | | + 5.7 |
| For Industry—Vegetable | + 1.0 | |
| Animal (Milk) | +24.3 | |
| For Agriculture | - 5.9 | |
| <i>Capital Goods</i> | | +11.8 |
| <i>Total</i> | | + 6.9 |

* The term "Prices Received by Agricultural Producers" has not been defined in a uniform way.

Prices of products included in the organized marketing system are wholesale prices less commission; in this area it is assumed that transport of these products to the market represents part of the production costs borne by the producer. Field crops, citrus fruit, etc., however, exclude the cost of transport to the market. The definition of prices of all agricultural products is uniform for the purpose of these calculations.

SOURCE: 1954/55 prices—Central Bureau of Statistics.

1955/56 prices—industrial crops: Economic Planning Department, Ministry of Agriculture; citrus for export: Central Bureau of Statistics; other items: Economic Department, Ministry of Agriculture.

as indicating an instability damaging to the producer, but possibly there would have been less frequent and less extreme fluctuations in the prices and in the quantities offered for sale had it not been for special factors, such as the resistance on the part of consumers arising from the allegedly harmful effects of eating hormone-injected fowl.

There was a slight rise in the prices of farm-produced industrial raw materials such as oil seeds (linseed and sesame). There was also a slight increase in the price of cotton, due to the subsidy given to growers following the depredations of the boll weevil. The stability of prices in this branch was mainly due to Government intervention, through the assurance of minimum prices or outright purchases of crops.

The rise in the price of milk obtained by producers was also due to Government subsidies, intended to safeguard regular supplies at the present level, and to prevent an increase in the retail price, considering its effect on the consumers' price index. While in the case of other products, the Government tended, more and more, to use indirect expedients to support prices, it continued to control the price of milk directly, paying a relatively large subsidy.

The average price of agricultural raw materials fell somewhat. Barley prices declined on the average by about 8 per cent as against 1954/55, and the prices of maize and sorghum declined even more. The good harvests of the year under review were the main reason for this development. In the preceding year, these crops had been affected by the drought, while the irregular imports of that period were insufficient to prevent price increases at the time.

2. INPUT

(a) *Real Input*

Real input, exclusive of wages, rent and interest, was 10 per cent higher in 1955/56 than in 1954/55. It is estimated that the input of labour increased to the same extent. A considerable rise occurred in the cost of transport and other production factors which are influenced by increased output, such as packing materials, fuel and wages. Moreover, owing to the meagre fodder harvests of 1954/55, farmers were compelled to purchase a larger proportion of imported grains.

The increase in productivity shown by the difference between the rise in real input (10 per cent) and increase in real output (16 per cent) was mainly due to the favourable weather conditions but also to the fact that past investments were beginning to yield returns.

The Cultivated Area

The cultivated area in 1955/56 totalled 3,715,000 dunams, as compared with 3,569,000 dunams in 1954/55. The increase comprised unirrigated and irrigated areas.

The irrigation of hitherto unirrigated fields made it possible to obtain more than one harvest a year by crop rotation. Moreover, some areas of new land are being added every year to the cultivated area, after special reclamation works.

TABLE IX-4
Cultivated Area, 1953/4 to 1955/6
(in thousands of dunams)

| Type of cultivation | 1953/54 | 1954/55 | 1955/56 ^a | Change in per cent | |
|---------------------|---------|---------|----------------------|----------------------------------|----------------------------------|
| | | | | 1954/55 as against 1953/54 | 1955/56 as against 1954/55 |
| Unirrigated | 2,810 | 2,679 | 2,722 | - 4.7 | + 1.6 |
| Irrigated | 750 | 890 | 993 | +18.5 | +11.6 |
| <i>Total</i> | 3,560 | 3,569 | 3,715 | + 0.2 | + 4.1 |

^a Provisional figures.

SOURCE: Central Bureau of Statistics.

The area of most of the unirrigated crops was larger in 1955/56 than in the preceding year. The extension of the irrigated area decreased the total unirrigated area but not all unirrigated lands had been exploited in the preceding year of drought; so that the unirrigated area under cultivation increased in 1955/56 as compared with 1954/55, but diminished in comparison with 1953/54.

The area of all unirrigated crops was extended in 1955/56 except those included under the general heading "Miscellaneous".

The area of unirrigated orchards remained virtually unchanged. In point of fact, new orchards were being planted on unirrigated land as in every year, especially in new agricultural settlements, but other unirrigated orchards were uprooted or brought under irrigation. The relatively largest increase was in the unirrigated areas of vegetables, melons, water-melons and pumpkins; the acreage under fodder and grains increased to a comparatively smaller extent.

The unirrigated area under industrial crops, including tobacco, sunflowers, safflowers, linseed, etc., increased only very slightly, after the considerable reduction in area of 1954/55.

The Irrigated Area

The area of irrigated orchards increased in 1955/56 to a greater extent than that of other irrigated crops—mainly as a result of the extension of the area planted with citrus. The area of other fruit trees was hardly extended during the year under review, since only a small part of the planted area was bearing

fruit as yet, and the relatively high prices obtained for fruit (particularly deciduous fruit) were expected to drop when the young orchards will have begun to bear fruit in the coming years. This consideration did not apply to citrus, essentially an export commodity whose weight on foreign markets is small and unlikely to affect prices seriously. On the contrary, high prices received for citrus accelerated the planting of groves.

The irrigated area of vegetables, potatoes, melons, water-melons and pumpkins varied in recent years in response to price fluctuations. There was a relatively large increase in the area under vegetables in 1955/56, as comparatively high minimum prices were guaranteed by the Minimum Price Fund.

The area under "Miscellaneous" irrigated crops was expanded considerably as further areas on auxiliary farms were brought under irrigation.

The cultivation of cotton was expanded more than any other industrial crop, and more than doubled in 1955/56. The area under groundnuts decreased somewhat, owing to the greater comparative profitability of alternative crops for the areas concerned—cotton and grains.

TABLE IX-5
Unirrigated Cultivated Area 1953/54 to 1955/56
(in thousands of dunams)

| <i>Crop</i> | <i>1953/54</i> | <i>1954/55</i> | <i>1955/56</i> ^a | <i>Change in 1954/55 as against 1953/54</i> | | <i>Change in 1955/56 as against 1954/55</i> | |
|---|----------------|----------------|-----------------------------|---|------------------------|---|------------------------|
| | | | | <i>in thousands of dunams</i> | <i>in per cent</i> | <i>in thousands of dunams</i> | <i>in per cent</i> |
| Fodder and Grains | 2,183 | 2,180 | 2,196 | - 3 | - 0.1 | +16 | + 0.7 |
| Industrial Crops | 122 | 108 | 112 | -14 | -11.5 | + 4 | + 3.7 |
| Vegetables, Melons, Pumpkins and Potatoes | 75 | 74 | 92 | - 1 | - 1.3 | +18 | +24.3 |
| Orchards | 239 | 238 | 240 | - 1 | - 0.4 | + 2 | + 0.8 |
| Miscellaneous | 91 | 79 | 57 | -12 | -13.2 | -22 | -27.9 |
| Area prepared for Irrigation | 100 | — | 25 | -100 | — | +25 | — |
| Total | 2,810 | 2,679 | 2,722 | -131 | - 4.7 | +43 | + 1.6 |

^a Provisional figures.

SOURCE: Central Bureau of Statistics.

Water

The total amount of water consumed is estimated to have been 7 per cent higher in 1955/56 than in 1954/55. A revised estimate for 1954/55 showed

TABLE IX-6
Irrigated Area 1953/54 to 1955/56
(in thousands of dunams)

| <i>Crop</i> | 1953/54 | 1954/55 | 1955/56 ^a | <i>Change in 1954/55 as against 1953/54</i> | | <i>Change in 1955/56 as against 1954/55</i> | |
|--|---------|---------|----------------------|---|------------------------|---|------------------------|
| | | | | <i>in thousands of dunams</i> | <i>in per cent</i> | <i>in thousands of dunams</i> | <i>in per cent</i> |
| Orchards | 236 | 287 | 325 | +51 | +21.6 | +38 | +13.2 |
| Fodder and Grains | 185 | 237 | 240 | +52 | +28.1 | + 3 | + 1.3 |
| Vegetables, Potatoes, Melons, and Pumpkins | 203 | 189 | 197 | - 14 | - 6.9 | + 8 | + 4.2 |
| Industrial Crops | 47 | 81 | 103 | +34 | +72.3 | +22 | +27.2 |
| Fish Ponds | 35 | 36 | 40 | + 1 | + 2.8 | + 4 | +11.1 |
| Miscellaneous | 44 | 60 | 88 | +16 | +36.4 | +28 | +46.7 |
| <i>Total</i> | 750 | 890 | 993 | +140 | +18.7 | +103 | +11.6 |

^a Provisional figures.

SOURCE: Central Bureau of Statistics.

that the consumption of water for non-agricultural purposes had been approximately 110 million cubic metres larger than previously assumed. Since the total water resources available are limited, this excess may cause difficulties in the future extension of the irrigated area.

TABLE IX-7
Water Consumption
(in millions of cubic metres)

| | 1954/55 | | 1955/56 | | <i>Change in Consumption</i> | |
|--------------|------------------|--|--------------|--|--|------------------------|
| | <i>Total</i> | <i>Average per irrigated dunam</i> | <i>Total</i> | <i>Average per irrigated dunam</i> | <i>in millions of cubic metres</i> | <i>in per cent</i> |
| Agriculture | 740 | 831 | 800 | 806 | +60 | +8.1 |
| Other | 240 | — | 250 | — | +10 | +4.2 |
| <i>Total</i> | 980 ^a | — | 1,050 | — | +70 | +7.1 |

^a Revised estimate.

SOURCE: Israel Water Planning Authority (Tahal).

The chief factor influencing water consumption in 1955/56, as compared with 1954/55, was the expansion of the irrigated area by some 11 per cent.

As shown in table IX-7, the average consumption of water per irrigated dunam declined slightly in 1955/56. This was due to the relatively small water

requirements of many crops grown on newly irrigated lands. But the average consumption per dunam of irrigated area, exclusive of young orchards, was about 823 cubic metres in 1955/56; in other words, normal average consumption did not decrease despite the favourable weather conditions. The water consumption of young orchards may be expected to increase in the future, and therefore, the average consumption per dunam is also likely to rise.

Many farmers are of the opinion that it is possible to reduce the consumption of water without serious effects upon yields. No shortage of water was experienced during the year under review; the quantity of water which could have been supplied to agriculture was not even fully exploited. But further increases in the irrigated area, and thereby a further expansion of agricultural output, becomes more and more dependent on the possibilities of distributing a given quantity of water over a larger area. This can be achieved only by rationing water, or by raising its price.

(b) *Input Prices*

According to a provisional estimate, there was virtually no change in input prices (apart from wages, rent and interest) in 1955/56, as compared with 1954/55. The prices of input items purchased by agriculture from other economic sectors rose by 6 per cent, while prices of input items produced by agriculture³ fell by about 6 per cent thanks to the good harvests of 1955/56.

The largest estimated price increase was that of services, mainly due to wages. Prices of irrigation pipes and accessories rose by about 12 per cent, and those of imported fodder by about 11 per cent, following the abolition of the subsidy. Prices of packing materials for citrus rose by approximately 8 per cent.

Increases ranging from 2 to 5 per cent occurred in the prices of water, transport, fuel, spare parts, fungicides and insecticides. Prices of fertilizers and imported seeds appear to have declined somewhat.

3. GOVERNMENT SUBSIDIES CONNECTED WITH AGRICULTURE

Government subsidies to agriculture are paid either on final products or on the use of production factors by the farmers, usually in order to achieve one or more of the following objects:

- (a) Aid to new agricultural settlements.
- (b) The maintenance of stable retail prices.
- (c) The encouragement of production of agricultural export commodities or substitutes for import goods.

³ Raw materials produced by and destined for agriculture constituted in 1954/55 and 1955/56 some 40 to 45 per cent of total input in agriculture.

(d) The encouragement of the consumption of certain agricultural products.

(e) The use of certain factors of production.

The direct recipients of such subsidy payments are not necessarily also the final beneficiaries. The benefit is usually divided between various groups of producers and consumers, and it would be difficult to appraise the share of each individual group.⁴

The continuous increase of agricultural subsidy payments which had been marked in previous years was checked in 1955/56, the total expenditure on these subsidies remaining approximately the same as in 1954/55. However, the system of payments was modified: rather than subsidizing production factors—such as concentrated fodder—there has been a tendency to pay subsidies on the final product, such as milk and eggs; this modification prevented the waste of concentrated fodder resulting from the previous cheapening of its price in relation to other production factors. Moreover, the allocation of the total amount of subsidies between various commodities underwent changes, as a result of revisions in the average subsidy per unit marketed, and also in consequence of shifts in the relative quantities of different products (see table IX-8).

TABLE IX-8
Government Cash Subsidies connected with Agriculture
(in IL. thousands)

| | 1954/55 | 1955/56 | Change |
|--|---------|---------|---------|
| <i>Subsidies on Final Products</i> | | | |
| Milk | 4,267 | 7,630 | +3,363 |
| Eggs | 35 | 1,430 | +1,395 |
| Vegetables and Potatoes | 5,481 | 4,808 | - 673 |
| Fruit | 1,672 | 936 | - 736 |
| Cotton | 268 | 2,935 | +2,667 |
| Groundnuts | 1,355 | 1,115 | - 240 |
| Sugar-Beet | | | |
| Tobacco | 50 | 100 | + 50 |
| Fish | 59 | 325 | + 266 |
| <i>Sub-Total</i> | 13,267 | 19,353 | +6,086 |
| <i>Subsidies on Production Factors</i> | | | |
| | 7,342 | 1,991 | - 5,351 |
| <i>Total</i> | 20,609 | 21,344 | + 735 |

SOURCE: Economic Planning Department, Ministry of Agriculture.

⁴ The benefit of the subsidy on industrial crops, for example, is shared between the farmers producing the crops and the manufacturers who use them as raw materials. To the extent that the subsidy contributes to reduce the price of the industrial product, some benefit accrues to the consumer.

(a) *Subsidies on Final Products*

Milk

Expenditure on subsidies paid according to the volume of milk marketed was increased by 79 per cent in 1955/56. The increase was largely due to the replacement of subsidies on fodder by the subsidization of milk distribution which was raised from 41.6 pruta to 70 pruta per litre.

Eggs

Until the abolition of the subsidy on fodder in February, 1956, there had been virtually no direct subsidy on eggs by quantity marketed, poultry farming being supported exclusively through the cheapening of fodder supplies. After the abolition of the fodder subsidy, a direct subsidy of 10 pruta per egg was paid for a certain period on eggs distributed by recognized marketing organizations.

Vegetables and Potatoes

The subsidy on vegetables was intended to maintain stable prices. It was extended through the Government's participation in the Minimum-Price Fund for Vegetables or through subsidies on vegetables distributed in periods of seasonal price rises. A subsidy was also granted to encourage the export of fresh and processed vegetables.

Total expenditure on these subsidies was less in 1955/56 than in 1954/55, although the export subsidy was somewhat increased. In the spring of 1956, the Government, jointly with the Minimum-Price Fund for Vegetables, guaranteed minimum prices of certain types of vegetables to encourage production and avert price increases in the following autumn and winter. Subsequently, the production of vegetables for which minimum prices had been guaranteed did, indeed, expand; however, at the guaranteed prices demand was insufficient to clear the market, with the result that large surpluses were accumulated. Thereupon a subsidy was paid to reduce retail prices and stimulate consumption; part of the surplus was absorbed and the cost of buying up the rest was diminished.

The subsidy on potatoes accounted for approximately half the total expenditure on vegetable subsidies. Expenditure on this subsidy in 1955/56 amounted to about IL.2 million, approximately the same sum as in the previous year.

The guarantee of relatively high minimum prices to producers induces the production of surpluses, quite apart from unforeseen excess supplies which may be the result of abundant harvests. It is not impossible that the Government's outlays on such subsidies are smaller than the expenses it would incur in consequence of a vegetable shortage accompanied by a rise in the consumers' price index. However, the objective of maintaining the stability of retail prices could also be achieved by guaranteeing minimum retail prices.

Fruit

The major part of the subsidy on fruit was on bananas, with the purpose of lowering their retail price. The expenditure on this subsidy declined in 1955/56 owing to the increased supply of bananas and the consequent decline in their price. The rate of the subsidy was therefore reduced but, being paid on a larger volume of supply, the total expenditure involved did not decrease to any significant extent.

Cotton

The cotton subsidy totalled IL.3 million in 1955/56, most of which was paid to farmers in compensation for damage caused by the boll weevil.

The Government allocated IL.3.8 million to be paid to cotton producers in proportion to the damage to their crops. New settlements received outright grants and older established farmers received smaller grants and loans. Altogether the subsidy totalled IL.2.5 million, and the loans IL.1.3 million. Moreover, a subsidy was paid on output, the rate being IL.150 per ton in 1955/56, as compared with IL.100 per ton in 1954/55.

Groundnuts

Total expenditure on the subsidy on groundnuts declined in 1955/56 owing to the smaller output. No locally-grown groundnuts were supplied to the oil industry in 1955/56, and the entire subsidy was given to exporters and new settlements. It would seem that these subsidies have failed to encourage farmers to grow groundnuts rather than, say, fodder crops, even though the cultivation of groundnuts contributes more to the improvement of the balance of payments.

Fish

Government outlays in connection with subsidies on fish increased considerably during 1955/56 in comparison with 1954/55. The difference was wholly due to the increased subsidy on sea fishing. The largest subsidy was on trawling. At the beginning of 1956, trawlers were granted a larger subsidy on their catches and, in addition, lump sums per sailing day according to the size of the vessels. This latter payment implied a departure from the system of paying subsidies on output to subsidization of production factors, which, although likely to encourage sailings, does not necessarily encourage production, and risks a wastage of fuel, etc. Trawler fishing in 1955/56 was also supported by Government participation to the extent of 40 per cent of costs in the purchase of new boats, tantamount to a subsidization of production factors. Fishing by artificial light received a subsidy according to the catch. Fishermen in the Gulf of Eilat—a small part of total fishing—were guaranteed minimum prices. Despite the considerably higher subsidies, the output of the fishing branch did not increase in 1955/56.

(b) *Subsidies on Factors of Production*

The subsidy on fodder accounted for most of this expenditure, although it declined from IL7.3 million in 1954/55 to IL.2 million in 1955/56, and was abolished altogether in February, 1956, when the exchange rate for imports of oil cakes and proteins was raised from IL.1.650 to IL.1.800 per dollar. Simultaneously, the price of locally produced oil cakes was increased so as to bring it into line with the prices in the world market.

Other subsidies on production factors, the volume of which has not been computed here, were given on water. These took the form of funds to finance the deficit of the Mekorot Company, and of cheap electricity rates for pumping. Investments in agriculture were indirectly subsidized by loans which were not fully linked to real values when granted, and which carried a rate of interest lower than current rates.

Subsidies on specific production factors have tended, first and foremost, to encourage the use of these factors. The farmer can increase the amount of subsidy paid to him by using more of such production factors, even though it is by no means certain that these will be used for the final purpose in which alone the Government is interested. Actually, in most cases these subsidies were merely a means of transferring funds intended for the general encouragement of output, or for supporting prices; only rarely could the intention have been to increase the use of a certain factor—for example, in order to improve the fertility of the soil through the greater use of fertilizers. Generally, this type of subsidy is apt to distort price relations and to lead to an uneconomic use of production factors. Hence, their replacement by subsidies on final products has been a step in the right direction.

(c) *Subsidies to New Settlements*

The special subsidy on the products of new settlements was intended to raise the settlers' income and to encourage agricultural production. The subsidy was granted in the form of an increment on the farmers' prices graded according to the financial state of each settlement. Table IX-9 summarizes the subsidies to new settlements in 1954/55 and 1955/56 over and above the subsidies granted to them in common with all farmers. However, table IX-9 does not include the increased subsidy on vegetables and the higher compensation of damage to cotton crops allowed to new settlements on account of their privileged status.

The subsidies on most commodities produced by the new settlements, though graded, neutralized the endeavour to stimulate the cultivation of some crops rather than others. They tended to raise the level of earnings generally, encouraging the new settlers to engage in agricultural production rather than in other occupations.

The subsidies to new settlements should at least partly be regarded as a long-term investment in agriculture. They have enabled new settlers to make a living

TABLE IX-9

Special Subsidies on the Products of New Settlements (Price Increments), 1954/55 and 1955/56

(in IL. thousands)

| | 1954/55 | 1955/56 | Change |
|-----------------------|---------|---------|--------|
| Potatoes ^a | 650 | 434 | - 216 |
| Groundnuts | 300 | 182 | -118 |
| Sugar Beet | 80 | 74 | - 6 |
| Tobacco | 50 | 100 | + 50 |
| Olives | — | 100 | +100 |
| Cow Milk | — | 441 | +441 |
| <i>Total</i> | 1,080 | 1,331 | +251 |

^a New settlements received a subsidy on vegetables to the amount of IL.930,000 in 1954/55 and of IL.1,148,000 in 1955/56 including the subsidy granted to all farmers.

SOURCE: Economic Planning Department, Ministry of Agriculture.

while yet inexperienced and when their productivity was still low, and have helped them to achieve greater efficiency.

4. INVESTMENTS

(a) *The Volume of Investments*

Gross investment in agriculture increased by 3 per cent, from IL.121 million in 1955⁵ to IL.125 million in 1956. Prices of investments rose by approximately 10 per cent, and the real volume of new investments diminished by about 5 per cent.

The largest real decrease occurred in new investments in basic utilities⁶, which remained nominally at the level of 1955 while price increases reduced their real volume. In real terms, the expansion of investments in agricultural settlements by about IL.5.9 million was tantamount to a decrease of some 3 per cent compared with the new investments made in 1954/55. The proportion of investments in agricultural settlements within the total volume of agricultural investments (59 per cent) remained virtually unchanged.

(b) *Investments in Agricultural Settlements*

According to available estimates, the biggest relative expansion took place in new investments in farm buildings; at current prices these increased by

⁵ Revised figure.

⁶ Investments in water projects, afforestation and land reclamation primarily conducted and financed by the Government, the National Institutions, the Israel Water Planning Authority (Tahal) and the Mekorot Company.

50 per cent. The increased production of agricultural raw materials (grains, straw, etc.) and of raw materials for industry (cotton, oil-seeds) called for the construction of barns within farm areas. Sizeable investments were also made in regional packing houses, new settlements and research stations. The increased investment in orchards primarily consisted of new citrus groves and additional investments in existing young orchards.

The number of agricultural machines was smaller at the beginning of 1956 than at the beginning of 1955, owing to the depreciation and obsolescence of tractors, combines and balers, which were not fully replaced by imports that year. The composition of agricultural machinery underwent some change: approximately 500 caterpillar tractors, most of which had been imported in the first years of the State and which had been used mainly on the continuously diminishing area of unirrigated land, were discarded in 1955, whereas only 218 tractors of this kind were imported in 1955 and 1956. A large number of other machines was also taken out of service but imports in 1956 probably sufficed to replace at least the wheeled tractors which are particularly suitable for work in irrigated fields and orchards. The number of wheeled tractors scrapped in 1955 was 200, but imports of such tractors in 1955 and 1956 totalled 885.

TABLE IX-10
Agricultural Machinery 1955 and 1956

| | <i>Stock beginning of 1955*</i> | <i>Imports in 1955</i> | <i>Stock beginning of 1956</i> | <i>Imports in 1956</i> |
|-----------------------|---|----------------------------|--|----------------------------|
| Caterpillar Tractors | 1,571 | 118 | 1,129 | 100 |
| Wheeled Tractors | 2,376 | 135 | 2,311 | 750 |
| <i>Total Tractors</i> | 3,947 | 253 | 3,440 | 850 |
| Combine Harvesters | 1,199 | 41 | 1,155 | 124 |
| Balers | 610 | 20 | 580 | 60 |

* Revised figures.

SOURCE: Mechanical Equipment Section, Ministry of Agriculture.

Imports in 1956 also included other agricultural equipment (mainly towed machinery, accessories and spare parts), to the value of IL.8.4 million, as compared with IL.6.3 million in 1955. Investments in mechanical equipment, inclusive of installation costs, totalled IL.14.5 million in 1956, as against IL.12.5 million in 1955.

Investments in cattle were likewise expanded, both as regards milch cows (the number of which had remained approximately static between 1954 and 1955) and beef cattle, in view of the high profits from cattle farming. The exact volume of investments in cattle cannot be determined, but the estimated

number of milch cows in 1956 rose by about 5 per cent to 40,000, as compared with 38,000 in 1955. Most of these investments was financed from the farmers' own resources. Careful selection of livestock resulted in high milk yields per cow. Funds were also invested in the breeding of calves for cattle and meat.

The number of sheep increased by about 15 per cent in 1956, to approximately 100,000; the number of pedigree goats remained at 45,000.

Investments in fishing in 1956 were mainly connected with fish-ponds, whereas the year before considerable sums had been invested in the purchase of fishing boats.

The steepest decline took place in new investments in the local irrigation of agricultural settlements, which contracted by 14 per cent in comparison with 1955. The drought of 1954/55 had caused an accelerated execution of irrigation projects at the time, entailing a subsequent restriction.

(c) *Investments in Basic Utilities*

The volume of investments financed by public bodies and institutions chiefly depends on the Government's budgetary allocations. The rate of investment in the national water project, regional projects, drainage, afforestation and soil conservation was largely determined by heavy defence spending. This made it impossible to accelerate investments, which therefore remained nominally the same as in the preceding year.

TABLE IX-11

Investment in Agriculture, at Current Prices, 1955 and 1956

| | 1955 | | 1956 | | In per cent | |
|---|--------------------|----------------|--------------------|----------------|-------------|------|
| | in IL. millions | in per cent | in IL. millions | in per cent | 1955 | 1956 |
| <i>Investment in Agricultural Settlements</i> | | | | | | |
| Orchards | 19 | | 20 | | 28 | 27 |
| Irrigation | 18 | | 15 | | 26 | 20 |
| Other Investments * | 32 | | 39 | | 46 | 53 |
| <i>Total</i> | 69 | 58 | 74 | 59 | 100 | 100 |
| <i>Investments in Basic Utilities</i> | | | | | | |
| Irrigation | 42 | | 41 | | 81 | 80 |
| Afforestation and Land Reclamation | 10 | | 10 | | 19 | 20 |
| <i>Total</i> | 52 | 42 | 51 | 41 | 100 | 100 |
| <i>Total Investment</i> | 121 | 100 | 125 | 100 | | |

* Including farm buildings, equipment, livestock and fishing.

SOURCE: Calculations of the Bank of Israel.

(d) *The Financing of Agricultural Investments*

In 1956, as in 1955, more than 80 per cent of agricultural investment was financed from government or national sources, at a rate of interest lower than that prevailing on the market. The remainder was financed by the farmers either through their own savings or out of loans provided by other sources, including banks.

The figures in table IX-12 refer only to new investments and do not include farmers' expenditure on the acquisition of existing assets, especially not the amortization of loans, the rates of repayment of which are usually more rapid than the actual depreciation of the physical assets.

TABLE IX-12
The Financing of Agricultural Investments, 1955 and 1956

| | 1955 | | 1956 | |
|-------------------------------------|---------------------|-----------------|---------------------|-----------------|
| | <i>IL. millions</i> | <i>per cent</i> | <i>IL. millions</i> | <i>per cent</i> |
| Government and Jewish Agency | 97.9 | 80.8 | 103.7 | 82.8 |
| Farmers' Own Resources ^a | 23.2 | 19.2 | 21.6 | 17.2 |
| <i>Total</i> | 121.1 | 100.0 | 125.3 | 100.0 |

^a Including borrowed funds.

SOURCE: Calculations of the Bank of Israel.

The repayment of long-term loans by individual farmers has been progressing for some time at a faster rate than long-term borrowing, i.e. the farmers' long-term indebtedness has been diminishing. Repayment has been financed out of the farmers' current incomes and, partly, through new short-term borrowing. No attempt has as yet been made to estimate farmers' total annual expenditure on new and existing capital assets and to compare this with the aggregate amount of additional long-term credit annually accruing to agriculture. This alone would provide a picture of the changes in the indebtedness of agriculture as a whole.

There was a greater accumulation of stocks, not included in the above figures, following the good harvest of agricultural and industrial raw materials.

(1) *Investments financed by the Government from the Development Budget*

Of the allocation to agriculture out of the Development Budget, 89 per cent were in the form of loans. Agricultural settlements received 39 per cent of these loans, and 61 per cent went to institutions and various public organizations.

The Government participated directly in the establishment of new settlements in the Southern Negev, in the maintenance of research stations, and in the share capital of the Israel Bank of Agriculture and the Huleh Development Company.

Other Government investments were in afforestation, land reclamation, in the amelioration of fishing installations, in educational and research institutions, etc.

About IL.35 million, or 65 per cent, of the Development Budget expenditure on agriculture in 1955/56 was on irrigation⁷, and of this amount 74 per cent was spent on investments of the Mekorot Company. Other loans from the public purse were granted to the Jewish National Fund for afforestation and soil conservation and various purposes to complement investments listed above.

The Government also spent about IL.5.4 million from Development Budget sources on orchards—mainly in the form of loans to citrus planters.

The main instrument for the granting of Development Budget loans was the Israel Bank of Agriculture, which handled 72 per cent of the loans to agricultural settlements. The loans to institutions were mostly given by the Government direct.

(2) *Investments financed by the Jewish Agency*

The investments of the Settlement Department of the Jewish Agency totalled about IL.53 million. Most of this expenditure went to continue investment activities in the new agricultural settlements founded by the Agency in previous years, and for the establishment of 20 new settlements during the year, comprising about 1,000 farm units.

(3) *Investments financed by Farmers*

Farmers' investment expenditures are roughly of two kinds: (a) expenditure to complement Development Budget loans; and (b) expenditure on investments for which Development Budget loans could not be obtained, and which must therefore be financed entirely by the farmers. Since about 70 per cent of all agricultural investments in 1955/56 were financed from Development Budget resources it may be assumed that farmers raised about IL.6 million from their own resources to complement loan funds and about IL.16 million was invested in livestock, farm buildings, and various types of orchards, the produce of which fetched high prices in the market.

5. CREDIT

(a) *Bank Credit*

Outstanding short-term bank credit to agriculture increased by IL.18.6 million, or 24 per cent, from IL.76.7 million at the end of 1955 to IL.95.3 million at the end of 1956.

The larger part of the additional credit—about IL.10 million—was granted from the banks' own resources. The addition, however, increased but slightly the proportion of agricultural credit within the total outstanding bank credit,

⁷ Including regional and national projects as well as local networks in the fields.

TABLE IX-13

Development Budget Expenditure on Agriculture—Investments and Long-Term Loans, 1956

(in IL. thousands)

| Purpose | Total | Direct Government investment | Loans | | | | | | |
|---|---------------|------------------------------------|---------------|---------------|---|---|-----------------|---|--------------------|
| | | | Total | to farmers | | | to institutions | | |
| | | | | Total | through Israel Bank of Agriculture | through other chan- nels (Jewish Agency, banks, and other financi- al institutions) | Total | through Israel Bank of Agriculture | Miscel- laneous |
| Water Projects (National and Regional) | 26,303 | 400 | 25,903 | — | — | — | 25,903 | — | 25,903 |
| Afforestation and Land Reclamation | 2,551 | 1,051 | 1,500 | 268 | 268 | — | 1,232 | — | 1,232 |
| Drainage | 1,116 | 646 | 470 | 116 | 116 | — | 354 | 354 | — |
| Irrigation Installations | 9,192 | 135 | 9,057 | 8,667 | 5,370 | 3,297 | 390 | — | 390 |
| Orchards | 5,367 | 200 | 5,167 | 4,416 | 3,239 | 1,177 | 751 | — | 751 |
| Livestock | 927 | 22 | 905 | 905 | 905 | — | — | — | — |
| Fishing | 407 | 307 | 100 | 100 | 75 | 25 | — | — | — |
| Miscellaneous | 7,893 | 3,067 | 4,826 | 4,426 | 3,426 | 1,000 | 400 | — | 400 |
| Total | 53,756 | 5,828 | 47,928 | 18,898 | 13,399 | 5,499 | 29,030 | 354 | 28,676 |

SOURCE: Calculations of the Bank of Israel, based on data from the Accountant General, Ministry of Finance.

viz. from 25.3 per cent at the end of 1955 to 26 per cent at the end of 1956. Even this increase was due first and foremost to the intervention of the Bank of Israel. Credits granted by the banking institutions within the limits of the prescribed liquidity ratios and the permitted volume of credit expanded by only 5.2 per cent, whereas credits authorized outside these limits increased by 29 per cent.

Of the additional bank credit, amounting to IL.18.6 million made available to agriculture in 1956, IL.13.5 million, or 73 per cent were directed to his sector by the Bank of Israel through the banking institutions, by way of exemptions from liquidity regulations and from the regulations governing the volume of credit, or directly by way of rediscount facilities.

Apart from this, agriculture had the benefit of some credits which were granted to industrial firms processing agricultural products in the first place with the intention that they be passed on to farmers in the form of advances on the supply of raw materials. Similarly, manufacturers of agricultural raw materials such as fertilizers, received loans which enabled them to sell their products to farmers on credit. Additional credit was also granted to agricultural marketing organizations.

TABLE IX-14

Outstanding Balances of Agricultural Credit, End 1955 and End 1956
(in IL. millions)

| Source of Credit | 31.12.55 | 31.12.56 | Change | |
|--|-------------------|------------------|--------------------|----------------|
| | | | in IL. millions | in per cent |
| Credit from Banks' Resources | 66.3 ^a | 76.4 | +10.1 | +15.1 |
| Bills Re-discounted with the Bank of Israel | 3.4 | 8.9 ^b | + 5.5 | +161.7 |
| Credit from Government Deposits in Banking Institutions | 7.0 | 10.0 | + 3.0 | +42.8 |
| <i>Total</i> | 76.7 | 95.3 | +18.6 | +24.1 |

^a Revised figure.

^b Including foreign currency bills to the amount of IL.455,000.

SOURCE: Bank of Israel.

(b) *The Composition of Bank Credit*

Credit directed to agriculture by the Government and the Bank of Israel constituted about 57 per cent of total bank credit granted to this sector, while in 1955 its share was less than 50 per cent. In other words, most of the additional balances created in 1956 was "directed" credit.

In 1956, the share of cotton among the recipients of "directed" credit was greater than that of any other individual crop. The value of cotton output in

TABLE IX-15
Outstanding Balances of Agricultural Credit from the Banks' Resources,
End 1955 and End 1956
(in IL. millions)

| | 31.12.55 | 31.12.56 | Change end of 1956, as against end of 1955 | |
|---|-------------|-------------|---|----------------|
| | | | in IL. millions | in per cent |
| <i>Within the Prescribed Liquidity and Volume of Credit Regulations</i> | | | | |
| 1. Banks | 28.4 | 28.9 | + 0.5 | + 1.8 |
| 2. Credit Co-operative Societies | 10.3 | 11.8 | + 1.5 | + 14.6 |
| <i>Sub-Total</i> | <i>38.7</i> | <i>40.7</i> | <i>+ 2.0</i> | <i>+ 5.2</i> |
| <i>Authorized Exemptions</i> | | | | |
| 3. Banks | 23.1 | 26.6 | + 3.5 | + 15.2 |
| 4. Credit Co-operative Societies | 4.5 | 9.1 | + 4.6 | +102.2 |
| <i>Sub-Total</i> | <i>27.6</i> | <i>35.7</i> | <i>+ 8.1</i> | <i>+ 29.3</i> |
| <i>Total</i> | <i>66.3</i> | <i>76.4</i> | <i>+10.1</i> | <i>+ 15.2</i> |

SOURCE: Bank of Israel.

TABLE IX-16
Outstanding Balances of Short-Term Agricultural Credit by Destination,
End 1955 and End 1956
(in IL. millions and in per cent)

| | IL. millions | | Per cent | |
|---|--------------|-------------|--------------|--------------|
| | end 1955 | end 1956 | end 1955 | end 1956 |
| <i>Directed Credit^a</i> | | | | |
| Cotton, for fibres | 4.2 | 7.9 | 5.5 | 8.3 |
| Citriculture | 3.5 | 7.3 | 4.5 | 7.7 |
| Milk and eggs (through marketing organizations) | 5.0 | 7.4 | 6.5 | 7.8 |
| Field crops | 6.0 | 6.9 | 7.8 | 7.2 |
| Miscellaneous | 15.5 | 19.5 | 20.4 | 20.5 |
| Loans for periods ranging from 1 to 3 years, for the consolidation of short-term debts | 3.8 | 5.6 | 4.9 | 5.8 |
| | 38.0 | 54.6 | 49.6 | 57.3 |
| <i>Ordinary Bank Credit</i> | <i>38.7</i> | <i>40.7</i> | <i>50.4</i> | <i>42.7</i> |
| <i>Total</i> | <i>76.7</i> | <i>95.3</i> | <i>100.0</i> | <i>100.0</i> |

^a Credits granted under exemptions from liquidity and volume regulations, re-discounts and advances from the Development Budget for working capital.

SOURCE: Bank of Israel.

1955/56 was IL.7.2 million, and loans to cotton growers approved in 1956 totalled IL.12.0 million. Of the latter amount, IL.4 million were intended to finance existing stocks of the 1955 crop, but even the rest (IL.8 million) exceeded the total value of the crop. Such a high rate of financing had become necessary in view of the effect of extensive damages, which resulted in the destruction of half the total harvest.

Directed credit was usually extended in amounts sufficient to cover a considerable proportion of production costs pending the marketing of the produce.

Credit granted for field crops ranged from IL.3.500 to IL.5.500 per dunam (the rate being lower for established settlements than for new ones); sowing and cultivation costs according to the farmers' estimates averaged IL.11 per dunam. Repayment was due about six months after the harvest, so that the credit also financed the holding of stocks. Credit to producers of groundnuts for export amounted to 80 per cent of the value of the output destined for export.

The additional credit was primarily directed to industrial crops and citrus, which contributed more to the improvement of the balance of payments than most other agricultural commodities. But since the output of animal products, which was also expanded considerably, represented to many farmers an important source of income, more credit was also granted to finance this line of production.

The total turnover of "directed" credit reached about IL.70 million, i.e. about 13 per cent of the value of agricultural output, or approximately 20 per cent of the value of agricultural produce sold to other economic sectors.

The 24 per cent increase in agricultural credit outstanding at the end of the year corresponds with the expansion of output at current prices, but exceeds the expansion of real output, which was no more than 16 per cent. In the previous year the expansion of credit also exceeded the expansion of output, but the growth of the latter cannot serve as a proper yardstick for estimating the increase in requirements of working capital, on account of the drought which reduced actual output in 1954/55.

Similarly, the expansion of output in 1955/56 should not be regarded as an indicator of credit requirements, considering the structural changes of agricultural production, especially the big relative expansion in the production of raw materials—which demanded considerable funds for storage.