

CHAPTER XI

AGRICULTURE

1. MAIN DEVELOPMENTS

ECONOMIC ACTIVITY in the agricultural sector expanded in 1962/63¹ at a faster rate than in the previous year. The net agricultural product, at fixed producer prices, increased by 10.6 per cent, as compared with 8 per cent in 1961/62 (see Table XI-1). Nearly two-thirds of the increment was contributed by citrus culture.

Nevertheless, the slower growth trend in agriculture, which began in 1958/59, continued during the year reviewed (see Diagram XI-1). Between 1952/53 and 1958/59 real agricultural product advanced by an average of 14 per cent per annum. During the second part of this period, from 1957/58 to 1958/59, the annual increase averaged 18 per cent, while during the years 1959/60 to 1962/63 the growth rate fell to 8 per cent. The deceleration is also very apparent in agricultural output. Before 1959/60 the real increase averaged 13 per cent per annum, whereas subsequently it averaged only 6 per cent. The continued slackening of the growth trend in 1962/63 stands out even more if we discount the expansion of citrus output ascribable to natural factors.

The tendency for agricultural output to expand more slowly since 1959/60 is also brought out by a comparison with other economic sectors. Until that year, the average rise in agricultural product outstripped that in the national product, whereas since 1959/60 it has lagged slightly behind.

The accelerated growth of the agricultural product in 1962/63 as compared with 1961/62 occurred despite the slowdown in the expansion of real output from 7 per cent to 6 per cent, since purchased inputs increased even more slowly. There was an advance of 10 per cent in product per unit of capital and labor, and of 5 per cent in output per unit of total input. These increases reflect the influence of natural factors and technology, as well as changes in the composition of output and input and greater efficiency in production.

During the year reviewed price developments were favorable to agriculture. In 1961/62 input prices rose faster than output prices (chiefly because of the devaluation), thus slightly reducing the growth of income originating in agriculture, but 1962/63 exhibited an opposite development. The producer prices of agricultural output moved up by some 12 per cent on the average, compared

¹ From October 1962 to September 1963.

Table XI-1

CURRENT ACCOUNT OF THE AGRICULTURAL SECTOR, 1961/62 AND 1962/63

| | Value at current prices (IL million) | | Per cent increase or decrease (-) from 1961/62 to 1962/63 | | |
|--|---|---------|---|----------|-------|
| | 1961/62 ^a | 1962/63 | Value | Quantity | Price |
| 1. Total agricultural output at producer prices | 1,027.1 | 1,222.6 | 19.0 | 6.3 | 12.0 |
| 2. Less: Agricultural raw materials (intermediate products) | 129.5 | 141.8 | 9.5 | -0.3 | 9.8 |
| 3. Agricultural output at producer prices | 897.6 | 1,080.8 | 20.4 | 7.3 | 12.3 |
| 4. Less: Subsidies on output | 63.6 | 86.5 | 36.0 | -3.6 | 41.1 |
| 5. Agricultural output at market prices | 834.0 | 994.3 | 19.2 | 8.1 | 10.3 |
| 6. Less: Purchased input (net of change in inventories) | 348.0 | 390.8 | 12.3 | 3.2 | 8.8 |
| 7. Gross agricultural product at market prices | 486.0 | 603.5 | 24.2 | 11.6 | 11.3 |
| 8. Less: Depreciation | 63.2 | 71.3 | 12.8 | 4.1 | 8.3 |
| 9. Net agricultural product at market prices | 422.8 | 532.2 | 25.9 | 12.7 | 11.7 |
| 10. Subsidies on output | 63.6 | 86.5 | 36.0 | -3.6 | 41.1 |
| 11. Net agricultural product at producer prices (national income originating in agriculture) | 486.4 | 618.7 | 27.1 | 10.6 | 15.0 |
| 12. Drought compensation payments | 8.0 | 12.7 | 58.7 | — | — |
| 13. Total income from agriculture | 494.4 | 631.4 | 27.7 | — | — |
| 14. Less: Wages paid to hired labor ^b | 110.8 | 130.2 | 17.5 | — | — |
| 15. Less: Interest and rent | 33.1 | 36.7 | 10.9 | — | — |
| 16. Income of farm owners from agriculture | 350.5 | 464.5 | 32.5 | — | — |

^a Revised data.

^b Bank of Israel estimates of the agricultural wage bill are some IL 15 million less than those of the Central Bureau of Statistics. The variance arose in 1960/61 owing to different methods of estimation.

SOURCE: 1 and 2—Table XI-4.

4 and 12—Table XI-11.

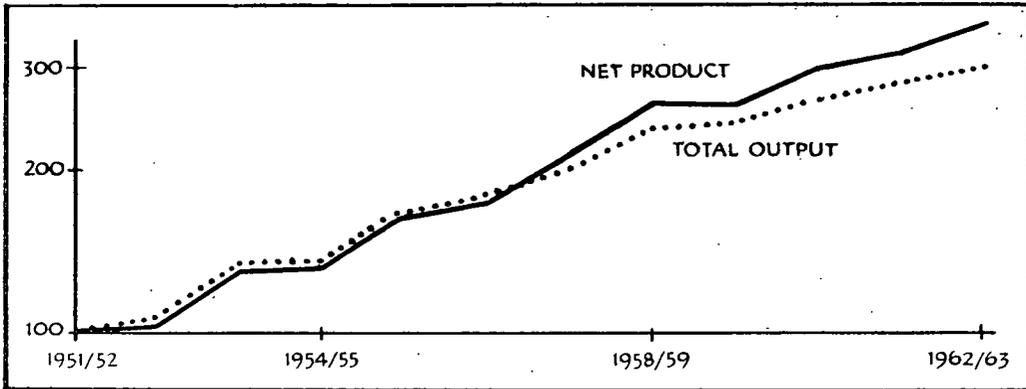
6 and 8—Table XI-8.

14 and 15—Bank of Israel estimates.

with a rise of approximately 9 per cent in purchased input prices. This was reflected by an increase of about 15 per cent in the value of net product at producer prices, and one of approximately 27 per cent in the total value of the

Diagram XI-1

REAL INCREASE IN TOTAL AGRICULTURAL OUTPUT AND
NET PRODUCT, 1951/52 TO 1962/63

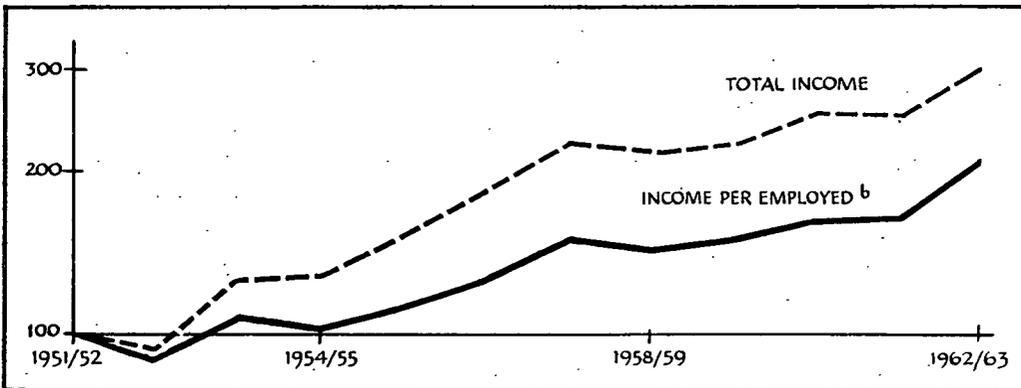


Semi-logarithmic scale.

product. About 60 per cent of the increase in the net product (i.e. of income originating in agriculture) in 1962/63 thus derived from the difference between input and output prices, and of this, one-third was due to higher price-support rates.¹

Diagram XI-2

REAL INCREASE IN INCOME OF FARM OWNERS,^a
1951/52 TO 1962/63



Semi-logarithmic scale.

^a Less increase in consumer price index.

^b Farm owners, family members, and others working without pay.

¹ The average subsidy per unit of output.

After deducting the increase in the farm wage bill as well as interest and rent payments, the net income of farm owners from agriculture reached IL 465 million in 1962/63—a gain of 33 per cent as compared with 1961/62. Allowing for the changes in the estimated labor input of the farmers themselves and their families as well as in equity capital, the increase in the return on own labor and capital in agriculture was somewhat larger. This reflects a considerable growth in real income, since the level of domestic consumption prices moved up 8 per cent.

The growth in total real income of farmers in 1962/63 far exceeded the moderate increases between 1958/59 and 1961/62, and even the average for the years 1955/56 to 1957/58 (see Diagram XI-2). Since the establishment of the State there has been only one year—1952/53—when real income rose more rapidly. But the growth rate per gainfully employed person reached an all-time peak in 1962/63.

The appreciable increase in incomes was also expressed in realized net income,¹ which rose to an even greater extent. The gap between the two reflects the decrease in the output of agricultural capital goods, this too in continuation of a trend prevailing for several years. The decline occurred chiefly in investments in livestock and young orchards, but also in the volume of public works such as afforestation and land reclamation (see Table XI-7). Other farm investments likewise showed a further downward movement (see Table XI-12), contracting in real terms by some 14 per cent. The only agricultural investments to increase during the year were those connected with the development of water resources—the National Water Carrier, other water projects, and the extension of irrigation networks (in preparation for the completion of the National Water Carrier). All told, real gross investment in agriculture contracted by about 3 per cent during the year.

Despite this decline, the gross value of productive farm assets showed a real increase of 4.1 per cent (see Table XI-13)—a slower rate than in 1961/62. Together with the expansion of current inventories required by the growth of output, the total gross value of productive assets went up by 4.6 per cent, as compared with 5.8 per cent in the preceding year. The growth in the net value was smaller, both absolutely and relatively, amounting to 2.7 per cent as against 3.9 per cent in 1962. Since the prices of the assets also rose more slowly than in 1962, the net capital stock in agriculture grew by 10.2 per cent in 1963, as compared with 12 per cent the year before.

The appreciation of assets due to the rise in their prices² reached IL 93.4 million, as compared with IL 97.4 million in 1962. Not all of these amounts represent a real capital gain for the farmers, since they partly reflect a rise in the

¹ Excluding imputed income from the output of capital goods.

² In respect of the net asset inventory at the beginning of the year remaining at year's end.

Table XI-2

PARTIAL CAPITAL ACCOUNT OF AGRICULTURE, 1961-63

(IL million)

(End of period)

| | 1961 | 1962 | 1963 ^a | Percentage change in value | |
|---|---------|---------|-------------------|-------------------------------|-------------------------|
| | | | | From 1961 to 1962 | From 1962 to 1963 |
| Assets | | | | | |
| (productive, net of depreciation and at replacement prices) | | | | | |
| Fixed assets | | | | | |
| Orchards, farm buildings, irriga- tion networks, and local water projects | 802.9 | 896.2 | 972.3 | 11.6 | 8.7 |
| Machinery, equipment, and livestock | 336.8 | 381.0 | 403.7 | 13.1 | 6.0 |
| Current assets | | | | | |
| Current inventories | 212.7 | 237.9 | 292.3 | 11.8 | 22.9 |
| Subtotal | 1,352.4 | 1,515.1 | 1,669.8 | 12.0 | 10.2 |
| Other assets ^b | .. | .. | .. | | |
| Liabilities | | | | | |
| Long-term institutional debt | 908.8 | 1,007.0 | 1,106.8 | 10.8 | 9.9 |
| Short-term institutional debt | 163.9 | 180.1 | 177.4 | 9.9 | -1.5 |
| Total institutional debt | 1,072.8 | 1,187.1 | 1,284.2 | 10.7 | 8.2 |
| Other liabilities ^c | .. | .. | .. | | |
| Equity capital | .. | .. | .. | | |
| Balance sheet ratios | | | | | |
| Long-term institutional debt to: | | | | | |
| Identified fixed assets | 1:1.25 | 1:1.27 | 1:1.24 | | |
| All identified assets | 1:1.49 | 1:1.50 | 1:1.51 | | |
| Short-term institutional debt to: | | | | | |
| Current assets | 1:1.30 | 1:1.32 | 1:1.65 | | |
| All identified assets | 1:8.25 | 1:8.41 | 1:9.41 | | |
| Total institutional debt to: | | | | | |
| All identified assets | 1:1.26 | 1:1.28 | 1:1.30 | | |

^a Linkage differentials of IL 20.8 million are included with liabilities.^b Private land, land amelioration, and financial assets (cash and deposits, receivables, rights, shares, etc.).^c Supplier credit, sundry creditors, and other noninstitutional credit.

SOURCE: Assets—Table XI-13; institutional debt—Table XI-14.

nominal value of equity capital.¹ However, the balance accruing from the appreciation of assets far exceeded the linkage differentials owed by the farmers, which totalled only IL 21 million in both years, thus constituting a real addition to

¹ At the rate of increase in the prices of agricultural assets.

own capital. This was reflected by the drop in the ratio between the institutional debt and total assets from 79.3 per cent in 1961 to 78.4 per cent in 1962 and 76.9 per cent in 1963.

As against an increase of some IL 155 million in the net stock of capital assets, the institutional debt¹ went up by IL 97 million, and net of linkage differentials, by IL 76 million—a little more than the additional finance capital available to agriculture in 1962. The source of this increase was the enlargement of the budget of the Jewish Agency's Settlement Department, which provided some 93 per cent of the additional funds at the disposal of the farm sector.

The incremental credit from other sources was IL 4 million smaller than in 1962, and its composition was completely different. In 1962 the amount of credit extended to agriculture by the banks was expanded by IL 17 million, while that supplied by financial institutions did not increase, and credit from other institutions was reduced by IL 10 million. In 1963, on the other hand, agriculture borrowed more from financial and other institutions than in the previous year, while credit from the banks and from Government deposits earmarked for working capital contracted. The decline occurred in directed credit to citriculture and for financing the storage of agricultural produce, while other types of directed credit were expanded. Nondirected credit granted by the banks from their own resources increased by IL 8 million.

The changes in the financial position of the agricultural sector can be estimated only on the basis of partial indicators. As already mentioned, there was a decline in the institutional debt/total assets ratio, which was largely due both to the rise in asset prices and to the fact that the bulk of the institutions' debt was either nonlinked or only partially linked to the consumer price index. The drop occurred in long- and short-term liabilities alike, in line with the trend of the past three years. But whereas the ratio between long-term liabilities and fixed assets was slightly higher at the end of 1963 than at the end of the two preceding years, the ratio of short-term debt to current assets moved down in each of the last three years. No definite conclusion can be drawn from these trends, not only because of the lack of data on changes in unidentified assets, but especially on account of the absence of data on unidentified liabilities. These liabilities, which for the most part appear to be short-term, may drastically alter the ratio between short-term debts and current assets as well as the trends in this ratio. It must also be taken into account that there is no clear division between short-term and long-term debts and that the liabilities to institutions may not have been identified *in toto* but only in large part.

Another indicator of the financial situation is the change in agriculture's liquidity position (see Table XI-3). According to this, the cash surplus in the combined current and capital account increased by some IL 90 million, or 34 per

¹ See Table XI-14 below.

cent. If allocation were made for the full amount of depreciation during the last two years, the rate of increase in the cash surplus would be larger still.

Table XI-3

IDENTIFIED CASH SURPLUS IN AGRICULTURE'S BUSINESS ACCOUNT, 1962-63
(IL million)

| | 1962 | 1963 | Increase over 1962 | |
|---|-------|-------|--------------------|------|
| | | | IL m. | % |
| 1. Surplus of receipts over payments on current account ^a | 281.4 | 404.2 | 122.8 | 43.6 |
| 2. Net additional institutional credit | 75.9 | 76.3 | 0.4 | 0.5 |
| 3. Purchases of capital assets (including increase in current inventories) ^b | 91.2 | 124.3 | 33.1 | 36.3 |
| 4. Cash surplus ^c (1+2-3) | 266.1 | 356.2 | 90.1 | 33.9 |

^a Receipts (sales and drought compensation) less payments (purchased input, wages, interest, and rent).

^b Gross investment in farms less output of capital assets (exclusive of public development projects).

^c This surplus represents the cash balances of farmers available for allocation to depreciation funds, for saving, consumption, and other purposes, after financing all business requirements, on the assumption of the constancy of net financing from other sources. According to certain indicators, the estimate for 1962 apparently has an upward bias, since as against the increase in the outstanding balance of institutional credit there was a decline in other sources of financing during that year (debt consolidation). On the other hand, there may have been a larger volume of credit from other sources in 1963. Accordingly, the change in the cash surplus as compared with 1962 may be underestimated.

(a) *Production trends*

The trend toward the slower expansion of economic activity in the agricultural sector is reflected principally in the growth of output. As shown by Diagram XI-1, the deceleration has been in evidence since 1959/60, and the increase in 1962/63 was smaller than in any other year.

The entire increase in output in 1962/63 was concentrated in citriculture. The growth rate in real agricultural output other than citrus declined from 12.3 per cent in 1960/61 to 6.8 per cent in 1961/62 and 0.5 per cent in 1962/63. This development was due to the changed economic conditions in the agricultural sector, particularly marketing limitations, and to a lesser extent to limitations imposed by the availability of water resources. The decline was also connected with the adoption of a policy of restraining the growth of output for the local market.

Exports, mainly of citrus, expanded greatly, and also benefited from a rise in foreign prices. But local marketing, particularly the direct marketing of fresh produce, increased at a much lower rate than in previous years. The expansion of supplies to the local market, which averaged 6.7 per cent (see Table XI-4),

more or less balanced the growth in demand due to the larger population and to a rise in real income per capita. The prices received by farmers for food marketed locally went up by an average of nearly 7 per cent, i.e. at about the same rate as the consumer price index; on top of this, price-support rates were increased.¹ These developments bear no similarity to those of 1961/62, when producer prices in the local market did not go up at all despite the raising of support levels, while consumer prices of marketed agricultural produce rose less than the consumer price index as a whole, thereby helping to keep it down. Consequently, in 1963 export prices (except in the case of citrus) lagged behind the rise in local market prices; this applies equally to total agricultural exports and to commodities with good prospects for larger foreign sales. Whereas in 1961/62 there was no change in the relative prices of exports and locally marketed produce, during the year reviewed there was a marked shift in favor of the local market. Since agricultural exports are organized by central marketing boards, this change in relative prices does not directly affect the farmer. As regards a number of important commodities, production boards pool the prices received from all marketing destinations. These boards determine marketing destinations, sometimes according to considerations of profitability but sometimes in accordance with fixed directives not necessarily designed to ensure maximum profits for the producer. This is the situation with regard to groundnuts, where all quantities of export standard are shipped abroad. But in respect of certain other commodities, relative prices directly or indirectly influence the division of output between the overseas and the local market. And indeed, these developments left their mark on exports in 1962/63. In contrast to the expansion of citrus sales, the foreign currency return on which soared by over 60 per cent, other direct agricultural exports declined by \$ 7 million, or 32 per cent. Most of the decrease occurred in exports not profitable to the economy (edible eggs). However, sales of some profitable or promising items—such as potatoes, groundnuts, and cotton—likewise declined. The contraction of egg and potato exports was due to the fall in their foreign prices during the autumn months. In several other vegetables, e.g. green peppers, sales fell off because of the rise in the local market price. In the case of groundnuts, the contraction of exports was caused by production cuts. The decline in cotton production was reflected *in toto* by the reduction of the quantity exported, though local market prices remained unchanged. The existence of a local price

¹ It should not be concluded from this that the market prices received by farmers would not have gone up at a different rate if subsidies had not been raised. In the case of several commodities the Government raised subsidy rates in lieu of allowing the price increases demanded by farmers. But if market prices had risen, there would almost certainly have been a certain contraction of the quantities consumed. Moreover, the Government had the alternative of keeping prices down without increasing subsidies (in respect of several commodities at least) by permitting imports. Consequently, it is impossible to establish the extent to which these were producer subsidies or consumer subsidies; most likely both the producer and the consumer benefited from them.

level higher than export prices has led to a situation where most of the commodities diverted to export are "surpluses" which cannot be marketed locally at the existing price level and therefore involve considerable difficulties in organizing a regular export. Production fluctuations are directly reflected by the quantities exported. Output earmarked from the start for export, and hence not affected by developments in the home market, is still very small, except for citrus.

The trends prevailing in 1962/63, particularly the increased profitability of producing for the local market, are fraught with a twofold danger: supplies for the local market may be expanded to an extent that would limit the effectiveness of administrative production controls, and the relative profitability of producing for export may decline. In respect of a large part of agricultural commodities, subsidies are linked to production or marketing quotas (this applies to eggs, milk, cotton, and vegetables), but the experience of recent years shows that when profitability is relatively high quotas tend to be enlarged more than the growth of demand would warrant.

Similarly, the year reviewed saw no significant adjustment in the structure of production with a view to achieving a more efficient utilization of resources, apart from the greater output and profitability of citrus. In the case of several commodities with a very high local currency return per dollar of value added or saved¹—e.g. milk, beef, and eggs—the producer prices were upped by a further 10 to 20 per cent mainly through the payment of larger subsidies. The producer price of beef, the local currency return on which in 1961/62 was high relative to the value saved, would have fallen in 1962/63 were it not for the fact that the subsidy rate was raised by some 60 per cent, thus doubling the total amount of the price support. Another contributory factor in these price developments was the prevention of import liberalization. To the extent that imports of agricultural products were allowed, their selling price was brought in line with that prevailing in the local market, and their volume was limited so as to safeguard the profitability of local production.²

In 1961/62 the output of all livestock products expanded more than the output of crops, though the prices of the former rose to a smaller extent than those of the latter. In 1962/63, however, the increase in the output of livestock products was less than that of crops, while crop prices went up faster than those of livestock products.

In contrast to 1961/62, output in the new settlements does not appear to have expanded much faster than in the older settlements. On the other hand, it seems that the employment and income situation continued to improve in

¹ This is equivalent to a high effective exchange rate.

² Imports of fresh meat were discontinued in 1961/62, though imports of frozen meat (on which a duty of about 100 per cent is levied) were increased in 1962/63. Imported butter, marketed in limited quantities, was sold to consumers at the same price as local butter, after the imposition of a duty of approximately 50 per cent. Imports of onions, permitted in order to keep prices in check during a certain period, were limited to 3,500 tons.

the new settlements, both in farming (mainly citrus—a large part of the young citrus groves belong to new settlements) and in nonfarm work. The policy of completing the consolidation of new settlements on the basis of nonagricultural occupations—especially in the hill areas—began to be implemented following the establishment of a special organizational framework for the purpose. However, progress in this sphere still falls far short of the requirements and of constituting a substitute for the expansion of unprofitable investments (from the general economic aspect) in livestock and orchards, which continued in 1962/63.

(b) *Agricultural planning*

The modest growth in agricultural output in 1962/63, particularly that for local marketing, was reflected by the slow rate of expansion in four of the most important types of farming—poultry, dairy, vegetables, and fruit—the output of which advanced more slowly than total agricultural output. As regards poultry and dairy farming, the low growth rate was not accompanied throughout most of the year by a rise in market prices, except for those of liquid dairy products, since the increase in total local supplies more or less matched the growth of local demand, either because exports were curtailed (eggs) or because imports were increased and local stocks reduced (meat and dairy products). Never before was there such a balanced expansion of supply and demand for these products.

There are several reasons for the slow expansion of output in these types of farming. All of them are subject to production quotas (including fruit, though here the controls are less stringent). These production curbs in poultry and dairy farming left a smaller margin for expansion in 1962/63 than in former years, even if the planned quotas were not to be exceeded. However, this alone does not provide an adequate explanation. As regards eggs, production invariably exceeded the planned quotas until July 1962, while during the first half of 1962/63 it was some 20 per cent below the target figure. In the case of milk, output exceeded the planned quota in 1961/62, but in the following year production was stabilized, as planned; however, this was due to the fact that while the moshavim (especially the older ones) failed to meet their quotas, the kibbutzim (again mainly the older ones) exceeded the quotas. The total quantity of vegetables marketed was about 10 per cent below the 1962/63 quota.¹

These deviations from the quotas demonstrate that the volume of production during the year or season is not necessarily determined by the quotas imposed, but are largely due to fluctuations in prices and the relative profitability of the commodities to the producer. The decline in the producer prices of eggs which began in 1960/61 failed to show any effect on the volume of production until

¹ These conclusions are based on the following sources: *Poultry Board News*, No. 51, December 1963; and the Report on Agriculture, presented to the Knesset by the Minister of Agriculture, January 1964, pp. 68, 69, and 104.

mid-1962. However, the continuation of the relatively low prices in 1961/62 and the rise in input prices following devaluation caused production to start falling off in the second half of 1961/62 and continue downward throughout most of 1962/63. The raising of prices for quota eggs in the first half of 1962/63 led to a reversal of the trend in the second half of the year. During the early months of 1963/64 egg supplies were some 10 per cent larger than during the corresponding period of the previous year, when their farm prices were slipping.

The producer price of milk rose by 10 per cent in 1960/61, thus stimulating the expansion of output in excess of the quotas in 1961/62,¹ despite the effort to liquidate part of the milch herds. However, profitability did not rise in 1961/62, and may even have fallen slightly after the devaluation. This caused a tendency to restrict production in 1962/63, which was particularly noticeable in the older moshavim. This trend was apparently reinforced by long-term considerations and social factors. The very imposition of quotas caused farmers to anticipate a decline in the relative long-term profitability of dairy farming, especially since small byres were prevented from expanding and enjoying the advantages of increased returns to scale and specialization, which today are regarded as appreciable. There also appears to have been a tendency to abandon livestock farming, including dairying, owing to the inflexible maintenance requirements which keep the farmer tied excessively to the farm. These factors exert considerable influence in established moshavim, which have alternative ways of exploiting their water quota and alternative sources of income. On the other hand, production was expanded in the older kibbutzim, since these social factors do not operate there owing to the organizational structure of the settlements, while long-term considerations are also different. It seems that the objective of these settlements was to ensure production quotas for themselves, in the hope that prices and profitability would go up. And indeed, the 10 per cent rise in producer prices in 1962/63 shows that these expectations were realized, and this may encourage the expansion of production in the future.

The stability of poultry-meat supplies in 1962/63, which did not accord with the plans, may also be explained by the decline in the prices and relative profitability of this commodity in the previous year, and perhaps by social factors too.

Supplies of vegetables contracted, as already mentioned, by some 10 per cent below the planned quotas, though economic factors should have led to an increase. For in 1961/62 there was a considerable rise in the producer prices of vegetables (except potatoes) following a very slow growth of output. However, the price advance took place during the winter months only, while in the spring and summer prices were lower than in 1960/61. The effect

¹ Planning in 1962/63 was based on quotas of milch cows, and in 1961/62 on milk marketing quotas.

Table XI-4

**TOTAL AGRICULTURAL OUTPUT, BY ECONOMIC DESTINATION,
1961/62 AND 1962/63**

| | Value at current prices | | Per cent increase or decrease (-) from 1961/62 to 1962/63 | | |
|---|-------------------------|----------------|---|-------------|--------------------|
| | 1961/62 ^a | 1962/63 | Value at current prices | Quantity | Price ^b |
| Output marketed | | | | | |
| For local consumption | | | | | |
| Direct marketing | 342.2 | 420.4 | 22.9 | 6.1 | 15.8 |
| Through industry ^c | 236.1 | 270.0 | 14.3 | 7.6 | 6.3 |
| Total | 578.3 | 690.4 | 19.4 | 6.7 | 11.9 |
| For export | | | | | |
| Direct marketing | 169.3 | 238.0 | 40.6 | 22.6 | 14.6 |
| Through industry ^c | 17.7 | 20.8 | 17.5 | 7.3 | 9.4 |
| Total | 187.0 | 258.8 | 38.4 | 21.2 | 14.2 |
| Total marketed output | 765.3 | 949.2 | 24.0 | 10.3 | 12.5 |
| Of which: Through industry | 253.8 | 290.8 | 14.6 | 7.6 | 6.5 |
| Output retained on the farm | | | | | |
| Own consumption | 61.4 | 68.6 | 11.7 | -2.1 | 13.4 |
| Capital goods ^d | 70.9 | 63.0 | -11.1 | -17.5 | 7.7 |
| Agricultural raw materials (intermediate goods) | 129.5 | 141.8 | 9.5 | -0.3 | 9.8 |
| Total | 261.8 | 273.4 | 4.4 | -5.4 | 10.2 |
| Total output | 1,027.1 | 1,222.6 | 19.0 | 6.3 | 12.0 |

^a Revised figures.

^b The price changes indicated for the economic destinations taken individually are unreliable, since the average change in the prices of all marketed produce has been imputed to many commodities for which separate data were not available.

^c All industrially processed commodities, including milk processed in dairies, meat processed in slaughterhouses, wine grapes, and industrial crops (including wheat, vegetables, and fruit). The estimate does not cover all agricultural output exported through industry, such as cotton spun into yarn or woven into textile products, owing to difficulties of measurement.

^d The rise in the value of orchards and livestock remaining on the farm, as well as investments in afforestation, soil conservation and reclamation, drainage, and irrigation networks laid by the farmers themselves.

SOURCE: Output in 1962/63 at 1961/62 prices—Central Bureau of Statistics and Bank of Israel; output prices in 1962/63—Central Bureau of Statistics.

of the price rise of 1961/62 was thus felt only during the winter of 1962/63, when supplies expanded markedly, surpluses were exported, and wholesale prices receded from the level of the previous winter. During the summer, on the other hand, supplies contracted and prices were higher than in 1961/62. The volume of output was thus determined mainly by the outlook for the coming season, taking into account the guaranteed prices and profitability during the previous season and the corresponding season the year before. A contributory factor was weather conditions.

The only instance where the moderate expansion was due exclusively to natural causes was fruit farming (except citrus). As a result of this, the down-trend in producer prices, which characterized the two previous years, was checked—temporarily it seems—in 1962/63.

It may therefore be concluded that in livestock farming fluctuations in profitability and long-run expectations have been the main factors determining the annual volume of output and the contribution of the various types of agricultural settlements thereto. As regards fruit and vegetables, there is an additional factor—weather conditions, the influence of which is very great. Administrative crop controls have had an indirect influence, mostly bearing on the long-range outlook, but they have proved incapable of actually governing the volume of output or its distribution as between the various types of farm settlements.

2. OUTPUT

(a) *Value of output*

The total farm value of agricultural output went up by 19 per cent in 1962/63, reaching IL 1,223 million; this followed an advance of 12 per cent in 1961/62 and an average annual rise of 10.7 per cent during the years 1959/60 to 1961/62. About two-thirds of the increment stemmed from a 12 per cent rise in producer prices, while a fifth, or some 2 per cent of the total value, reflected increases in output subsidies. The average increase in producer prices during 1961/62 came to only some 5 per cent, of which one-third was due to higher subsidies.

(b) *Destination of output*

Over 90 per cent of the growth in the value of output, which totalled nearly IL 200 million, was due to larger receipts from farm marketings (see Table XI-4); over half of the latter increment stemmed from price increases. Exports accounted for about one-third of the additional proceeds, a larger share than in 1961/62.

The real increase in total output was slower during the year reviewed than in 1961/62, owing to the contraction of output consumed on the farm (especially of capital goods) by approximately 5 per cent. However, marketed output advanced somewhat more rapidly than in 1961/62—by 10 per cent

as against 9 per cent. This expansion occurred in exports (citrus fruit only), whereas the rise in local sales was below the 1961/62 rate. The slowdown in local marketing took place in sales for direct consumption, whereas those to industry went up more rapidly than in 1961/62.

The outstanding price development in 1962/63 was an average rise of some 16 per cent in prices of products marketed directly for local consumption, as compared with a 2 per cent decline the year before. This was the decisive factor changing the average prices of all marketed produce, which moved up by approximately 13 per cent as against only some 4 per cent in 1961/62. The prices of produce retained on the farm also advanced more rapidly in 1962/63 than in the previous year—10 per cent as against 7 per cent.

Table XI-5
CURRENT AGRICULTURAL OUTPUT,* BY TYPE OF FARMING,
1961/62 AND 1962/63
(IL million)

| | Value at current prices | | Per cent increase or decrease (-) from 1961/62 to 1962/63 | | |
|----------------------------------|-------------------------|----------------|--|-------------|-------------|
| | 1961/1962 | 1962/63 | Value at current prices | Quantity | Price |
| Livestock | | | | | |
| Poultry farming | 216.7 | 242.0 | 11.7 | -3.9 | 16.2 |
| Cattle farming | 158.8 | 190.5 | 20.0 | 13.2 | 6.0 |
| Other livestock | 67.5 | 74.8 | 10.8 | — | 10.8 |
| Total | 443.0 | 507.3 | 14.5 | 2.8 | 11.4 |
| Crops | | | | | |
| Fruit | 249.4 | 363.4 | 45.7 | 27.1 | 14.6 |
| Vegetables | 82.4 | 101.6 | 23.3 | 4.5 | 18.0 |
| Field crops and miscellaneous | 181.4 | 187.0 | 3.1 | -3.6 | 6.9 |
| Total | 513.2 | 652.0 | 27.0 | 12.6 | 12.8 |
| Total current output | 956.2 | 1,159.3 | 21.2 | 8.1 | 12.2 |

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

SOURCE: Central Bureau of Statistics.

(c) *Output, by type of farming*

Current output (see Table XI-5) expanded at a slightly higher rate than in 1961/62 in real terms, but output prices went up three times as fast during

the year reviewed, so that the increase in the farm value was double the 1961/62 rate.

The largest quantitative growth was in crop output, especially fruit (owing to the excellent citrus yield), whereas in 1961/62 livestock and crops advanced at a similar rate.

Output of poultry products was down 4 per cent, owing to a decrease of approximately 4 per cent in egg production. Cattle farming showed an appreciable rise, thanks to a growth of nearly 40 per cent in meat production; milk output remained at the same level as in the previous year because of the production controls in force. The rise in the producer prices of poultry products, which was due to the larger subsidies paid and the contraction of egg exports, included both eggs (20 per cent) and poultry meat (12 per cent). In cattle farming only milk prices went up, following the raising of subsidies, the larger proportion of output marketed for drinking, and the higher market prices obtained for liquid dairy produce.

Price supports on poultry products were upped some 10 per cent in 1962/63. There was a relatively big increase of 13 per cent in egg subsidies despite the contraction of output. The rise in the average subsidy per egg thus exceeded 23 per cent. In the case of quota eggs the average subsidy was some 30 per cent higher. Price supports for cattle farming were enlarged by IL 10 million, or approximately 50 per cent. The subsidy rate on milk was raised by 34 per cent, while the total subsidy on beef was more than doubled following the setting of a guaranteed price. This increase stemmed from a rise of more than 60 per cent in the subsidy rates, which averaged IL 0.14 per kilogram, or about 6 per cent of the producer price.

Table XI-6

CITRUS OUTPUT, BY ECONOMIC DESTINATION, 1962/63

| Destination | Quantity '000 tons | Value at current prices IL m. | Per cent increase or decrease (-) from 1961/62 to 1962/63 | | |
|-------------------|-----------------------|--|--|----------|-------|
| | | | Value at current prices | Quantity | Price |
| Direct exports | 504.8 | 201.0 | 68.3 | 46.6 | 14.9 |
| Industry | 119.2 | 9.5 | 41.8 | 31.3 | 8.0 |
| Local consumption | 112.3 | 21.6 | 16.8 | 16.8 | 0.0 |
| Total | 736.3 | 232.1 | 60.5 | 42.0 | 13.0 |

SOURCE: Central Bureau of Statistics.

Fruit: Most of the big increase in fruit output was accounted for by citrus, which showed a real gain of some 40 per cent over the previous year. The quantity diverted to export expanded to an even greater extent, and the prices fetched abroad were approximately 11 per cent higher than in 1961/62. Since part of the export in 1961/62 was executed before the devaluation, the average increase in the local currency return in 1962/63 came to more than 15 per cent. The price of citrus diverted to industry also exceeded the previous year's figure. On the other hand, there was no increase in the producer prices of citrus marketed for direct local consumption, despite a IL 1 million subsidy.

The olive crop was more than four times as large as in 1961/62; this is attributable to cyclical fluctuations due to natural factors.

As regards other fruit, quantities produced showed no gain. The output of grapes was down almost 20 per cent and their prices up by some 28 per cent. There was a growth of nearly 20 per cent in the output of apples, but a decline in most other deciduous fruit owing to weather conditions. The average producer price of deciduous fruit moved up 24 per cent, after having receded in earlier years.

Vegetables: The output of vegetables and potatoes was 4.5 per cent higher during the year reviewed; all of the increment was accounted for by the former, whereas the potato output was somewhat smaller than in 1961/62. Other vegetables advanced 6 per cent. The increase in vegetable production took place entirely during the winter season, following an appreciable climb in vegetable prices throughout most of the autumn and winter of 1961/62 and the introduction of price guarantees for 1962/63. This applies particularly to the principal vegetable—tomatoes. In the spring and summer tomato supplies contracted, partly on account of weather conditions, but mainly because prices fell steeply during the summer of 1961/62 as compared with 1960/61. The raising of the guaranteed prices failed to prevent production cutbacks, as is reflected by the smaller area under tomatoes during the season reviewed. Despite the curtailment of quantities during the second half of 1962/63, large “surpluses”—which during four of the six months concerned exceeded those in the corresponding period of 1961/62—were withdrawn from the market. This helped to raise the average market price. On the other hand, the quantity of “surplus” cucumbers and some other vegetables taken off the market was reduced. The total quantity withdrawn came to more than 10 per cent of the quantity marketed, but was slightly smaller than in 1961/62. Following the raising of guaranteed prices, a change in the seasonal composition of the “surpluses”, and the granting of special subsidies in order to reduce prices, the volume of subsidies totalled some IL 13 million, almost three times higher than the previous year's figure. Since the quantities offered for sale increased only slightly, the average subsidy rate was over 2½ times higher than in 1961/62.

Field crops: The output of field crops contracted by some 4 per cent as compared with 1961/62. Most of the decrease occurred in unirrigated crops, partly because of the drought, but mainly because the area sown with grains was reduced by more than 100,000 dunams in regions frequently hit by drought. However, there was a significant decline in other crops as well. The tobacco crop was almost entirely lost because of pests, and the Government granted the growers IL 0.6 million as compensation, on top of some IL 1 million in output subsidies. The cotton crop was 17 per cent smaller than in 1961/62, owing to the reduction of the cultivated area by 33,000 dunams, part of them irrigated. This decline was apparently due chiefly to the lower relative profitability of cotton as compared with other irrigated crops such as hay, sorghum, and fruit (especially citrus). The average cotton subsidy went up by about 28 per cent, following the raising of the rate from IL 0.6 to IL 0.77 per kilogram of fiber.

There was a substantial expansion of 11 per cent in the sugar beet crop in 1962/63, though acreage was slightly reduced. The producer price advanced by approximately 5 per cent.

Fisheries: The total fish haul expanded by about 2 per cent in real terms. The yield from the Mediterranean, Red Sea, and Eilat fishing grounds was smaller

Table XI-7^a

OUTPUT OF AGRICULTURAL CAPITAL GOODS,^b 1961/62 AND 1962/63
(IL million)

| | Value at current prices | | Per cent increase or decrease (-) from 1961/62 to 1962/63 | | |
|---|-------------------------|---------|--|----------|-------|
| | 1961/62 | 1962/63 | Value at current prices | Quantity | Price |
| Livestock | | | | | |
| Poultry | -0.6 | 0 | — | — | — |
| Cattle | 9.1 | 0 | -100.0 | -100.0 | — |
| Other livestock | 0.5 | 0 | -100.0 | -100.0 | — |
| Total livestock | 9.0 | 0 | -100.0 | -100.0 | — |
| Orchards | 35.3 | 35.6 | 0.8 | -6.5 | 8.0 |
| Other capital goods | | | | | |
| Afforestation, drainage, land reclamation and conservation, etc. | 26.6 | 27.4 | 3.0 | -4.1 | 7.5 |
| Total | 70.9 | 63.0 | -11.2 | -17.6 | 7.8 |

^a See note to Table XI-12.

^b The enhancement in the value of livestock, orchards, and other production assets originating in agriculture.

SOURCE: Central Bureau of Statistics.

than in the previous year, but that caught in more distant seas (including tuna) was more than 50 per cent bigger than in 1961/62. Other types of fishery showed a moderate rise of 4 to 7 per cent. These changes were due to fluctuations in the operation of fishing boats, motivated primarily by profitability considerations. Subsidies on fishery production were doubled as compared with 1961/62, reaching IL 0.6 million. The producer prices of fish rose by an average of 17 per cent in the wake of these developments.

The biggest contribution to the incremental value of agricultural output was made by citrus: it accounted for more than half the total output increment, of which some 50 per cent (i.e. about a quarter of the total rise in the value of output) was due to higher prices. After fruit came livestock, which was responsible for about a quarter of the total growth, with cattle and poultry farming contributing in equal parts. Almost the entire increase in these types of farming can be attributed to the rise in prices.

3. INPUT

(a) *Changes in inputs*

The real rise in the total input of raw materials and services (excluding labor, interest, and land) amounted to 2.6 per cent in 1962/63 (see Table XI-8). This was smaller than in either of the two preceding years. The labor input declined by an estimated 2 per cent¹—all of it in the labor of farm owners and unpaid family members, which decreased by an estimated 8 per cent. On the other hand, the input of hired labor went up by about 8 per cent, mainly in citriculture. Since the number of hired farm hands dropped by some 2 per cent, the increase in the average number of man-days worked per wage earner came to 10 per cent. The decrease in the number of farm owners and family members is estimated at nearly 3 per cent, and the number of man-days worked per gainfully employed person in this category fell by some 5 per cent. The decline in the number of gainfully employed and man-days occurred mainly in the non-Jewish sector, but partly in kibbutzim.²

(b) *Productivity*

Taking into consideration the real expansion of the net capital stock, the productivity of the factors of production—as expressed by the ratio between the real product and primary production factors (i.e. labor and capital)—rose

¹ Measured on the basis of the estimated number of standard 8-hour working days required by agriculture at the existing level and structure of production (for details of the calculation, see the Appendix to the Bank of Israel Annual Report for 1960 and the Appendix to this Report—in Hebrew only).

² The data on the number of gainfully employed and their composition are based on the above estimate of the labor input, adjusted to data of the Central Bureau of Statistics' man-power surveys.

Table XI-8

**INPUT OF MATERIALS AND SERVICES^a IN AGRICULTURE,
BY SOURCE, 1961/62 AND 1962/63**

(IL million)

| Source | Value at current prices | | Per cent increase or decrease (-) from 1961/62 to 1962/63 | | |
|--|-------------------------|----------------------|---|-------------|------------|
| | 1961/62 | 1962/63 ^b | Value at current prices | Quantity | Price |
| Purchases from other sectors | | | | | |
| Fodder | 148.6 | 167.6 | 12.8 | 0.3 | 12.4 |
| Fertilizers | 21.2 | 22.8 | 7.6 | -11.8 | 21.9 |
| Seeds | 4.7 | 4.9 | 4.3 | -11.8 | 19.3 |
| Pesticides and veterinary preparations | 17.1 | 17.3 | 1.2 | -9.4 | 8.1 |
| Water | 42.5 | 45.2 | 6.3 | 2.1 | 4.1 |
| Packing materials | 33.6 | 43.1 | 28.3 | 28.0 | 0.2 |
| Transportation | 20.8 | 23.8 | 14.4 | 5.8 | 8.2 |
| Spare parts, repairs, and small tools | 21.0 | 23.2 | 10.5 | -0.0 | 11.0 |
| Fuel and electricity | 11.5 | 12.7 | 10.4 | 8.7 | 1.6 |
| Services | 8.1 | 9.5 | 17.3 | 9.9 | 6.7 |
| Taxes | 14.6 | 16.2 | 11.3 | 9.9 | 1.3 |
| Pipes and irrigation equipment | 0.9 | 1.0 | 11.1 | 2.8 | 8.0 |
| Miscellaneous | 3.4 | 3.6 | 5.8 | — | 5.8 |
| Total | 348.0 | 390.9 | 12.3 | 3.2 | 8.9 |
| Intermediate goods | 129.5 | 141.8 | 9.5 | -0.3 | 9.8 |
| Depreciation^c | 63.2 | 71.3 | 12.8 | 4.1 | 8.3 |
| Total input | 540.7 | 604.0 | 11.6 | 2.6 | 8.8 |

^a Total input, exclusive of labor, interest, and rent.^b Revised figures.^c Calculated on the basis of replacement value.

SOURCE: Central Bureau of Statistics.

by an estimated 9.8 per cent. Total productivity, expressed by the ratio between total output and total input, advanced 4.6 per cent.¹ Part of the gain is actually attributable to changes in the composition of output in 1962/63, especially the bigger weight of citrus where the product component is much higher than average. Nature conditions likewise contributed to the increase, while changes in

¹ The increases in the capital and labor inputs were weighted according to their imputed share of income originating in agriculture in 1961/62 (for details of the calculation, see the Appendix to this Report—in Hebrew only).

productivity in the various types of farming accounted for only a small percentage of the total.

The data indicate a rising productivity trend in respect of the purchased input in livestock farming, since the input of fodder, including intermediate goods, did not increase while output went up by 2.8 per cent. This development too may be largely explained by structural changes in the various types of farming, which raised the proportion of commodities with a higher product component. There may also have been a certain increase in the capital input component (depreciation).

The purchased input data for crop farming likewise suggest a rise in productivity, expressed in a steep decline in fertilizer consumption and purchases of spare parts, despite the expansion of crop output and the extension of the irrigated area by over 4 per cent. The smaller input of fertilizer and spare parts may have been partly due to the reduction of the unirrigated area under cultivation (see Table XI-10). But there can be no certainty that these were not fortuitous developments which will not be sustained in the future. For there is a constant increase in capital assets—machinery, equipment, and farm buildings—which is reflected *inter alia* in a rise in depreciation and in expenditure on repairs and spare parts.

The water input increased more slowly than the irrigated area; the input of water per dunam declined from 805 cubic meters to 787, i.e. by some 2 per cent (see Table XI-9). The limited quantities of water available constitute, at present prices, a factor limiting the extension of the irrigated area. However, it apparently does not entirely prevent its expansion, for the irrigated area has been enlarged by some 26 per cent since 1957/58, while the quantity of water consumed by agriculture in 1962/63 was only 16 per cent greater than in 1957/58. There are no signs that the lower amount of water used per dunam caused any significant decrease in yields in 1962/63 (though such a development would not necessarily be undesirable from the economic standpoint). On the contrary, yields continued to rise. The change in the utilization of the irrigated area—the increased weight of fruit and the reduced weight of field crops and vegetables—also contributed somewhat to the decrease in the average quantity of water consumed, despite the big expansion of citriculture. The limited water supply has certainly not prevented the expansion of agricultural product and output, which since 1957/58 have advanced by 68 and 50 per cent respectively. The explanation is to be found in the fact that for a growing proportion of the output, especially livestock, there is a certain degree of elasticity in its dependence on water. In dairying it is possible, to some extent, to provide a substitute for water by feeding cattle with concentrated fodder instead of roughage; the output of poultry farming is hardly dependent on water at all. To these factors must be added the changed composition of irrigated crops and the more efficient use of water. The rationing of water often directly contri-

Table XI-9
WATER INPUT IN AGRICULTURE, 1956/57 TO 1963/64

| | Unit | 1956/57 | 1957/58 | 1958/59 | 1959/60 | 1960/61 | 1961/62 | 1962/63 |
|---|----------------------------|---------|---------|---------|---------|---------|---------|--------------------|
| Irrigated area | Thousands of dunams | 1,100 | 1,185 | 1,230 | 1,300 | 1,360 | 1,415 | 1,477 |
| Quantity of water | Millions of m ³ | 830 | 1,000 | 990 | 1,060 | 1,025 | 1,139 | 1,163 ^a |
| Quantity of water per dunam of irrigated area | M ³ | 755 | 844 | 805 | 815 | 734 | 805 | 787 |
| | Index | 100 | 112 | 107 | 108 | 100 | 107 | 104 |
| Rainy (+) or dry (-) year | | + | - | - | - | + | - | - |

^a Provisional estimate.

SOURCE: Central Bureau of Statistics.

butes to its more efficient use in agriculture, while the schedule of water rates now in force contributes little to the encouragement of this process. The quantity of water diverted to agriculture has risen at a slightly higher rate

Table XI-10
CULTIVATED AREA, 1962/63

| | Thousands of dunams | Per cent of total cultivated area | Per cent increase or decrease (-) | |
|------------------------------|---------------------|-----------------------------------|-----------------------------------|--------------------|
| | | | As against 1957/58 | As against 1961/62 |
| Unirrigated land | | | | |
| Field crops | 2,144 | 54.0 | -10.0 | -5.4 |
| Vegetables and potatoes | 19 | 0.5 | 11.8 | -5.0 |
| Fruit | 227 | 5.7 | -3.4 | -1.4 |
| Miscellaneous | 104 | 2.6 | -14.8 | 4.0 |
| Total | 2,494 | 62.8 | -9.5 | -4.6 |
| Irrigated land | | | | |
| Citrus | 378 | 9.5 | 45.4 | 3.6 |
| Other fruit | 195 | 4.9 | 44.4 | 4.3 |
| Field crops | 532 | 13.4 | 13.2 | 2.1 |
| Vegetables and potatoes | 226 | 5.7 | 22.8 | 9.7 |
| Fish ponds | 58 | 1.5 | 34.9 | 3.6 |
| Miscellaneous | 88 | 2.2 | 12.8 | 3.5 |
| Total | 1,477 | 37.2 | 26.2 | 4.4 |
| Total cultivated area | 3,971 | 100.0 | 21.2 | -1.5 |

SOURCE: Central Bureau of Statistics.

than the total water supply, since there has been a slight drop in the amount consumed for nonfarm purposes following the institution of water rationing, the billing of consumers for the actual quantity used, and the raising of the marginal price. The basic problem of Israel's water economy is the shortage of water at existing prices and consumption habits, and this problem will not be solved even when the National Water Carrier comes into operation in 1963/64, as most of the additional water will compensate for the overexploitation of underground sources in several areas and meet the growth in demand resulting from the maturing of young orchards.

Outlay on packing materials rose conspicuously, chiefly because of the bigger output of citrus. But the use of packing materials for other commodities has also been expanding fairly rapidly owing to the improvement of marketing standards.

(c) *Prices*

The level of material and service input prices was on the average 9 per cent higher in 1962/63 than in 1961/62. Most of the increase took place during the second half of 1961/62, following the devaluation. Especially affected were the prices of fodder, spare parts, and repairs, which rose by 11 to 12 per cent, and the prices of fertilizers and imported seeds, up some 20 per cent. There were slower increases in the prices of water, packing materials, electricity, fuel, and taxes.

4. INCOMES

(a) *Aggregate farm income*

Income originating in agriculture totalled IL 620 million in 1962/63—a growth of IL 132 million, or some 27 per cent, over 1961/62; this compares with a rise of IL 35 million, or 8 per cent, in the previous year and the stability marking the years 1958/59 and 1959/60. More than half of the increment in 1962/63 was due to changes in output and input prices. There was an increase of some IL 5 million in drought compensation payments, so that aggregate farm income went up by IL 137 million, or 28 per cent, reaching IL 631 million.

Price supports were enlarged by IL 31.8 million, or 39.7 per cent, and totalled IL 112 million. This represented 17.7 per cent of aggregate farm income in 1962/63, as against 16.2 per cent the preceding year.

(b) *Factor shares of income*

Following a rise of 8.5 per cent in average hourly wages paid in agriculture and an 8 per cent increase in the number of man-days worked by hired hands, the farm wage bill went up by 17.5 per cent, reaching IL 130 million.

Table XI-11

SUBSIDIES TO AGRICULTURE, 1961/62 AND 1962/63
(IL million)

| Item | 1961/62 | 1962/63 | Per cent increase or decrease (-) ^a | | |
|---|------------------|--------------|--|-----------------|----------------------------|
| | | | Subsidies | Physical output | Subsidy per unit of output |
| Eggs | 17.8 | 20.2 | 12.9 | -8.5 | 23.4 |
| Poultry | 4.3 | 4.6 | 7.5 | 0.9 | 6.5 |
| Cow's milk | 20.1 | 26.6 | 32.3 | -0.2 | 34.1 |
| Beef | 1.9 | 4.3 | 122.1 | 37.6 | 61.4 |
| Ewe's milk | 0.1 | 0.2 | 73.9 | 0.2 | 73.9 |
| Cotton | 10.0 | 10.6 | 6.0 | -7.0 | 27.7 |
| Vegetables and potatoes | 4.8 | 13.0 | 170.8 | 2.4 | 164.3 |
| Groundnuts | 0.7 | 0.4 | -42.9 | 4.8 | -45.5 |
| Fruit (other than citrus) | 0.8 | 1.8 | 138.1 | 7.7 | 121.0 |
| Fish | 0.3 | 0.6 | 71.4 | 1.0 | 70.0 |
| Tobacco | 0.3 | 1.6 | | | |
| Oranges (Valencia) | 0 | 1.0 | | | |
| Subsidies by the Jewish Agency Settlement Dept. | 2.6 | 1.6 | | | |
| Total subsidies on output | 63.7 | 86.5 | 36.0 | -3.7 | 41.2 |
| Drought compensation | 8.0 | 12.7 | 43.7 | | |
| Fertilizer and water | 6.9 | 5.7 | -17.4 | | |
| Fodder | 1.5 ^b | 7.0 | 366.5 | | |
| Total subsidies | 80.1 | 111.9 | 39.7 | | |

^a Calculated on the basis of unrounded figures.

^b Excluding the value of exemptions from the surtax levied on stocks existing on the day of the devaluation.

SOURCE: Ministry of Agriculture, Jewish Agency, Central Bureau of Statistics, and Accountant General's Office.

Data on interest and rent payments show an increase of some IL 3 million, or 11 per cent, as compared with 1961/62. This was apparently due in part to a rise in interest rates, resulting mainly from the introduction of a premium of 3 per cent per annum in lieu of value-linking new long-term loans.

Net of these expenditures, the income of farm owners went up by some IL 114 million, or about 33 per cent, reaching IL 465 million. Taking into account the changes in the number of man-days invested by farmers and members of their families, this figure represents a gain of 44 per cent in income per man-

day worked in agriculture, and of 36 per cent in income per gainfully employed farm owner or family member.¹

Owing to lack of data, it is impossible to determine how the additional income breaks down as between the different types of farming or between the main types of agricultural settlements. But according to citrus marketing data it appears that approximately half of the farm owners' incremental earnings originated in citrus growing. The share of those marketing their produce through Tnuva-Export Ltd. (mainly moshavim and kibbutzim) came to about 30 per cent of total citrus marketing in 1962/63, while their share of the incremental marketing receipts—which totalled some IL 90 million—was nearly 40 per cent.

5. CAPITAL AND FINANCING

(a) *Investment in agriculture*

Total investment in farms and public development projects in the agricultural sector showed a real decrease of some 3 per cent, following an advance of about 7 per cent in 1961/62 (see Table XI-12). As in 1961/62, the decline affected only investment in farms, while that in public development projects was expanded, although at a slower rate than in 1961/62.

The only increase was in investment in water projects and irrigation networks, in preparation for the opening of the National Water Carrier in 1963/64. All other items were below the previous year's figure. The biggest drop was in livestock, where new investment was virtually nil. Investment in farm buildings, equipment, and other assets was off from 10 to 18 per cent in real terms; that in new plantations likewise contracted.

Investment prices moved up 6.4 per cent. Except for livestock prices, which remained stable, those of most investment items rose at rates ranging from 5.2 to 8.7 per cent. Wage increases were responsible for a considerable proportion of this rise.

(b) *Capital stock*

Despite the downtrend in the volume of investment in farms, it still exceeded depreciation, so that the stock of capital assets net of depreciation rose by approximately 3 per cent, as compared with 4 per cent in 1962 (see Table XI-13). Current inventories of raw materials and goods in process expanded by an estimated 9 per cent, and fixed assets by 2 per cent. As regards the latter, the only increase was in equipment, machinery, and orchards, while farm buildings, irrigation installations, and livestock showed little change. In recent years there has been a tendency to invest extensively in buildings and auxiliary installations on a regional basis and on an industrial and commercial pattern.

¹ These data are not completely reliable, but the orders of magnitude are statistically significant.

Table XI-12
ESTIMATED GROSS INVESTMENT IN AGRICULTURE,
1961/62 AND 1962/63
 (IL million)

| | Value at current prices | | Per cent increase or decrease (-) from 1961/62 to 1962/63 | | |
|---|-------------------------|---------|---|----------|-------|
| | 1961/62 | 1962/63 | Value | Quantity | Price |
| Investment in farms | | | | | |
| Orchards | 34.9 | 36.3 | 4.0 | -3.7 | 8.0 |
| Installation of irrigation networks | 12.3 | 14.0 | 13.8 | 8.1 | 5.2 |
| Livestock and farm buildings | 28.1 | 17.4 | -32.1 | -41.3 | 5.4 |
| Livestock | 9.6 | 0.3 | -96.1 | -96.1 | — |
| Farm buildings | 18.5 | 17.1 | 7.6 | -18.4 | 5.6 |
| Equipment and other investments | 43.2 | 42.3 | -2.1 | -10.0 | 8.7 |
| Total | 118.5 | 110.0 | -9.3 | -13.7 | 7.5 |
| Investment in public development projects | | | | | |
| Water projects and drainage | 112.6 | 128.4 | 14.0 | 8.3 | 5.3 |
| Afforestation, land reclamation and conservation, natural pasture | 24.7 | 26.1 | 5.7 | -1.6 | 7.4 |
| Total | 137.3 | 154.5 | 12.5 | 6.5 | 5.7 |
| Grand total | 255.8 | 264.5 | 3.4 | -2.9 | 6.4 |

NOTE: The figures in this table do not tally with those in Table XI-7 owing to the use of different sources.

SOURCE: Central Bureau of Statistics.

The developments in the net stock of capital assets do not fully reflect the changes in productive capacity, since the value of assets discarded is less than the amount charged to depreciation, owing to the low age of the assets. The gross stock of capital assets, net of discards, grew by 4.6 per cent in 1963 as against 5.8 per cent in 1962. In both years the weight of machinery went up, owing to a rise in investment prices—by 6.9 per cent in 1963 and 8 per cent in 1962. The increase in the net stock of capital assets is estimated at 10.2 per cent in 1963, as against 12 per cent in 1962.

(c) *Institutional financing*

The amount owed by the agricultural sector to financing institutions rose during 1963 by IL 97 million, or about 8 per cent (see Table XI-14). The

Table XI-13

STOCK OF CAPITAL ASSETS* IN AGRICULTURE, 1961-63

| | Net stock of capital assets | | | | | | | | | Gross stock of capital assets | | |
|---|-------------------------------|---------|---------|--------------------------------------|----------|-------|-------------------------------|----------|-------|-------------------------------|---|------|
| | IL million, at current prices | | | Per cent increase over previous year | | | | | | IL m. at current prices | Per cent real increase over previous year | |
| | | | | 1962 | | | 1963 | | | | 1963 | 1962 |
| | 1961 | 1962 | 1963 | Value at current prices | Quantity | Price | Value at current prices | Quantity | Price | | | |
| Fixed assets | | | | | | | | | | | | |
| Orchards | 412.1 | 464.4 | 516.7 | 12.7 | 2.8 | 9.6 | 11.3 | 3.0 | 8.0 | 699.4 | 5.2 | 5.5 |
| Farm buildings, irrigation networks, and local water projects | 390.8 | 431.8 | 457.1 | 10.5 | 1.2 | 9.1 | 5.9 | 0.5 | 5.3 | 696.4 | 4.9 | 4.2 |
| Machinery and equipment | 114.2 | 145.4 | 167.8 | 27.3 | 7.7 | 18.3 | 15.4 | 6.2 | 8.7 | 278.8 | 9.2 | 6.7 |
| Livestock | 222.6 | 235.6 | 235.9 | 5.8 | 5.8 | 0 | 0.1 | 0.1 | 0 | 235.9 | 5.8 | 0.1 |
| Total | 1,139.7 | 1,277.2 | 1,377.5 | 12.1 | 3.4 | 8.5 | 7.9 | 2.0 | 5.7 | 1,910.5 | 5.7 | 4.1 |
| Current assets | | | | | | | | | | | | |
| Current inventories | 212.7 | 237.9 | 292.3 | 11.8 | 6.7 | 4.8 | 22.9 | 9.0 | 12.7 | 292.3 | 6.6 | 9.0 |
| Grand total | 1,352.4 | 1,515.1 | 1,669.8 | 12.0 | 3.9 | 7.9 | 10.2 | 2.7 | 6.9 | 2,202.8 | 5.8 | 4.6 |

* Excluding land and financial assets (cash and deposits, rights, receivables, etc.).

SOURCE: Fixed assets—A.L. Gaathon, *Capital Stock, Employment and Output in Israel, 1950-1959* (data brought up to date).

Current inventories—For 1962: M. Hayat, *Estimated Current Capital Stock and Demand for Working Capital in Israeli Agriculture in 1963/64*, Ministry of Agriculture, November 1963 (to be published).

For 1961 and 1963: Bank of Israel calculations.

OUTSTANDING INSTITUTIONAL FARM DEBT, 1961-63

| Description | 1961 | 1962 | 1963 | | Increase or decrease (-) as against preceding year | | | | |
|--|----------------|----------------|-----------------------------|-----------------------------|--|------------|------------------------------------|------------|--|
| | | | Excl. linkage differentials | Incl. linkage differentials | 1962 | | 1963 (excl. linkage differentials) | | |
| | | | | | IL m. | % | IL m. | % | |
| Long-term^a | | | | | | | | | |
| To the Jewish Agency ^b | 676.5 | 744.3 | 815.3 | 815.3 | 67.8 | 10.0 | 71.0 | 9.5 | |
| To financial institutions ^c | 199.2 | 199.3 | 207.9 | .. | 0.1 | 0.0 | 8.6 | 4.3 | |
| Of which: | | | | | | | | | |
| To Israel Bank of Agriculture | 139.0 | 138.4 | 143.1 | 161.3 | -0.6 | -0.4 | 4.7 | 3.4 | |
| Of which: Development budget loans | 108.3 | 111.0 | 126.3 | .. | 2.7 | 2.5 | 15.3 | 13.8 | |
| To agricultural funds and agricultural financial institutions ^d | 56.4 | 58.9 | 59.7 | .. | 2.5 | 4.4 | 0.8 | 1.4 | |
| To other financial institutions | 3.8 | 2.0 | 5.1 | .. | -1.8 | -47.4 | 3.1 | 155.0 | |
| To banks—from Government deposits | 10.6 | 49.0 | 49.1 | 49.2 | ° | ° | 0.1 | 0.2 | |
| To other institutions ^f | 22.6 | 14.4 | 16.2 | .. | -8.2 | -36.3 | 1.8 | 12.5 | |
| Short-term^e | | | | | | | | | |
| To banks—from their own resources | 152.1 | 169.0 | 165.5 | 168.0 | 16.9 | 11.1 | -3.5 | -2.2 | |
| To banks—from Government deposits | 11.8 | 11.1 | 9.4 | 9.4 | -0.7 | -5.9 | -1.7 | -15.3 | |
| Total institutional debt | 1,072.8 | 1,187.1 | 1,263.4 | 1,284.2 | 75.9 | 7.1 | 76.3 | 6.4 | |

^a Including some short-term credit which cannot be separated because of insufficient data.

^b Assets of the Settlement Department of the Jewish Agency in the agricultural sector (loans and investments of the Jewish Agency, net of its direct investments). A large part of this sum does not constitute an actual liability, but is a potential debt pending the signing of contracts with the settlers for the consolidation of their farms.

^c As defined in Chapter XVII.

^d Some of the financial resources of these institutions (especially the funds of the settlement movements) constitute equity capital of the agricultural sector. This sum has not been deducted from the balance of these institutions' liabilities to agriculture.

^e The increase in liabilities in 1962 was not due to additional credit, but to the fact that the Government transferred some of its farm loans to the banks for collection.

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

^g Including some medium- and long-term credit which cannot be separated because of insufficient data.

SOURCE: For the Jewish Agency—reports of the Jewish Agency and the Zionist Organization.

For financial institutions—Chapter XVII, "Financial Institutions".

For other items—Bank of Israel (for details, see Appendix to this Report—in Hebrew only).

Table XI-15

OUTSTANDING BALANCE OF BANK CREDIT TO AGRICULTURE, 1962-63
(IL million)

| | 1962 ^a | | 1963 | | Increase or decrease (-) in 1963 | | | |
|--|-------------------|--|-------------------|-----------------------------|-------------------------------------|-------|-------------------|-------|
| | End of year | An- nual aver- age ^b | End of year | An- nual aver- age | End of year | | Annual average | |
| | | | | | IL m. | % | IL m. | % |
| Directed credit^c | | | | | | | | |
| From banks' own resources and Bank of Israel rediscounts | 98.2 | 83.0 | 86.9 | 78.6 | -11.3 | -11.5 | -4.4 | -5.5 |
| From Government deposits and from the Israel Bank of Agriculture | 9.4 | 10.2 | 9.7 | 9.9 | 0.3 | 3.2 | -0.3 | -2.9 |
| Total directed credit | 107.6 | 93.2 | 96.6 | 88.5 | -11.0 | -10.3 | -4.7 | -5.0 |
| Nondirected credit | | | | | | | | |
| From banks' own resources | 70.8 | 75.3 | 78.6 ^d | 74.1 | 7.8 | 11.0 | -1.2 | -1.6 |
| From Government deposits ^e | 49.0 | 21.8 | 49.1 | 46.2 | 0.1 | 0.2 | 24.4 | 111.9 |
| Total credit to agriculture | 227.4 | 190.3 | 224.3 | 208.8 | -3.1 | -1.4 | 18.5 | 9.7 |
| Total, less credit from Government deposits ^f | 169.0 | 158.3 | 165.5 | 152.7 | -3.5 | -2.1 | -5.6 | -3.5 |

^a Revised figures.

^b In respect of nondirected credit, the annual average is computed on the basis of quarterly balances, and for directed credit on the basis of monthly balances. The annual average is based on the amount of directed credit approved, while end-year balances are based on reports received from the banks; consequently, the annual average has an upward bias.

^c Credit within the framework of exemptions from liquidity requirements and Bank of Israel rediscounts, credit from Government deposits for working capital requirements, and from the Israel Bank of Agriculture. This definition of directed credit differs from that employed elsewhere in this Report.

^d Excluding IL 3.0 million in linkage differentials.

^e Excluding linkage differentials. At the end of 1962 a relatively large amount of liabilities owed by agriculture to the Government was transferred to the banks for collection. This does not constitute additional credit to agriculture during that year.

^f Excluding credit from Government deposits for the payment of income tax debts; this totalled IL 3.0 million in 1962 and IL 1.3 million in 1963.

SOURCE: Bank of Israel.

growth in the medium- and long-term debt (i.e. liabilities for periods exceeding one year) reached IL 100 million, or about 10 per cent, while the short-term debt was reduced by approximately IL 3 million, or less than 2 per cent. The total debt at the end of 1963 reached IL 1,284 million, some 14 per cent of it short-term.

The growth in the debt during the year reviewed includes linkage differentials arising from the 1962 devaluation. Net credit available to agriculture in 1963 was higher by IL 76.3 million, or 6.4 per cent, the same rate as in 1962. The expansion occurred entirely in medium- and long-term liabilities, which went up by some IL 81 million, whereas short-term bank credit contracted by IL 5 million.

The main item of institutional indebtedness was that owed by agricultural settlements to the Jewish Agency Settlement Department, which also supplied approximately 93 per cent of the incremental credit received by the sector in 1963. Next in order was Government development budget loans, which also occupied second place as regards the 1963 credit increment. Credit from other sources made available through the Israel Bank of Agriculture declined, while that from other financial institutions increased by IL 4 million.

As stated, bank credit to agriculture contracted during the year by IL 3 million. The annual average debt owed by the sector to the banking system was higher than in 1962, but this increase reflects the transfer of Government loans to the banks for collection rather than new credit to agriculture. The balance of outstanding credit from the banks' own resources dropped by IL 3.5 million, or about 2 per cent, during the year, while the average annual balance declined by IL 5.6 million, or 3.5 per cent.

Table XI-16

AVERAGE ANNUAL BALANCE OF APPROVED DIRECTED CREDIT,^a
BY DESTINATION, 1962-63

| Destination | 1962 | | 1963 | | Increase or decrease (-) from 1962 to 1963 | |
|---|-------|-------|-------|-------|---|-------|
| | IL m. | % | IL m. | % | IL m. | % |
| Field crops and garden plants | 39.6 | 39.9 | 40.3 | 42.2 | 0.7 | 1.8 |
| Citrus | 17.4 | 17.5 | 9.1 | 9.6 | -8.3 | -47.7 |
| Livestock, livestock products, and fodder | 11.9 | 12.0 | 11.2 | 11.8 | -0.7 | -5.9 |
| Other inventories and miscellaneous | 3.8 | 3.8 | 5.1 | 5.4 | 1.3 | 34.2 |
| Undefined ^b | 26.6 | 26.8 | 29.5 | 31.0 | 2.9 | 10.3 |
| Total | 99.3 | 100.0 | 95.2 | 100.0 | -4.1 | -4.1 |

^a The volume of directed credit approved exceeded the amount actually granted by IL 6 million in 1962, and by IL 6.8 million in 1963.

^b To supply organizations, farms, and individuals through various funds, to victims of drought, and for the production and storage of grain.

Nondirected credit granted by the banks to agriculture was expanded by nearly IL 8 million, or some 11 per cent, between the end of 1962 and the end of 1963, but the average annual volume was slightly smaller than in 1962. On the other hand, directed credit contracted by IL 11 million between the end of 1962 and the end of 1963, while the average annual volume declined by IL 4.7 million, or 5 per cent. The decrease was particularly marked in citriculture, where the volume of such credit was cut by approximately IL 16 million in an effort, made in conjunction with the Citrus Marketing Board, to substitute self-financing for bank credit. Credit for cotton raising was reduced by some IL 2 million on account of the smaller crop, while that extended for financing stocks of dairy and poultry produce declined following the liquidation of surpluses in the previous year. Directed credit for other purposes was larger than in 1962.

These changes brought down the proportion of credit utilized for defined purposes from about 73 per cent of all directed credit in 1962 to 69 per cent in 1963 (annual averages).

The contraction of directed credit was therefore due to the smaller amount of financing required for purposes covered by such credit, whereas most of the growth in current farm inventories was not covered by this type of credit.