

II—AGRICULTURAL PERFORMANCE

8. Output of foodgrains during 1967-68 reached the record level of 95.6 million tonnes, or 28.8 per cent more than the 1966-67 level of 74.2 million tonnes. In part the good performance in 1967-68, which was spread over all foodgrains, was accounted for by the new agricultural strategy, but also in part by favourable weather conditions. As compared with 1964-65, the latest previous year in which weather conditions were even more favourable, foodgrains output was 7.4 per cent higher, the compound annual growth rate between these years being 2.4 per cent. A better perspective of long-term performance is gained if it is considered over a longer period of time ; if growth is measured from a base period of 1949-50 to 1951-52, it indicates a compound annual growth rate of 3 per cent.

TABLE 2

Production of Foodgrains

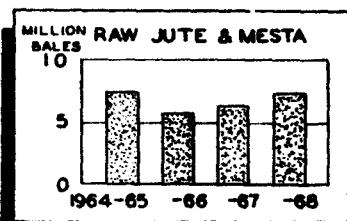
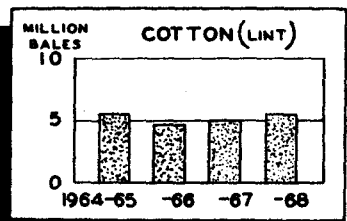
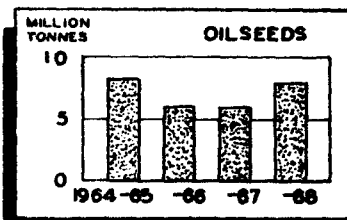
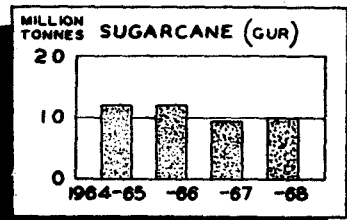
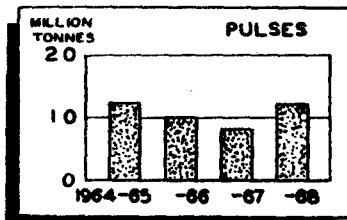
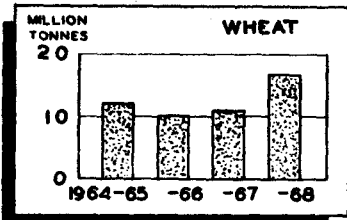
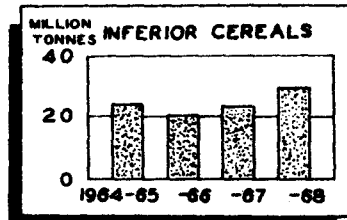
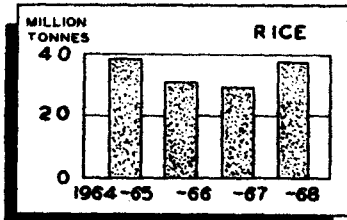
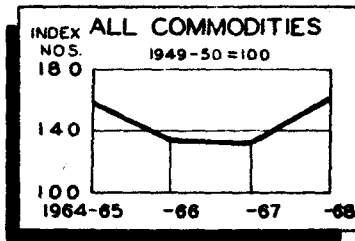
(Million tonnes)

	1964-65	1965-66	1966-67	1967-68
Cereals	76.6	62.2	65.9	83.4
of which :				
Rice	39.0	30.7	30.4	37.9
Wheat	12.3	10.4	11.4	16.6
Coarse Cereals	25.3	21.1	24.1	28.9
Pulses	12.4	9.8	8.3	12.2
of which :				
Gram	5.8	4.2	3.6	6.0
Total Foodgrains	89.0	72.0	74.2	95.6

A comparison of levels of output in 1964-65 and 1967-68 for the various foodgrains indicates the crops for which the new agricultural strategy has yielded the best results. As can be seen from Table 2, there has been marked improvement in the case of wheat. Coarse grains output, particularly that of maize, also responded significantly. On the other hand, the impact on production of rice and pulses would appear to be not yet evident.

9. The same pattern is to be seen with regard to most of the commercial crops as well. Though as compared to 1966-67 there is a substantial improvement in output in 1967-68, the performance is not always superior to that in 1964-65. In the table below the only exceptions are jute, tea and coffee. Taking a somewhat longer view the growth in the output of commercial crops in recent years has not been as high as that of food crops. Also a large part of the

AGRICULTURAL PRODUCTION



increase in output is seen to be due to increases in area rather than in productivity. Productivity increases are limited because some of these crops are unirrigated while in the case of others significant improvements in technology have not been achieved.

TABLE 3
Production of Commercial Crops

	1964-65	1965-66	1966-67	1967-68
Oilseeds (Million Tonnes)	10.5	8.0	8.2	10.2
Groundnuts (Million Tonnes)	5.9	4.2	4.4	5.8
Rapeseed and Mustard (Million Tonnes)	1.5	1.3	1.2	1.5
Fibres (Million Bales)	13.3	10.6	11.6	13.1
Jute (Million Bales)	6.0	4.5	5.4	6.4
Cotton (Lint) Million Bales	5.7	4.8	5.0	5.6
Tea (Million Kgs.)	372	373	372	383
Coffee ('000 Tonnes)	63.4	62.1	71.0	72.6
Sugarcane (Million Tonnes) (In terms of gur)	12.0	12.1	9.5	10.0
Tobacco ('000 Tonnes)	346	298	353	344

10. It is too early to take a view regarding the final outcome in agriculture in 1968-69. A judgment can, however, be based on the information available regarding the kharif crops, which account for 75 per cent of output. The onset of the south-west monsoon was delayed and as a result kharif sowing was delayed by 10-15 days. There was a prolonged dry spell but late rains in September and October have proved beneficial to the standing crops. While rainfall was deficient in Andhra Pradesh and parts of Gujarat and Rajasthan, it was adequate elsewhere. Rice output in the eastern States, namely, West Bengal, Orissa, Assam and Bihar has been at high levels; in the southern States of Andhra Pradesh, Tamil Nadu and Mysore, however, performance has not been as good. Prospects for coarse cereals are not bright because of deficient rainfall in some areas; similarly inadequate rainfall has affected the cotton and groundnut crops. Jute output is substantially lower, whereas prospects for sugarcane are favourable.

11. It is expected that the deficits of the kharif season will be made up through better performance in the case of the rabi crops. Policy measures taken to secure this result include greater resort to multiple cropping of short duration varieties in states like Andhra Pradesh and West Bengal. Aggregate foodgrains output this year is likely to be not less than last year's level of 96 million tonnes. With the new agricultural strategy, substantially higher output could have been secured had weather conditions been more favourable; the deficient rainfall in certain parts of the country is, however, likely to result in falls in production which will roughly balance improvements secured in areas where rainfall has been adequate.

12. A result of the bumper crop of 1967-68 was a considerable improvement in food availability. The net availability of cereals and pulses had gone down significantly in 1966-67 after the improvement in 1965; per capita availability per day had declined from 474 grams in 1965 to 396 grams in 1967. In 1968 the net availability of foodgrains improved substantially, and per capita daily availability rose to 457 grams, or 15 per cent more than in 1967. It was, however, lower than the availability in 1965 by 3.6 per cent, and not substantially higher than the availability in earlier good years. There is thus no room for complacency with regard to the availability of foodgrains in relation to the expansion of population.

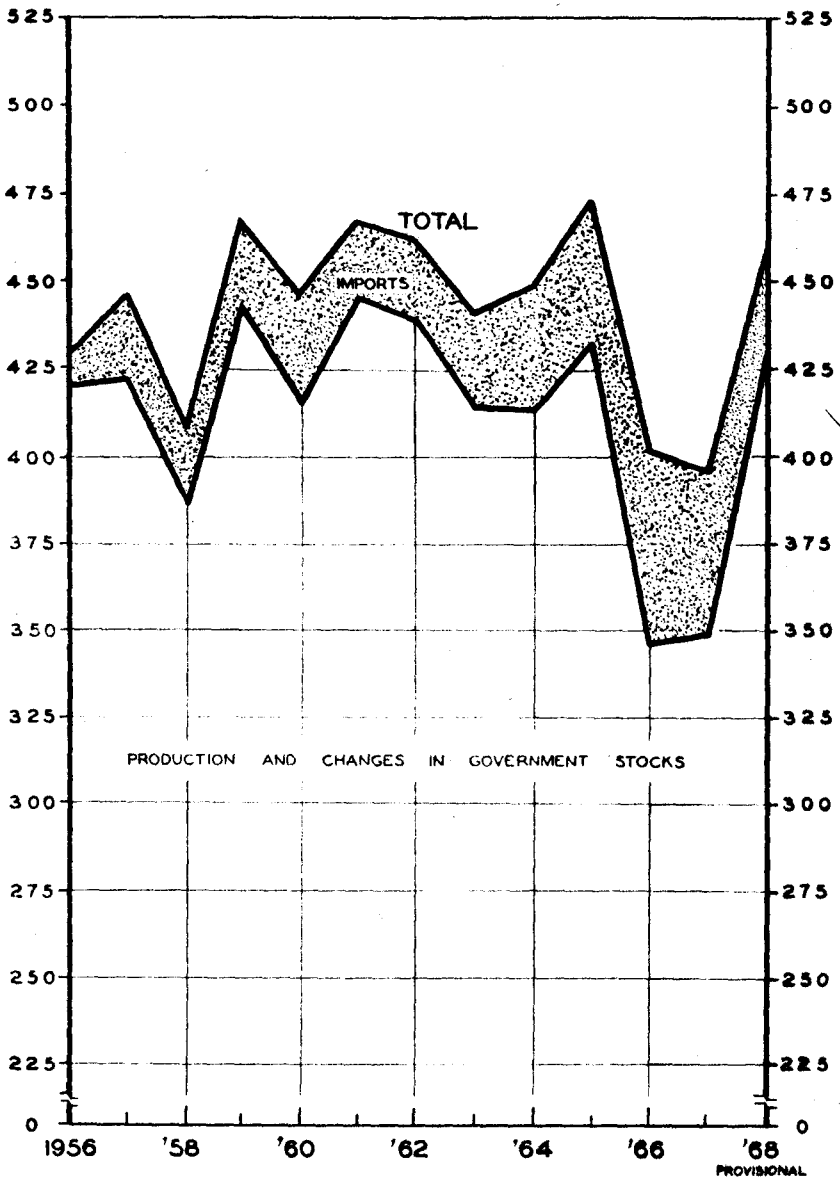
13. Although it is convenient to compare 1964-65 with 1967-68 on an aggregative basis an examination of the behaviour of different crops throughout the period and in different regions of the country brings out certain interesting features. 1965-66 was a bad year for all crops except perhaps maize, which was marginally higher. In the following year, while rice and pulses declined further, there was recovery in the output of wheat and millets like jowar, bajra and ragi. Maize production increased even further. Regionwise also, disparate movements are noticed in different parts of the country. On the whole Punjab and Haryana seem to have done better in these four years than States like Uttar Pradesh, Madhya Pradesh and Bihar. Similarly Andhra Pradesh and Tamil Nadu have shown less instability than Orissa and West Bengal. It is the objective of the new agricultural strategy to minimise the effects of such fluctuations in output due to variations in weather by producing high yields in concentrated areas through the application of technology and liberal doses of inputs.

14. The high yielding varieties programme is a major constituent of the new agricultural strategy. The emphasis of the programme during 1967-68 was largely on wheat and rice with considerably smaller areas under jowar, bajra and maize. The largest areas under high yielding varieties of rice were in Tamil Nadu, Andhra Pradesh and Bihar; a relatively small area was covered in West Bengal, the biggest rice growing State. The largest areas covered by high yielding varieties of wheat were in Uttar Pradesh and Punjab, while the largest area under jowar was in Maharashtra. The use of high yielding varieties of bajra and maize was fairly uniformly distributed in all the States with relatively low rainfall.

15. Evaluations of the programme made so far indicate that its effectiveness varies from State to State due to a number of factors. In the case of wheat, for example, best results are seen to be achieved, when the proper number of waterings are given in addition to application of proper dosages of fertilizer. The provision of water varied from State to State depending upon the availability of irrigation. Similarly, the strain of seed chosen affected yields considerably. High yielding varieties of wheat like PV-18 and Kalyan S-227 used in the Punjab gave invariably yields between 10—15 quintals per acre. Those used in Bihar like Lerma Rojo and K-68 were not as successful. The intensity of extension efforts also played a part.

PER CAPITA AVAILABILITY OF FOODGRAINS

(GRAMS PER DAY)



16. The objective of policy is to expand supplies of the high yielding varieties of seeds, promote multiple cropping through short duration varieties, secure a quick increase in water inputs primarily through minor irrigation, and to expand supplies of fertilizers, so that production can be rapidly expanded by a combined application of the necessary inputs. In 1967-68 it was possible to raise the area under high yielding varieties of seeds to 6.03 million hectares, of which 1.78 million hectares were under rice and 2.94 million hectares were under wheat. The target for 1968-69 is 8.5 million hectares. Most of the State Governments have been organising the production and multiplication of hybrid and other high yielding varieties of seed so as to ensure that the seed requirements of cultivators are fully met. A number of States are setting up large-sized seed farms. In addition to the two Central seed farms at Suratgarh and Jetsar, one farm has been set up in Orissa and two more are proposed to be set up in Haryana and Punjab. The National Seed Corporation is also helping in the supply of foundation seeds of hybrid varieties and certification of various types of seeds.

17. Through the introduction of short duration crops it is proposed to encourage double/multiple cropping on land under irrigation where only one crop is being grown at present. Such multiple cropping was attempted on 3 million hectares in 1967-68 and the corresponding target for 1968-69 is 6.1 million hectares.

18. In the field of irrigation considerable emphasis is being given to minor irrigation. The programme of minor irrigation, particularly lift irrigation, has been making steady progress since 1960-61, but has recently gained substantial momentum. Between 1960-61 and 1966-67, 754000 pump sets were installed. 98000 private tube wells and filter points and 3000 State tube wells were constructed. In 1967-68 alone, 248000 pump sets were installed, 48000 private tube wells and filter points and 1000 State tube wells were constructed. In addition 197000 masonry wells were sunk. The additional area brought under minor irrigation in 1967-68 amounted to 1.38 million hectares. This benefit is to be extended to another 1.5 million hectares in 1968-69.

19. The pace of change in the consumption of chemical fertilizers can be seen from the following table:

TABLE 4
Consumption of Chemical Fertilizers

	('000 tonnes of nutrients)				
	1964-65	1965-66	1966-67	1967-68	Target 1968-69
N	451	541	938	1235	1700
P ₂ O ₅	145	135	301	549	650
K ₂ O	57	94	143	279	450

The increase in consumption has been particularly sharp since 1966-67 when the new strategy was adopted. To meet this new demand imports of nitrogenous fertilizers doubled between 1965-66 and 1966-67 and there was a very steep increase in the import of phosphatic fertilizers. Between 1966-67 and 1967-68, the import of phosphatic fertilizers more than doubled while the imports of potassic fertilizers were nearly twice as much as in the previous year. The import of nitrogenous fertilizers rose by 33 per cent. There was a substantial increase in domestic production as well. The production of nitrogenous fertilizers rose during 1966-67 by 33 per cent from a level of 232,000 tonnes in 1965-66. It rose further to 367000 tonnes in 1967-68. The production of phosphatic fertilizers rose from 123000 tonnes in 1965-66 by 23 per cent in 1966-67 and 32 per cent in 1967-68. While the consumption in 1968-69 may turn out to be lower than the target it will nevertheless be considerably higher than the consumption in 1967-68.

20. The assurance to farmers that larger output can be sold at prices which will yield adequate returns is an important part of the agricultural strategy. The Agricultural Prices Commission has advised Government from time to time regarding the price problems of various agricultural commodities. Procurement and support prices for various crops had been raised steadily over the years, and in 1968-69, procurement prices for kharif crops were by and large maintained at the high levels of 1967-68. As Government was willing to purchase all quantities offered at these prices, these were in effect support prices. Open market prices of foodgrains, however, declined somewhat during the year. While, therefore, the market value of foodgrains output may have been somewhat lower, farmers may have been in a position to sell larger quantities, as depleted inventories may have been restored in 1967-68.

21. In order to contain inflationary tendencies and to ensure equitable distribution of available supplies of foodgrains, an elaborate system of public distribution has been set up. Statutory rationing had been introduced in the urban areas in several deficit States. The system was generally maintained during 1967-68 and the current year, except that statutory rationing has been relaxed in Kanpur, Delhi, Hyderabad, Secunderabad and Siliguri. There has also been some reduction in the current year in the quantities of foodgrains released through the public distribution system in view of the easier trends in prices in the open market. Movement restrictions on foodgrains have also been relaxed in order to reduce regional price disparities. Movement of foodgrains, other than rice, is now permitted freely within a much larger zone of northern States consisting of the surplus States of Punjab and Haryana and the deficit States of Himachal Pradesh, Jammu and Kashmir and Delhi. There is no restriction on the movement of gram and barley throughout the country while restrictions on maize, jowar and bajra have been lifted from the States of Punjab and Haryana. The following table sets out the data regarding total quantities of foodgrains issued from Central and State Government stocks:

TABLE 5
Public Distribution of Foodgrains

(Million tonnes)

	1965	1966	1967	1968
Rice	3.6	4.1	3.0	3.6
Wheat	5.9	8.2	7.4	5.7
Coarse grains	0.6	1.8	2.8	1.2
TOTAL	10.1	14.1	13.2	10.5

22. Supplies for the public distribution system—and for building up stocks—have been secured through internal procurement and imports. In spite of the unsatisfactory production of foodgrains during 1966-67, the Centre and the States made vigorous efforts to procure, and 4.5 million tonnes of foodgrains were purchased during 1967. In 1968, internal procurement was raised to 6.6 million tonnes. Imports of foodgrains amounted to 10.4 million tonnes and 8.7 million tonnes in 1966 and 1967 respectively, and are expected to decline to 5.7 million tonnes in 1968.

23. A policy decision was taken last year that a sizable food buffer stock should be built up during the next few years. Procurement during 1968 has been of the order of 6.6 million tonnes, while imports during 1968 will be 5.7 million tonnes. Total stocks—including working stocks—with the Government and with the Food Corporation of India are expected to be of the order of 3.5 million tonnes at the end of the financial year. If, however, account is taken of the possible procurement out of the rabi crop that will come into the market soon and the balance of the imports under the recently signed PL 480 agreement for 2.3 million tonnes of foodgrains, food stocks by the end of June 1969 are likely to be of the order of 5 million tonnes.

24. In the coming year efforts to cover a larger area with the new agricultural strategy will be continued with the same vigour. A target of 10.9 million hectares is proposed to be covered by high yielding varieties. Similarly, the areas under multiple cropping and the areas covered by minor irrigation will also be increased. The use of fertilizers will continue to grow from the high levels achieved during 1968-69 but most of the growth will come from the increase in domestic production rather than from imports. Supplies of pesticides will also continue to increase. In addition, integrated development of the command areas of irrigation projects is being taken up so as to expedite the utilisation of irrigation potential and improve the efficiency of water use. Several pilot water management projects are being undertaken. Side by side with measures to increase production, the policy of building up food stocks in order to take care of fluctuations in output will now be undertaken wholly by the Food Corporation of India. Storage and warehousing capacity is being built up rapidly by the Food Corporation in order to be able to cope with adequate buffer stocks.