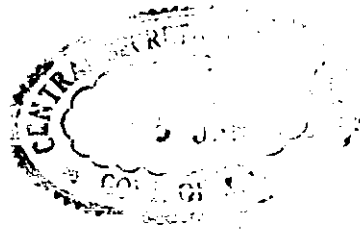




The Third Plan Progress Report

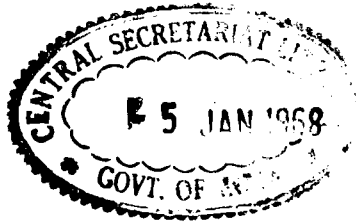
1963-65



309.23 0954

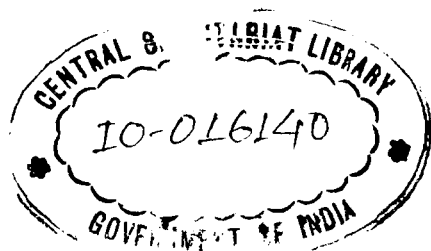
IND-PIIP *5

GOVERNMENT OF INDIA
PLANNING COMMISSION



**The Third Plan
Progress Report
1963-65**

IOD-PD-3
381,00720954
PLC-T, 1963



CONTENTS

	PAGE
I. Economic Situation	1
II. Financial Resources for the Plan	20
III. Plan Outlay and Targets	30
IV. Agriculture and the Rural Economy :	
1. Agricultural Production	45
2. Forests and Soil Conservation	58
3. Cooperation	60
4. Community Development and Panchayati Raj	67
5. Animal Husbandry, Dairying and Fisheries	73
6. Rural Works Programme	78
7. Land Reform	80
V. Irrigation and Power	87
VI. Industries and Minerals	96
VII. Village and Small Industries	122
VIII. Transport and Communications	132
IX. Scientific Research and Natural Resources	141
X. Education	147
XI. Health and Water Supply	155
XII. Housing and Urban and Rural Planning	166
XIII. Welfare of Backward Classes and Social Welfare	176
XIV. Labour Policy and Programmes	178
XV. Public Cooperation and Participation	182
XVI. Administration	187

CHAPTER I

ECONOMIC SITUATION

The Indian economy was under considerable strain during the two years under review. The imbalances generated in the economy were reflected in the rising trend in prices, the difficulties met in raising sufficient resources for investment and the marked decline in foreign exchange reserves. The primary factor on the supply side underlying the difficult economic situation was the stagnation in agricultural output during the first three years of the Third Plan (1961—64). In 1963-64 there was a slight increase in the agricultural output but the production of foodgrains was below the level achieved two years earlier in 1961-62. The situation in regard to food production was aggravated by the deficiencies in the distribution. These factors along with the speculative activities, exerted a strong and persistent pressure on the price level which remained abnormally high during the two years under review. In the industrial sector, production in 1963-64 increased at a rate higher than in the previous two years but the progress was not so marked in the consumer goods industries. During 1964-65, the tempo of industrial production which had shown a rising trend in the earlier three years slackened; the rate of growth having declined from 8.6 per cent in 1963-64 to 6.6 per cent in 1964-65. The gap between aggregate demand and supply was further widened by substantial monetary expansion and enhanced governmental outlays on defence and development.

NATIONAL INCOME AND PRODUCTION TRENDS

According to preliminary estimates, the national income in real terms rose by 7.6 per cent during 1964-65, compared to 4.9 per cent in the preceding year. This rate compares favourably with an increase of 1.7 per cent in 1962-63 and 2.5 per cent in 1961-62, respectively. The average annual increase in national income during the four years (1961—65) has been 4.2 per cent in terms of constant prices, as against an average annual compound increase of 5.4 per cent anticipated for the Third Plan period as a whole. The average annual increase in per capita income during the same

period has been 1·8 per cent as against the targeted annual increase of 3·2 per cent over the Plan period.

Sector	Percentage contribution to total National Income (1964-65)	Percentage change in 1964-65 over 1963-64	Contribution to the overall percentage change in 1964-65 over 1963-64
1	2	3	4
Agriculture	36·9	+9·8	3·5
Mining and Factory Establishments	10·4	+6·8	0·7
Communications	0·6	..	..
Railways	2·6	+2·6	0·1
Organised Banking and Insurance	1·1	+6·2	0·1
Other Commerce and Transport	15·5	+7·9	1·2
Others	32·9	+6·2	2·1
All Sectors	100·0	+7·6	7·6

The improvement recorded in overall national income level during 1964-65 was mainly due to the increase in agricultural production. The group "Mining, Manufacturing and Small Enterprises" has also made a steadily rising contribution to the growth of national income. During 1965-66 national income declined in real terms by 4·2 per cent on account of a substantial fall in agricultural production, a slackening in industrial production and border trouble with Pakistan.

The estimates of national income and per capita income (at 1948-49 prices) for selected years are shown in the table below:

Estimates of National Income and Per Capita Income in Selected Years

Year	National Income (at 1948-49 prices)	Per Capita* Income (at 1948-49 Prices)
	(Rs. 100 crores)	(Rs.)
1950-51	88·5	247·5
1955-56	104·8	267·8
1960-61	127·3	293·2
1961-62	130·6	294·3
1962-63	133·1	293·4
1963-64	139·7	301·1
1964-65†	150·5	317·0
1965-66‡	144·9	298·3

*Based on Census data.

† Preliminary estimates

‡ Quick estimates.

INVESTMENT

Concurrently with the increase in national income, there has been an increase in the rate of investment in the economy. On a rough basis, it would appear that the rate of investment as percentage of national income increased from a little over 11 per cent in 1960-61 to over 12·5 per cent in 1964-65 and was expected to be about 14 per cent by the end of 1965-66. Making due allowance for the net inflow of investible funds from abroad, domestic savings as a percentage of national income rose from about 9 per cent

in 1960-61 to about 10.5 per cent in 1965-66. There was a progressive step-up of investment outlay in both the public and the private sectors. Private imports of capital equipment increased from Rs. 140 crores, being the average during the first two years of the Third Plan, to Rs. 161 crores in 1963-64. Data relating to advances to the private sector through institutional sources and domestic output of machinery, cement, etc. also showed a similar trend. During the Third Plan period the rise in respect of public sector investment outlay, particularly in industry was greater than that of private investment. The investment outlay of the public sector in industry during the five-year period increased by more than 60 per cent as compared to 23.5 per cent of private investment in industry. It may be noted that net capital formation out of the budgetary resources of the Central Government rose from about 764 crores in 1960-61 to Rs. 1,600 crores in 1964-65 and to about Rs. 1,829 crores (R.E.) in 1965-66, thereby showing an increase of nearly 140 per cent over the Plan period.

EMPLOYMENT

There has been some improvement in understanding the employment situation in the country during the period under report. Apart from the usual sources of information relating to employment, a new source has recently become available. This consists of the data collected during the course of the Employment Market Information Programme initiated recently by the Ministry of Labour and Employment. Even so, more studies are needed for a better understanding of the mechanism of employment generation.

For the year ended March, 1965, data relating to establishments employing between 10 and 25 per cent are available in respect of 277 E.M.I. areas. Comparable data for the preceding year ended March, 1964 are available only for 238 areas. It is hoped to cover the entire country by the end of the Third Plan. Pending availability of more comprehensive information from this source, inferences can be drawn about the behaviour of employment and unemployment only on the basis of data available in connection with the Compulsory Notification of Vacancies Act. These show that over the period of four years 1961—65, total employment in the public and private sectors taken together increased by 2.9 million of which the share of public sector was about 1.9 million. The largest percentage increase was recorded by 'trade and commerce' followed by 'plantations', 'forestry, etc.', 'services', 'electricity, gas, water supply and sanitary services', 'manufacturing' and 'transport' in that order. In the case of States, Kerala, Maharashtra, Mysore, Punjab and West Bengal recorded percentage increases more than the All-India average. States which recorded less than the all-India average figure were Assam, Bihar, Gujarat, Madhya Pradesh, Orissa and Rajasthan. Assam registered the lowest percentage increase.

Actual employment provided will, however, be larger since the above data do not include wage-paid employment in the smaller units and less organised sectors, besides self-employment which falls outside the scope of E.M.I. programme. However, adopting the same method of estimation as was done while setting targets for the Third Plan, non-agricultural employment of about 4.6 million could have been generated in the years under report. This does not include the boost given to employment as a result of step-up in expenditure on defence and its effect on other sectors of employment generation, allied to defence and the multiplier effect of such employment generation. There was some improvement in employment in agriculture though it cannot be quantified easily. It is possible, however, that an increase in employment in agriculture and other self-employed sectors might have resulted in a change in the level of under-employment. On the whole, therefore, employment situation could not be considered as unsatisfactory as the numbers seemed to indicate.

The employment exchange data show that the number of persons on the live register decreased from 24.83 lakhs in March, 1963 to 23.96 lakhs in March, 1965. The corresponding figure in March, 1964 was higher at 24.53 lakhs. Similarly fresh registrations were less in 1964-65 as compared to 1963-64 while the number of vacancies notified and placements effected have been somewhat higher than in the previous year as the following table would show:

	1963-64	1964-65	Increase(+) or decrease(-)
Fresh registrations	4,075,903	3,803,185	(-) 272,718
Vacancies notified	918,321	923,296	(+) 4,975
Placements effected	542,187	551,927	(+) 9,740

It would appear that unemployment among the educated sections has increased faster than among the general population. Among the educated persons as a class, unemployment in the case of "higher secondary passed" and the "unskilled" categories has increased more. Side by side with unemployment, the economy is facing shortage of trained personnel such as teachers, stenographers, doctors (physicians and surgeons), nurses, midwives, civil engineers, overseers and draughtsmen. There are also cases of lapses on the part of employment seekers to renew their registration, to appear before the employers and even to join duty when employment is offered. There is also reluctance to move to other areas for seeking employment.

The Government of India in collaboration with State Governments propose to undertake employment studies in two States viz. Kerala and Bihar and also in three industries, viz. 'road transport', 'machine tools' and 'coal', with a view to secure a better understanding of the mechanism of employment generation. Simultaneously investigations are in progress to study in depth the data on unemployment available through the National Sample Survey, the 1961 Census and special inquiries undertaken for understanding employment and unemployment situation in different areas.

AGRICULTURAL PRODUCTION

The Index of Agricultural Production (1949-50 = 100) rose from 137.5 in 1962-63 to 142.6 in 1963-64 and further to 158.4 (provisional) in 1964-65. The agricultural output in 1963-64, however, was only 3.7 per cent higher than in the preceding year and was barely maintained at the 1960-61 level. In 1963-64 the production of all foodgrains except rice, small millets and *Ragi* showed a decline. According to final production estimates for the year 1964-65, foodgrains are placed at 88.99 million tonnes, showing an increase of 10.9 per cent over the previous year. Details regarding progress of agricultural production during the period 1960-61 to 1964-65 are given in the relevant Chapter. The table below sets out the estimates of agricultural production for the last three years:

Agricultural Production—All-India

Commodity	Unit	1962-63	1963-64	1964-65	Percentage change in 1964-65 over 1963-64
Rice	million tonnes	31.92	36.89	39.03	5.8
Jowar	"	9.62	9.13	9.75	6.8
Bajra	"	3.89	3.73	4.45	19.3
Maize	"	4.58	4.55	4.66	2.4
Ragi	"	1.89	1.96	1.90	(—) 3.1
Small Millets	"	1.86	2.02	1.95	(—) 3.5
Wheat	"	10.83	9.86	12.29	24.6
Barley	"	2.42	2.04	2.52	23.5
Pulses	"	11.44	10.06	12.44	23.7
<i>Total Foodgrains</i>	"	<i>73.45</i>	<i>80.24</i>	<i>88.99</i>	<i>10.9</i>
Raw Cotton (Lint)	million bales*	5.31	5.49	5.41	(—) 1.5
Raw Jute and Mesta	"	7.15	8.05	7.67	(—) 4.7
Sugarcane (in terms of gur)	million tonnes	9.54	10.60	12.32	16.2
Groundnut	"	4.82	5.22	5.89	12.8

* Bale of 180 kgs. each.

Rice output estimated at 39 million tonnes in 1964-65 was the highest on record and showed an increase of 2.15 million tonnes or 5.8 per cent compared to the previous year. Among *Rabi* crops, the production of wheat placed at over 12 million tonnes increased by about 25 per cent. Barley, bajra and pulses and to a lesser extent jowar shared in the increased production of foodgrains. *Ragi*, however, showed a slight fall in the output, in spite of a small increase in acreage during 1964-65, compared to the previous year. Since the first three years of the Plan were of sluggish growth

in foodgrains production, these increases under individual crops taken together did not have any great impact in easing the supply position.

The position in respect of non-food crops was not favourable, on the whole, and the available data for 1964-65 showed no improvement over the previous year, except under sugarcane and oilseeds. The production of groundnuts estimated at 5.9 million tonnes in 1964-65 was a record crop showing an increase of about 13 per cent compared to the preceding year. The output of other main varieties of oilseeds, viz. sesamum, rapeseed, mustard and linseed was also higher than in the previous year. The production of sugarcane (gur) increased from 10.6 million tonnes to 12.3 million tonnes or by over 16 per cent. Raw jute and mesta declined by about 5 per cent from 8.1 to 7.7 million bales. Raw cotton recorded a fall of 1.5 per cent from 5.5 to 5.4 million bales.

INDUSTRIAL PRODUCTION

The rate of industrial growth showed a deceleration in 1964-65 with the Index of Industrial Production advancing by 6.6 per cent during the year which was the lowest on record since 1961-62. In 1963-64 output had increased at a faster rate (8.6 per cent) than in the previous two years, in particular, the producer's goods and intermediate industries made notable advance. The consumers' goods industries, however, generally lagged behind. The average annual growth rate during the four-year period (1961—65) was 7.8 per cent, as against the Plan target of 11 per cent.

The slackened activity in the industrial field during 1964-65 was the result of several factors. There was absolute decline in the output of coal, pig iron and chemical industries. Mainly as a result of slackening demand, the production of coal fell from the peak of 66.3 million tonnes in 1963-64 to 64.4 million tonnes in 1964-65. Secondly, the rate of growth in a number of other industries, in particular, cement, fertilizers, rubber products, paper and paper board and petroleum products slowed down. There was a lag in the creation of additional capacity in certain important industries such as steel, aluminium, jute, etc. In the case of these industries, utilisation had already been achieved either at full or near capacity levels. Another important cause of slower pace of growth of industrial production was continued shortage of imported raw materials, spares and components. There was also a shortage of some indigenous agricultural raw materials on account of a lower level of production during the previous two years and as a result a rise in their prices. This factor adversely affected the growth margin of agro-industries. For instance, there was an absolute decline in the production of vanaspati during 1964-65 due to the shortage of groundnut oil over the major part of the year.

The following table shows the trends in industrial production in some of the important industries in the last three years:

Production in Selected Industries

Item	Unit	1962-63	1963-64	1964-65 (provi- sional)	Perce- tage change in 1964-65 over 1963-64
1	2	3	4	5	6
Coal	mill. tonnes	63.8	66.3	64.4	(—) 2.0
Iron ore	„	13.5	14.8	15.1	2.0
Pig iron	„	6.1	6.5	6.7	3.1
Finished steel	„	4.0	4.3	4.4	2.3
Aluminium (virgin metal)	'000 tonnes	42.6	54.0	54.1	0.2
Machine tools	mill. rupees	126.0	201.0	257.0	27.9
Railway wagons	'000 nos.	15.7	20.4	24.2	18.6
Automobiles	„	54.8	56.7	70.8	24.9
Bicycles	„	1111.0	1259.0	1442.0	14.5
Sewing machines	„	347.0	282.0	330.0	17.0
Power transformers	'000 k.v.a.	2420.0	2758.0	3590.0	30.2
Electric motors	'000 h.p.	1041.0	1182.0	1436.0	21.5
Radio receivers	'000 nos.	358.0	413.0	512.0	24.0
Nitrogenous fertilizers	'000 tonnes of N	178.0	219.0	234.0	6.8
Sulphuric acid	'000 tonnes	485.0	602.0	595.0	15.4
Soda ash	„	236.0	274.0	286.0	4.4
Caustic soda	„	130.0	163.0	192.0	17.8
Paper and paper board	„	401.0	478.0	494.0	3.3
Cement	mill. tonnes	8.8	9.4	9.7	3.9
Refined petroleum products	„	6.9	8.0	8.4	5.0
Jute textiles	'000 tonnes	1202.0	1248.0	1292.0	3.5
Cotton cloth (total)	mill. metres	7006.0	7410.0	7745.0	4.5
(i) Mill sector	„	4498.0	4484.0	4676.0	4.3
(ii) Decentralised sector	„	2502.0	2926.0	3069.0	4.9
Rayon yarn	'000 tonnes	62.1	67.9	72.2	6.3
Sugar*	„	2152.0	2569.0	3260.0†	26.9
Tea	mill. Kgs.	343.0	342.0	373.0	9.1
Electricity (generated)	Kwh (billion)	22.1	25.9	29.0	12.0

* Relates to crop year beginning November.

† Provisional

During 1964-65 some engineering industries such as machine tools, automobiles, power transformers and electric motors maintained fairly high rates of production. Among consumer goods industries the production of motor cycles, scooters and bicycles, radio receivers, cotton cloth (mill sector) and sugar registered increases. The output of sewing machines and electric fans which had declined in the previous year improved considerably in 1964-65. The production of tea which in 1963-64 had nearly remained unchanged at the previous year's level, however, increased by 9.4 per cent in 1964-65.

PRICE SITUATION

The pressure on prices which set in 1962-63 was aggravated during the year 1963-64. The Index of Wholesale Prices (1952-53=100) advanced sharply from 127.4 at the end of March, 1963 to 139.0 one year later and further to 151.0 at the end of March, 1965. The peak during 1964-65 was reached in January, 1965 when the Index touched 161. Later it came down to 150 in the middle of March. Thereafter, however, it resumed the upward trend, rising to 169 at the end of December, 1965. The rise of 8.7 per cent in the general level of wholesale prices in 1964-65 on the top of an increase of 9.1 per cent in 1963-64 has seriously strained the Indian economy and emphasised the need to adopt effective measures to check price rise. The upward movement in the Index of Wholesale Prices was reflected in the Working Class Consumer Price Index Number which rose from 130 to 143 between March, 1963 and March, 1964 and touched 159 in March, 1965. Food articles and industrial raw materials were together responsible for about three-quarters of the increase in the general price level in 1964-65.

*Index Numbers of Wholesale Prices (1952-53=100)**(Last week of the year)*

	1961-62	1962-63	1963-64	1964-65
I. All commodities	123	127	139	151
II. Manufactures	126	130	133	141
III. Industrial Raw Materials, of which	135	135	146	163
Raw Jute	143	150	151	172
Raw Cotton	113	118	120	132
Oilseeds	148	143	166	194
IV. Fuel, Power, Light and Lubricants	122	138	140	148
V. Liquor and Tobacco	99	117	119	138
VI. Food Articles	118	124	141	154
Cereals, of which	102	103	123	140
Rice	103	111	122	128
Wheat	92	86	118	144
Jowar	119	106	134	192
Bajra	124	115	145	181
Pulses	91	99	133	152
Edible Oils	150	140	163	185
Sugar	125	141	145	151
Gur	120	153	182	157
Tea	158	186	180	176

Food articles advanced by about 9 per cent in 1964-65 as against 14 per cent in the preceding year. The increase during 1964-65 was higher in case of wheat, jowar, bajra, pulses and edible oils. The rise in case of rice was modest, only about 5 per cent as compared to about 10 per cent during

1963-64. The effect of the all round increase under food articles, raw materials, fuel, power, etc., was seen in the rise in the prices of "Manufactures" which went up by 6.3 per cent in 1964-65 as against only 2.5 per cent in the previous year.

The up-trend in prices during 1963-64 was mainly due to the increase in prices of agricultural commodities and particularly for the food articles. Even though the production of rice was much higher, the price showed an increase. The rise in prices of wheat, other cereals and pulses was still sharper due to the fall in the production of these items. Prices of edible oils also rose primarily because of the fall in production of mustard but were aggravated because of the speculative activity. In the following year i.e. 1964-65, while agricultural production recorded a marked increase, the upward trend in prices, particularly of agricultural commodities, continued to persist. The relative stagnancy of foodgrains production during the first three years of the Third Plan led, in all probability, to the depletion of private stocks of foodgrains in the hands of producers, traders and consumers. The large increase in output which occurred in 1964-65 appeared to have reversed this tendency and it was probable that private stocks were rebuilt during the year. This is supported by the fact that there was considerable decline in the market arrivals. The situation was aggravated by the widespread speculative activity. Moreover, the price trends in agricultural commodities in this period might be viewed in the context of long-term trends. During the ten years ended March, 1963 the Index of Wholesale Prices showed an increase of 21 per cent in case of agricultural commodities whereas during the same period, prices of manufactures went up by 30 per cent, of the intermediate products by 36 per cent and of fuel by 38 per cent. A part of the increase in prices of foodgrains since April, 1963 was, therefore, in the nature of corrective to the earlier trend. But, perhaps, another important factor which contributed to the larger increase in the prices of agricultural commodities than for manufactured articles was the policy of giving remunerative prices to farmers to stimulate agricultural production. The policy of price support for agricultural products and the fixation of minimum and maximum prices for foodgrains and other agricultural commodities added to general increase in the price level, resulting from higher cost of living, cost of materials and cost of production.

The pressure on prices of manufactured goods was in part due to the slow pace of industrial growth in 1964-65 and certain fiscal measures, in particular, commodity taxation in the form of sales taxes and excises. It appears that the imposition of fresh commodity taxes or enhancing the rates of such existing taxes with a view to restrain consumption has not been particularly effective because of the increases in the spendable incomes. Moreover, control on prices and distribution of a number of articles was removed in December, 1963 with the result that prices of some of the commodities such as caustic soda, tyres and tubes and washing soap went

up. After decontrol of certain categories of steel in March, 1964, the Joint Plant Committee announced revised prices which were 3 to 5 per cent higher than they were before decontrol.

Apart from the factors mentioned above, the secular trends, the developmental policies and the increase in defence expenditure, added to the strain on prices. The growth in money supply which was nearly 14 per cent in 1963-64 and 9 per cent in 1964-65, was much higher than the corresponding growth in national output which was only 4.9 per cent and 7.6 per cent in 1963-64 and 1964-65 respectively. The rising defence expenditure, the substantial increase in investment outlays both in the public and the private sectors and the growth in population and money incomes all contributed to the pressure on prices.

The persistent rise in the general price level since April, 1963, in particular of food articles has caused anxiety particularly on account of its repercussions on the vulnerable sections of the community and called for co-ordinated action on several fronts. In the agricultural sector, steps were taken to increase domestic supplies through intensification of internal procurement and making arrangements for larger imports. Internal distribution of food supplies was sought to be improved through zonal restrictions on movement of wheat and rice on the one hand and by the establishment of consumer cooperative stores and increase in the number of fair price shops, particularly in scarcity areas on the other. Maximum wholesale and retail prices of paddy and rice were fixed, following the recommendations of Jha Committee. Statutory rationing was introduced in Greater Calcutta and informal rationing in Kerala. Distribution of sugar on card basis was progressively introduced in a number of towns. With a view to checking speculative activities, the regulation of forward trading and the control of commercial bank credit were made more stringent. The Essential Commodities Act was amended, providing for summary trial of dealers committing offences against the Act as also of Government employees abetting the commission of such offences.

Among other measures of a long-term nature was the establishment of Food Corporation of India to act as the main agency for buying from the producers and building up buffer stocks and to ensure fair prices to both the producers and the consumers. The Agricultural Prices Commission was constituted in the beginning of 1965 to advise Government on matters of agricultural policy and in evolving a rational price structure. Steps were also taken to control the prices and output of commonly used varieties of cloth viz., *dhotis*, *saris*, longcloth, shirting and drills. These steps were reinforced by the adoption of monetary and fiscal measures to contain the inflationary pressures. Despite these measures, the general price situation has, on the whole, continued to be a matter of concern.

MONETARY AND CREDIT TRENDS

During the year 1963-64, monetary expansion was sizeably higher (- Rs. 442 crores) as compared to the previous year (+ Rs. 264 crores). The bulk of the enlarged money supply with the public was attributable to extension of (net) bank credit to the government sector. Liquidity in the economy continued to grow though at a slower rate during 1964-65, the increase in money supply with the public being of the order of Rs. 328 crores (8.7 per cent) as against an increase of Rs. 442 crores (13.4 per cent) in the previous year. Net foreign exchange assets of the banking sector exerted a contractionary influence on money supply in 1964-65 together with a reduced rate of increase in net bank credit to the public and private sectors, more so in respect of the latter. The rate of increase in net bank credit to the private sector was appreciably lower during 1964-65, being Rs. 74 crores as compared to Rs. 163 crores and Rs. 105 crores respectively in the two earlier years. This was attributable to two main factors: the increase in time deposits of scheduled banks during 1964-65, which was in excess of the rise in the two preceding years taken together, and secondly the restrictions on credit imposed by the Reserve Bank of India. The scheduled banks increased their investment in Government securities by Rs. 79 crores as against Rs. 47 crores in 1963-64 to meet the higher liquidity requirements under the Banking Companies Act which came into operation in September, 1964.

Variations in Money Supply

(Rs. crores)

	1962-63	1963-64	1964-65
Money Supply with the Public	+264	+442	+328
Factors affecting money supply—			
Net Bank credit to Government Sector*	+269	+281	+235
Net Bank Credit to Private Sector	+105	+163	+74
Net Foreign Exchange Assets of the Banking Sector	-43	+39	-19
Others	-67	-41	+38

*Adjusted for PL 480 and PL 665 deposits with banks in India (other than the Reserve Bank) but not taking into consideration the transfer of PL 480 deposits from the State Bank to the Reserve Bank (Rs. 40 crores) during 1964-65.

A number of measures were taken by the Reserve Bank to check excessive creation of bank credit and to raise the cost of credit. The seasonal credit expansion during the busy season in 1964-65 was 8 per cent higher (Rs. 407 crores) than in the corresponding period of the 1963-64 season (Rs. 376 crores).

The working of the policy of selective credit control was intensified during 1964-65. In order to restrict excessive credit, discourage speculation and promote savings in the economy, the bank rate was raised from 4½ per cent to 5 per cent in September, 1964 and further by a full one per cent

to 6 per cent in February, 1965. The inflow of banking funds from abroad was also regulated and a ceiling of Rs. 20 lakhs was placed on the funds, a banking company operating in India could borrow from abroad without obtaining prior approval from the Reserve Bank.

The policy of credit squeeze was aimed at checking an excessive use of credit by the private sector and to discourage speculation. As a result, the banks had a difficult task in meeting the credit needs of industries and trade during the busy season. The greater dependence of the private sector on bank credit might also have been due to the slackness in the capital market and to the government measures against bogus *hundis*. Consequently the business transactions and speculation hitherto financed from non-banking sources had to depend increasingly on financial assistance from the banks.

THE BALANCE OF PAYMENTS

The year 1963-64 recorded an increase of Rs. 10·8 crores in the foreign exchange reserves, as compared to the small reduction in the reverses in the first two years of the Third Plan. The improvement in the reserves occurred in spite of a repayment of Rs. 23·8 crores to the IMF, and was primarily due to the marked increase in export earnings and improvement in the utilisation of external assistance. Exports increased by about Rs. 120 crores to Rs. 802 crores in 1963-64, the largest increase in a single year since the Korean boom. The increase in the imports, on the other hand, was also higher at Rs. 139·4 crores mainly attributable to Government imports; private imports being somewhat less than in the previous year 1962-63. The trade deficit increased to Rs. 429 crores in 1963-64 as against a deficit of Rs. 409 crores in the preceding year. The improvement in the net position on the invisible account (other than official transfer payments) in 1963-64 was due mainly to the increase in official rupee grants under PL 480 assistance. Gross official loans showed an increase of Rs. 48 crores in 1963-64. Deficit under 'other capital transactions' declined from Rs. 59 crores in 1962-63 to Rs. 26 crores in 1963-64.

There was a marked deterioration in the external payments position in 1964-65 despite a substantial increase in the inflow of external assistance. There was a decline of Rs. 56·1 crores in the foreign exchange reserves. This decline would have been larger but for a transfer of Rs. 16 crores worth of non-monetary gold from the Government to the Reserve Bank of India. The pressure on reserves was due to several factors : a sharp increase in import payments and an increase in debt servicing charges accompanied by hardly any increase in export earnings. The trade deficit, therefore, widened in 1964-65 to Rs. 593 crores as compared to a deficit of Rs. 429 crores in 1963-64. The increased imports were mainly on Government account; private imports being of about the same order as in the preceding

year. The current account deficit (including errors and omissions) increased in 1964-65 to Rs. 508 crores from Rs. 382 crores in 1963-64. There was a significant step-up in official loans by Rs. 146 crores in 1964-65 to Rs. 589 crores as compared with Rs. 443 crores in 1963-64. However, "Other capital transactions" showed a deficit of Rs. 137 crores in 1964-65 as compared to a deficit of Rs. 26 crores in 1963-64. During the year 1964-65 repurchase of Rs. 47.6 crores from the IMF was offset by drawing the corresponding amount from the Fund.

The balance of payments position in respect of each year from 1960-61 to 1964-65 is indicated in the table below:

India's Balance of Payments

(1960-61 to 1964-65)

(Rs. crores)

	1960-61	1961-62	1962-63*	1963-64**	1964-65**
1. Imports c.i.f.	1,105.7	1,006.0	1,091.3	1,230.7	1,396.0
(a) Private	644.0	641.7	626.0	620.3	612.5
(b) Government	461.7	364.3	465.3	610.4	783.5
2. Exports f.o.b.	680.5	668.3	682.2	801.7	802.7
3. Trade balance (2-1)	-475.2	-337.7	-409.1	-429.0	-593.3
4. Non-monetary gold movement . . . . .	..	..	..	..	16.0
5. Official transfer payments (net)	45.2	45.9	76.7	78.9	123.8
6. Other invisibles (net)	37.6	-14.6	-13.1	14.8	16.8
7. Current account (net)	-392.4	-306.4	-345.5	-335.3	-436.7
8. Errors and omissions	-6.3	7.8	-4.3	-46.6	-71.2
9. Official loans (gross)	256.6	274.1	394.9	442.8	589.1
10. Other capital transactions	93.6	-40.2	-59.3	-26.3	-137.3
11. Drawings on IMF (net)	-10.7	58.4	11.9	-23.8	..
12. Movement in foreign exchange reserves (increase + or decrease -)	-59.2	-6.3	-2.3	+10.8	-66.1

*Revised estimates.

**Preliminary estimates.

EXPORTS

In the year 1963-64 there was a substantial improvement in export earnings which according to customs data, increased by 11.2 per cent to Rs. 793 crores, @ compared to the preceding year. This was the largest increase recorded in a single year except during 1951-52 when exports touched a high mark on account of the Korean boom. A noticeable feature of the increase in export earnings during 1963-64 was that it reflected an increase in the volume of goods exported rather than any gain by way of increase in export prices. The main commodities which contributed to this increase were sugar, jute, non-essential vegetable oils, cotton textiles, art

@According to exchange control data, exports increased by about 18 per cent, to Rs. 1,802.7 crores in 1963-64, over the 1962-63 level.

silk fabrics, oil-cakes and tobacco. The improvement recorded in these commodities was partially offset by lower export earnings in the case of tea, essential oils, raw hides and skins, mica, coal and coke, etc. Export performance during 1964-65, did not turn out to be very satisfactory. The earnings from exports showed an increase of Rs. 21 crores* over the previous year. This was much lower as compared with the increase of Rs. 80 crores in 1963-64; the fall was in part due to the ban imposed on export of groundnut oil in July, 1964 and a decline in the export of sugar, art silk fabrics and vegetable oils. The principal commodities which registered increases in exports during 1964-65 were jute manufactures, cashew kernels, coffee, manganese ore, oilcakes, iron and steel and ferro-manganese.

As regards direction of exports, there was no important change in 1963-64 as compared with the previous year. In absolute terms, India's exports during 1963-64 increased to all regions of the world, except Africa. In percentage terms, exports to Asia and Oceania rose from 23 per cent of total in 1962-63 to 27 per cent in 1963-64 while those to West European countries declined moderately from 34 per cent to 32 per cent.

Exports of certain selected commodities

(Value : Rs. crores)

Commodity	1960-61	1961-62	1962-63	1963-64	1964-65
1. Vegetable oils (non-essential)	8.5	5.8	13.2	19.9	7.1
2. Oilcakes	14.3	17.3	31.1	35.4	39.8
3. Tobacco—unmanufactured	14.6	14.0	18.0	21.1	24.1
4. Spices	16.6	17.5	13.8	16.0	16.8
5. Sugar (including molasses)	3.3	15.3	18.1	27.1	18.2
6. Cashew kernels	18.9	18.2	19.3	21.4	29.0
7. Raw wool	7.1	8.4	5.6	5.4	7.0
8. Fish	4.6	3.9	4.0	5.7	6.8
9. Tea	123.6	122.3	129.8	123.4	124.7
10. Coffee	7.2	9.0	7.6	8.3	13.4
11. Iron ore and concentrates	17.0	35.4	35.3	36.4	37.2
12. Manganese ore	14.0	10.7	8.0	8.4	13.1
13. Cotton fabrics	57.6	58.2	48.2	54.3	58.0
(a) mill-made	52.8	43.2	41.5	47.5	48.4
(b) handloom	4.8	5.0	6.7	6.8	9.6
14. Art silk fabrics	3.2	6.7	6.9	10.6	6.5
15. Coir yarn and manufactures	8.5	11.0	11.8	11.5	11.1
16. Jute manufactures	135.2	145.9	149.5	155.7	168.4
17. Footwear	3.1	2.4	2.8	3.6	4.2
18. Hides and skins tanned or dressed	24.8	25.3	22.4	26.2	27.2
19. Manufactures of metals	1.9	2.2	2.7	3.0	4.2
20. Machinery and transport equipment	3.7	3.9	4.4	5.9	8.6
21. Iron and steel	5.5	4.7	1.3	1.9	4.3
22. Ferro-manganese	4.2	5.6	1.2	1.7	6.1
23. Chemical and allied products	3.4	3.7	3.9	4.0	6.6
TOTAL exports (including re-exports and other exports)	660.2	679.7	713.6	793.2	814.6

NOTE : — Figures are inclusive of :

(i) Goa, Daman and Diu from 1960-61 onwards;

(ii) exports by parcel post of precious and semi-precious stones and pearls from 1962-63; and

(iii) land-borne trade with Nepal from 1962-63.

Source : D.G.C.I. & S. data.

*According to ECD data, exports during 1964-65 at Rs. 802.7 crores were only a crore higher than the previous year's figure of Rs. 801.7 crores.

Exports to the U.S.A. which formed about 22 per cent and to East European countries between 13 to 14 per cent did not show any change during the same period. In 1964-65 there were some significant changes in the direction of India's exports. Exports to East European countries increased from 14 per cent of the total exports in 1963-64 to 18 per cent in 1964-65. Exports to Asia and Oceania declined from 27 per cent to 25 per cent and to West European countries from 32 per cent to 30 per cent. The position regarding exports to America and Africa did not show any material change in 1964-65.

A number of export promotion measures were adopted in the period under review. In order to increase exports of minerals and metals, a new corporation viz., Minerals and Metals Trading Corporation was established in the public sector. The Export Credit and Guarantee Corporation was constituted to take over the functions of the Export Risks Insurance Corporation. Freight concessions on exports were extended to 65 additional engineering items. It was also decided to set up a free trade zone at Kandla port. A new scheme of granting tax credit certificates to exporters was announced. Action was also taken to set up export promotion organisations in different States,

IMPORTS

Imports recorded a substantial increase during the years 1963-64 and 1964-65. In 1963-64, according to customs data, the total value of imports was of the order of Rs. 1,223 crores, showing an increase of Rs. 87 crores or 7.7 per cent over 1962-63. In 1964-65 imports registered a further increase of Rs. 126 crores or 10.3 per cent, reaching a level of Rs. 1,349 crores. The increase in the total value of imports during these two years was mainly the result of higher imports of cereals and machinery and equipment.

In 1963-64, the main items of import which showed an increase were mineral fuels, lubricants and related materials, fertilizers, iron and steel, machinery and raw wool. On the other hand, the imports of a number of items like raw cotton, chemical elements and compounds, dyeing, tanning and colouring materials and raw jute declined. The fall in imports of these commodities was mainly due to increased production of substitutable indigenous goods and the restrictive import policy followed. In 1964-65 imports of machinery and cereals recorded a further increase. The other items of import which showed a marked increase were cashewnut, raw cotton, raw jute, iron and steel and dyeing and colouring materials. On the other hand, fertilizers, mineral fuels and lubricants and chemicals which had shown increases in 1963-64 registered a decline in 1964-65. Crude rubber, art silk yarn and medicinal and pharmaceutical products were some of the items whose imports also declined. The following table gives the trends in imports of principal commodities during the years 1960-61 to 1964-65.

Imports of Principal Commodities

(Rs. crores)

Commodity	1960-61	1961-62	1962-63	1963-64	1964-65
1. Cereals and cereal preparations ..	181.4	117.9	144.3	179.6	282.1
2. Raw cotton other than linters ..	81.7	62.7	56.9	49.0	58.0
3. Fertilizers crude and manufactured	12.1	15.0	30.0	37.6	32.9
4. Mineral fuels, lubricants and related materials	69.5	95.9	88.0	104.5	68.7
5. Chemical elements and compounds	39.3	35.6	38.1	32.1	34.0
6. Medicinal and pharmaceutical products	10.5	11.3	9.3	8.6	8.2
7. Dyeing, tanning and colouring materials	10.6	14.5	12.1	8.0	9.2
8. Crude rubber and rubber manufactures	14.0	13.6	12.0	11.7	6.8
9. Base metals	169.9	167.3	144.2	148.2	163.4
(i) Iron and steel	122.6	108.0	89.0	93.2	105.0
(ii) Non-ferrous metals	47.3	49.3	55.2	55.0	58.4
10. Machinery and parts thereof ..	260.6	304.2	315.3	365.9	404.2
11. Transport equipment	72.4	64.6	72.0	71.1	73.5
12. Others	217.8	214.5	213.4	206.6	208.0
TOTAL IMPORTS ..	1,139.7	1,107.1	1,135.6	1,222.9	1,349.0

Import policy during the two years under review continued to be broadly restrictive with a small measure of liberalisation. It was influenced by two main factors, viz., a difficult foreign exchange situation and the need to accord priority to the requirements of defence and development. In 1963-64 the drastic cuts which had been imposed in the preceding year in respect of established importers' quotas were partially restored but the grant of quotas was confined to specific items of key importance to the economy and such items which had a bearing on export promotion. The year 1964-65 was marked by a further liberalisation of the quotas for the small-scale sector. In the expectation of an increase of non-project aid, some relaxation was also made for maintenance imports needed by actual users with a view to facilitate fuller utilisation of installed capacity.

EXTERNAL ASSISTANCE

External assistance (other than PL 480) authorised during the first four years of the Third Plan amounted to Rs. 1,984 crores. Taking into account the carry-over of Rs. 694 crores from the Second to the Third Plan, the total assistance for the Third Plan that became available by the end of 1964-65 amounted to Rs. 2,678 crores—Rs. 2,581 crores as loans and Rs. 97 crores as grants. Of the total authorisation of Rs. 1,984 crores during the first four years (1961—65), approximately 92 per cent accrued from the members of the Aid-India Consortium, 7 per cent from the USSR and the East European countries and 1 per cent from other countries. The details are given in the Annexure at the end of the Chapter, ...

A progressive improvement in the rate of utilisation of external assistance was recorded since the beginning of the Third Plan. Utilisation during the two years, 1963-64 and 1964-65, was of the order of Rs. 408 crores and Rs. 502 crores respectively as against Rs. 251 crores in 1961-62 and Rs. 325 crores in 1962-63. The improvement was mainly due to a large proportion of non-project assistance being made available by the donors. Non-project assistance formed about 50 per cent of the commitments made by the members of the Consortium for the year 1964-65. This may be compared to about 40 per cent for the previous year. The stream-lining of procedures at both ends and better implementation of the projects financed through foreign aid have also contributed to speedier utilisation of the assistance. A Committee on Utilisation of External Assistance under the chairmanship of Prof. V. K. R. V. Rao was appointed in June, 1963 to suggest *inter alia* ways and means of ensuring speedier and more efficient utilisation of foreign assistance. The Committee submitted its report in March, 1964 and its main recommendations have been accepted by the Government. The data regarding availability and utilisation of external assistance and the unspent balance as on 1st April, 1965 is given in the Annexure at the end of the Chapter.

There was a considerable step-up in the inflow of PL 480 assistance from the USA in the form of commodities. The following table shows the authorisation and utilisation of such assistance during the first four years of the Third Plan:

PL 480 Assistance

(Rs. crores)

	Authorisation	Utilisation	Balance as on 1st April 1965
Carry-over of undisbursed aid from the Second to Third Plan	597.50		
1961-62 .. .. .	..	87.51	
1962-63	43.33	122.87	
1963-64	4.91	185.19	
1964-65	225.19	215.32	
TOTAL ..	870.93	610.89	260.04

There was also a liberalisation in the terms of borrowing during this period. The average rate of interest on external borrowings which was 4.3 per cent during the Second Plan period came down to about 2.6 per cent in 1963-64. The maturity period of loans also increased. A substantial portion of the foreign loans outstanding in September, 1964, about 50 per cent of the total, however, carried interest rate of 5 per cent or more.

ANNEXURE

Availability of External assistance and utilisation thereof during the first four years of the Third Plan (1961-62—1964-65)

(Rs. crores)

Source of aid	Carry-over of unutilised aid from Second to Third Plan	Authorisation during Third Plan					Total available for Third Plan upto 31-3-65	Utilisation during Third Plan					Balance available as on 1-4-65
		1961-62	1962-63	1963-64	1964-65	Total		1961-62	1962-63	1963-64	1964-65	Total	
		3	4	5	6	7		8	9	10	11	12		13	14
A. Loans													
1. IBRD ..	61.76	69.29	..	14.29	..	83.58	145.34	35.91	33.59	14.94	17.59	102.03	43.31
2. IDA ..	..	50.95	82.37	9.52	58.57	201.41	201.41	1.23	9.04	42.07	58.40	110.74	99.67
3. USA ..	197.62	79.29	330.47	199.46	84.87	694.09	891.71	70.96	166.18	195.14	181.29	613.57	278.14
4. UK ..	0.81	60.00	66.66	40.00	39.98	206.64	207.45	22.98	29.76	34.74	39.96	127.44	80.01
5. West Germany ..	14.20	69.64	55.95	94.99	45.22	265.80	280.00	66.01	27.06	30.82	49.64	173.53	106.47
6. Canada ..	..	..	..	7.35	23.62	30.97	30.97	..	..	0.80	5.82	6.62	24.35
7. Japan ..	19.44	38.10	4.76	38.08	28.57	109.51	128.95	8.47	11.40	20.87	25.27	66.01	62.94
8. France ..	..	14.29	14.28	9.52	9.52	47.61	47.61	..	..	..	13.00@	13.00	34.61
9. Italy ..	..	21.43	4.18	21.43	17.14	64.18	64.18	..	0.18	2.22	6.63	9.08	55.10
10. Austria ..	..	..	2.38	1.83	1.90	6.11	6.11	..	..	1.20	1.36	2.56	3.55
11. Belgium ..	..	..	4.76	4.76	..	9.52	9.52	..	..	..	1.17	1.17	8.35
12. Netherlands ..	..	..	..	13.15	2.63	15.78	15.78	..	..	..	2.78	2.78	13.00
13. Sweden ..	..	..	..	..	2.21	2.21	2.21	..	..	..	..	..	2.21
14. Denmark ..	..	..	..	1.03	1.38	2.41	2.41	..	..	..	0.41	0.41	2.00
15. Switzerland ..	6.60	..	5.38	3.27	..	8.65	15.25	..	0.23	1.61	0.13	1.97	13.28
16. USSR ..	308.96	..	..	..	100.50	100.50	409.46	24.57	32.43	47.29	64.97	169.26	240.20
17. Czechoslovakia ..	23.10	..	..	..	40.00	40.00	63.10	..	..	0.79	5.19	5.98	57.12
18. Yugoslavia ..	19.05	..	..	..	..	..	19.05	..	..	0.40	3.89	4.29	14.76
19. Poland ..	14.30	..	15.50	..	10.50	26.00	40.30	0.03	0.57	1.87	7.34	9.81	30.49
TOTAL A—(Loans)	665.84	402.99	586.69	458.68	466.61	1,914.97	2,580.81	230.16	310.44	394.76	484.89	1,420.25	1,160.56

B. Grants															
1. USA	..	16.49	7.46	3.87	1.54	4.11	16.98	33.47	10.01	8.36	2.94	4.30	25.61	7.86	
2. Canada	..	9.44	12.13	8.82	8.34	16.08	45.37	54.81	9.46	5.29	}	9.50	12.49	38.23	21.07
3. Australia	..	0.64	1.49	0.74	(—)0.97*	0.70	1.96	2.60	0.73	0.46					
4. New Zealand	..	0.20	0.02	..	0.17	0.51	0.70	0.90	0.19	0.01					
5. U.K.	..	0.35	0.05	0.05	0.54	..	0.64	0.99	0.10	..					
6. Norway	0.99	0.33	0.33	0.33	1.98	1.98	0.45	0.40	0.32	0.35	1.52	0.46	
7. West Germany	..	1.48	..	..	..	..	..	1.48	0.10	0.33	0.42	0.44	1.29	0.19
8. Sweden	1.10	1.10	1.10	..	..	..	..	..	1.10	
TOTAL B—(Grants)	..	28.60	22.14	13.81	9.95	22.83	68.73	97.33	21.04	14.85	13.18	17.58	66.65	30.68	
TOTAL A+B (Loans & Grants)		694.44	425.13	600.50	468.63	489.44	1,983.70	2,678.14	251.20	325.29	407.94	502.47	1,486.90	1,191.24	
<i>U.S. Public Law Assistance (PL 480)</i>															
	..	597.50	..	43.33	4.91	225.19	273.42	870.93	87.51	122.87	185.19	215.32	610.89	260.04	

@ Estimated.

* Due to adjustments.

Source : Economic Survey for 1965-66 published by the Ministry of Finance, Government of India.

CHAPTER II

FINANCIAL RESOURCES FOR THE PLAN

The Third Plan envisaged aggregate financial outlays in the public sector of the order of Rs. 7,500 crores, investment at Rs. 6,300 crores and current outlay at Rs. 1,200 crores. The cost of implementing the physical programmes included in the Plan, however, added up to around Rs. 8,300 crores. It was stressed, therefore, that every effort should be made to bridge the gap between the limit of Rs. 7,500 crores for financial outlays as indicated by the estimates on resources and the requirements.

During the first four years of the Plan, there have been certain important developments which have had a significant effect on the resources position. Combined revenue receipts of the Centre, States and Union Territories rose from about 1,718 crores in 1960-61 to Rs. 3,109 crores in 1964-65 or by about 80 per cent. The increase in tax revenues during the same period was higher at 89 per cent. The marked improvement in revenue receipts was the result of intensification of resource mobilisation under the impact of national emergency. A massive tax effort was made at the Centre in the budget for 1963-64 and was carried further during the following year. Consequently, the proportion of total tax revenue to national income which was 9.6 per cent in 1960-61 rose to 13.5 per cent in 1963-64, as against a level of 11.4 per cent expected to be reached by the end of the Third Plan, that is, 1965-66. The increase of 4 per cent over the first three years of the Plan may be compared to a rise of 2.2 per cent over a whole decade covering the first two Plans.

On the expenditure side, the overall revenue expenditure of the Centre, States and Union Territories increased by over 76 per cent between 1960-61 and 1964-65. Defence expenditure on both revenue and capital account went up by Rs. 535 crores between 1960-61 and 1963-64 followed by a marginal decline of Rs. 10 crores in 1964-65. There was a large increase in expenditure under non-plan development items also, more than was originally estimated at the time of formulation of the Plan. The total deficit of the Central and State Governments taken together increased from about Rs. 184 crores in 1961-62 to Rs. 211 crores in 1963-64 and there was a decline to Rs. 188 crores in the following year. In the context of slow rate of growth in agricultural production, despite a vigorous effort at resource mobilisation to narrow the gap between outlay and receipts, there was steady rise in the price level during the period under review.

The following table shows the original scheme of financing the Third Five Year Plan and as it has operated over the period of four years, 1961—65. Details are given in the Annexure at the end of the Chapter.

Financing of the Third Plan—1961-62 to 1964-65

(Rs. crores)

	Five- year scheme of Finance	1961-62 (Accts.)	1962-63 (Accts.)	1963-64 (Accts.)	1964-65 (Accts.)	Total four years 1961-65
1. Balance from current revenues (at 1960-61 rates of taxation)	550	163	56	(—)156	(—)163	(—)100
2. Additional taxation	1,710	107	292	654	785	1,838
3. Contribution of Railways	100	43	28	29	(—)8	92
4. Surpluses of other public enterprises (at 1960-61 prices of products)	450	29	35	92	110	266
5. Loans from public (net)	800	133	192	184	243	752
6. Small savings	600	92	79	137	129	437
7. Unfunded debt (net)	265	54	59	71	72	256
8. Compulsory deposits and annuity deposits (net) .. ..	..	..	..	30	42	72
9. Steel Equalisation Fund	105	13	11	(—)1	1	24
10. Miscellaneous capital receipts (net)	170	48	45	(—)39	60	114
1. Budgetary receipts corresponding to external assistance	2,200	262	406	497	572	1,737
12. Deficit financing	550	184	183	211	188	766
TOTAL	7,500	1,128	1,386	1,709	2,031	6,254

The performance under each of the items indicated in the above table is discussed below:

Balance from Current Revenues

As against the net outturn of Rs. 163 crores and Rs. 56 crores respectively under this item during the first two years, the actual realization in 1963-64 and 1964-65 turned out to be (—) Rs. 156 crores and (—) Rs. 163 crores respectively. While the balance from current revenues generally maintained an upward trend in the States during the first three years, there was a sizeable deterioration in this respect at the Centre and in the overall position. Following the declaration of emergency and the consequent step-up of outlay on defence and other non-plan expenditure, both developmental and non-developmental, the net out-turn of balance from current revenues showed a marked decline in 1963-64. In the States also, there was an increase in non-plan expenditure on account of revision of emoluments of State Government employees and an increase in the outlay on civil defence programmes etc.

Additional Taxation

The Third Plan target of additional taxation, including measures to raise the surplus of public enterprises was indicated at Rs. 1,710 crores, Rs. 1,100 crores at the Centre and Rs. 610 crores in the States. The yield over the first four years at Rs. 1,838 crores was Rs. 128 crores more than

the target. The bulk of additional taxation, as much as Rs. 1,437 crores was imposed by the Centre and the States' share came to Rs. 401 crores. The Central Government had made a good start right from the beginning of the Plan period. In the States the beginning was modest in the first two years but in the third year under the impact of national emergency, both the Centre and the States put in a substantial effort at additional resource mobilisation. The steps taken included the revision of railway fares and freights, postal rates, electricity tariffs and State road transport charges. At the Centre, additional taxation to the extent of Rs. 260 crores was imposed in 1963-64, which was expected to yield an amount of Rs. 827 crores over the Plan period. At the State level, the measures introduced brought forth a yield of about Rs. 56 crores in 1963-64, estimated to bring in Rs. 209 crores over the Plan period.

In 1964-65, the Centre pursued the effort further. Additional taxation which covered some adjustment in railway freights also was expected to bring in about Rs. 65 crores in that particular year and about Rs. 225 crores over the last two years of the Plan. In the case of States, the effort made during 1964—65 was rather small, eight States put through measures expected to yield about Rs. 7 crores during the year and Rs. 17 crores over the Plan period.

As a whole, the tax effort put in both by the Centre and the States over the four years 1961—65 was substantial. At the end of the fourth year, several States had reached and some fulfilled their Plan targets of additional resource mobilisation. The emphasis was more on increasing the rates or widening of the existing taxes and duties rather than on the imposition of new ones. There was a considerable increase both in coverage and in the rates of Union excise duties. State Governments did not undertake any substantial changes in the taxation of the agricultural sector and major reliance was placed on general sales tax, motor vehicles taxation, taxes on passengers and goods, electricity duty, stamps and registration. Out of the aggregate additional taxation of the order of Rs. 400 crores undertaken by the States over the four year period, only Rs. 49 crores related to land revenue, agricultural income-tax and irrigation rates.

Contribution of Railways

Against the five-year estimate of Rs. 100 crores (excluding the amounts to be raised from changes in freights and fares), the railways' contribution towards financing of the Plan over the first four years totalled Rs. 92 crores. The contribution was Rs. 43 crores in 1961-62 and Rs. 28 crores in 1962-63. In 1963-64 the outturn remained almost unchanged at Rs. 29 crores and in the fourth year it dwindled to (—) Rs. 8 crores. The decline over the years was mainly due to the increase in working expenses and revision of pay scales and allowances of the railway staff. In the light of this trend, it appeared that there might be some shortfall in the contribution of the railways over the five-year period.

Surpluses of other Public Enterprises

This item represents not merely net profits of public enterprises,* it also includes net accretions to depreciation reserve funds and other funds of the enterprises. It was assumed that since most of the public enterprises were new, the provision made for depreciation and other funds would normally be available for financing their expansion programmes. Of the total estimated contribution of Rs. 450 crores over the Plan period, Rs. 300 crores were expected to accrue in respect of Central Government enterprises and the remaining Rs. 150 crores from enterprises of State Governments. These estimates were tentative, being based on inadequate data. As against the five-year estimate of Rs. 450 crores, contributions of the enterprises in the first four years were of the order of Rs. 266 crores, Rs. 181 crores at the Centre and Rs. 85 crores in the States. Even on the optimistic assumption that an improvement might occur in the last year of the Plan, the target of Rs. 450 crores was not likely to be reached and a substantial shortfall was anticipated over the Plan period.

The Posts and Telegraphs Department in 1964—65 made a net contribution of Rs. 13.4 crores to depreciation and other reserve funds as compared to Rs. 14.3 crores in 1963-64. As regards other Central Government enterprises, Hindustan Steel Ltd., which accounts for a major part of the total investment in the industrial and commercial undertakings of the Central Government, showed a net profit of Rs. 2.1 crores in 1964-65 after allowing for depreciation and interest charges, as compared to a loss of Rs. 4.8 crores in 1963-64. As for State Government enterprises, their contribution was of the order of Rs. 85 crores over the first four years as against the estimate of Rs. 150 crores over the entire Plan period. The bulk of the contributions of State Government enterprises was derived from the surpluses of electricity boards and road transport undertakings. Net return on investment in electricity undertakings (after providing for depreciation but not interest charges) and taking into account the receipts from electricity duty was estimated at 7.6 per cent in 1963-64. Excluding receipts from electricity duty which is in the nature of a sales tax, the net return works out at about 5 per cent.

Loans from the Public

The target set in the Third Plan for market borrowings was Rs. 800 crores, Rs. 475 crores in respect of the Centre and Rs. 325 crores for the States. The total originally included the net collections under the prize bonds scheme also. It was clearly stated in the Third Plan that the amount

*For purposes of estimating contribution of public enterprises to Plan resources, major enterprises working on autonomous lines were taken into consideration. The departmentally managed enterprises such as irrigation, forests and certain commercial and industrial undertakings were excluded but Posts and Telegraphs were included.

of Rs. 800 crores was intended to be net absorption of Government securities by the public, including commercial banks. The support of the Reserve Bank to the loan programme, if the need arose for it, was to be treated as part of deficit financing. Net market borrowings in the first four years totalled Rs. 752 crores. The share of the Central and State Governments in the aggregate was roughly equal. Judging from the fact that about 94 per cent of the target of Rs. 800 crores had been achieved over the four-year period, the realisation over the Plan period was likely to exceed the original estimate by about Rs. 100—150 crores.

In the first two years of the Plan, the States' net borrowings were placed at Rs. 65 and Rs. 107 crores respectively and the performance was even better in 1964-65. The rate at which the States were able to draw on the market was higher than was considered feasible at the time of the formulation of the Plan. In 1963-64 a centralised borrowing programme was adopted and the States' share of Rs. 101 crores (gross) was passed on to them. Following a decision taken by the Finance Minister's Conference held in November, 1963, the States were allowed to float market loans independently of the Centre's programme. In 1964-65 the net borrowing of the States (including State enterprises) amounted to Rs. 111 crores, and of the Centre to Rs. 132 crores.

Small Savings and other related items

The five-year target for small savings was placed at Rs. 600 crores. The actual collections in four years 1961—65 amounted to Rs. 437 crores or an average of Rs. 109 crores per year. Judging from the past trend, it appeared that the Plan target would nearly be fulfilled. From a record level of net collections at Rs. 108 crores in 1960-61, there was a decline in the first two years of the Third Plan to Rs. 92 crores in 1961-62 and Rs. 79 crores in 1962-63. The results achieved over the next two years were encouraging, the net receipts being shown at Rs. 137 crores in 1963-64 and Rs. 129 crores in 1964-65.

Compulsory Savings

There was no specific provision made in the Third Five Year Plan under compulsory savings. In 1963-64 the Central Government introduced a compulsory deposits scheme in the form of an additional surcharge on income-tax. The levy was discontinued from the assessment year 1964-65. The accretions from this source amounted to Rs. 30 crores in 1963-64 and Rs. 1.6 crores in 1964-65. Under the Finance Act, 1964, an income-tax annuity deposits scheme was introduced which required assesseees whose annual income exceeded Rs. 15,000 to make annuity deposits on a graduated scale. The deposits are repayable in ten annual equated instalments of principal and interest. Credit of Rs. 40.3 crores (net) was taken under this item in 1964-65. Including contributions from compulsory deposits, the total accruals under small savings and related items amounted to Rs. 509 crores over the first four years or an average of Rs. 127 crores per year.

Unfunded Debt

The five-year estimate in regard to provident fund and other items was indicated at Rs. 265 crores, Rs. 183 crores at the Centre and Rs. 82 crores for the States. The total realisation has steadily risen from Rs. 54 crores in 1961-62 to Rs. 72 crores in 1964-65. On the basis of available data, contributions over the Plan period were likely to be of the order of Rs. 340 crores, that is substantially higher than the target figure. The results achieved were mainly due to the extension of provident schemes to all employees of the Central Government on a compulsory basis and similar steps taken in most of the States.

Steel Equalisation Fund

In the original scheme of finance for the Third Plan, the net accrual under this item was estimated at Rs. 105 crores. The realisation in the first two years of the Plan amounted to Rs. 13 crores and Rs. 11 crores respectively. In 1963-64 the contribution from this source was a minus entry and at Rs. 1 crore in 1964-65. With the abolition of the surcharge on iron and steel from 1st March, 1964 there were no adjustments to be made in respect of new transactions. The transfers to the Fund from 1964-65 onwards merely indicate the arrear collections of surcharge on iron and steel.

Balance of Miscellaneous Capital Receipts

This is a highly variable item, being a summation of a large number of entries in the capital budget on account of various funds, deposits, loans and advances, State trading, etc. The net receipts were estimated at Rs. 170 crores over the Third Plan period, Rs. 428 crores at the Centre and (—) Rs. 258 crores in the States. There was a net outturn of Rs. 48 crores and Rs. 45 crores respectively in the first two years of the Plan. In the third year the net receipts at (—) Rs. 39 crores showed a marked deterioration but in the fourth year they rose to Rs. 60 crores. Over the four-year period, the net outturn was Rs. 114 crores as against the Plan estimate of Rs. 170 crores. On this basis, a shortfall under this item might be expected over the Plan period. It appeared that the assumptions on which the original estimate was based had not materialised. The assumptions were that the non-plan capital disbursements would be kept down to the minimum and the recoveries in respect of arrears of outstanding loans and advances would be speeded up.

External Assistance

The estimate of budgetary receipts against external assistance (other than PL 480) was shown at Rs. 2,200 crores over the Plan period. In all the receipts amounted to Rs. 1,737 crores over the first four years or about 79 per cent of the total. On present indications, the accrual from this source over the five-year period was likely to exceed the original estimate by over Rs. 250 crores. There has been a progressive improvement in the

rate of utilisation of external assistance in recent years. This is attributed to a larger proportion of non-project aid made available by friendly countries and international agencies, the change in procedures and better implementation of the projects financed through external assistance.

Deficit Financing

During the Third Plan it was proposed to limit deficit financing to the minimum in the context of emerging economic trends. On a broad view, the limit was placed at Rs. 550 crores, 524 crores at the Centre and Rs. 26 crores in the States. The main desiderata were the course of prices, the food situation and the strength of inflationary pressure in the economy. Over the first four years, deficit financing amounted to Rs. 766 crores, that is, about 40 per cent more than the original estimate for the Plan period as a whole. The deficits incurred in the first two years were of the order of Rs. 183—184 crores and in the third year the figure went up to Rs. 211 crores. In the beginning of 1964-65 it was felt that deficit financing at the level of the preceding year could not but raise prices further and thus aggravate economic difficulties. Thus it was scaled down to Rs. 188 crores as part of the measures directed to bring a measure of relief to the economy strained by rising prices and a low level of production.

Central Assistance to States

Central assistance towards State Plans over the five-year period was taken at Rs. 2,375 crores while their own resources added to Rs. 1,462 crores. Thus the total of the resources available for financing State Plans would add up to Rs. 3,837 crores or close to the programme limit of Rs. 3,847 crores. In the four years 1961—65, central assistance to States by way of loans and grants to finance their plans totalled Rs. 1,804 crores. Thus nearly 60 per cent of the total Plan outlay of the States was met through this source which was broadly in accordance with the Plan estimates.

In spite of the general buoyancy of their tax revenues and increased Central assistance some of the State Governments have been facing serious ways and means difficulties. Ways and means advances from the Reserve Bank of India nearly trebled from Rs. 10·8 crores (five States) at the close of 1960-61 to Rs. 32·8 crores (six States) at the end of 1964-65. The resort to overdrafts has also increased in recent years. Nine States were responsible for overdrafts to the tune of Rs. 45 crores at the end of 1964-65 as compared to Rs. 39 crores on behalf of an equal number of States at the end of 1960-61. Total outstanding debt of the State Governments increased by about 70 per cent from Rs. 2,737 crores at the end of 1960-61 to Rs. 4,671 crores at the end of 1964-65 and was expected to be nearly doubled at the close of the Third Plan period.

The Overall Position

The overall picture regarding internal resources that emerges is one of optimism tempered with caution. Against the target of total public sector outlay of Rs. 7,500 crores over the five years, the outlay over the first four years was estimated at Rs. 6,254 crores or about 83 per cent of the total Plan outlay. According to the latest data available, the outlay during 1965-66 was around Rs. 2,374 crores so that the total Plan outlay over the five-year period would be roughly of the order of Rs. 8,630 crores. This figure is slightly inflated and the actual might turn out to be lower. It is clear that part of the increased outlay was on account of the higher costs of capital equipment, materials and wages etc. The incurring of outlay of this size was made possible as a result of collective and corporate effort at the Centre and in the States to raise adequate resources, albeit at some strain in a somewhat difficult economic situation. The less satisfactory features of the situation were optimistic budgeting in regard to revenue, sizeable increase in expenditure under non-development items and a deterioration in ways and means position in a number of States.

ANNEXURE
Financing of the Third Plan—Centre and States*
 (1961-62 to 1964-65)

(Rs. crores)

	1961-62 Accounts			1962-63 Accounts			1963-64 Accounts			1964-65 Accounts**			Total four years (1961-65)		
	Centre	States	Total	Centre	States	Total	Centre	States	Total	Centre	States	Total	Centre	States	Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Balance from current revenues	136	27	163	(—) 26	32	56	(—)236	80	(—)156	(—)202	39	(—)163	(—)328	228	(—)100
2. Additional taxation† ..	90	17	107	238	54	292	505	149	654	604	181	785	1,437	401	1,838
3. Railways Contribution† ..	43	..	43	28	..	28	29	..	29	(—)8	..	(—)8	92	..	92
4. Surplus of other Public enterprises†† ..	13	16	29	12	23	35	72	20	92	84	26	110	181	85	266
5. Loans from public (net)‡	48	85	133	85	107	192	112	72	184	132	111	243	377	375	752
6. Share in small savings§ ..	27	65	92	32	47	79	66	71	137	45	84	129	170	267	437
7. Compulsory Deposits and income tax annuity deposits ..	..	..	..	..	..	..	30	..	30	42	..	42	72	..	72
8. Unfunded debt	40	14	54	45	14	59	51	20	71	50	22	72	186	70	256
9. Steel equilisation Fund (net)	13	..	13	11	..	11	(—)1	..	(—)1	1	..	1	24	..	24

10. Miscellaneous capital receipts (net) ..	47	1	48	91	(-)-46	45	..	(-)-39	(-)-39	112	(-)-52	60	250	(-)-136	114
11. Total (1 to 10)	457	225	682	516	281	797	628	373	1,001	860	411	1,271	2,461	1,290	3,751
12. Budgetary receipts corresponding to external assistance @	262	..	262	406	..	406	497	..	497	572	..	572	1,737	..	1,73
13. Deficit financing	155	29	184	220	(-)-37	183	234	(-)-23	211	227	(-)-89	188	836	(-)-70	766
14. Total (11 to 13) ..	874	254	1,128	1,142	244	1,386	1,359	350	1,709	1,659	372	2,031	5,034	1,220	6,254
15. Assistance for States ‡	..	(-)-327	327	..	(-)-432	432	..	(-)-450	450	..	(-)-595	595	..	(-)-1,804	1,804
16. Total Resources— Plan Outlay	547	581	1,128	710	676	1,386	909	800	1,709	1,064	967	2,031	3,230	3,024	6,254

*Centre includes Union Territories.

**Data included for States for 1964-65 relate to preliminary actuals.

+Includes the yield from changes in railway fares and freights and postal rates as well as the changes introduced by Electricity Boards and State Transport Undertakings in electricity tariffs and bus fares respectively.

†Excluding the amount raised by changes in fares and freights which is included under item 2.

††Excluding the amount raised by changes in postal rates as well as in electricity tariffs and bus fares. This amount is included under item 2.

‡As defined in the Plan, receipts under market loans refer to net absorption of Government securities by the public. Correspondingly, deficit financing refers to changes in Government's indebtedness to the Reserve Bank.

§Includes receipts under Prize Bonds and Gold Bonds.

@Receipts corresponding to external assistance include net receipts from foreign grants and loans as well as net accretion of rupee resources arising from PL 480 imports other than those for building up buffer stocks of foodgrains.

‡The figures of Central assistance are as indicated by State Governments.

CHAPTER III

PLAN OUTLAY AND TARGETS

The Third Five-year Plan provided for public sector outlays totalling Rs. 7,500 crores corresponding to the financial resources in sight at the time of formulation of the Plan. As against this, the total cost of physical programmes included in the Third Plan was reckoned around Rs. 8,300 crores. During the period of four years 1961—65, there was a progressive increase in Plan outlays of the Central and State Governments (including Union Territories) from about Rs. 1,128 crores in 1961-62 to Rs. 1,709 crores in 1963-64 and Rs. 2,031 crores (anticipated) in 1964-65. On the basis that expenditure of the order of Rs. 6,254 crores had been incurred over the four-year period, about 83 per cent of the total Plan outlay would have been completed. The total outlay during the five-year period (1961—66), however, is estimated at about Rs. 8,631 crores i.e. Rs. 1,131 crores higher than the original provision of Rs. 7,500 crores. The bulk of the increase mainly under Transport and Communications, Power and Industry was due to revision of cost estimates (and in some cases, scope of projects) and inclusion of new programmes. The increase in expenditure was partly due to the rise in prices reflected in a general increase in construction and other costs. About 13 per cent of the total expenditure was incurred in the first year, 16 per cent in the second year, 20 per cent in the third year and 23 per cent in the fourth year. The tempo of outlay reached its peak in the fifth year around 28 per cent.

The distribution of the public sector outlay as indicated in the Third Five-year Plan was: Centre Rs. 3,600 crores, States Rs. 3,725 crores and Union Territories Rs. 175 crores, a total of Rs. 7,500 crores. During the four-year period, the Centre (including Union Territories) would have achieved 86 per cent of the projected Plan outlay. The States (including Nagaland) spent 78 per cent of the five-year programme limit of Rs. 3,855 crores. It may be mentioned that from the very start, the States had been working on the basis of "programme limit" which was higher than their share of the total Plan outlay shown at Rs. 3,725 crores. Among the States, there were considerable disparities in the level of outlay reached in the four years (Table 6). The proportion varied between 59 per cent for Jammu and Kashmir and 104 per cent for Orissa. Nine States had a figure below the average and seven above the average. For Union Territories, the proportion was low for Goa, Daman and Diu and Andaman and Nicobar Islands (Table 7). Himachal Pradesh with over 95 per cent of the Plan outlay completed in four years was ahead of all the Union Territories.

The sectoral distribution of outlays (Table 1) showed that during the first four years, the outlay under Transport and Communications had been proportionately much higher than in all the other sectors. The pace of expenditure under Agriculture, Community Development and Cooperation, Irrigation and Village and Small Industries had been rather slow.

TABLE 1—Third Five-Year Plan Outlays during 1961—65
(Centre, States and Union Territories)

Major Head	Third Plan Financial Limit (1961-66)	1961-62 (Actuals)	1962-63 (Actuals)	1963-64 (Actuals)	1964-65 (Anticipated)	1961-65	
						Amount	Percentage of Col. 2
1	2	3	4	5	6	7	8
Agricultural Programmes	665	83.7	101.1	133.4	185.0	503.2	75.7
Community Development and Cooperation	403	64.4	72.4	74.3	76.8	287.9	71.4
Major and Medium Irrigation (including Flood Control)	650	106.0	114.5	120.5	149.2	490.2	75.4
Power	1,012	139.5	182.4	257.1	305.6	884.6	87.4
Industry and Mining	1,520	194.9	255.9	343.0	406.3	1,200.1	79.0
Village and Small Industries	264	37.6	39.8	43.2	48.9	169.5	64.2
Transport and Communications	1,486	296.5	374.6	459.7	506.2	1,637.0	110.2
Social Services	1,300	191.7	230.5	257.8	326.1	1,006.1	83.2
Miscellaneous		13.6	14.6	20.3	26.6	75.1	
Inventories*	200	..	..	..	..	..	..
TOTAL	7,500 (100)	1,127.9 (15.0)	1,385.8 (18.5)	1,709.3 (22.8)	2,030.7 (27.1)	6,253.7 (83.4)	83.4

*The expenditure under Inventories is distributed over the various heads of Development.
Note: Figures in brackets against Total indicate percentages.

It will be seen from Table 2 that the relative shares of outlay under different major heads as indicated in the Third Plan had been more or less maintained except in the case of Transport and Communications which accounted for 26 per cent of the total expenditure over the four years as compared to 20 per cent as originally envisaged. The share of Power advanced by one per cent while that of all other sectors declined by one per cent.

Under Transport and Communications, since the commencement of the Third Plan, a series of steps had been taken with a view to strengthening programmes and obtaining the maximum use of available capacities on

railways, road transport and coastal shipping. The emergency led to a further review of the Plan programmes in relation to requirements in the North-East and the need to develop the main arterial routes. Under the impact of emergency, substantial increases were also made in the outlays under Posts and Telegraphs Department. It was felt that in particular the rail transport capacities should be more adequate and even a little ahead of the actual requirements.

TABLE 2—*Third Five-Year Plan: Distribution of Outlays*
(1961—1965)

Major Head	(Rs. crores)							
	Third Plan Financial Limit 1961-66		Total Expenditure Centre, States & Union Territories (1961-65)		All States (1961-65)		Centre and Union Territo- ries (1961-65)	
	Amount	Per cent	Amount	Per cent	Amount	Per cent	Amount	Per cent
Agricultural Program- mes	665	9	503.17	8	433.23	14	69.94	2
Community Develop- ment and Coopera- tion	403	5	287.92	5	263.61	9	24.31	1
Major and Medium Irrigation including Flood Control	650	9	490.22	8	485.17	16	5.05	neg.
Power	1,012	13	884.59	14	813.16	27	71.43	2
Industry and Mining	1,520	20	1,199.97	19	68.88	2	1,131.09	35
Village and Small Industries	264	4	169.44	3	75.20	3	94.24	3
Transport and Com- munications	1,486	20	1,637.00	26	224.69	7	1,412.31	44
Social Services	1,300	17	1,006.12	16	615.36	20	390.76	12
Miscellaneous			75.15	1	41.05	2	31.10	1
Inventories*	200	3	..	..	..	..	..	..
TOTAL	7,500	100	6,253.58	100	3,023.35	100	3,230.23	100

* The expenditure under Inventories is distributed over the various heads of Development.
NOTE: The figures of outlays as given in this Chapter do not tally with similar figures, indicated in the subject Chapters. Differences are, however, marginal and are due to the fact that they have been compiled from different sources.

The programmes in the power sector were also enlarged and their implementation expedited in order to reduce the power shortage and to secure continuing expansion of power generation to meet the requirements in the early years of the Fourth Plan. The costs of projects also increased considerably on account of the rise in prices and in some cases as a result of adoption of generating units of higher capacities than envisaged earlier. In regard to rural electrification, additional programmes of energising of pumping sets were taken up during 1964—65. Under Industries, when the Third Five-Year Plan was formulated, cost estimates of several projects

were tentative and had to be revised subsequently on receipt of more detailed information contained in the project reports. Moreover, in some cases the scope of the projects was enlarged.

The tempo of outlays under agricultural programmes was slow in the first two years, which is attributed mainly to delays in finalization of schemes and obtaining financial sanctions. With the onset of emergency, the need for accelerating the progress in this key sector was recognised with a view to raising the level of agricultural production. Consequently there was a perceptible increase in outlays under this head in 1963-64 and a further stepping up in expenditure in 1964-65 in the wake of realization of serious difficulties on the food front and the drain on foreign exchange in importing foodgrains. As recommended by the Planning Commission, the State Governments made substantially higher provisions for agricultural programmes for 1964-65. Additional allocations (of Rs. 15 to 20 crores) accompanied by accelerated Central Assistance were also made available to States for high priority programmes in this sector such as, minor irrigation, soil conservation and intensive development programmes.

The shortfall recorded in respect of outlays under irrigation was attributed to difficulty in getting necessary foreign exchange and secondly, tight resources position in some States. The element of foreign exchange in irrigation projects is comparatively small, but the overall effect of shortage of foreign exchange on the progress in this sector should not be under-rated. If construction equipment and certain key materials like cement and steel fall short or are not made available in time, the tempo of work on the projects is slowed down. The progress of expenditure had been rather slow under Cooperation and extremely tardy under Panchayati Raj schemes. Against the Plan provision of Rs. 80 crores under Cooperation, about Rs. 59 crores were spent during the first four years. The corresponding figures for Panchayati Raj schemes were Rs. 11.5 crores spent against the Plan allocation of nearly Rs. 35 crores. The slow progress in the setting up of cooperative processing units was mainly on account of the fact that only a few States were technically well-equipped to undertake industrial projects in the cooperative sector. The implementation of storage schemes was also delayed because the selection of sites for rural and mandi godowns took a long time. There being no provision for Central Assistance for Panchayati Raj, the funds for various schemes under this head were to be provided wholly by the States. Apparently the State Governments were not able to find sufficient funds for these schemes, especially after the emergency.

PRODUCTION AND DEVELOPMENT TARGETS

Progress in achieving the Third Plan targets in the various sectors during the first four years, 1961—65 is described in detail in the relevant chapters. The data in respect of selected items regarding the levels of production and development reached during 1964-65 relative to the position

in 1960-61 and the targets laid for the last year of the Plan (1965-66) is summarized in Table 3.

A few general observations may be made. An assessment of the performance during the years 1961—65 in relation to the Third Plan targets reveals that the results were slow to come in the first two years. Although the achievements showed some improvement in the third and fourth year, however, on account of certain weaknesses and lags in implementation, it took longer time than was originally expected for the Plan to gather momentum. The net result was that the overall progress fell short of expectations in most of the sectors. In the key sector of agriculture, progress over the four years had been behind schedule. There was a steady enlargement in irrigation potential and utilisation of irrigation facilities, however, the achievement was substantially below the target figure. The industry and mineral sector fared better than agriculture and encouraging progress had been made in certain directions but on account of certain difficulties and bottlenecks, progress over the whole field had been rather slow and there would be substantial shortfalls in several key industries. The increase in the installed capacity of power had also lagged behind the target. In transport, shortfall was likely in the increase of freight traffic on railways due to several factors. In the field of Social Services, both general and technical education and some of the health programmes had made significant progress and in some cases, Plan targets had in fact been exceeded. Housing had not made satisfactory progress. In certain other fields of Social Services e.g. social welfare, welfare of backward classes and public cooperation, it was not possible to measure progress in purely physical terms.

TABLE 3—Progress during 1961—65: Selected Targets

Item	Unit	Achievements					Third Plan target (1965-66)
		1960-61	1961-62	1962-63	1963-64	1964-65	
1	2	3	4	5	6	7	8
Index Number of Agricultural Production . . .	1949-50=100	142.2	144.8	137.5*	142.6*	158.4*	176
Foodgrains production	million tonnes	82.02	82.71	78.45*	80.24*	88.99*	101.6
Nitrogenous fertilizers consumed . . .	lakh tonnes of nitrogen	2.1	2.4	3.1	3.9	5.6	10.2
Cooperation: short and medium term loans advanced . . .	Rs. crores	203	228	257	297	331	530
Major and Medium Irrigation:							
Potential at channel outlets (cumulative)	million acres (gross)	11.7	12.2	13.3	14.3	15.8	29.5
Utilization (cumulative)	"	8.3	9.0	10.1	11.0	12.1	22.8
Power: Installed capacity . . .	million kW	5.61	6.21	6.93	7.64	8.56	12.69

* Provisional.

TABLE 3—(contd.)

1	2	3	4	5	6	7	8
Index number of Industrial Production (calendar years)	1956=100	130.1	138.3	150.5	162.5	174.7	242‡
Production of :							
Steel ingots . . .	million tonnes	3.4	4.3	5.4	5.9	6.1	9.3
Aluminium . . .	'000 tonnes	18.3	19.9	42.6	54.0	54.1	81.3
Machine tools graded	value in (million rupees)	70	93	126	201	200	300
Sulphuric acid . . .	'000 tonnes	361	430	485	602	695	1,524
Refined petroleum products . . .	million tonnes	5.8	6.2	6.9	8.0	8.4	10.0
Cotton cloth:							
Mill sector . . .	million metres	4,649	4,686	4,498	4,484	4,676	5,300
Decentralized sector . . .	"	2,072	2,429	2,502	2,926	3,147	3,135
Total . . .	"	6,721	7,115	7,000	7,410	7,823	8,485
Minerals:							
Iron ore . . .	million tonnes	11.0	13.0	13.5	14.8	15.1	30.5
Coal . . .	"	55.7	55.2	63.8	66.3	64.4	98.6
							(90.0)§
Railways: freight carried	"	156.2	160.5	178.0	191.1	193.8	248.9
Road Transport: commercial vehicles on road . . .	'000 numbers	224	244	266	280	303	365
Shipping tonnage . . .	million grt	0.86	0.91	1.06	1.29	1.40	1.04
General Education:							
Students in Schools†	millions	44.6	50.0	53.9	58.3	63.0	63.9
							(65.1)§
Technical Education:							
Engineering and Technology degree level annual admissions . . .	'000 numbers	13.8	15.9	17.1	21.0	23.8	19.1
diploma level annual admissions . . .	"	25.8	27.7	30.8	39.7	46.2	37.4
Health:							
Hospital beds . . .	"	186	193	202	212*	229*	240
Doctors . . .	"	70.0	72.0	75.0	76.4	82.0	81.0
Exports . . .	million rupees	6,602	6,797	7,136	7,932	8,163	8,500

*Provisional

‡Estimated.

†Excludes students in pre-primary schools. §Figures in brackets indicate revised targets.

Agricultural production was stagnant during the first three years of the Plan and showed a substantial increase of 11.1 per cent in the fourth year. The production of foodgrains reached the level of 88.9 million tonnes in 1964-65 against the Plan targets of 101.6 million tonnes. As regards commercial crops, there was likely to be some shortfall in cotton, jute and oilseeds. The production of raw cotton and raw jute and mesta in 1964-65 was at about the same level as two years earlier. Sugarcane did much better and the Plan target of 10.2 million tonnes (of gur) was exceeded in 1963-64 and the production in 1964-65 was 12.32 million tonnes. The target for oilseeds was not likely to be achieved. The principal bottlenecks in achieving the Plan targets in the agricultural sector had been the low availability of chemical fertilizers and manures and of improved seeds which were much below requirements, slow progress in the field of major and medium

irrigation and lack of coordination of administrative activities at different levels. It has to be admitted that adverse weather conditions also contributed to the shortfalls in agricultural production. The coverage under improved seeds during 1964-65 was estimated at about 102 million acres which was half of the Plan target. The use of chemical fertilizers had steadily risen but the level of consumption of nitrogenous fertilizers reached in the fourth year was a little more than half (55 per cent) of the target indicated for the end year of the Plan. The consumption level of phosphatic and potassic fertilizers in 1964-65 was relatively lower at about 37 and 34 per cent of the targeted figures. Substantial progress was made in minor irrigation, against the Plan target of 12.8 million acres, the achievement during the first four years was estimated at 9.3 million acres. The progress of utilisation of the irrigation potential created from major and medium irrigation schemes had been rather slow in terms of physical targets laid in the Plan. This was mainly due to optimistic assessment of targets and shortage of key construction materials. The various factors inhibiting better implementation of the agriculture plan have been analysed in the relevant Chapter and necessary steps are being taken to overcome the various difficulties and bottlenecks.

The annual increase in industrial production estimated at 7.8 per cent (compound) during the four years 1961—65 was not in consonance with the average increase of around 11 per cent contemplated in the Third Five-Year Plan. In judging the performance of the industrial sector, however, note should be taken of the structural changes and diversification that had been achieved alongside the steady increase in the quantum of production. The emphasis in the programmes of industrial development in the Third Plan had been on capital goods and basic intermediate industries such as steel, heavy electricals, machine building, chemicals, fuel and power which are fundamental to rapid economic growth. They helped to raise the infra-structure for the future and prove the vital material inputs for agriculture and equipment and raw materials for a large number of industries. The output in these industries had increased at a higher rate than in the consumer goods industries.

The slowing down of the rate of growth in industrial production during 1964-65 was attributed mainly to foreign exchange difficulties and consequent shortage of maintenance imports including spares, components and raw materials. The result had been under-utilisation of capacities in a number of industries which were dependent on imports. In addition, considerable delays occurred in the implementation of several projects both in the public sector and private sector mainly on account of insufficient attention given to preparation of projects, lack of proper phasing and co-ordination, increases in cost estimates and prolonged negotiations with foreign collaborators. The delays contributed to the shortfalls in a number

of important industries such as steel, alloy steel, aluminium, heavy electricals, automobiles, fertilizers, sulphuric acid, soda ash, caustic soda, paper board, cement and rayon filament.

In regard to coal, a substantial shortfall was anticipated. The production reached 64.4 million tonnes in 1964-65 as against the revised target of 90 million tonnes. The demand for coal did not materialise as visualized earlier, with the result that production showed signs of being surplus and stocks at pit-heads accumulated. The production of iron ore touched 15 million tonnes (excluding Goa) in 1964-65 which was about half of the Plan target. The shortfall was due to the delay in the installation of the handling facilities at Visakhapatnam port which stood in the way of Kiriburu project going into full production and the difficulties arising from the nature of the terrain in the implementation of the Bailadila project. Moreover, the domestic demand for iron ore did not materialise as was expected earlier. In the case of petroleum refining, although India has been placed on the world oil map, as against the revised Plan target of 17.25 million tonnes, the capacity installed by the end of 1964-65 was 8.4 million tonnes or about 55 per cent. The effective capacity in terms of crude oil would be at a lower level because the bulk of the additional capacity from the second and third-million ton stage at Barauni, as also the three stages of Koyali and the new refinery at Cochin were expected to be ready for commissioning towards the close of the Third Plan period.

In the decentralised sector of Industry, the targets of handloom and khadi cloth and silk were likely to be almost achieved though the production of certain small-scale industries and handicrafts was expected to fall short of the targets. The programme of setting up industrial estates had not made significant advance because of the procedural delays in acquisition and development of land, shortage of building materials and to some extent inadequate attention being given to integrated planning.

The shortfall under Power was attributed chiefly to underestimating the time-span required for commissioning of large thermal stations and the difficulties in securing necessary foreign exchange. It had been found by experience that it took a minimum period of five years from the date of authorization to get a large thermal station going, as compared to about four years envisaged earlier. Similarly, nuclear and hydro-power stations would take longer than was originally expected. The demand for power had increased at a rapid rate with the result that power shortage and imbalances had arisen in certain areas. In the field of transport, shortfalls had occurred in the freight traffic on railways which was mainly due to the fact that the production of coal, steel and cement had fallen short of the targets laid down in the Third Plan. As regards road transport, the main reason for the slow pace of putting commercial vehicles on the road was that an increase in production of vehicles was constrained by the allocation of foreign exchange for importing raw materials and components.

In the Social Services sector, both general education and technical education had maintained a steady rate of advance. The number of students in schools at all levels (excluding pre-primary) increased by about 41 per cent over the four-year period 1961—65. The achievement at the end of 1964-65 was 63 million against the Plan target (revised) of 65 million. Secondary education in particular had made rapid strides and the achievements in the first four years of the Plan had gone beyond the targets set out for the Plan period. Elementary education, however, recorded a shortfall which was mainly due to lower achievement in the enrolment of girls. The enrolment of boys during the two years 1963—65 was higher than the targets laid down and this was reflected in the enhanced disparity between the progress of boys' and girls' education.

In the sphere of technical education, striking progress had been made during the period under review. The admissions to degree and diploma courses in 1964-65 exceeded the targets laid down in the Plan. The expansion of technical education beyond the physical facilities available, however, had created problems relating to shortages of teaching staff, hostel accommodation and of buildings. The shortage was more acute in the case of equipment and hostel facilities.

Emergency gave a fillip to certain health programmes, specially medical education, training of nurses and of health visitors and provision of more beds in hospitals and dispensaries. The number of medical colleges and their annual intake rose to 81 and 10,277 respectively during 1964-65 against the Plan target of 75 colleges and the annual intake of 8,000 students. The increase in the number of colleges and their intake, however, was not matched by the quality of education imparted and the maintenance of proper standards of admission. The number of nurses under training increased from 11,433 in 1961 to 15,084 in 1964 and it was expected that the number of trained nurses would reach 45,000 by the end of 1965-66. The establishment of primary health centres had also made good progress. 4,500 such centres had been established up to the end of 1964-65 and it appeared that the Plan target of 5,200 was not likely to be attained. Probably the target of 14,600 hospitals and dispensaries and 240,100 beds would be achieved by the end of the Plan period. As far as the work on the control of communicable diseases was concerned, satisfactory progress was made in respect of the two major programmes of eradication of malaria and smallpox. These programmes are being carried over into the Fourth Plan.

The housing schemes included in the Plan had made poor progress. The financial provisions for housing included in the annual plans of the

States were generally inadequate, even so there was a tendency to divert the small provisions under this head to other developmental activities. Other factors which contributed to slow progress in this sphere were the non-availability of sufficient land in and around growing cities and the shortage of building materials, particularly cement. The subsidized industrial housing scheme had not made much progress because of the reluctance on the part of the employers to provide housing facilities to a large number of their workers on the present terms of financial assistance extended by the Central Government. Low income group housing scheme was popular with the States, however, the financial provisions made for this purpose were grossly inadequate to meet the growing requirements. The slum clearance scheme had evoked poor response from the slum dwellers who were very reluctant to move from the areas selected for clearance. The emphasis now is on improving the living conditions in the slum areas by providing certain basic amenities for hygienic living. As for the village housing scheme, a sizeable section of the village population is still inclined to consider investment in a house as unproductive. The State Governments had generally accorded a low priority to this scheme.

THE YEAR 1965-66

The sizeable increase in agricultural production of 11.1 per cent and the rise in national income in real terms by 7.6 per cent during 1964-65 had raised expectations of steady improvement. The last year of the Third Plan, however, turned out to be the worst year since planning began. There was a fall of about 17 per cent in agricultural production during 1965-66 on account of an unprecedented drought. The growth in industrial production in 1965-66 was the lowest on record during the Third Plan period around 4 per cent as compared to an annual increase of 7.8 per cent (compound) in the first four years. The poor performance in agriculture and the slackening in industrial growth were reflected in a decline in national income by 4.2 per cent. The Indo-Pakistan hostilities and suspension of external assistance by some leading aid-giving countries added to the strain on the economy. The result was a further rise in prices and pressure on the balance of payments. From the available data it was clear that the physical targets for 1965-66 in respect of many development fields had not been achieved. This would have repercussions on long-term development since the ground covered by the end of 1965-66 would serve as the base for progress during the Fourth and subsequent Plans. The temporary setbacks have to be overcome with determination and a sense of rectitude with special attention to be given to economic and financial discipline and removing the deficiencies of effort and organisation.

TABLE 4—State Plans—Outlay by Heads of Development

(Inclusive of Nagaland)

(1961—65)

(Rs. lakhs)

Head of Development	Third Plan Programme Limit (1961—66)	Actuals				Total (1961—65)		As % of Col. 2
		1961-62	1962-63	1963-64	1964-65	Amount		
1	2	3	4	5	6	7	8	
Agricultural Production	18,313	1,974	2,253	3,210	4,246	11,683	63.8	
Minor Irrigation	17,266	2,968	3,716	5,022	6,582	18,288	105.9	
Soil Conservation	5,732	686	788	1,126	1,604	4,204	73.3	
Area Programmes for Irrigation Projects . . . . .	..	31	32	21	44	128	..
Animal Husbandry	4,532	433	511	672	855	2,471	54.5	
Dairying and Milk Supply	3,086	428	497	669	647	2,241	72.6	
Forests	4,151	475	629	693	889	2,686	64.7	
Fisheries	2,094	201	294	365	467	1,327	63.4	
Warehousing and Marketing	843	55	84	67	89	295	35.0	
I. Agricultural Programmes	56,017	7,251	8,804	11,845	15,423	43,323	77.3	
Cooperation	6,968	862	982	970	1,432	4,246	60.9	
Community Development	28,133	5,106	5,510	5,167	5,433	21,216	75.4	
Panchayats	2,824	244	198	207	250	899	31.8	
II. Community Development and Cooperation	37,925	6,212	6,690	6,344	7,115	26,361	69.5	
Irrigation	58,121	9,347	9,705	10,132	12,908	42,092	72.4	
Flood Control	5,995	1,169	1,634	1,758	1,864	6,425	107.2	
Power	88,270	13,289	17,077	24,058	26,892	81,316	92.1	
III. Irrigation and Power	152,386	23,805	28,416	35,948	41,664	129,833	85.2	
Large and Medium Industries	6,850	1,081	1,419	1,551	2,004	6,055	88.4	
Mineral Development	1,107	194	180	234	245	853	77.0	
Village and Small Industries	13,580	1,697	1,768	1,848	2,207	7,520	55.4	
IV. Industry and Mining	21,537	2,972	3,367	3,633	4,456	14,428	67.0	
Roads	20,833	4,540	4,359	4,471	5,662	19,032	91.3	
Road Transport	2,044	257	187	272	678	1,394	68.2	
Ports and Harbours	490	58	168	707	780	1,713	349.6	
Other Transport	273	8	24	53	71	156	57.1	
Tourism	370	47	43	36	48	174	47.0	

TABLE 4—(contd.)

(Rs. Lakhs)

Head of Development	Third Plan Programme Limit (1961-66)	Actuals				Total (1961-65)	
		1961-62	1962-63	1963-64	1964-65	Amount	As % of Col. 2
1	2	3	4	5	6	7	8
<i>V. Transport and Communications</i>	24,010	4,910	4,781	5,539	7,239	22,469	93.6
General Education	31,680	3,991	5,337	6,737	8,660	24,725	78.0
Technical Education	6,986	804	931	1,096	1,279	4,110	58.8
Health	27,026	4,893	5,553	5,259	6,111	21,816	80.7
Housing	9,608	1,167	1,300	941	1,321	4,729	49.2
Welfare of Backward Classes	7,487	956	1,125	1,039	1,367	4,487	60.1
Social Welfare and Public Co-operation	1,077	60	83	103	116	362	33.6
Labour and Labour Welfare	2,521	157	234	400	516	1,307	51.8
<i>VI. Social Services</i>	86,365	12,028	14,563	15,575	19,370	61,536	71.2
<i>VII. Miscellaneous</i>	7,217	911	973	1,074	1,417	4,405	61.0
TOTAL	385,457	53,119	67,594	79,958	96,684	302,355	78.4

TABLE 5—Union Territories: Plan Outlays by Heads of Development (exclusive of Nagaland)

(1961-65)

(Rs. lakhs)

Head of Development	Third Plan Programme Limit (1961-66)	Actuals				Total (1961-65)	
		1961-62	1962-63	1963-64	1964-65	Amount	As % of Col. 2
1	2	3	4	5	6	7	
Agricultural Production	838	74	80	112	187	453	54.0
Minor Irrigation	217	22	22	23	20	87	40.1
Soil Conservation	311	25	45	45	64	179	57.5
Animal Husbandry	191	23	29	39	46	137	71.7
Dairying and Milk Supply	48	7	4	7	17	35	72.9
Forests	303	39	56	76	128	299	98.7
Fisheries	153	7	17	21	46	91	59.5
Warehousing and marketing	61	2	7	11	7	27	44.3
<i>I. Agricultural Programmes</i>	2,122	199	260	334	515	1,308	61.6
Cooperation	166	17	25	43	68	153	92.2
Community Development	577	123	126	137	150	536	92.9
Panchayats	76	3	10	11	18	42	55.3
<i>II. Community Development and Cooperation</i>	819	143	161	191	236	731	89.2
Irrigation and Flood Control	147	20	42	65	41	168	114.3
Power	2,855	240	575	480	777	2,072	72.6

TABLE 5—(contd.)

1	2	3	4	5	6	7	8
III. Irrigation and Power	3,002	260	617	545	818	2,240	74.6
Large and Medium Industries	64	7	3	2	7	19	29.7
Mineral Development	20	..	..	..	..	..	..
Village and Small Industries	538	48	73	87	125	333	61.9
IV. Industry and Mining	622	55	76	89	132	352	56.6
Roads	3,024	422	581	558	665	2,226	73.6
Road Transport	649	127	110	105	122	464	71.5
Ports and Harbours and Other Transport	306	4	16	31	30	81	26.5
Tourism	36	1	2	9	12	24	66.7
V. Transport and Communications	4,015	554	709	703	829	2,795	69.6
General Education	2,301	254	377	476	746	1,853	80.5
Technical Education	534	22	52	66	42	182	34.1
Health	2,744	173	430	396	521	1,520	55.4
Housing	2,583	452	602	618	466	2,138	82.3
Welfare of Backward Classes	396	64	66	59	83	272	68.7
Social Welfare	121	9	14	18	20	61	50.4
Labour and Labour Welfare	297	21	49	44	52	166	55.9
VI. Social Services	8,976	995	1,590	1,677	1,930	6,192	69.0
VII. Miscellaneous	772	223	142	90	106	561	72.7
TOTAL	20,328	2,429	3,555	3,629	4,566	14,179	69.7

TABLE 6—State Plans: Progress of Expenditure (1961—65)

(Rs. crores)

State	Third Plan Pro-gramme Limit (1961—66)	Actuals				Total (1961—65)	
		1961-62	1962-63	1963-64	1964-65	Amount	As % of Col. 2
1	2	3	4	5	6	7	8
Andhra Pradesh	305.0	49.7	52.2	63.3	77.9	243.1	79.7
Assam	120.0	17.8	24.6	29.1	31.0	102.5	85.4
Bihar	337.0	50.4	54.3	57.0	72.0	233.7	69.3
Gujarat	235.0	35.7	46.0	47.5	51.1	180.3	76.7
Jammu and Kashmir	75.0	10.4	11.5	9.9	12.6	44.4	59.3
Kerala	170.0	26.3	29.7	35.2	40.1	131.3	77.2
Madhya Pradesh	300.9	36.4	48.4	63.8	68.4	217.0	72.3
Madras	290.9	50.0	58.7	71.3	77.6	257.6	88.5
Maharashtra	390.2	55.1	59.2	79.0	99.7	293.0	75.1
Mysore	250.0	42.8	47.4	51.6	51.1	192.9	77.2
Orissa	160.0	23.8	33.4	47.8	61.3	166.3	103.9
Punjab	231.4	37.3	41.1	44.3	60.2	182.9	79.0
Rajasthan	236.0	35.1	36.2	37.7	48.0	157.0	66.5
Uttar Pradesh	497.0	68.3	80.1	94.8	144.6	387.8	78.0
West Bengal	250.0	40.8	51.9	65.8	68.7	227.2	90.9
Nagaland	7.2	0.9	1.0	2.4	2.7	7.0	97.2
TOTAL	3,854.7	580.8	675.7	800.5	967.0	3,024.0	78.4

TABLE 7—Union Territories: Progress of Plan Expenditure (1961—65)

(Rs. crores)

Union Territories	Third Plan Programme Limit (1961—66)	Actuals				Total (1961—65)	
		1961-62	1962-63	1963-64	1964-65	Amount	As % of Col. 2
1	2	3	4	5	6	7	8
Andaman and Nicobar Islands	9.8	1.1	1.2	1.2	1.5	5.0	51.0
Delhi	98.3	11.2	20.1	18.2	19.4	68.9	70.1
Goa, Daman and Diu	23.1	..	0.9	2.7	6.4	10.0	43.3
Himachal Pradesh	27.9	5.2	6.0	6.5	8.9	26.6	95.3
Laccadive, M. & A. Islands	1.0	0.1	0.2	0.2	0.3	0.8	80.0
Manipur	12.9	2.2	2.3	2.4	2.7	9.6	74.4
N.E.F. A.	7.1	0.9	1.0	1.3	1.8	5.0	70.4
Pondicherry	6.9	0.9	0.9	1.0	1.5	4.3	62.3
Tripura	16.3	2.7	2.9	2.7	3.3	11.6	71.2
TOTAL	203.3	24.3	35.5	36.2	45.8	141.8	69.7

TABLE 8—Centre: Progress of Plan Expenditure by Heads of Development (1961—65)

(Rs. lakhs)

Head of Development	Third Plan Programme Limit (1961—66)	Actuals				Total (1961—65)	
		1961-62	1962-63	1963-64	1964-65	Total	As % of Col. 2
1	2	3	4	5	6	7	8
Agricultural Production	3,658	159	239	286	870	1,554	42.5
Minor Irrigation	230	18	18	39	37	112	48.7
Soil Conservation	1,295	64	146	216	403	829	64.0
Animal Husbandry	680	51	75	83	110	319	46.9
Dairying and Milk Supply	498	58	63	61	119	301	60.4
Forests	667	11	42	73	140	266	39.9
Fisheries	672	10	25	27	68	130	19.3
Warehousing, Marketing and Storage	3,300	549	440	373	813	2,175	65.9
I. Agricultural Programmes	11,000	920	1,048	1,158	2,560*	5,686	51.7
Cooperation	900	59	346	838	252	1,495	166.1
Community Development and Panchayats	600	24	41	62	78	205	34.2
II. Community Development and Cooperation	1,500	83	387	900	330*	1,700	113.3
Irrigation	1,803	64	73	94	106	337	18.7
Power	11,312	419	589	1,167	2,896	5,071	44.8

* Anticipated.

TABLE 8—(contd.)

(Rs. lakhs)

Head of Development	Third Plan Pro- gramme Limit (1961-66)	Actuals				Total (1961-65)	
		1961-62	1962-63	1963-64	1964-65	Total	As % of Col. 2
1	2	3	4	5	6	7	8
III. Irrigation and Power	13,115	483	662	1,261	3,002	5,408	41.2
Organised Industry and Mineral Development	180,240	18,210	23,901	32,515	38,374	113,090	62.7
Village and Small Industries	12,300	2,014	2,135	2,380	2,562	9,091	73.9
IV. Industry and Mining	192,540	20,224	26,126	34,895	40,936	122,181	63.5
Railways	94,000	17,564	24,901	30,190	31,424	104,079	110.7
Roads	8,000	1,351	2,202	3,968	3,863	11,384	142.3
Ports and Harbours	12,500	1,247	1,369	1,591	1,691	5,898	47.2
Shipping	5,500	1,050	400	400	1,280	3,130	56.9
Posts and Telegraphs	7,900	1,201	1,746	2,486	2,578	8,011	101.4
Civil Aviation	5,500	319	308	298	282	1,207	73.0
Air Corporations		1,038	533	281	955	2,807	
Inland Water Transport	600	9	74	25	91	199	33.2
Broadcasting	1,100	122	164	183	152	621	56.5
Tourism	350	45	28	29	29	131	37.4
Other Communications	930	120	166	179	158	623	67.0
Lighthouses	600	120	75	101	50	346	57.7
V. Transport and Communications	136,980	24,186	31,966	39,731	42,553	138,436	101.1
General Education and Cultural Programmes	7,800	937	1,111	1,373	2,225	5,646	72.4
Technical Education	7,000	1,044	1,193	1,299	1,500	5,036	71.9
Scientific and Technological Research	7,000	719	1,019	1,253	1,900*	4,891	69.9
Health and Water Supply	4,500	377	506	742	1,062*	2,687	59.7
Housing and Construction	2,500	495	287	224	439	1,445	57.8
Welfare of Backward Classes	3,500	441	459	637	1,023*	2,560	73.1
Social Welfare	1,600	209	238	239	245*	931	58.2
Labour and Labour Welfare	4,400	350	594	1,027	1,124	3,095	70.3
Rehabilitation	4,000	1,014	915	823	834	3,586	89.7
Rural Works			32	112	419	559	1,122
Local Works			502	409	458	356	1,725
Public Cooperation			30	54	35	41	160
VI. Social Services	47,300	6,150	6,897	8,529	11,308	32,884	69.7
Statistics	450	35	50	62	95	242	53.8
Research (RPC)	50	7	8	10	11	36	72.0
Information and Publicity	600	30	28	25	36*	119	19.8
Others	4,100	128	259	771	994	2,152	52.5
VII. Miscellaneous	5,200	200	345	868	1,136	2,549	49.0
Inventories**	20,000	..	..	..	..	..	..
TOTAL	4,27,635	52,246	67,431	87,342	101,825	3,08,844	12.2

*Anticipated.

**Expenditure against "Inventories" is distributed over the various sub-heads.

CHAPTER IV

AGRICULTURE AND THE RURAL ECONOMY

I. AGRICULTURAL PRODUCTION

There was a steady expansion in the total agricultural effort during the two years, 1963-64 and 1964-65. After two successive years of bad harvests which were reflected in a marginal increase of 1.8 per cent in 1961-62 and a decline of 5 per cent in 1962-63, the Index of Agricultural Production (1949-50=100) showed a moderate increase of 3.7 per cent in 1963-64. But for the adverse weather conditions which affected the Rabi crops over extensive areas, the increase in production in 1963-64 would have been larger. Agricultural production showed a substantial increase of 11.1 per cent in 1964-65. The Index of Agricultural Production went up from 142.2 in 1963-64 to 158.4 in 1964-65. The average annual increase in agricultural production during the first four years of the Plan was estimated at about 2.8 per cent (compound) as against the targeted increase of 5.1 per cent per annum (compound) over the Third Plan period as a whole.

The following table gives the outlays on Agricultural programmes, including Community Development, Cooperation and Panchayats for the Third Five Year Plan and the progress of expenditure under these sub-heads during the four years 1961-65.

*Outlay on Agricultural Programmes
(Centre, States and Union Territories)*

(Rs. crores)

Sub-head	Third Plan Outlay		Actuals				Col. 8 as % of Col. 3	
	Finan- cial Limit	Pro- gramme Limit	1961-62	1962-63	1963-64	1964-65	Total (1961- 65)	Col. 3
1	2	3	4	5	6	7	8	9
Agricultural Production		226.1	22.3	25.8	31.3	49.4	131.8	58.2
Minor Irrigation . . .		176.8	30.2	34.4	50.6	66.4	181.6	102.7
Soil Conservation . . .		72.7	7.7	9.6	13.7	21.0	52.0	71.5
Animal Husbandry		51.4	5.0	6.1	8.0	10.2	29.3	53.8
Dairying and Milk Supply		36.1	5.0	5.7	7.3	7.3	25.3	70.0
Forests		51.4	5.2	7.2	8.4	10.9	31.7	61.7
Fisheries		28.6	2.2	3.5	4.1	5.6	15.4	53.8
Warehousing, Marketing and Storage		41.5	6.2	5.5	4.7	6.3	22.7	51.7
Sub-total—								
Agriculture	665.00	637.6	83.8	97.8	131.1	177.1	489.8	71.9

TABLE—(contd.)

1	2	3	4	5	6	7	8	9
Cooperation		80.1	9.4	13.5	18.5	16.2	57.6	71.9
Community Develop- ment		293.7	52.7	55.9	53.4	57.8	219.8	74.8
Panchayats		28.8	2.4	2.1	2.2	3.0	9.7	33.7
II. Sub-total—								
Community Deve- lopment and Co- operation	403.00	402.6	64.5	71.5	74.1	77.0	287.1	71.3
TOTAL I and II	1,068.00	1,090.2	148.3	169.3	205.2	254.1	776.9	71.3

There has been a steady increase in outlay on agricultural development programmes during the last four years. Against an expenditure of Rs 148.3 crores for 1961-62, the anticipated outlay during 1964-65 is placed at Rs. 254.1 crores. The total expenditure incurred during the four years, 1961-65 works at about 71 per cent of the programme limit set for the Third Five Year Plan period.

The following table shows production of main crops during the two years under review, as compared to the last year of the Second Plan and targets set for the Third Plan.

Progress of Agricultural Production

Commodity	Unit	1960-61	1963-64	1964-65	Percentage variation in 1964-65 over 1960-61	Third Plan target
Rice	Million tonnes	34.57	36.89	39.03	+12.9	45.7
Wheat	"	11.00	9.86	12.29	+11.7	15.2
Jowar	"	9.81	9.13	9.75	-0.6	
Bajra	"	3.28	3.73	4.45	+35.7	} 23.4
Maize	"	4.08	4.55	4.66	+14.2	
Ragi	"	1.84	1.96	1.90	+3.3	
Small millets	"	1.91	2.02	1.95	+2.9	
Barley	"	2.82	2.04	2.52	-10.6	
Pulses	"	12.71	10.06	12.44	-2.1	17.3
Total Foodgrains	"	82.02	80.24	88.99	+8.5	101.6
Sugarcane (gur)	"	11.14*	10.60	12.32	+10.6	10.2
Cotton	Million bales@	5.29	5.49	5.41	+2.3	7.0
Oilseeds	Million tonnes	6.98	7.04	8.30	+18.9	10.0
Jute	Million bales@	4.13	6.18	6.02	+45.8	6.2
Index Numbers	(1949-50=100)					
Foodgrains	"	137.1	135.9	150.2	+9.5	171.0
Non-foodgrains	"	152.6	156.2	174.9	+14.1	186.0
All Commodities	"	142.2	142.6	158.4	+11.1	176.0

*Adjusted figure is 11.20 million tonnes with 1961-62 as the base.

@Bale of 180 kgs. each.

There was an upward trend in the production of most of the crops during the last four years. The increase in agricultural production, however, had not kept pace with the targets set out in the Plan. The rate of growth for foodgrains was substantially less than for non-foodgrains. The production of foodgrains which was about 82.0 million tonnes in 1960-61 and rose slightly to 82.7 million tonnes in 1961-62, fell to 78.4 million tonnes in 1962-63. In the following year it went up to 80.2 million tonnes. In 1964-65 there was a significant increase in the production of foodgrains to the level of 88.9 million tonnes after three successive years of stagnancy. The increase was largely contributed by the staple crops of rice and wheat, besides bajra. Rice production reached a new peak at 39 million tonnes in 1964-65 and wheat was over one million tonnes higher than in 1960-61.

Among commercial crops, sugarcane (gur) and groundnut have done well and registered a substantial increase in output over the four-year period. The sugarcane (gur) target has already been exceeded but a shortfall under cotton and oilseeds is indicated. The production of cotton has remained practically static at the 1960-61 level. The production of jute increased by about 46 per cent in 1964-65 over 1960-61 though it was lower by about 4 per cent as compared to the peak level reached in 1961-62.

The shortfalls in agricultural production, mainly under foodgrains, cotton and oilseeds were attributed to a number of factors. Adverse weather conditions did, no doubt, affect agricultural production to an extent during the first three years of the Plan, particularly in 1962-63. More than any other factor, adequate inputs specially fertilizers were not available to the farmer and the supplies were appreciably below the levels contemplated in the Plan. Among the other reasons for shortfalls were the absence of detailed planning and dispersal of limited resources over large areas, existence of a weak extension service overburdened with multifarious duties, inadequacy of credit facilities and lack of co-ordination between various departments and institutions dealing with complementary and inter-related aspects of the agricultural programmes. To these factors may be added the delay and deficiencies in the implementation of land reforms.

PROGRESS OF AGRICULTURAL PROGRAMMES

The following table shows the physical targets of important agricultural programmes laid in the Third Plan and the achievements during the first four years:

*Agricultural Production Programme
Physical Targets and Achievements during 1961-65*

Item	Unit	Third Plan Target	Achievements				Total 1961-65
			1961-62	1962-63	1963-64	1964-65	
Irrigation (additional area benefited)	Million acres						
Major and Medium Irrigation	..	12.8	0.7	1.1	0.9	1.1	3.8
Minor Irrigation	..	12.8	1.5	2.1	2.8	2.9	9.3

TABLE—(contd.)

Item	Unit	Third Plan Target	Achievements				Total 1961-65
			1961-62	1962-63	1963-64	1964-65	
Soil Conservation	Million acres	11.8	1.1	1.3	1.7	2.2	6.3
Improved Seeds*	„	204	58	69	83	102	
Consumption of Chemical Fertilizers*							
Nitrogenous (N)	Lakh tonnes	10.2	2.4	3.1	3.9	5.6	
Phosphatic (P ₂ O ₅)	'000 tonnes	406	82	111	140	149	
Potassic (K ₂ O)	„	203	29	36	56	69	
Organic and Green Manuring*							
Urban Compost	Million tonnes	5.1	2.5	2.7	3.1	3.7	
Rural Compost	„	152	75	83	93	103	
Green Manures	Million acres	41.0	13.3	16.2	17.5	18.6	
Plant Protection*	„	50.0	16	22	29	38	

*Figures of achievements relate to the levels reached by the end of the period mentioned.

Irrigation

It will be seen from the above table that the progress in physical terms in irrigation and other programmes fell considerably short of the Plan targets. The pace was particularly slow in the case of major and medium irrigation, soil conservation, improved seeds and fertilizers and manures. That the benefits of the substantial investments in the major and medium irrigation were inadequately realised is seen from the fact that the additional area irrigated during the years 1961—65, totalled 3.8 million acres, as against the Plan target of 12.8 million acres or less than one-third. The position regarding minor irrigation has been satisfactory in as much as an additional area of 9.3 million acres was brought under irrigation (through minor works) against the five-year target of 12.3 million acres or about 73 per cent.

The total outlay provided for minor irrigation programme in the Third Plan was Rs. 176.8 crores. An expenditure of Rs. 181.6 crores was incurred in the first four years, including additional outlays sanctioned during the period under review. After the national emergency, the need for accelerating minor irrigation programme in order to raise agricultural production received increased attention. In pursuance of the directives by the National Development Council and the recommendations made by the Central Study Teams, additional Central assistance was provided to the States for the purpose.

An effort was made to meet, to the maximum extent possible, the requirements of cement and iron and steel for minor irrigation and other agricultural purposes. Some of the other measures taken for accelerating the minor irrigation programme included, intensification of the work on

surveys and investigations, training of necessary technical personnel and preparation of technical manuals for improving technical standards in minor irrigation and construction of masonry wells by individual cultivators. The need for making effective arrangements for the maintenance of existing minor irrigation works and desilting of tanks through concerned agencies with the necessary financial and technical guidance was also stressed upon the State Governments.

The Exploratory Tubewells Organization carried out ground water exploration in various parts of the country. During the four years 1961—65, the organization drilled 198 bores, out of which 65 proved successful and, in addition, constructed 450 productive tubewells. The programme for ground water exploration had to be curtailed in 1964-65, since the Organization was required to assist the States of Gujarat, Bihar and Rajasthan in the construction of tubewells in the scarcity areas, as a measure of famine relief and for providing increased irrigation facilities.

To speed up utilisation of irrigation potential, a co-ordinated programme aimed at the integrated development of the command area of irrigation projects was recommended by the Central Government for initiation by the State Governments. The programme covers soil, surveys, construction of field channels, land levelling and shaping, consolidation of holdings, supply of fertilizers and improved seeds, provision of credit facilities to farmers, establishment of research and demonstration farms and provision for storage, marketing and development of communications.

Chemical Fertilizers

The use of chemical fertilizers has been increasing steadily but at a slower rate than was envisaged at the time of formulation of the Third Plan programmes. It had not been possible to meet the increased demand for fertilizers due to shortfalls in targeted indigenous production and shortage of foreign exchange for imports. The following table shows the actual consumption of nitrogenous, phosphatic and potassic fertilizers, as compared to the levels postulated in the Third Five Year Plan:

Consumption of Chemical Fertilizers

(*000 tonnes)

Year	According to the Provisional Schedule in the Third Plan			Actual consumption		
	Nitro- genous	Phos- phatic	Potassic	Nitro- genous	Phos- phatic	Potassic
1960-61 . . .	234	71	25	210	70	26
1961-62 . . .	406	102	33	240	82	29
1962-63 . . .	533	152	102	310	111	36
1963-64 . . .	660	229	132	390	140	56
1964-65 . . .	813	305	163	555	149	69
1965-66 . . . (anticipated)	1,016	406	203	600	150	90

It will be seen that the actual consumption of nitrogenous, phosphatic and potassic fertilizers in 1964-65 was about 32 per cent, 51 per cent and 58 per cent less respectively than the figures assumed in the Third Plan. The main bottleneck in achieving the targets has been the lower availability of fertilizers, as against the provisional targets fixed for each year of the Third Plan. With a view to having a proper appraisal of the problems relating to fertilizers consumption, pricing, distribution, marketing and sale promotion, the Government of India constituted an Enquiry Committee in October, 1964 to go into these problems. The Committee has since submitted its report which is under consideration.

Intensive efforts were continued to step up the use of fertilizers, specially in the areas which were irrigated or had assured rainfall. The promotional measures taken included allowing off-season rebates on the sale of urea, calcium ammonium nitrate and sulphate of ammonia, subsidy on road transport of chemical fertilizers from the railheads to hilly and inaccessible areas and strengthening of supply arrangements through establishment of departmental sale depots or appointing of private agencies in places where cooperatives did not exist or were not effective. There was a considerable increase in the number of fertilizers trials on cultivators' holdings. A reduction of Rs. 100 per tonne was made in the sale price of urea in January, 1964 with a view to promoting its consumption. A provision of Rs. 30 crores was made for financial assistance as short-term loans to the State Governments for the purchase of fertilizers, improved seeds and pesticides and their distribution on credit terms to farmers.

Organic and Green Manures

In the Third Plan, considerable attention was given to the production of organic manures both in urban and rural areas and also to green manures. During 1963-64, about 3.1 million tonnes of town compost was prepared in 2,410 urban centres and about 3.7 million tonnes in the following year, compared to 2.4 million tonnes in 1960-61. In the Third Plan, it was programmed to achieve a total production of 5.1 million tonnes of urban compost. Certain schemes for the utilisation of sewage and sullage were in progress and an area of over 31,600 acres was being irrigated by utilising about 240 million gallons of sewage and sullage per day. Under the scheme for the development of local manurial resources in community development blocks and night soil composting in the larger panchayat areas, about 103 million tonnes of rural compost was expected to be produced during 1964-65. Green manuring seeds in small baskets as well as in bulk were distributed in a number of States to enable cultivators to develop their own supplies of seeds. Arrangements were made for meeting the requirements of certain States in respect of *dhaincha* seeds through supplies from surplus States. The coverage under green manuring increased to 18.6 million acres in 1964-65, as compared to 11.0 million acres in 1960-61.

Improved Seeds

During the Third Five Year Plan, it was envisaged to extend the area under improved seeds from 55 million acres in 1960-61 to 204 million acres by the end of 1965-66. As against this, the achievement for the first four years was 102 million acres or half of the target. A Bill on seed certification was introduced in the Parliament during 1964 for laying down of standards of quality, and for making arrangements for seed analysis, inspection, certification and regulation of sale of notified seeds. With the object of ensuring that the entire area under foodgrains was covered with improved seeds during the Fourth Plan period, the States and Union Territories were advised to take action from 1964-65 to develop seed farms so as to improve the quality and increase the quantity of foundation seeds. During 1964-65, arrangements were made for the supply of about 60,000 tonnes of Rabi seeds, particularly of wheat from Punjab to Bihar, Gujarat, Maharashtra, Rajasthan and Uttar Pradesh at reasonable prices. The National Seeds Corporation which started functioning during 1963 made steady progress over the two years under review. Production of foundation seeds of hybrid maize was stepped up with the ultimate objective of increasing the area for the production of double cross hybrid maize seed. About 1,300 tonnes of double cross seed was produced in 1964-65 which could be considered sufficient to cover an area of about two lakh acres for planting hybrid maize crop in 1965-66.

Plant Protection

The Third Five Year Plan envisaged extension of plant protection measures to 50 million acres, as compared to 16 million acres in 1960-61. The area benefited by plant protection measures in 1964-65 was estimated at 38 million acres. Greater progress would have been possible, if there had been no paucity of foreign exchange for importing pesticides and plant protection equipment and there was a proper system of distribution of pesticides, etc.

Improved Agricultural Implements

The importance of improved implements and equipment for affecting a breakthrough in traditional agricultural practices has been always recognized but the progress in this direction has been very slow. Seventeen research-cum-testing and training centres, have been established to undertake development and testing for implements. Demonstrations in the use of improved implements were being conducted and a subsidy to the extent of 25 to 50 per cent was allowed on the sale of improved implements. Training of village artisans continued to be undertaken in the 39 workshop wings of extension centres. An All-India Conference on manufacture and popularisation of implements was convened in July, 1963 in which private manufacturers and farmers' representatives participated. On the recommendations of the Conference, a Board of Agricultural Machinery and Implements has been recently constituted.

So far five firms are licensed for the manufacture of tractors in the country. The number of tractors produced increased from 1,627 in 1962 to 3,179 in 1964. Good progress has been made in the manufacture of other items of agricultural machinery and equipment. It is estimated that during the year 1963-64, improved agricultural implements and machines of the value of Rs. 3.7 crores were distributed all over India. The progress in the field of manufacture of power tiller has been rather slow and only one firm has taken up this work at Hyderabad.

Training in the utilisation of agricultural machinery and mechanised farming techniques was provided at the Tractor Training and Testing Station at Budni and the Tractor Training Centre, Hissar. The capacity of these training centres was raised from 112 to 120 trainees per annum in 1964-65. It is generally felt that the programme of research, extension and training pertaining to agricultural implements needs reorientation and re-organization, keeping in view the requirements of different areas. The agricultural engineering sections of the Departments of Agriculture in States are inadequately equipped and require strengthening. The difficulties experienced in regard to the supply of adequate quantities of iron and steel for the manufacture of implements also demand attention.

A Study Team for Agriculture was appointed by the Committee on Plan Projects in September, 1962 and to start with it took up the study of problems relating to the introduction of improved agricultural implements. The Team has completed its field work and its report is under preparation.

Intensive Agricultural District Programme

An Intensive Agricultural District Programme was initiated in 1960-61 with the object of accelerating efforts for agricultural production in areas which could quickly respond to such efforts. The programme has been in operation for over four years in the first batch of seven districts and for a period of about three years in the remaining eight districts and has been recently extended to the Union Territory of Delhi. At the end of 1964-65, the coverage had increased to 283 Community Development blocks out of a total number of 314 blocks and accounted for a cultivated area of about 30 lakh hectares representing about 38 per cent of the total cultivated area in the selected districts.

An assessment of the Intensive Agricultural District Programme for the period 1960—65 has been made by the Expert Committee on Assessment and Evaluation of the Intensive Agricultural District Programme under the Chairmanship of Dr. S. R. Sen. The data collected by the Committee reveals that in many of the IADP areas, yield rates for foodgrains

have shown a significant increase; in some districts moderate increase and in two of them, some decline. A summary position is given below:

Yield Rates for Foodgrains

(a) *Group I*

(In quintals per hectare)

District	Crop	Before IADP	After int- roducing IADP	Percentage Increase (+) or dec- rease(-)
		Average		
		(1958-61)	(1961-65)	
Thanjavur	Rice	14.8	16.1	+8.78
West Godavari	Rice	13.6	15.9	+16.91
Shahabad	Rice	..	12.2	
	Wheat	..	7.0	
Raipur	Rice	9.1	10.0	+9.89
Aligarh	Wheat	10.8	12.7	+17.59
	Maize	4.6	8.3	+80.43
Ludhiana	Wheat	11.6	19.3	+66.37
	Maize	13.8	16.7	+21.01
Pali	Wheat	8.7	9.5	+9.19
	Maize	7.6	8.3	+9.21

(b) *Group II*

District	Crop	Before IADP	After intro- ducing IADP	Percentage increase (+) or decrease (-)
		Average		
		(1959-62)	(1962-65)	
Sambalpur	Rice	9.3	9.6	+3.23
Surat	11.7	12.9	+10.26
Mandya	15.4	22.5	+46.10
Alleppey	14.5	14.1	-2.76
Palghat	15.8	16.8	+6.32

District	Crop	Average	Average	Percent- age inc- rease(+) or decrease(-)
		(1960-63)	(1963-65)	
Burdwan	Rice	14.3	18.0	+25.87
Bhandara . . . . .	..	9.4	9.8	+4.23
	Wheat	4.3	3.8	-16.28
Cachar	Rice	10.8	12.0	+11.11

The Expert Committee has indicated a number of weaknesses inhibiting the pace of progress under this programme. It refers to the failure of the industrial sector to supply the needed inputs for agricultural production; the need for gearing of the administrative system and improving the Government's basic policies regarding credit, marketing, prices, industries, imports, investment and land. On the positive side, it is stated that the basic concept of the IADP has proved to be essentially sound and that the IADP has established beyond doubt that the Indian farmer, in spite of his illiteracy and poverty, is fairly prompt to accept innovations that are useful and within his means; provided he is convinced through extension efforts, specially through demonstration. The IADP experience has also proved that the small farmer can be no less progressive than the big farmer. Besides, these, the Expert Committee Report emphasises that in extending the package approach to other areas, the programmes should be related to the stages of development and the special requirements of the particular areas.

As a result of the experience gained in the working of the IADP, intensive cultivation programme was undertaken in 1,084 blocks in 114 districts from the Kharif season of 1964 for paddy, wheat, millets and pulses. The cultivators were to be assisted on individual basis to adopt a package of improved practices. To ensure speedy implementation of the programme, State Governments had taken steps for strengthening and streamlining administrative machinery at the block and district levels in the selected districts.

Agricultural Education and Research

With the increase in the number of agricultural colleges to 66 and the annual intake to 8,935 in 1964-65, the target of 57 colleges and annual intake of 6,200 for the last year of the Third Plan had already been exceeded. The emphasis is now on improving the teaching standards in a number of agricultural colleges. With the establishment of Agricultural Universities in the States of Mysore, Madhya Pradesh, Andhra Pradesh and West Bengal, the number of such Universities in the country has increased to eight. A Board of Agricultural Education was constituted in 1964-65 to advise on matters pertaining to education in the fields of agriculture, animal husbandry and allied subjects and to co-ordinate research activities in these fields.

Steps were taken to strengthen agricultural research, specially to ensure that it fitted into the national pattern. Following the recommendations made by a high-powered Research Review Team, which submitted its report in March, 1964, the Indian Council of Agricultural Research has been re-organised into an autonomous body. It was also decided to transfer to the Council all Central Research Institutes under the Ministry of Food and Agriculture, and to abolish the various Commodity Committees. The research work hitherto conducted under the auspices of the

Committees would now vest with the Indian Council of Agricultural Research. With a view to simplifying the procedure for consideration of research schemes, separate Boards of Agricultural Research and Animal Husbandry Research have been constituted. The activities of the Indian Agricultural Research Institute, Central Potato Research Institute, Indian Veterinary Research Institute and National Dairy Research Institute in the spheres of research, education and training made good progress in these two years. Research efforts have been extended with reference to fodder, vegetable crops and breeding of new fruit trees.

Agricultural Marketing and Storage

Efforts were intensified for promotion of grading and standardization of agricultural produce, statutory regulation of markets and market practices, conducting market research and surveys and training of personnel in agricultural marketing, market extension work, etc. With a view to help the producer-seller to get an adequate return for his produce, 307 grading units were set up in the regulated markets and selected marketing co-operatives in various States. Legislation for regulation of agricultural markets had been enacted in all the States except Assam, West Bengal and Kerala (excluding Malabar district). The number of regulated markets increased to 1,488 at the end of 1964-65, compared to 1,035 in 1963-64 and 731 in 1960-61. The Third Five Year Plan had provided for regulation of 2,376 wholesale markets in the country. There was obvious need to expand the coverage of markets and commodities under the Acts. The scheme for improvement of market intelligence was extended during 1964-65 to all the States and Union Territories.

The Third Plan had envisaged an increase in storage capacity from 2.5 million to 5.1 million tonnes of which 3.6 million tonnes was to be owned by Government. During the year 1964, the total capacity owned by the Government of India rose by 0.89 lakh tonnes to 1.86 million tonnes. In addition, godowns of about 4.74 lakh tonnes were under construction and preliminaries were in progress for a further capacity of over one million tonnes. The hired accommodation with the Department of Food (Ministry of Food and Agriculture) was 8.3 lakh tonnes in the beginning of 1965, as against about 12 lakh tonnes in January, 1964.

Agricultural Price Policy

It has been an accepted policy of the Government to ensure fair and reasonable prices to the producer for his produce. While Government used to fix procurement prices in the past, minimum support prices were being announced for paddy and wheat since the 1962-63 season. For determining the level of these prices for the 1964-65 season, the Foodgrains Prices Committee was appointed under the Chairmanship of Shri L. K. Jha. Following the recommendations of the Committee, Government announced, in October, 1964, minimum support prices for paddy, jowar, bajra, maize, wheat and gram. At the same time, State Governments were

authorised to evolve a three-tier price structure for rice by fixing statutory ex mill/wholesale prices, wholesale prices at consuming centres and retail prices of rice. These prices were fixed with a view to stabilising consumer prices and providing reasonable marketing margins for the middle-man. The operational minimum price for jute, which had been announced in November, 1961 had continued. Government have been announcing minimum prices for sugarcane and cotton for over a decade now. The minimum prices of these two commodities were revised upwards during the 1963-64 season. Government of India in 1964 appointed the Sugar Enquiry Commission (under the Chairmanship of Dr. S. R. Sen) to go into the determination of the price and distribution of sugar and the policy regarding licensing of new sugar factories.

In January, 1965 the Agricultural Prices Commission was set up to advise Government on a continuing basis on the price policy for agricultural commodities, with a view to evolving a balanced and integrated price structure in the perspective of the overall needs of the economy and with regard to the interests of the producers and the consumers. The Commission has submitted reports on price policy for a number of agricultural commodities, namely, kharif cereals (rice, jowar, bajra and maize) and rabi cereals (wheat and gram), cotton and jute. Government has announced support prices for these commodities in the light of recommendations made by the Agricultural Prices Commission.

In pursuance of the policy of building up buffer stocks for moderating price fluctuations, steps were taken during the period under review to build stocks of wheat and rice largely from imports and partly through internal procurement. The Food Corporation of India was established in January, 1965 to undertake purchase, storage, movement and distribution and sale of foodgrains and other foodstuffs at reasonable prices throughout the year. It is hoped that the Corporation in course of time will emerge as the principal agency for making purchases from the producers and should be in a position to counteract effectively the speculative activities in the foodgrains trade.

Administration and Coordination

Various measures were taken during the period under review to ensure close coordination of administrative activities in the agriculture and allied fields. An Agricultural Production Board was constituted in November, 1963 with the Union Minister of Food and Agriculture as its Chairman, to secure effective and continuous co-ordination between the concerned Ministries and Departments at the Centre and between the Centre and States in the matter of formulation and implementation of agricultural programmes. To assist the Board, a Committee of Secretaries of the Ministries concerned and Planning Commission was also set up to study matters to be placed before the Board and tender its considered advice

on various problems. Three Panels of Agricultural Economists, Agricultural Scientists, and Agricultural Administrators were also constituted to advise the Government on current matters of policy and implementation of agricultural production programmes.

In pursuance of the suggestions made to the State Governments, Co-ordination Committees at Cabinet and Secretariat levels were set up in all States for taking expeditious decisions in respect of activities which have a bearing on the development of agricultural production. These Committees have helped to reach speedy decisions on policy matters. In a number of States, Agricultural Production Commissioners or Special Secretaries have been appointed and made responsible for coordinating the activities of Departments of Agriculture, Irrigation, Revenue, Animal Husbandry, Cooperation, Community Development and Panchayati Raj.

A Working Group on Inter-Departmental and Institutional Coordination for agricultural programmes under the Chairmanship of the then Union Minister of Agriculture (Dr. Ram Subhag Singh) was constituted in August, 1963 to review the existing arrangements and to suggest an integrated pattern of administration at different levels, best suited for achieving maximum coordination within the entire administrative and organisational structure. The major recommendations made by the Working Group have been accepted and implemented. The arrangements at the State level for inter-departmental and institutional co-ordination for agricultural production programmes have been streamlined and strengthened. At the district, block and village levels, arrangements for co-ordination of agricultural development efforts have been made, though they are not uniform in all the States. One important recommendation related to the integration of the departments and agencies concerned with agricultural production and panchayati raj into one Department at the Secretariat level. Another important recommendation made by the Working Group was that the Village Level Worker should be relieved of his duties, other than those relating to agriculture, so as to enable him to devote his time exclusively to agricultural programmes.

Joint Central Teams comprising the representatives of the Ministries of Food and Agriculture, Community Development and Cooperation, Irrigation and Power and the Planning Commission visited the States to hold discussions with the State authorities in regard to the progress and problems relating to agricultural development programmes. These Teams made a number of suggestions relating to financial outlays, administrative, organisational and institutional arrangements and supply of physical inputs etc. Many of the recommendations of the Teams have been accepted and implemented both at the Centre and in the concerned States. Additional outlays were sanctioned for accelerating the programmes of agricultural production, minor irrigation and soil conservation, which were mainly based on the recommendations made by the Teams.

A proposal to create an all-India Agricultural Service recommended by the Conference of State Agricultural Ministers held in August, 1963 is still under the consideration of the Government.

2. FORESTS AND SOIL CONSERVATION

The Third Five Year Plan emphasised the protective as well as productive role of forests in the Indian economy and suggested as a long-term objective that a third of the land area should be under forests. It was proposed to intensify some of the programmes initiated in the earlier two plans and also to lay special emphasis on measures to meet long-term requirements of the country for timber and other forest products. The immediate objective was to increase the output from forests through intensive management and improved methods of timber extraction, to develop forest communications and to bring about better utilisation of forest products through the increased use of preservation and seasoning processes. The progress in these fields, both at the Centre and in the States appears to be satisfactory. The expenditure incurred during the four years ending 1964-65 was estimated at Rs. 31.7 crores, against a total Plan outlay of Rs. 51.4 crores or about 62 per cent.

During the four years 1961—65, over 4.5 lakh acres of plantations of industrial and commercial species were raised against the Plan target of 7 lakh acres. The Centrally-sponsored scheme of raising plantations of quick-growing species had made substantial progress. As against the Plan target of planting 137,500 acres under this scheme, the achievement during the first four years (1961—65) was estimated at 132,000. As a result of merger of princely States and abolition of the ex-proprietary rights, large tracts of degraded forests situated in the erstwhile States and zamindari estates came under Government control. These forests were rehabilitated with plantations of more valuable species and with the aid of silvicultural operations.

There is likely to be a considerable shortfall in the construction of forest roads and paths. The achievement during the first four years is estimated at about 5,000 miles (8,046 kilometres) of roads as against the Plan target of 13,800 miles (22,209 kilometres). The shortfall was mainly due to increased costs of construction and the low priority accorded to this programme after the national emergency.

The scheme of village and farm forestry has made very slow progress in most of the States. According to present indications, only about 45,000 acres were likely to be covered under this programme during the period 1961—65, as against the Plan target of 12 lakh acres. A substantial shortfall is anticipated which is attributed to inadequate incentives provided under the scheme. It has since been decided to reorient the scheme.

An agreement was signed with United Nations Special Fund in February, 1965 for a pre-investment survey of forest resources to facilitate

the formulation of a long-term programme for forest development. The project is designed to assess various forest resources in selected regions and to examine the scope for industrial development they offer. Another project for the establishment of four logging training centres is also proposed to be taken up with the assistance from the UN Special Fund with the object of training forest workers in the use of modern logging equipment and mechanised means of transportation of timber.

The research and training programmes at the Forest Research Institute, Dehra Dun were intensified during the period under review. 177 officers were trained at the Institute during 1964-65. Besides, 485 forest rangers received training at the two institutes at Dehra Dun and Coimbatore.

The bottlenecks in the way of achievement of targets set for development of forestry include, the pruning of Plan allocations under this head by the State Governments and difficulties in securing necessary foreign exchange for the import of equipment needed for increased production and extraction of timber and minor produce from the forests.

Soil Conservation

The importance of soil conservation programme for increasing agricultural production was reiterated by the Central Teams on Agricultural Production which visited the States during the period under review. An expenditure of Rs. 52.0 crores is likely to be incurred under this sub-head during the period of four years, 1961—65 as against the Plan outlay of Rs. 72.7 crores or about 71.5 per cent of the total.

Under the Third Plan, a target of 11.8 million acres of agricultural land to benefit from soil conservation measures was indicated. The achievement during the first four years of the Plan was about 6.3 million acres or 53 per cent of the target. With the object of popularising dry farming techniques, a number of demonstration projects were undertaken. The area under dry farming covered about 4.7 million acres in 1964-65. The total area brought under this programme by the end of 1964-65 was 12.3 million acres as against the Plan target of 22 million acres or a little more than half.

Under the All-India Soil and Land Use Survey scheme, an area of 14 lakh acres was surveyed during 1964-65, bringing the total area surveyed over the first four years to 8.8 million acres as against the Plan target of 12.5 million acres. The total area covered by aerial photography in the first four years was 42,311 sq. miles*. Under a Centrally-sponsored scheme, soil conservation measures in the catchment areas of river valley projects were continued in 13 priority river valley catchments, over an area of 1.6 lakh acres during 1964-65. This brought the total area covered under the scheme during the four year (1961—65) to 5.2 lakh acres as against the target of 7.60 lakh acres, indicated in the Third Plan.

*109966 sq. kilometres.

In 1964-65 training was imparted to 58 officers and 247 assistants, bringing the total number of personnel trained in the four years of the Third Plan to 203 officers and 901 assistants.

During the last four years, efforts have been made to accelerate the progress of soil conservation through additional allocations to the States over and above the outlays approved for the annual Plans. The principal limiting factors in the way of better implementation of soil conservation programmes were shortage of trained personnel, absence of adequate organization particularly at the State level, delay in enactment of soil conservation legislation in some States, lack of sufficient inter-departmental and inter-State co-ordination, apart from sociological factors. Attempts are being made to minimise these handicaps.

3. COOPERATION

The Third Five Year Plan emphasised the role of cooperation as an indispensable instrument of planned economic action in democracy and assigned a number of important tasks to cooperative agencies and organisations in several fields of economic activity. It provided for specific programmes such as those for cooperative credit, marketing and processing, consumer cooperatives and for cooperative training, education and administration. During the two years under review, a steady rate of progress has been maintained in physical terms by the cooperative movement. The main developments during this period related to the linking of agricultural credit to production and the introduction of the crop loan system, initiation of the programme of rationalisation of the primary credit structure on a clear basis of viability, the impetus given to the cooperative marketing of foodgrains and to processing, particularly of sugarcane and organisation of consumers' stores in urban areas.

Cooperative Credit

The various targets for cooperative credit and the achievements during the four years 1961—65 are set out in the table below:

Item	Third Plan Target	Achievements*			
		1961-62	1962-63	1963-64	1964-65
Membership of primary agricultural credit societies (in million)	37.2	19.6	21.7	23.7	25.4
Coverage of rural population (per cent)	60.0	27.2	30.6	31.4	33.0
Short and medium-term loans advanced (Rs. crores)	530	228	257	297	316
Long-term loans outstanding (Rs. crores)	150	49	70	92	121

*The figures in this table and elsewhere in this Section relate to the cooperative year beginning 1st July through 30th June.

The number of primary agricultural credit societies which stood at 212,129 in 1960-61 declined to 201,046 in 1964-65 mainly due to the process of revitalisation through amalgamation of weak units and winding up of dormant societies. The Third Plan had envisaged that all villages will be served by cooperatives by the end of 1965-66. The percentage of villages covered by the primary societies reached 85 in June, 1965 as compared to about 75 in 1960-61. Membership increased from 17 million in 1960-61 to 25.4 million in 1964-65; the coverage of rural population having risen from 24 per cent to 33 per cent during the same period. The share capital and the deposits also showed a substantial upward trend. The rate of progress has been uneven; out of the total short and medium-term credit of Rs. 316 crores disbursed in 1964-65, the share of six States, Maharashtra, Uttar Pradesh, Gujarat, Madras, Madhya Pradesh and Punjab was as much as 81 per cent. The cooperative movement is particularly weak in the eastern States of Assam, Bihar, Orissa and West Bengal and the Union Territories of Manipur and Tripura, and also in Rajasthan. The problem was examined by an Informal Group recently constituted by the Reserve Bank of India. The Group recognised the need for transitional arrangements and recommended the setting up of agricultural credit corporations in the cooperatively weak States. A Committee was appointed in 1964-65 by the National Cooperative Development Corporation to review the scheme of outright grants made to the special bad debt reserves of cooperative societies to encourage them to admit more members from the weaker sections of the community.

Land mortgage banks provide long-term loans to the cultivators mainly for developmental purposes. At the end of 1964-65 there were 18 central and mortgage banks with over 900 primary banks/branches. The long-term loans outstanding increased from Rs. 38 crores in June, 1961 to Rs. 121 crores in June, 1965. The target of Rs. 150 crores by the end of 1965-66 is likely to be reached.

Measures were taken during 1964-65 to implement the Action Programme for the development of cooperatives in the districts selected for intensive agricultural development with emphasis on production-oriented credit and simplification of loaning procedures. Under the crop loan system, the credit needs of farmers are to be determined with reference to the requirements of production of various crops. The credit limits are fixed subject to the capacity for repayment and loans are given, as far as possible, in kind.

The Agricultural Refinance Corporation was established in July, 1963 for providing medium and long-term loans to central land mortgage banks and other approved credit institutions for financing specific schemes for the development of agriculture. The Corporation has sanctioned a dozen schemes till the end of 1964-65 in six States, involving refinance amounting to Rs. 14.4 crores.

Marketing and Processing

During the Second Plan period, 1,869 primary marketing societies were established or re-organised. In the first four years of the Third Plan, 362 new societies were set up as against the five-year target of 544 societies. It was expected that by the end of the Third Plan, all important secondary markets would be covered by such societies. Besides these 362 societies which were organised on an area basis, there were about 500 specialised commodity marketing societies dealing in cotton, arecanut, tobacco, coconut, fruits and vegetables etc. There were 160 marketing societies at the district level and 19 apex marketing societies. The State level societies are federated into the Agricultural Cooperative Marketing Federation at the national level.

In order to strengthen and develop cooperative marketing on a sound basis, a number of steps were taken during the period under review. To enable cooperative marketing societies to meet possible losses arising out of such purchases, a scheme of Government contribution to a Price Fluctuation Fund was introduced. During 1964-65 about 150 primary marketing societies were selected for implementing the scheme. Another step taken was the setting up of promotional and assessment cells in the apex marketing federations with the object of providing the necessary support and guidance to the primary marketing societies.

The value of agricultural produce marketed by cooperatives during the year ended June, 1965 was estimated at Rs. 301 crores as compared to Rs. 224 crores in 1963-64 and Rs. 160 crores in 1962-63. The commodity-wise break-up of the value of produce marketed during 1964-65 was sugarcane (Rs. 116 crores), foodgrains (Rs. 99 crores) and other crops (Rs. 86 crores). There was a noticeable increase in the value of foodgrains marketed through cooperatives to Rs. 99 crores in 1964-65, as compared to Rs. 40 crores in the preceding year. It was as low as Rs. 10.5 crores in 1958-59.

In recent years, some progress has been made in cooperative marketing of plantation crops such as arecanut, coconut, cardamom, pepper, etc. Plantation crops valued at about Rs. 8 crores were handled by 61 marketing societies during the year 1964-65. The cooperatives have also entered export trade in pulses, bananas, peas, onions, mangoes, oranges, tobacco, etc.

As an initial step for linking of cooperative credit with cooperative marketing, measures were taken to ensure that cooperative credit societies affiliated themselves to the primary marketing societies. At the end of 1964-65, about 60 per cent of the primary agricultural credit societies were so affiliated.

Significant progress has been made in the sphere of cooperative sugar factories. Out of the total of 219 sugar factories licensed/registered by the end of 1964-65, 65 were in the cooperative sector. Fifty of the cooperative sugar factories were in production during the 1964-65 season and accounted for about a quarter of the total output of sugar in the country, as compared

to about 14.8 per cent in 1960-61. The processing of agricultural products other than sugarcane and cotton ginning and pressing, has not made any significant advance. During the Second Plan period, State Governments provided assistance for the establishment of 464 processing units (other than sugar factories). The Third Five Year Plan envisaged the setting up of 783 more units. During the first four years, a total of 434 units were assisted. Cooperative marketing of paddy could not be successful without the provision of adequate processing facilities. Stress, was, therefore, being laid on the establishment of modern cooperative rice mills and hullers. By the end of 1964-65, 342 rice mills and rice hullers were assisted out of which 275 rice mills and rice hullers were installed. Besides, the National Cooperative Development Corporation provided assistance for the setting up of five modern rice mills in the IADP districts of West Godavari, Thanjavur, Mandya, Raipur and Burdwan.

Cotton ginning and pressing on cooperative basis had also made some progress. The number of units assisted by the end of 1964-65 was 201. There were 148 ginning factories and 54 presses in operation in 1963-64 which accounted for the sale of ginned and pressed cotton valued at over Rs. 21 crores in that year. Among other developments, mention may be made of 21 cooperative spinning mills of cotton growers, 106 oil mills and expellers and 17 units engaged in the processing of fruits and vegetables in 1963-64.

A beginning has also been made in setting up larger cooperative processing units on the lines of sugar factories, e.g. solvent extraction plants, cotton spinning mills, etc.

The provision of storage facilities is an important requisite of cooperative marketing of agricultural products and is also necessary to facilitate the distribution of agricultural supplies and essential consumer articles in the rural area. The Third Plan provided for the construction of 980 godowns at mandi centres, over 9,200 godowns in rural areas besides 32 cold storages. During the first four years of the Plan, a programme of constructing 890 mandi-level godowns and 5,528 rural godowns was undertaken. From the beginning of the Second Plan period till March, 1965, assistance was provided for the construction of 2,553 mandi level godowns and 11,047 rural godowns. Of these, 1,670 mandi godowns and 6,590 rural godowns were completed. The progress in construction has been slow due to difficulties in acquisition of land, supply of construction materials and certain other factors. In addition, the cooperatives have built about 1,000 godowns at mandi level and 1,500 in the rural areas from their own resources during the first four years of the Plan. Upto the end of 1964-65, assistance was provided for setting up 23 cooperative cold storages of which 8 units had already been installed and the remaining units were under various stages of construction.

Supply of Consumer Articles to Rural Areas

In 1963-64 a Centrally sponsored scheme for distribution of essential consumer articles such as sugar, kerosene, matches, etc. in rural areas

through the agency of marketing societies and village cooperatives was introduced. Some progress was made in this direction during the two years under review. The value of sales by these cooperatives rose to Rs. 101.9 crores in 1964-65 as compared to Rs. 28.4 crores in 1962-63.

Consumers' Cooperatives

A centrally sponsored scheme for the setting up of 200 wholesale stores and 4,000 primary units in cities and towns with a population exceeding 50,000 was launched in November, 1962. The object in view was to ensure equitable distribution of consumer articles at fair prices especially in the urban areas. By the end of June, 1965, 224 wholesale stores with 1,679 branches and 5,423 primaries affiliated to them had been organised. They served 222 out of a total of 250 towns with a population of over 50,000. The individual membership of the wholesale and primary stores reached the level of 20 lakhs at the end of December, 1965. The sales recorded a significant increase, amounting to Rs. 70.7 crores for the half-year ending December, 1965, as compared to Rs. 38.6 crores for the corresponding period in the preceding year.

The Central Government Employees' Consumer Cooperative Stores at New Delhi, established under a scheme sponsored by the Ministry of Home Affairs, continued to operate in the city through its 32 branches. Its membership, which stood at 18,000 at the end of 1963 had recorded an increase to over 42,000 in December, 1965.

A special scheme was sponsored by the Union Ministry of Labour and Employment for organisation of consumers' cooperatives in public and private sector undertakings employing 300 or more workers. The number of these stores (and branches) rose to 1,975 at the end of 1965 as compared to 1,260 towards the close of 1963. More than 60 per cent of the undertakings (total number 3,841) were being serviced through these stores in 1964-65.

The main problems facing the consumers' stores pertain to ensuring sound business management, training of key personnel, ensuring regular supplies of goods on reasonable terms and building up consumer loyalty. An effort is being made to establish a closer liaison between the consumer cooperatives and cooperative marketing societies and to implement the scheme for the training of junior personnel employed by the consumer cooperatives, including managers and salesmen of primary stores. A Central Institute of Management for Consumers' Business was established in Bombay in July, 1964 to provide training to the executives and key personnel of the wholesale stores.

Cooperative Farming

During the Third Five Year Plan, 318 pilot projects, each comprising 10 cooperative farming societies, were scheduled to be organised in selected community development blocks. The aim was to demonstrate to farmers that by pooling their resources in land, manpower, etc. they could increase

agricultural production and raise their standard of living. The cooperative farming societies outside the pilot areas were also to be given all encouragement and assistance.

By the end of 1965, 2,485 farming societies were working in the pilot areas besides 2,527 in other areas, as compared to 1,198 and 1,101 societies respectively by the end of December, 1963. The progress made during recent years is indicated below:

Cooperative Farming Societies: Achievements

	Cumulative up to the end of March			
	1962	1963	1964	1965
Number of Cooperative Farming Societies				
(a) pilot areas	226	865	1,525	2,283
(b) non-pilot areas	454	838	1,312	2,022
TOTAL	680	1,703	2,837	4,305
Membership—				
(a) pilot areas	5,318	15,743	28,640	39,296
(b) non-pilot areas	5,619	17,453	26,726	44,133
TOTAL	19,937	33,196	55,366	83,429
Total area covered (acres)				
(a) pilot areas	36,934	92,277	173,807	227,425
(b) non-pilot areas	29,435	101,943	186,513	234,734
TOTAL	66,369	194,220	360,320	462,159

The average membership of a society in pilot and other areas was 18 to 22 and the average area 106 and 114 acres respectively. The progress was uneven, there being a substantial variation in the achievement of physical targets in different States.

To assess the progress of cooperative farming and to evaluate the working of the pilot-projects, a Committee of Direction was constituted in July, 1963 with Prof. D. R. Gadgil as Chairman. The Committee came to the conclusion that taking the country as a whole, cooperative farming had not yet developed firm roots. The programme was still in its infancy and from its very nature, cooperative farming would require time before it could make a significant impact. The Committee observed that a great deal required to be done to encourage, guide and sustain the programme of cooperative farming.

Some of the more important findings of the Committee were:

- (i) The programme had demonstrated its capacity to step up agricultural production and create a potential for future development. Most of the societies had been able to undertake some measures of land development.
- (ii) The performance of the societies varied generally according to the availability of resources, technical guidance and managerial skill.

- (iii) The programme hitherto had been officially inspired and guided in most areas and there was need to draw upon non-official leadership.
- (iv) The bigger farmers had sometimes dominated the cooperative farming societies. At times, non-working members had been enrolled in order to fulfil the minimum requirements of registration and members of societies had pooled only part of their lands which were of inferior quality.
- (v) Technical and financial support was not forthcoming in adequate measure either from Government or from cooperative societies.
- (vi) Most of the societies were still to devise satisfactory procedures of work allotment and assessment of individual performance.

Cooperatives in other Sectors

Cooperative activity in the sectors of village and small industries, irrigation, housing, and transport has also made good progress during the period under review. The number of industrial cooperatives of all types increased from 47,200 in 1963-64 to 51,000 in 1964-65. The number of irrigation societies increased by 33 to 1,499 in 1963-64 as compared to the preceding year. The housing and transport cooperatives registered an increase of 1,106 and 54 respectively in 1963-64 over 1962-63 when they numbered 8,779 and 959 respectively. There were also 220 cooperative printing presses and 7 insurance cooperatives by the end of 1963-64. About 57 lakh workers in the lower and middle income groups as well as Government employees had organised themselves into 13,279 thrift and credit societies which held deposits of Rs. 136 crores in 1963-64 and advanced loans amounting to Rs. 210 crores in that year.

To strengthen the economic position of the weaker sections in rural areas, steps were taken to promote and strengthen functional cooperatives for dairying, poultry, fisheries, etc. and to intensify the working of labour cooperatives and other programmes of benefit to the weaker sections. At the end of 1963-64 there were 5,052 milk supply and dairy cooperatives with a membership of 3.49 lakhs and a working capital of Rs. 3.42 crores. The number of poultry societies increased from 607 in 1962-63 to 803 in 1963-64 and their sales from a little over Rs. 14 lakhs to over Rs. 40 lakhs during the same period. The number of fishermen cooperatives increased from 2,729 with a membership of 2.79 lakh at the end of 1962-63 to 2,912 at the end of 1963-64 with 2.94 lakh members. In 1963-64 the sales of these societies amounted to Rs. 2.44 crores.

Increasing emphasis was placed on the organisation of labour contract and construction societies and forest labour cooperatives. In 1964-65 there were about 4,000 labour contract and construction societies with membership of 2.78 lakhs, apart from 1,017 forest contract societies in 1963-64. The

value of works executed by the labour contract and construction societies amounted to Rs. 10.5 crores during 1964-65. Cooperative societies were also organised of rickshaw pullers and washermen.

Training and Education

Cooperative training and education of managerial personnel and office bearers of cooperative organisations is of basic importance for a growing cooperative movement. The National Cooperative Union and the State Cooperative Unions continued to be responsible for the programmes of training and education. There is a four-tier system composed of the National Cooperative College and Research Institute, Poona, for the training of senior personnel, 13 intermediate and 67 junior centres for the training of intermediate and junior level personnel and 612 peripatetic units for imparting training and education to non-officials and field level workers.

Cooperative Administration

A Committee was appointed in April, 1963 by the erstwhile Ministry of Community Development and Cooperation under the Chairmanship of late Shri V. L. Mehta to review the then existing departmental set-up in various States and to suggest the broad lines for determining the strength of departmental staff at various levels. The Committee which submitted its report in October, 1963 has made several recommendations for streamlining and strengthening the administrative set-up of the State Cooperative Departments.

4. COMMUNITY DEVELOPMENT AND PANCHAYATI RAJ

COMMUNITY DEVELOPMENT

At the end of the Second Plan period, the community development programme covered about 364,000 villages, accounting for about 64 per cent of the total number of villages and well over half of the India's rural population. By the close of 1964-65, all the rural areas were covered through 5,240 community development blocks. Of these, 601 blocks had completed ten years of development; 1,910 blocks had completed the first five years of development and the rest were in the first stage of development. Of 450 Tribal Development Blocks, scheduled to be started during the Third Plan period, 299 had been allotted by the end of 1964-65.

The Third Five Year Plan provided for an outlay of Rs. 293.7 crores for community development. The actual expenditure during the first four years amounted to Rs. 219.8 crores or about 75 per cent of the Plan outlay. The performance in terms of progress of expenditure has been uneven in different States; for example, the shortfall in expenditure had been over 20 per cent in Bihar, Gujarat and Madhya Pradesh.

The community development programme, initiated in 1952 was intended to be the spearhead of the socio-economic development in rural areas, with emphasis on agricultural development. The fundamental objective was the reconstruction of rural life both in its economic and social aspects and to bring about a change in the outlook of people in rural areas so that they could improve their level of living through self-help programmes. The programme has been supported by a network of extension services and a structure of democratic institutions, known as the Panchayati Raj. While agriculture was the focal point in economic development in rural areas, the community development programme covered a variety of other activities such as rural industries, social education, health and sanitation, social welfare and communications.

The real test of a key programme of this nature and dimensions is not so much the magnitude of the population or the number of villages covered but the voluntary and active participation of the people in the planning and execution of development projects. From this angle, it may be said that significant progress had been made in community capital formation. For example, by the end of 1964-65, about 4 lakh drinking water wells had been constructed in rural areas with sizeable public contributions; about 3 lakh kilometres of approach roads had been laid and over 4,000 primary health centres had been established. Some progress had also been made in the orientation of the community development programme so as to subserve the main objective of agricultural development. Recent studies, however, point out that although community development programme had greatly expanded, the people's contribution and participation had tended to decline in a majority of the States.

The Third Five Year Plan attached considerable importance to the role of the block as a unit of planning as well as development. A memorandum placed before the National Development Council in October, 1964 emphasised the need of realistic and integrated local plans as the basis of the national plan. The State Governments were advised to select a few districts to serve as pilot areas for working out suitable local planning techniques. Although the principle of treating the block as a unit of planning has been generally accepted, it has been translated into action only in a few States including Maharashtra, Gujarat, Rajasthan and Madras and to some extent in Uttar Pradesh, Orissa and Andhra Pradesh.

Another noteworthy development in preparing block programmes has been the adoption of an intensive approach to ensure the most effective utilisation of available resources. On the recommendations of an expert group (1964) the Department of Community Development has classified the blocks in three broad categories: (a) blocks suitable for impact programmes

of agricultural development; (b) blocks with special potential for development of animal husbandry, dairying, fisheries and sheep and wool developments; and (c) blocks in need of land and water developments, soil conservation, flood control, etc. Increasingly, the State Governments are also entrusting the implementation of schemes of different development departments to the community development block organisation.

The training arrangements for the various categories of personnel are kept under constant review with a view to improving their quality and content. Steps have already been taken to reorient the training programmes so as to meet the needs of rapid increase in agricultural production. There were noticeable shortages in the ranks of overseers, social education organisers, extension officers (Panchayats) and women extension staff. The existing training facilities, however, have not been fully utilised. It will be worthwhile to discover the causes of unutilised capacity and to take steps to bridge the gap that still exists between trained and untrained personnel. By 1964-65, there were in operation 12 Orientation and Study Centres, 4 Tribal Orientation and Study Centres, and 18 Special Education Organisers/Mukhya Sevikas Training Centres. At the apex of this training network was the National Institute of Community Development with its twin objectives of offering high level orientation courses to key personnel engaged in or associated with community development programme and of organising a programme of broad-based research on themes having a direct bearing on planned change. Besides there were 100 institutions for training Gram Sevaks and 44 for training Gram Sevikas.

PANCHAYATI RAJ

The structure of local democratic institutions known as the Panchayati Raj Institutions, provides the institutional framework of community development at the village, block and district levels. The three-tier panchayati raj was in operation at the end of 1964-65 in all the States except Jammu and Kashmir, Madhya Pradesh, Kerala and Nagaland. In Bihar, the system was in force in three districts only. In Madhya Pradesh, the higher tier bodies, that is, the panchayat samities and zila parishads had not yet been set up. The Kerala Panchayat Union Council and Zila Parishad Bill which was introduced in the State Assembly, lapsed on the dissolution of the State legislature in September, 1964. In Jammu and Kashmir, the State Government reconstituted the Democratic Decentralization Committee which was asked to suggest a suitable pattern of panchayati raj for the State. The Committee has not yet submitted its report. A statement showing the coverage of the three tier system as at the end of 1964-65 is given in the Annexure at the end of this Section.

In 1963-64, a Consultative Council on Panchayati Raj was set up to advise the Ministry of Community Development and Cooperation on general policies regarding panchayati raj and for suggesting measures for

educating public opinion in a better understanding of the role and objectives of the panchayati raj. The various recommendations made by the Consultative Council on panchayati raj and the several Study Teams constituted by the Ministry of Community Development and Cooperation to cover important aspects of panchayati raj, such as mode of elections, finances, audit, etc. were followed up with the State Governments. The Council set up a Committee to suggest *inter-alia* measures to safeguard the integrity and to strengthen the finances of panchayati raj bodies. The Committee submitted an interim report in March, 1965.

A high powered Working Group with the Union Minister of Agriculture as Chairman was set up in August, 1963 to review the existing arrangements and to suggest measures for greater inter-departmental and institutional coordination, right from the village level to the State level. The recommendations of the Working Group which centred on the establishment of an integrated set-up at the State, district and block levels, have been accepted and are at different stages of implementation.

The Santhanam Study Team on Panchayati Raj Finances made several recommendations designed to augment the tax revenues of panchayati raj institutions. The more important of these aimed at compulsory levy of house tax, professional tax and vehicle tax, prescription of maximum and minimum rates for profession tax, specification of minimum rates of vehicle tax and levy of pilgrim tax by the higher tier panchayati raj institutions. Most of the States have accepted these recommendations in principle. In modification of one of the recommendations of the Study Team, a scheme has been prepared for providing matching incentive grants to panchayati raj institutions for increasing their tax effort.

A Committee was set up in February, 1964, under the Chairmanship of Shri K. Santhanam to study the mode of elections to panchayati raj institutions in various States. It has since submitted the report.

Another Study Team was set up in 1964 to undertake a detailed examination of the current system of audit of accounts of panchayati raj bodies and locate deficiencies; to devise measures to strengthen the system of audit and to suggest a basic pattern of audit. The recommendations of the Study Team were made available to Government towards the end of 1964-65.

Some State Governments have also undertaken assessments and conducted studies with a view to evolve guidelines for the future. The Government of Gujarat appointed a Committee to review the working of panchayati raj in the State. The committee has submitted its report. The Study Team appointed earlier by the Government of Rajasthan under the Chairmanship of Shri Sadiq Ali made its report in 1963-64. One of the important recommendations of the Team is that the *Pradhans* of the Panchayat Samities and the *Pramukhs* of Zila Parishads should be elected not only by the members of the bodies concerned but by broad-based electoral colleges.

It has also suggested constitution of State and district level tribunals to deal with matters relating to control and supervision of panchayati raj bodies.

The Government of Uttar Pradesh appointed a Team in 1964 to undertake a study of the working of panchayati raj institutions in Andhra Pradesh, Maharashtra, Gujarat and Rajasthan. The Report of the Team contains several recommendations for strengthening the panchayati raj institutions and taking special measures for releasing local initiative and developing a sense of responsibility and comradeship among officials and non-official workers.

In March, 1965, the Planning Commission moved the State Governments to examine the organisational, institutional and procedural set-up of the panchayati raj institutions with a view to discover deficiencies and make them more effective instruments of rural development in general and agricultural development, in particular. Consequently several State Governments set up committees, some of which have submitted their recommendations. These go to show that there are several aspects of organisation and operational areas which require improvement and strengthening. It appears that a more precise definition of the responsibilities and powers of the panchayati raj institutions vis-a-vis Government Departments is necessary. The relations between the officials serving the panchayati raj institutions and the elected non-officials holding positions of authority have also to be clearly defined. Further there is need for more effective communication and consultation between the panchayati raj institutions and Government authorities concerned with their operations and also for improving the service conditions of the employees of the panchayati raj institutions.

In sum, the period of first four years of the Third Plan in regard to the community development and panchayati raj institutions was one of expansion, trial and investigation. The process of consolidation, improvement and strengthening will engage attention in the next phase of development.

ANNEXURE

Coverage of Panchayats, Panchayat Samities and Zila Parishads
(as on 31st March, 1965)

State	No. of Panchayats	No. of Panchayat Samities	No. of Zila Parishads	No. of villages covered by Panchayats	Rural population covered by Panchayats (lakhs)*	Percentage villages covered by Panchayats	Percentage rural population covered by Panchayats
1	2	3	4	5	6	7	8
Andhra Pradesh	15,268	321	20	27,084	297	100	100
Assam . . .	2,570	120	16	17,717	83	100	100
Bihar . . .	10,725	71†	3†	67,679	421	99	99
Gujarat . .	11,755	182	17	18,247	153	100	100
Jammu and Kashmir . .	960	..	..	6,559	30	100	100
Kerala . . .	922	..	..	1,574	144	100	100
Madhya Pradesh	12,801	..	..	70,414	277	100	100
Madras . . .	12,905	373	22	13,983	247	99	100
Maharashtra .	20,287	295	25	35,492	281	99	99
Mysore . . .	7,450	172	20	25,880	183	100	100
Orissa . . .	2,340	313	13	47,939	158	94	96
Punjab . . .	13,476	226	17	22,532	162	100	100
Rajasthan . .	7,388	232	26	32,241	169	100	100
Uttar Pradesh	72,333	854	51	112,624	643	100	100
West Bengal .	19,649	325	14	38,530	264	100	100
A. & N. Islands	32	..	..	100	0.5	80	93
Delhi . . .	215	5‡	..	276	3	100	100
Goa, Daman and Diu . . .	159	..	..	265	5	100	100
Himachal Pradesh .	638	..	5	10,424	13	100	100
Manipur . . .	227	..	..	581	5	31	63
Tripura . . .	248	..	..	N.A.	N.A.	N.A.	N.A.
All India . .	212,348	3,489	249	550,151	3,558.5	99	99

N.A.—not available.

*According to 1961 Census.

† Panchayati raj bodies have been constituted in three districts viz. Ranchi, Bhagalpur and Dhanbad.

‡ Non-Statutory Panchayat Samitis.

5. ANIMAL HUSBANDRY, DAIRYING AND FISHERIES

ANIMAL HUSBANDRY

The main emphasis in the programmes relating to animal husbandry was on increasing the production of animal proteins, to develop better breeds, and to augment the production of other items of economic importance such as wool, hides and skins, etc. Expenditure under Animal Husbandry during the first four years totalled about Rs. 29.3 crores against the Plan provision of Rs. 54.4 crores. The progress of important programmes in physical terms is summarised in the statement below:

Selected Physical Targets and Achievements (1961-65)

Item	Unit	Third Plan Target	Achievements					
							1961-65	
			1961-62	1962-63	1963-64	1964-65 (anticipated)	Total	as per cent of Col. 3
1	2	3	4	5	6	7	8	9
Key Village Blocks-established	Numbers	79	10	23	9	10	52	65.8
Key Village Blocks-expanded	"	64	18	21	8	10	57	89.0
Subsidized rearing of Calves	"	44,440	6,412	6,441	1,716	2,743	17,312	39.0
Cattle Breeding Farms established	"	10	1	1	2	2	6	60.0
Cattle Breeding Farms-expanded	"	35	4	5	6	5	20	57.1
Calf Rearing Farms	"	13	2	2	9	—	13	100.0
Goshalas	"	168	22	23	31	30	106	63.1
Gosadans	"	23	1	2	1	1	5	21.7

Key Village Scheme

The Key Village Scheme is a coordinated project for bringing about an improvement in the milking capacity and draught efficiency of the country's bovine population through controlled breeding, adequate feeding, effective disease control, proper management and marketing facilities for livestock and livestock products. The scheme was continued with expanded scope in the Third Plan. 19 new Key Village blocks were established during the period under review, bringing the total to 52 blocks, upto the end of 1964-65. 18 existing blocks were also expanded during this period, the cumulative total up to 1964-65 being 57 blocks against the Plan target of 64 blocks. It was emphasised in the Third Plan Mid-term Appraisal that cattle development programmes should be implemented in an integrated manner over large and compact areas, supported by feed and fodder development programme, mass castration, disease control, etc. These programmes have

not, however, made much impact on cattle development and milk production as the Key Village blocks were widely scattered and they covered only about 3 per cent of the breedable cattle population of the country as also because of lack of inputs in many cases.

Intensive Cattle Development Programme

A new scheme known as Intensive Cattle Development Project with objective similar to Key Village Scheme, but wider in scope was taken up during 1964-65 under the special agriculture development programme. An intensive cattle development project covers a population of about one lakh breedable cows/buffaloes. 19 such projects have been implemented in ten States. These projects are linked up with the dairy and milk supply schemes. The object is twofold, to increase the supply of milk to the dairies to enable them to reach their capacity and secondly, to provide the farmers a ready and remunerative market for milk and milk products. A minimum increase in milk production to the extent of 30 per cent over a period of five years is laid down as the target for each intensive cattle development project.

Hill Cattle Development Scheme

With the object of increasing milk production, a pilot project in cross breeding of indigenous cattle with Jersey bulls in hilly areas was taken up by the Indian Council of Agricultural Research. The results of this project indicated that selected areas in hills were suitable for taking up cross breeding programme on a large scale. In the Third Five Year Plan, a scheme for the development of cattle in hilly areas through cross breeding with Jersey cattle was taken up. Under the scheme two bull depots, four artificial insemination centres, 41 sub-centres and 82 subsidiary centres had been established in Punjab, Assam, Uttar Pradesh, Jammu and Kashmir, Kerala and Madras. The scheme covered 1.25 lakh cattle in 300 villages. During 1964-65 a total of 2,000 inseminations had been done.

Jersey Cattle Breeding Farms

With a view to meeting the requirements of Jersey bulls for Hill Cattle Development scheme and other cross breeding programmes, two Jersey farms were set up during the Third Five Year Plan. The farms at Kataula (Himachal Pradesh) and Hessarghatta (Mysore State) have continued and made good progress. 81 Jersey bulls reared during the period were issued from these farms for upgrading non-descript cattle.

Progeny Testing Scheme—Hissar

The scheme for production of progeny tested bulls of Haryana and Murrah breeds was in progress in the Third Five Year Plan. A progeny testing farm had been set up and 10 bulls each of Haryana and Murrah breeds were being tested for their ability to transmit qualities for high milk production. A composite block of 30,000 cows and buffaloes is attached to the farm where breeding facilities are extended. This will help in evaluating the breeding worth of bulls simultaneously at the farm and under village conditions.

Gaushalas

The scheme for the development of gaushalas aimed at utilising selected gaushalas as cattle breeding-cum-milk production units for supplementing Government's efforts for the supply of good breeding bulls and for increasing milk production. During the year 1964-65, 30 gaushalas were taken up for development compared to 31 in the preceding year.

Weeding

The scheme for mass castration of scrub bulls was in operation in the States of West Bengal, Uttar Pradesh, Rajasthan, Orissa and Mysore with a view to restricting the multiplication of inferior quality cattle. Under the Gosadan scheme which aimed at the segregation of unproductive and un-economic cattle, two more gosadans were set up during the period under review and *Charmalays* were attached to the existing 12 gosadans for economic utilisation of carcasses. The scheme for control of stray and wild cattle was in operation in Punjab, Uttar Pradesh, Madhya Pradesh and Delhi Territory. During the two years 1963—65, about 22,000 cattle were rounded up, of which 3,822 were productive ones and were distributed among bona-fide breeders. The unproductive ones were sent to gosadans.

Feed and Fodder

In view of the importance of improving nutrition for increasing the productive capacity of animals, feed and fodder development activities were taken up in almost all the States. During 1964-65, 58 pasture demonstration plots were established, besides nine farms were set up for pasture improvements and four for the production of seeds. Encouragement was also given for the construction of silo-pits and chaff-cutters were distributed to the farmers at subsidized rates. Feed and fodder and grazing committees were functioning in most of the States for coordinating the work connected with feed and fodder development.

Sheep and Wool

Breeding trials undertaken in crossing of local sheep with Rambouillet rams has given encouraging results. The first sub-station in Kulu of the Central Sheep and Wool Research Institute has started functioning. Steps were also taken for the establishment of a second sub-station at Kodai-canal in Madras State.

Breeding trials of local ewes with Rambouillet rams in the hill regions for production of fine woolled strains yielded encouraging results. A modest programme for extension of this work was undertaken by importing 428 Soviet Merinos from USSR and 400 Rambouillets from the U.S.A. Further 413 sheep of Romney Marsh breed were obtained as gift from New Zealand for sheep development programme in different States. A number of sheep and wool extension centres and sheep farms were also established during the period. During 1964, as a part of special development programme for increasing meat production, proposals for establishing 10 sheep farms, strengthening 22 existing sheep farms, establishment of 24 sheep and wool

extension centres and distribution of 67,300 breeding ewes to the farmers were also sanctioned for implementation. During the period, a large scale programme of sheep shearing and wool grading was initiated in Rajasthan.

Poultry

At the regional poultry farms at Delhi and Bangalore, the target of maintaining 5,000 layers has been achieved while at the Bhubaneswar and Bombay farms the target is expected to be achieved by the end of the Third Plan. These farms produced about 21·38 lakh eggs and distributed 2·7 lakh birds in 1964-65, as compared to 15 lakh eggs and 2·3 lakh birds during 1963-64. A large number of chicks were also supplied to the private poultry farms by the poultry breeding farms set up with foreign collaboration. In addition, 24 intensive poultry development blocks, 2 marketing centres and 11 poultry feed manufacturing centres were set up and 17 State poultry farms were expanded during 1964-65. Attention was also given to the development of poultry under the special agricultural development programme. Funds were provided for establishment of poultry dressing plants, cold storages and setting up of intensive egg production-cum-marketing centres and of poultry feed manufacturing and distribution centres and granting of credit facilities to farmers.

Piggery

The two regional pig breeding station-cum-bacon factories at Aligarh (Uttar Pradesh) and Haringhatta (West Bengal) have made satisfactory progress. These two stations supplied during 1964-65, 115 boars and sows to the States for breeding purposes. Another station which was established at Aarey (Maharashtra) during 1962-63 also made steady progress and supplied 53 boars for breeding purposes. Arrangements for setting up of the fourth station at Kessarpalli (Andhra Pradesh) were taken up in hand. The pig breeding units and piggery development blocks established earlier continued to function satisfactorily.

Research and Education

Trials of cross-breeding with Jersey bulls were undertaken at a number of places. Cross-bred progeny had shown earlier maturity and high milk yielding capacity. The central Jersey farms reared 81 bulls which were distributed for upgrading of local stock. At the Indian Veterinary Research Institute, Izatnagar, nine research schemes pertaining to disease control were in operation.

Animal Health

Rinderpest eradication scheme which was taken up as a pilot project during the year 1954 and later extended to other parts of the country continued to make steady progress. During the years 1963-64 and 1964-65, over 10 million and 5 million animals respectively were vaccinated making a total of nearly 136 million out of the total inoculable population of 140 million in the country. The impact of the eradication programme is clearly

seen in a considerable decline in the incidence of the disease from an annual figure of 8,000 outbreaks before the scheme was taken up, to about 500 during the year 1963-64 and about 300 in 1964-65.

DAIRYING AND MILK SUPPLY

In the field of urban milk supply schemes, three new dairy plants were commissioned at Agra, Lucknow and Cuttack while four such plants were established at Patna, Calicut, Jamnagar and Surindernagar during 1964-65, raising the total number of dairy plants to 29. Besides, pilot milk schemes were in operation in several cities, as a prelude to the setting up of dairy plants. The average daily through-put of the dairy plants and pilot schemes was about 10 lakh litres in 1964-65 as against 8.5 lakh litres during 1962-63. Construction work for installation of equipment was in hand in respect of 26 dairies. The preliminaries for a second milk colony under the Bombay Milk Scheme were taken in hand. The cattle feed compounding factory set up at Anand with aid from Oxford Committee for Famine Relief, under the 'Freedom from Hunger' campaign went into production in October, 1964. The composite milk plants at Amritsar and Rajkot produced milk powder in addition to supply of milk. Two more smaller plants were under construction at Miraj and Vijayawada. In addition to the creameries in operation at Aligarh and Barauni, another creamery was commissioned at Junagadh. Two milk-powder factories were established at Anand and Mehsana. Assistance was signified under the Colombo Plan from New Zealand Government for the establishment of dairies at Dehra Dun and Dhulia. The UNICEF was assisting in the establishment of dairies at Ludhiana and Baroda and in the further development of the Calcutta project. The Swedish Government provided 12 million Kroners for the purchase of equipment for several dairy projects.

The supply of milk under the Delhi Milk Scheme remained satisfactory till the end of 1963-64. Thereafter, difficulties arose mainly due to the after-effects of floods and shortage of fodder which resulted in a large shortfall in the procurement of milk under the scheme. A Team of experts was appointed to review the working of the scheme and to suggest ways and means for improvement. The Team recommended that the Delhi Milk Scheme should be reorganised as a limited company so as to infuse greater flexibility in its working and that milk should be procured from remotest areas within a radius of about 300 miles. For efficient distribution of milk, 'cash and carry' system which was recommended by the Team has already been implemented alongwith some other recommendations of the Team. An agreement was entered with the FAO for supplies of skimmed milk powder for production of double-toned milk for distribution among the poorer sections of the community.

Training in dairying (I.D.D.) was imparted at six centres in the country. In order to provide technical personnel for various dairy projects, training arrangements were intensified at Karnal, Bangalore, Anand, and

L/B(D)227PC

Aarey with assistance from UNICEF. Two diploma courses in dairy engineering and three short courses in dairy extension were held with UNICEF assistance. The UNICEF also helped in holding tutorial workshops for the benefit of teachers engaged in the training institutes.

FISHERIES

Against the Plan provision of Rs. 28.6 crores, total expenditure during the first four years of the Plan was expected to be Rs. 15.4 crores. The development of fisheries continued to make progress during the period under review. The total fish production in 1963 was 10.5 lakh tonnes as against 9.7 lakh tonnes in the preceding year and rose to 13.2 lakh tonnes in 1964. The value of fish exported during 1964-65 was Rs. 6.84 crores as against Rs. 4.09 crores in 1962-63. Improved methods of pisciculture were demonstrated and fish farmers were assisted in tackling specific problems to improve fish rearing techniques.

The Deep-Sea Fishing Stations continued exploratory fishing operations to locate rich fishing grounds. Under the Indo-Norwegian Project, investigations were conducted on exploratory fishing and the activities were extended to Mandapam in Madras, Karwar in Mysore and Cannanore in Kerala State.

Against the Third Plan target of 4,000 mechanized fishing crafts, about 2,800 mechanized crafts were introduced by the end of 1964-65. The construction of fishing harbours at Veraval, Kakinada, Nagapattinam and Vishakhapatnam was nearing completion. The work on the construction of fishing harbours at Porbunder, Umbergaon, Karwar and Bhatkal was in progress.

Out of a total provision of Rs. 1 crore as loan assistance to fisheries cooperatives under the Third Plan, a sum of Rs. 42.8 lakhs had been sanctioned to apex organisations in some of the States. The proposal to establish a Central Fisheries Corporation to exploit marine fisheries potential both for export and internal consumption was under consideration.

For quick transport of fish from landing centres to interior areas, six refrigerated rail coaches were provided, two each on Kozhikode-Madras, Palasa-Howrah and Vijayawada-Howrah routes. Efforts were being made to expand this facility and three more coaches were under construction.

At the Central Institute of Fisheries Education, Bombay, 52 students received training in two batches during 1964-65. The Fisheries Operative Training Institute at Cochin also made good progress. It provided training to 28 master fishermen and 17 engine drivers in 1964-65. At the Central Inland Fisheries Research Institute, Barrackpore, 25 trainees were undergoing training for a course of 10 months' duration.

6. RURAL WORKS PROGRAMME

The number of development blocks in which the Rural Works Programme has been implemented increased from 293 in 1962-63 to 730 in

1963-64 and 924 in 1964-65. The outlay incurred under the programme increased from Rs. 112 lakhs in 1962-63 to Rs. 418 lakhs in 1963-64 and Rs. 559 lakhs in 1964-65. Thus, 1963-64 marked a significant increase in the coverage of the programme. During the two years 1963-64 and 1964-65, the average annual expenditure per block was in the neighbourhood of Rs. 60,000, ranging from about Rs. 1 lakh in Uttar Pradesh, Gujarat, Maharashtra and Himachal Pradesh to around Rs. 40,000 to Rs. 50,000 in a number of other States. The average employment per block reckoned in man-days was around 24,000 to 25,000 and employment in man-days for every hundred rupees of expenditure works out on the average to about 40, though in some States a significantly larger quantum of employment was secured.

The programme has also resulted in the creation of valuable community assets, altogether 78,604 acres benefited from minor irrigation works, 343,873 from soil conservation and afforestation and 113,184 acres from land reclamation and anti-waterlogging measures, according to information available in respect of certain blocks till the end of 1964-65. Also 3,556 miles (5,723 kilometres) of rural market roads were constructed or improved.

The expansion of the programme during 1963-64 appears to have been ahead of organisational preparation in a number of States and a proportion of blocks was found to be comparatively inactive. Accordingly, in February, 1965, the Ministry of Community Development and Cooperation forwarded to States a list of 232 blocks where implementation had been unsatisfactory and suggested their replacement by other blocks. The following statement gives an indication in terms of scale of operation of blocks allocated under the programme falling within different categories.

Range of expenditure (Rs.)	Number of Blocks	
	1963-64	1964-65
1 lakh and over	117	174
75,000—1 lakh	69	112
50,000—75,000	115	150
25,000—50,000	162	224
Below 25,000	267	240
Nil	106	122
TOTAL	836	1,022*

*Includes 25 blocks in three States, withdrawn during 1964-65.

The progress of the rural works programme during the first four years of the Third Plan was reviewed at an inter-State Conference, held in April, 1965. Preliminary proposals for the Fourth Plan were also drawn up at this Conference.

7. LAND REFORM

The main objectives of the land policy are to remove such motivational and other impediments to increases in agricultural production as arise from the agrarian structure, to bring all cultivators into direct relationship with the State and to establish owner-cultivators on the widest possible scale.

The principal programmes adopted towards the fulfilment of these objectives were:

- (i) Abolition of intermediary tenure;
- (ii) Tenancy reforms, including regulation of rent, ensuring security of tenure for tenants and conferment of ownership on tenants;
- (iii) Ceiling on land holdings;
- (iv) Consolidation of holdings; and
- (v) Settlement of landless agricultural workers.

Abolition of Intermediaries

The intermediary tenures like zamindaris, jagirs and *inams* had been abolished earlier in most States. In this field the principal developments during the period under report were as follows:

Andhra Pradesh.—Conversion of minor *inams* into ryotwari holdings was in progress and *pattas* were issued in about 10 lakh cases. Legislation was also undertaken for the abolition of *mahals* and *muttas* in the Andhra areas and *inams* in the Telangana areas.

Assam.—Further progress was made in the implementation of the Abolition of Estates Act, in Karimganj Sub-Division.

Gujarat.—Legislation was enacted for the abolition of the remaining minor tenures other than the religious and charitable *inams*.

Kerala.—Implementation of the provisions of the Pattazhi Devaswom Lands Vesting and Enfranchisement Act and Jenmikaram Payment Abolition Act was in progress.

Madhya Pradesh.—Legislation was enacted for the abolition of cash grant tenures.

Madras.—Implementation of the legislation for the abolition of post-1936 *inam* estates and minor *inams* was in progress and legislation was enacted for the abolition of leaseholds in Madras area and *pandaravaka*, *jenmikaram* and *thiruppuvaram* tenure obtaining in the areas transferred from former Tranvancore-Cochin.

Maharashtra.—Legislation was enacted for the abolition of miscellaneous alienations.

Mysore.—Proposals were formulated for the abolition of certain minor *inam* which still remain.

Orissa.—Legislation was enacted for the abolition of village offices tenures.

Rajasthan.—Legislation was enacted for the acquisition of estates of ex-Rulers.

Uttar Pradesh.—Implementation of the legislation for the abolition of intermediary tenures in the urban areas and in Kumaon and Uttarkhand Division was in progress.

Tenancy Reforms

The principal features of tenancy reform are security of tenure for tenants, regulation of rent and the conversion of tenants into owners. In several States, comprehensive legislation on all these aspects had been enacted earlier. Provisions for regulation of rent have been provided in all the States, although the rate of fair rent varies considerably from State to State. In States where the landlord was given the right to resume some area for personal cultivation, the time limit during which such resumption could be made has since expired in most States. In Mysore and Orissa, the right of resumption was due to expire in 1966. In Andhra, Madras, Punjab and West Bengal (in respect of Bargadars), the time limit for resumption has yet to be provided. Some progress has also been made in converting tenants into owners. The principal developments during the period under report are as follows:

Andhra Pradesh.—In Telangana area, tenancies are regulated under the Hyderabad Tenancy and Agricultural Lands Act which is a comprehensive measure. In Andhra area, the Tenancy Act is a temporary measure. A unified comprehensive tenancy Bill for the State as a whole was before the Legislature. Pending its enactment, the life of the temporary legislation for Andhra area was extended.

Gujarat.—Comprehensive legislation for tenancy reform had been enacted earlier for the different areas of the State. During the period under review, implementation of the provisions for purchase of ownership made further progress. Purchase price had been fixed in respect of 4.5 lakh tenants holding an area of about 14 lakh acres. Some gaps were observed in the provisions which had rendered purchases ineffective in several cases. Proposals were formulated for the amendment of the law to fill these gaps.

Kerala.—The Agrarian Relations Act was struck down by the Supreme Court and replaced by the Kerala Land Reforms Act, which provides for fixation of fair rent at 1/4th to 1/8th of the gross produce for paddy lands; security of tenure for tenants subject to landlord's right to resume a portion of the leased area not exceeding five standard acres, an optional right of purchase for tenants on payment of compensation; and for bringing tenants into direct relationship with the State by *suo motu* action by

the Government. During the period under review, more than 30,000 applications for fixation of fair rent were disposed of. The right of resumption had since expired. Provisions for the optional right of purchase by tenants in respect of non-resumable lands were brought into force. Other provisions for *suo motu* action by the State for transfer of ownership will be enforced after the work relating to determination of fair rent has been generally completed.

Madras.—Comprehensive proposals for tenancy reform are under the consideration of the State Government. Meanwhile, the life of the interim legislation was extended.

Maharashtra.—Implementation of the provision for the conversion of tenants into owners made further progress. More than 5 lakh tenants on payment of full purchase price have acquired ownership in respect of nearly 11 lakh acres. The law was also amended to strengthen the provisions with a view to minimising ineffective purchases.

Mysore.—The Land Reform Act was amended to remove certain deficiencies. It provides for the fixation of maximum rent at 1/4th to 1/5th of the gross produce, depending upon the class of land; fixity of tenure for tenants subject to landlord's right to resume land not exceeding 1/2 of the area leased; and for bringing tenants of non-resumable lands into direct relation with the State. The Act has since been enforced.

Orissa.—Comprehensive legislation which had been enacted earlier was amended during the period under report with a view to removing certain deficiencies. It provides for fixation of maximum rent at 1/4th of the gross produce, fixity of tenure for tenants subject to landlord's right to resume half the leased area for personal cultivation; and for transfer of ownership to tenants in respect of non-resumable lands. The Act has since been brought into force.

Punjab.—Further progress was made in the implementation of the provisions for providing alternative land to tenants who were liable to eviction on grounds of resumption of land by landowners for personal cultivation. Some further progress was also reported in the purchase of ownership rights by the tenants. Nearly 20,000 tenants had exercised this right in respect of 1.28 lakh acres.

Uttar Pradesh.—Under the Land Reform Act, there are two principal tenures, namely, *bhumidars* who enjoy full ownership rights and *sirdars* who hold permanent and heritable rights, their right of transfer being limited. Provision was made to facilitate hypothecation of land by *sirdars* to co-operative institutions and Government for raising loans for agricultural purposes.

Union Territories.—In Goa, legislation was enacted for fixation of fair rents and security of tenure for tenants. In Karikal, the life of the

interim law was extended and in Himachal Pradesh, Manipur and Tripura where legislation had been enacted earlier, further progress had been reported in the implementation of the laws.

Ceiling on Land Holdings

Legislation for ceiling had earlier been adopted in all the States except the former Punjab area where there is no ceiling on ownership but the Government had taken powers to settle tenants evicted or to be evicted on grounds of resumption on lands under the personal cultivation in excess of the permissible limit. Implementation of the legislation had been taken up in a few States. Progress reported in the implementation during the period under report is briefly as follows:

Andhra Pradesh.—Preliminary steps were taken for the enforcement of the provision and for determination of surplus lands.

Assam.—The returns submitted by the landlords were scrutinised and about 20,000 acres declared surplus. 6,000 acres were taken possession of.

Bihar.— } Rules were framed and preliminary steps taken for
Gujarat.— } determination of surplus lands.

Kerala.—The provisions in the Agrarian Relations Act were replaced by the provisions of the Land Reform Act enacted in 1964. The provisions for preventing transfers which would affect surplus lands were brought into force.

Madhya Pradesh.—Under the law landholders were required to transfer land by way of sale to persons in specified categories before November 14, 1963. During the period under review, measures were taken to determine and acquire surplus lands from landholders who had not transferred them as required under the law.

Madras.—Preliminary steps were taken for determining surplus lands.

Maharashtra.—About a lakh acres were declared surplus. About 37,000 acres of surplus lands belonging to sugar factories were taken over and placed under the management of the Maharashtra State Farming Corporation constituted for the purpose.

Mysore.—The law was amended and provision made for disregarding certain transfers affecting surplus lands. The law as amended has since been enforced.

Orissa.—The ceiling law was amended.

Punjab.—About 4 lakh standard acres were declared surplus out of which 1.22 lakh standard acres were utilised for settling tenants and landless persons.

Rajasthan.—The legislation enacted earlier was brought into force in December, 1963 after determining equivalents of standard acres for various

categories of land. The declarations of holdings were obtained from the landholders and were being scrutinised with a view to determining surplus lands.

Uttar Pradesh.—Over 2 lakh acres were declared surplus out of which 1·65 lakh acres were taken possession of and 64,000 acres distributed.

West Bengal.—Further progress was made in the implementation of ceilings. About 7·8 lakh acres were reported to have been declared surplus out of which 4·35 lakh acres were taken possession of and leased out temporarily to share croppers and landless persons pending final disposal.

Consolidation of Holdings

Considerable progress was made in the consolidation of holdings in several States and about 102·5 lakh acres were consolidated at a cost of Rs. 35·5 crores during the period under review:

State/Union Territory	Upto 1962-63	During		Total upto 1964-65
		1963-64	1964-65	
Anhra Pradesh	5·77	1·41	0·50	7·68
Bihar	1·00	0·28	0·07	1·35
Gujarat	8·64	1·44	2·10	12·18
Jammu and Kashmir	0·02	N.A.	0·27	0·29
Madhya Pradesh	44·65	4·50	4·60	53·75
Maharashtra	27·58	8·44	7·02	43·04
Mysore	13·06	1·16	1·85	16·07
Punjab	196·00	12·41	8·10	216·51
Rajasthan	35·93	5·98	2·50	44·41
Uttar Pradesh	103·48	20·80	18·10	142·38
Delhi	2·04	0·01	..	2·05
Himachal Pradesh	1·92	0·41	0·50	2·83
TOTAL	440·09	56·84	45·61	542·54

At the end of 1964-65, the work was in hand over another 100 lakh acres. It is expected that the target set out in the Third Five Year Plan will be fully achieved.

Settlement of landless agricultural workers

A Centrally sponsored scheme for the survey of wastelands in blocks of less than 250 acres was initiated in 1962 through the State Governments. The survey has since been completed in 145 districts and about 26 lakh acres of wastelands have been located as suitable for cultivation. The Waste Land Survey and Reclamation Committee of the Ministry of Food and Agriculture had earlier located about 12 lakh acres in 13 States in blocks of 250 acres and above.

About 71 lakh acres of culturable waste lands (including Bhoodan and Gramdan lands) were reportedly distributed mainly to the landless agricultural workers during the first two five-year Plans and about 42 lakh acres during the four years of the Third Plan as part of the normal distribution of land by the district authorities.

(lakh acres)

State/Union Territory	First and	Third plan
	Second Plan periods	1961-65 (four years)
Andhra Pradesh	7.57	9.77
Assam	2.53	0.42
Bihar	3.86	0.41
Gujarat	2.21	0.13
Jammu and Kashmir	0.60	..
Kerala	0.18	0.60
Madhya Pradesh	14.08	3.80
Madras	3.52	0.96
Maharashtra	5.65	4.30
Mysore	7.98	3.20
Orissa	2.57	..
Punjab	0.82	0.25
Rajasthan	13.81	15.93
Uttar Pradesh	4.29	1.74
West Bengal	0.42	..
Union Territories	0.77	0.17
TOTAL	70.86	41.63

Lands available for distribution frequently require planned reclamation and settlement. A provision of Rs. 7 crores was made at the Centre in the Third Five Year Plan. As schemes of settlement were not making satisfactory progress, the matter was reviewed at a conference convened by the Planning Commission in November, 1963 and as a result of these discussions the pattern of assistance was revised and liberalised. An officer was specially deputed by the Ministry of Food and Agriculture to assist in formulating schemes of resettlement. A number of schemes have since been prepared by the State Governments and sanctioned by the Ministry of Food and Agriculture at an estimated cost of about Rs. 13 crores.

Amendment of Constitution

The validity of several land reform enactments had been challenged through writ petitions both in the High Courts and the Supreme Court. To avoid delays in the implementation of land reform laws arising out of litigation, the Constitution was amended to—

- (i) re-define the term "estate" for purpose of Article 31-A so as to protect the laws relating to land reforms even in respect of

- ryotwari holdings and other agricultural lands from attack on grounds of infringement of Articles 14, 19 and 31; and
- (ii) include the principal enactments in the Ninth Schedule to the Constitution to give them the protection of Article 31-B, against attack on ground of infringement of any right conferred by Part III of the Constitution relating to Fundamental Rights.

Problems of Implementation

In November, 1963, following the Mid-term Appraisal of the Third Plan, the National Development Council reviewed the progress made in the implementation of land reforms in different States and noted that on account of legal and other factors, in some States the legislation had not been fully enforced. The National Development Council emphasised that speedy execution of the programme of land reform was vital for increasing agricultural production and strengthening the rural economy and called upon all State Governments to complete the implementation of land reform programmes before the end of the Third Plan. The Council also constituted a committee with the Minister of Home Affairs as Chairman to review the progress of land reform in different States and propose measures for securing the implementation of land reform legislation. Since these decisions were taken, the difficulties encountered in giving effect to the programme of land reform have been examined in detail in most of the States. Certain problems have been observed which call for urgent attention. Firstly, the record of rights did not exist in several States and consequently the implementation of land reform laws was being impeded. Secondly, a considerable area is cultivated through informal tenancy arrangements and such tenants are not recognised and entered in the record of rights. Consequently, they pay high produce rents, do not enjoy security of tenure and are not able to obtain financial assistance under programmes of agricultural production. Thirdly, the administrative arrangements for supervising action on implementation were inadequate and the provisions of the law were not sufficiently publicised in some States. The benefits conferred by law were not, therefore, availed of by the cultivating tenants in many cases. And, finally, in some States there were gaps in the law which were tending to defeat aims of the legislation. A review of implementation of land reforms in different States has since been submitted to the National Development Council on behalf of the Committee.

CHAPTER V

IRRIGATION AND POWER

IRRIGATION

One of the goals of agricultural policy is to put a progressively larger part of the irrigated area under perennial irrigation. The ultimate area which can be irrigated from major and medium irrigation schemes is estimated at about 112 million acres (gross). At the beginning of the First Plan, the irrigation potential created in the country from major and medium schemes was of the order of 23.8 million acres. During the first two Plans, these types of schemes had created additional irrigation potential of 11.7 million acres (gross) with a corresponding utilisation of 8.3 million acres. The anticipated potential at the end of the Third Plan was placed at about 17.0 million acres (gross) from the schemes of the first three Plans, with a corresponding utilisation of 13.7 million acres. The potential achieved at the end of March, 1965 was about 15.8 million acres and utilisation was placed at 12.1 million acres (gross). It will be observed that the country is still far from the saturation point in the matter of irrigation facilities.

Table below shows the progressive cumulative potential and utilisation from Plan projects at the end of First and Second Plans and over the Third Plan period:

		(Million acres-gross)							
		End of First Plan	End of Second Plan	1961-62	1962-63	1963-64	1964-65	1965-66	
Potential at outlets	. . .	6.5	11.7	12.2	13.3	14.3	15.8	17.0	
Utilisation	. . .	3.1	8.3	9.0	10.1	11.0	12.1	13.7	

Not all the additional potential that is created in a year is available for utilisation in that very year. The figures of utilisation, shown above, should, therefore, be viewed in relation to the potential in the previous year. It would appear that the utilisation of irrigation potential has improved in recent years. Special attention is being given to speeding up the pace of utilisation.

In order to expedite accrual of benefits from irrigation projects, an integrated programme of agricultural development in the project areas is to be carried out simultaneously with the construction of the projects. This covers setting up experimental and demonstration farms, soil conservation, supply of improved seeds and fertilizers, development of local manurial resources, tractorisation and levelling of fields where necessary,

provision of credit and marketing facilities, establishment of warehouses and godowns, opening of communications and organizing extension work, etc. To facilitate action on these lines, a new sub-head viz., "Area Programme for Irrigation Projects" was introduced in the plans of States/ Union Territories under the major head "Agricultural Programme" from the year 1964-65. The purpose of introducing this sub-head is to ensure that a planned agricultural development programme is formulated for each project area, in which the tasks and responsibilities of the various Departments concerned are clearly specified. It has been suggested by the Planning Commission that the responsibility for the formulation of this programme should be that of the State Agricultural Department acting in collaboration with Irrigation Department and the Department of Community Development and Cooperation, and that adequate provision under this sub-head should be made, along with that for irrigation projects.

The position in regard to financial outlays for major and medium irrigation and flood control programme is given in the table below:

		(Rs. crores)				
		Third Plan (provision)	1961-62	1962-63	1963-64	1964-65
Irrigation	. . . . .	599.3	95.7	99.1	102.4	130.0
Flood Control	. . . . .	61.3	12.5	17.0	18.7	19.0
TOTAL	. . . . .	660.6	108.2	116.1	121.1	149.0

On the basis of information available, a shortfall of the order of Rs. 24 crores was expected in the outlay under irrigation during the Third Plan period while the outlay on flood control was likely to exceed the Plan provision by about Rs. 24 crores. The shortfall under irrigation was primarily due to shortage of foreign exchange, and to a certain extent to the tight resources position in some States. The increase under flood control was due to urgent needs having arisen to spend more on flood control measures in certain States.

Technical Teams from the Centre visited the States during the year 1963 to review the progress of major and medium irrigation schemes. The teams observed that the utilisation of the irrigation potential created had considerably improved. However, the irrigation potential anticipated at the end of the Third Plan was not likely to be achieved. The main reasons were:

- (i) Increase in the estimated cost of some projects partly due to lack of adequate investigations while preparing the original estimates and partly on account of rise in the cost of materials and wages, etc.,
- (ii) Over-optimistic fixation of targets; and
- (iii) Shortage of essential construction materials as well as of foreign exchange.

Flood Control

In 1963, heavy floods were experienced in Assam and Bihar and medium to heavy floods in the Punjab, Uttar Pradesh, West Bengal, Rajasthan, Orissa, Delhi Territory and certain parts of Gujarat, Maharashtra, Madhya Pradesh and Mysore. Coastal areas in Trivandrum, Quilon, Kozhikode and Alleppey districts in Kerala were affected by sea erosion. An area of about 88 lakh acres and population of about 111 lakhs were affected. About 4 lakh houses were reported to have been damaged and 419 human lives were lost.

During the monsoon of 1964, high floods were experienced in Assam, Bihar, Punjab and Delhi. The northern parts of West Bengal, eastern districts of Uttar Pradesh and parts of Andhra Pradesh, Madhya Pradesh, Maharashtra and Rajasthan were also affected by floods. Some coastal areas in Kerala suffered from beach-erosion. An area of 114 lakh acres and a population of about 140 lakhs were affected in various States and Delhi territory. About 2.66 lakh houses were reported to have been damaged and 695 human lives lost.

The flood control measures so far taken during the course of the three Five Year Plans have benefited an area of over 10 million acres and provided protection to 80 towns and 4,336 villages. This still leaves a large flood problem on hand which on account of limitation of resources would take many years to solve in a satisfactory manner.

Financial Returns from Irrigation Projects

In April, 1964, the Union Ministry of Irrigation and Power set up a Committee with Shri S. Nijalingappa, Chief Minister, Mysore, as Chairman to examine the question of securing adequate financial return from irrigation projects. The Committee submitted its report in December, 1964. The following recommendations of the Committee have been commended by the Ministry of Irrigation and Power to the State Governments for acceptance and necessary action:

- (i) "Water rates should be on the basis of a suitable percentage of the additional net benefit to the farmer from an irrigated crop where with the available data, this can be worked out. These rates may be fixed at 25 per cent to 40 per cent of the additional net benefit, keeping in view factors like rainfall, water requirements, yield and value of crop, etc. Where it is not feasible to work out the additional net benefit, water rates may be fixed, to start with, as a suitable percentage of gross income to the farmer from the irrigated crop. Rates in this case may be 5 to 12 per cent of the gross income.....".

"Water rates should be reviewed every five years. Required data regarding additional net benefit should be continuously collected for this purpose".

- (ii) "In States where irrigation charges are optional, in consideration of the irrigation facilities having been made available for an area, there should be a 'charge' to cover at least the maintenance and operation charges, whether the facility is actually made use of or not. This should be levied on the entire culturable commanded area assured of irrigation.....On carrying out actual irrigation, this facility charge paid in respect of the area, should be deducted from the total irrigation dues for the year, i.e. it will form part of the water rate".

The progress of certain large irrigation projects is reviewed below:

(i) *Nagarjunasagar (Andhra Pradesh)*.—The estimated cost of the project has risen to about Rs. 165 crores. The ultimate irrigation potential of the project was 20.5 lakh acres. To the end of March, 1965, an outlay of Rs. 84 crores was incurred. The project is expected to be completed during the Fourth Plan period.

(ii) *Kosi (Bihar)*.—The estimated cost of the irrigation part of the project is Rs. 44 crores and it is expected to be completed in the early part of Fourth Plan. The ultimate irrigation potential of the project is 14 lakh acres. An irrigation potential of 2.65 lakh acres was created by June, 1965 against which actual utilisation was of the order of 1.1 lakh acres.

(iii) *Gandak (Bihar and Uttar Pradesh)*.—This is a joint project of Bihar and Uttar Pradesh, but Nepal would also derive benefits from it. The total revised cost of the project is estimated at Rs. 137 crores of which Bihar's share is placed at Rs. 95 crores and of Uttar Pradesh Rs. 42 crores. The ultimate irrigation potential is placed at about 35.4 lakh acres comprising 27.7 lakh acres in Bihar, 6.5 lakh acres in Uttar Pradesh and 1.2 lakh acres in Nepal. To end of 1964-65, an outlay of Rs. 15.1 crores was incurred. No benefits are expected from the project during the Third Plan and these will accrue only in the Fourth Plan period.

(iv) *Chambal including Rana Pratap Sagar (Madhya Pradesh and Rajasthan)*.—This is a joint project of Madhya Pradesh and Rajasthan. The total cost is estimated at Rs. 71 crores of which Rs. 28 crores will be found by Rajasthan Government and Rs. 43 crores by Madhya Pradesh Government. The project is expected to be completed in the Fourth Plan period. The ultimate irrigation potential of the project is 14 lakh acres divided equally between the two States. To the end of March, 1965 a potential of 4.9 lakh acres was created; 1.7 lakh acres in Madhya Pradesh and 3.2 lakh acres in Rajasthan. The utilisation was about 2.6 lakh acres comprising 2.2 lakh acres in Rajasthan and 0.4 lakh acres in Madhya Pradesh.

(v) *Parambikulam Aliyar (Madras)*.—The irrigation component of the estimated cost of the project is Rs. 38 crores. By the end of 1964-65, outlay of Rs. 25 crores had been incurred. The project is expected to be completed by the end of the Fourth Plan. The ultimate irrigation potential of the project is 2.4 lakh acres. The potential created and utilisation to end of March, 1965 were 0.3 and 0.1 lakh acres respectively.

(vi) *Tungabhadra High Level Canal Scheme (Andhra Pradesh and Mysore)*.—This is a joint Scheme of Andhra Pradesh and Mysore. The scheme will be executed in two stages. Stage I of the Scheme costing about Rs. 22 crores and providing for irrigation of an area of 1.89 lakh acres is nearing completion. Stage II estimated to cost about Rs. 15 crores, will irrigate an additional area of about 2.4 lakh acres in Andhra Pradesh and Mysore.

(vii) *Mahanadi Delta (Orissa)*.—The estimated cost of the project is Rs. 34 crores, and the ultimate irrigation potential from it would be around 16 lakh acres. The outlay incurred to the end of March, 1965 was Rs. 17.6 crores. The project is expected to be completed during the Fourth Plan period. The potential and utilisation to the end of June, 1965 were 5.7 lakh acres and 5.2 lakh acres respectively.

(viii) *Rajasthan Canal*.—The estimated cost of Stage I of the project is Rs. 80 crores, including the share cost of Rs. 5.39 crores of Madhopur Beas Link and Harike Barrage Projects in Punjab. To the end of 1964-65, an expenditure of Rs. 38 crores had been incurred on the project. The stage I is expected to be completed during the Fourth Plan period. The ultimate irrigation potential from the first stage of the project is estimated to be 13 lakh acres. The potential created and utilisation achieved to the end of March, 1965 were 1.0 lakh acres and 0.6 lakh acres respectively.

(ix) *Kangsabati (West Bengal)*.—The estimated cost of the project is Rs. 32 crores and the ultimate irrigation potential 9.5 lakh acres. To end of March, 1965, an outlay of Rs. 13 crores was incurred. The project is expected to be completed by the end of Fourth Plan. The potential and utilisation to end of March, 1965 were reported to be 1 lakh acres and 0.2 lakh acres respectively.

POWER

Targets and achievements

At the end of the year 1964-65, the aggregate installed generating capacity in the country was 8.37 million kW as against the targeted 10.15 million kW for the year, envisaged in the Third Plan.

The yearwise targets, actual achievements of installed generating capacity in the first four years are indicated in the table below:

(Million kW)

Year	Plan target		Achievement	
	Additional during the year	Total at the end of the year	Additional during the year	Total at the end of the year
1961-62	0.60	6.30	0.56	6.21
1962-63	0.73	7.03	0.72	6.93
1963-64	1.05	8.08	0.69	7.62
1964-65	2.07	10.15	0.75	8.37

Some of the large schemes such as Upper Sileru, Koyna Stage II, Sabarigiri, Sharavathi, Pathratu, Kothagudam, Korba, Talcher, Dhuyaran, Obra and Bandel did not progress according to schedule, resulting in a substantial shortfall in the targeted capacity. There was some shortage of power in the northern and southern regions. Experience gained during the past four years has shown that the construction of large thermal stations normally took about five years from the date of authorisation as against four years anticipated at the time of formulation of the Third Plan. Similarly the construction of hydro and nuclear stations took considerably longer time than estimated earlier. Apart from this factor, foreign exchange shortage and the consequent difficulties in procuring certain key materials like steel and cement in adequate quantities resulted in delaying the completion of some of the power projects according to schedule. In order to conserve steel for more important projects and also to bring down costs of rural electrification, the question of using wood poles for construction of transmission and distribution lines has once again come into prominence.

The major power units commissioned during the period under review are listed below:

(i) Tungabhadra (R.B.) (Andhra Pradesh and Mysore)	27 MW
(ii) Nellore thermal station (Andhra Pradesh)	30 MW
(iii) Sharavathi H.E. Scheme (Mysore)	89 MW
(iv) Bhadra H.E. Project (Mysore)	31.2 MW
(v) Panniar H.E. Scheme (Kerala)	30 MW
(vi) Hirakud H.E. Project Stage II (Orissa)	61.5 MW
(vii) Dhuvanan thermal station (Gujarat)	125 MW
(viii) Amarkantak thermal station (Madhya Pradesh)	60 MW
(ix) Kundah H.E. Scheme, Stage III (Madras)	135 MW
(x) Neyveli thermal station (Madras)	150 MW
(xi) Khaperkheda thermal station (Maharashtra)	60 MW
(xii) Harduaganj thermal Scheme, Stage II (Uttar Pradesh)	30 MW
(xiii) Barauni thermal station (Bihar)	30 MW

(xiv) Durgapur Coke Oven Plant (West Bengal)	150 MW
(xv) Chandrapura thermal station (DVC)	140 MW
(xvi) Delhi 'C' thermal station	36 MW
(xvii) Ahmedabad thermal station (Private sector)	30 MW
(xviii) Calcutta Electric Supply Company (Private sector)	50 MW

Generation

Generation in utilities (including Neyveli station) in the first four years of the Plan is shown below:

Year	Total generation (in million kWh)	Percentage increase over previous year
1961-62	19,670	16.1
1962-63	22,652	15.2
1963-64	26,817	18.4
1964-65	29,563	10.2

The percentage increase in units generated during 1964-65 over the previous year was lower than the rate of growth in the previous three years although the installed capacity added during 1964-65 was 0.75 million kW as against 0.69 million kW in 1963-64. This was so, as a number of large-sized units were commissioned only in the later part of the year.

Outlays

During the first three years 1961—64, about Rs. 574 crores had been spent against the Third Plan outlay of Rs. 1012 crores for power in the public sector. The outlay in 1964-65 is expected to be Rs. 310 crores. Thus in the first four years of the Plan, about 87 per cent of the Plan outlay would have been incurred.

New power schemes

Upto March, 1964, 10 new generating schemes aggregating to 1.44 million kW had been authorised as part of advance action on some of the Fourth Plan schemes. In the year 1964-65 the following additional schemes aggregating to 1.66 million kW were authorised:

(i) Lower Sileru H. E. scheme (Andhra Pradesh)	300 MW
(ii) Ennore thermal station (Madras)	300 MW
(iii) Kalpakkam Atomic Station (Madras)	400 MW
(iv) Ranapartap Sagar Atomic Station Extension (Rajasthan)	200 MW
(v) Bhatgar and Vir H. E. scheme (Maharashtra)	23 MW
(vi) Koyna Stage III (Maharashtra)	320 MW
(vii) Harduaganj thermal station extension Stage IV (Uttar Pradesh)	120 MW

Rural Electrification

As against the Third Plan target of electrification of 43,000 towns and villages by the end of Third Plan, about 47,624 villages and towns had been electrified by the end of March, 1965. Thus the Third Plan target was exceeded in the fourth year of the Plan. The number of villages electrified during 1964-65 was 3,480 and the outlay under this sub-head amounted to Rs. 23 crores. The number of electrified pumpsets in the country had risen to four lakhs by March, 1965.

Regional Electricity Boards

The stage has been reached in power development where the integrated operation of the power systems of neighbouring States is expected to result in sizeable economies in operation and savings of standby generating units. As a first step in this direction, five Regional Electricity Boards have been set up, of which the representatives of the concerned State Electricity Boards are members, along with one representative each from the Central Electricity Authority. It is hoped that the deliberations of the Electricity Boards would pave the way for integrating the power systems and increasing the productivity of the power stations.

Working of the State Electricity Boards

Most of the Electricity Boards are not earning adequate revenues and some of them are unable even to pay interest charges. A Committee was constituted in April, 1964 with Shri R. Venkataraman, then Minister of Industries, Madras as Chairman to report on the working of these Boards with a view to improving their revenues. The Committee submitted its report in October, 1964. It recommended, *inter alia*, that all the State Electricity Boards should aim at securing higher returns; this might be achieved in two phases, where necessary:

- (i) "The first phase of the objective for all the State Electricity Boards should be to aim at higher revenues sufficient to cover operation and maintenance charges, contributions to the general and depreciation reserves and interest charges on loan capital. Boards which have not already achieved this should aim at realising the objective within a period of three to five years".
- (ii) "As a second phase objective, the Board should aim at achieving a balance of revenue, after meeting all the charges indicated in the first phase, working out a net return of 3 per cent on the capital base. Boards which have already achieved the first phase should immediately proceed to realise the second phase and other Boards should aim at achieving the second phase within three to five years of their achieving the first phase".

The Government of India has accepted the above recommendations and the State Governments have been advised to take necessary action.

Annual Load Survey

In December, 1962, the Government of India had set up a Committee for conducting an electric power survey of the country on which some foreign experts were also invited to serve. The Committee was required to estimate power demands up to the year 1970-71. The report of the Committee has provided a broad picture of the power requirements of the country over the next few years. The second survey was undertaken in 1963 and the report was published in May, 1964. This survey gave estimates up to 1967-68. In 1964, the third power survey was undertaken and the report brought out the estimates up to the year 1968-69. The projected demand for power worked in this report was generally lower than indicated in the report of the first Survey.

The latest all-India Electricity Statistics pertaining to the year 1963-64 show an improvement in the average overall thermal efficiency of steam power stations from 20 per cent in 1962-63 to 22.5 per cent in 1963-64, which was primarily due to commissioning of new power units of modern design and larger in size.

CHAPTER VI

INDUSTRIES AND MINERALS

The objectives set out in the industrial plan for the period 1961—66 were to accelerate the pace of industrialisation through pushing ahead on the basic capital and producer goods industries and also develop management skills, technical know-how and designing capacity. While the accent was on capital goods industries, especially machine-building, the industrial programmes were also to provide to the extent possible, for meeting the growing demands for a wide variety of manufactured consumer goods.

Good progress has been made in these directions during the two-year period under review. The annual rate of industrial growth during 1963-64 showed an increase of 8.6 per cent but declined to 6.6 per cent during 1964-65. The growth rate during the first four years of the Plan works out to about 7.8 per cent against the average of 11 per cent envisaged in the Third Five Year Plan. In spite of some shortfalls and delays in the expansion programme of certain major industries in both the public and private sectors, industrial activity was kept at a fairly high level and some further diversification of production was achieved.

Year	Index of Industrial Production* (Base 1956 = 100)	Percentage increase over the preceding year
1960-61	133.5	..
1961-62	144.1	7.9
1962-63	155.8	8.1
1963-64	169.2	8.6
1964-65	180.3	6.6

*Seasonally adjusted.

NOTE.—Index of Industrial Production by major groups of industries may be seen at Annexure I.

During 1963-64 steady progress was maintained in the industrial field. The tempo of production in the capital goods and basic intermediary industries was at a distinctly higher rate in contrast to the consumer goods industries. The production of aluminium recorded a significant increase. There was a substantial increase in the production of domestic refrigerators, machine tools, weighing machines and paper and paper board. The production of steel castings, electric motors, power-driven pumps, insulated cables, tyres and tubes, cement and asbestos, electric lamps, radio receivers and leather footwear, also recorded increase of 10 to 30 per cent

over the year 1962-63. There was a noticeable increase in the production of jute manufactures, however, the output of cotton cloth was somewhat lower, compared to the preceding year.

Several factors contributed to this favourable trend. Railway transport was no longer a bottleneck unlike in the first two years of the Plan. This factor along with the increased availability of power and basic materials like steel, coal and cement facilitated substantial additions to capacity and increase in production during the year.

The slow rate of growth during 1964-65 was partly due to lack of any appreciable increase in the production of iron and steel, aluminium and fertilizers arising from comparatively small increases affected in the installed capacity of these industries. In the case of coal, paper and paper board, the production did not show an increase mainly on account of slackening demand. The decline in the production of chemical industries was due to power cutback and shortage of raw materials. The fall in the production of vanaspati was the result of shortage of groundnut oil which was felt towards the middle of the year. The difficult foreign exchange position during the year also contributed to the delays in implementation of some of the industrial projects. The situation in regard to maintenance imports continued to be difficult especially in industries which were dependent on the import of metals, components and intermediates. The under-utilisation of capacity in some of the industries like copper conductors, insulated power cables, room air conditioners, wire ropes, laboratory glassware, synthetic rubber and brass, copper and lead pipes was estimated to be high.

Despite the slow-down in industrial growth during 1964-65, there were some redeeming features in the picture which may be noted. Substantial expansion in capacity was made in the machine tools, machine building, sugar, cement, paper and pulp, cotton textiles and coal mining industries. (Target and progress of selected industries is given in Annexure II.) Several industries such as cement, industrial gases, rubber tyres and tubes, steel pipes, motor cycles, scooters and bicycles and food processing industries increased their output. During the two years under review the manufacture of several new items on a commercial scale was established—these comprised tapered roller bearings taximeters, sheet glass of 1.3 m.m. thickness, micrometers, single spindle automatic lathes and switches for heat control. More than a dozen items relating to heavy engineering were also produced for the first time. Some progress was also made in the import substitution of certain items which were wholly imported before, such as pulp for the manufacture of rayon, some basic chemical intermediates, besides certain drugs and pharmaceuticals. First steps were also

taken during this period towards the setting up of a petro-chemical industry in the country. The proportion of indigenous components in the production of commercial vehicles, jeeps and passenger cars also increased.

A rather unsatisfactory feature of industrial advance during the past four years is that the physical achievements in the public sector were not commensurate with the financial outlays due to a rise in costs and delays in implementation. In the case of several important projects, implementation has been delayed for various reasons. These include, among others, Durgapur and Rourkela steel plants, Durgapur Alloy and Tool Steel Project, Heavy Electricals, Bhopal, Heavy Machine Tool Project and Foundry Forge Project at Ranchi, the fertilizer factories at Trombay, Namrup and Gorakhpur and Barauni Oil Refinery. Apart from these projects which were delayed in execution, there were several others included in the Plan which could not proceed beyond the preliminary stage or their implementation had not started. Among such projects may be mentioned the Bokaro Steel Plant, the second shipyard at Cochin, pump and compressor plant, the marine diesel engine project, plate and vessel works and low temperature carbonization plants etc.

The position was somewhat similar in the case of several important industrial schemes in the private sector as well. Progress on a number of schemes for which licences had been granted was slow for various reasons and a few schemes were altogether abandoned. The industries affected were pig iron, fertilizers, cement, alloy and tool steel, etc.

As a result of the delays in execution and non-implementation of certain projects shortfalls in achieving Plan targets were anticipated in some of the important industries such as steel, alloy steel, aluminium, pig iron, copper, steel castings and forgings, fertilizers, sulphuric acid, cement, newsprint, rayon and synthetic rubber. It was evident that the Third Plan targets of capacity as well as of production in these industries would be realised only in the early years of the Fourth Plan.

The principal factors which contributed to the delays in implementation of public sector projects appeared to be inadequate preparation of projects, increases in cost estimates (which could not always be foreseen), lack of proper phasing and programming of the different stages of a project and lack of sufficient co-ordination between the various agencies concerned during implementation. In the case of projects in the private sector, impediments in execution were attributed in the main to the relative stagnancy in the capital market, the difficulty in securing necessary foreign exchange and prolonged negotiations with the foreign collaborators.

The position in regard to some of the important industries is discussed below:

Iron and Steel.—The overall production during the four years, 1961—65 is shown in the following statement:

(million tonnes)							
Item	Third Plan target	1961-62	1962-63	1963-64	1964-65	1965-66 (estimated)	
Steel Ingots . . .	9.30	4.33	5.40	5.94	6.14	6.2	
Finished Steel . . .	6.8	2.98	4.00	4.30	4.43	4.6	
Pig iron for sale . . .	1.50	1.02	1.10	1.16	1.09	1.2	

The production of steel ingots and finished steel has increased steadily but slowly, however, in the case of pig iron the level of production reached in 1964-65 was practically the same as two years earlier. The progress of the iron and steel industry as a whole has been behind the schedule. The shortfall under finished steel has been mainly due to the delay in achieving the targeted expansion of Rourkela, Durgapur and IISCO and non-implementation of Bokaro steel project, during the current Plan period. The shortfall would have been of a higher magnitude but for the achievement of Bhilai which has exceeded its annual targets. TISCO's biggest blast furnace and first blast furnace at Rourkela were re-commissioned during 1964-65 after carrying out certain repairs and modifications. In the case of pig iron also, the expected production of 0.3 million tonnes envisaged from Bokaro did not materialise.

Alloy and special steel.—The demand for alloy and special steel has been mostly met by imports. The indigenous production was very small, around 20,000 tonnes and annual imports were estimated between 55,000 and 66,000 tonnes during the last two years. The Third Plan envisaged creation of capacity of 2 lakh tonnes of alloy and special steels by setting up of two plants in the public sector (at Durgapur and Bhadravati) and three in the private sector. 15 units in the private sector were granted licences and letters of intent were issued for an additional capacity of 3.26 lakh tonnes.

Fertilizers.—The total production of nitrogenous fertilizers in 1960-61 was about 99,000 tonnes in terms of Nitrogen and increased to 2.22 lakh tonnes in 1963-64 and 2.34 lakh tonnes in 1964-65. The level of production was much below the capacity during 1964-65 which was of the order of 3.91 lakh tonnes. The capacity under implementation was 5.01 lakh tonnes and further approved in principle 8.40 lakh tonnes, making a total of 17.32 lakh tonnes.

The production of phosphatic fertilizers during 1964-65 was stepped up to 1.31 lakh tonnes from 1.07 lakh tonnes of P_2O_5 in 1963-64 and 54,000 tonnes in the beginning of the Third Plan. The installed capacity during 1964-65 was 1.59 lakh tonnes and further about 4.51 lakh tonnes of capacity was under implementation or approved in principle which gave a total of 6.10 lakh tonnes. The units producing phosphatic fertilizers were confronted with the difficulty in procuring adequate quantities of sulphur and rock phosphate which were the basic raw materials.

The production of fertilizers during the last five years is given below:

Year									('000 tonnes)	
									Nitrogenous Fertilizers (in terms of Nitrogen)	Phosphatic Fertilizers (in terms of P_2O_5)
1960-61	.	.	.	.	.	.	.	.	99.0	54.0
1961-62	.	.	.	.	.	.	.	.	144.9	66.0
1962-63	.	.	.	.	.	.	.	.	177.6	80.6
1963-64	.	.	.	.	.	.	.	.	222.1	107.5
1964-65	.	.	.	.	.	.	.	.	234.0	130.9

The production of fertilizers in both the public and private sectors has not come up to expectations. The performance of the existing units was also not quite satisfactory and the pace at which new ones were being set up was slow. The Sindri factory had been working much below its capacity. The Trombay Plant which was scheduled to be commissioned by the end of 1964, went into production in October, 1965 and that too only partially. The progress of the private sector units also was much behind the schedule.

PUBLIC SECTOR

The major developments in some of the important projects in the public sector are reviewed below:

Iron and Steel.—The production from the three steel plants during the first four years of the Plan was as follows:

Item	(million tonnes)											
	1961-62			1962-63			1963-64			1964-65		
	Bhilai	Rour-kela	Durga-pur	Bhilai	Rour-kela	Durga-pur	Bhilai	Rour-kela	Durga-pur	Bhilai	Rour-kela	Durga-pur
Pig Iron for Sale	0.38	0.07	0.32	0.34	0.08	0.40	0.40	0.10	0.40	0.35	0.08	0.39
Steel Ingots	0.80	0.35	0.46	1.06	0.70	0.73	1.14	0.80	0.97	1.26	0.98	1.01
Saleable Steel	0.53	0.21	0.37	0.79	0.49	0.49	0.97	0.57	0.72	0.91	0.70	0.72

Bhilai Steel Plant.—Bhilai reached the rated capacity in 1962-63 and since then, production has been substantially higher than the capacity being 114 per cent for hot metal (pig iron), 113 per cent for steel ingots and 105 per cent for saleable steel for the year 1964. The merchant mill achieved a record production of 27,502 tonnes in September, 1964 and the blooming mill a record output of 89,633 tonnes in December, 1964. By the end of March, 1965 the first stage of expansion of the plant was completed. The fourth coke oven battery and blast furnace, one open hearth furnace and slag granulation plant had been already commissioned. The remaining work in order to achieve the expansion to 2.5 million tonnes of steel ingots was likely to be completed by the end of 1965. All the units were expected to be commissioned by the end of March, 1966.

Durgapur Steel Plant.—The production of steel ingots and pig iron reached the rated capacity from 1963-64. The production of finished steel at 0.72 million tonnes during 1963-64 showed no improvement in the following year. The achievement on rated capacity of saleable steel was 88 per cent in the year 1964, Sporadic labour troubles in the various sections of the rolling mills spread over a period of five months in 1964 affected the production to some extent. The expansion programme of the plant from 1 million tonnes to 1.6 million tonnes showed satisfactory progress. The blast furnace, gas cleaning plant, coal handling plant and the oxygen plant were expected to be ready by the end of 1965, the skelp mill and the rolling mill in 1966 and the sintering plant in early 1967. The fishplate finishing plant commenced production towards the end of 1964.

Rourkela Steel Plant.—The plant was commissioned in 1959, however, the rated capacity of one million stage was fully realised during 1964-65. Behind the slow progress were the teething troubles in the various units of the plant during the earlier years, including the breakdown twice of the blooming and slabbing mill. The expansion to 1.8 million tonnes is to be achieved during 1966-67.

Bokaro Steel Plant.—The position of this project crystallised in May, 1964 when USSR agreed to finance the first stage of the integrated Bokaro steel plant. An agreement was signed in January, 1965 with the Government of USSR for cooperation in the construction of a modern steel works at Bokaro with a capacity of 1.5 to 2 million tonnes per annum at the initial stage, with provision for expansion to 4 million tonnes. USSR has extended a credit upto worth about Rs. 105 crores (at pre-devaluation rate) for the purpose of meeting the foreign exchange cost of the plant. The work in regard to acquisition of land, development of the site and of township etc. is progressing. The construction of the plant will be partly entrusted to a new public sector enterprise, the Hindustan Steelworks Construction Limited.

Alloy and Tool Steel Plant (Durgapur).—The Alloy and Tool Steel Plant (Durgapur) when completed will have an initial capacity of 100,000 tonnes of alloy steel ingots per year or about 60,000 tonnes of finished products with provision for further expansion. The cost of the main plant and equipment is being financed out of the yen credit offered by the Japanese Government. The plant was partially commissioned in January, 1965, and is expected to go into full production towards the middle of 1967 instead of August, 1966. The progress of the project has been somewhat behind the schedule.

Mysore Iron and Steel Works.—The expansion programme to increase the capacity for the production of steel ingots from 45,000 to 100,000 tonnes per annum has been nearly completed. The scheme relating to alloy steel conversion costing Rs. 10.7 crores has been approved by Government and an agreement for a loan of Rs. 71.42 million (DM 60 million) to meet the foreign exchange cost was signed with West Germany in October, 1964. Orders for the supply of major portion of the equipment have been placed. The capacity of 77,000 tonnes of finished alloy and special steel, corresponding to 106,000 tonnes of ingots is likely to be achieved by 1967-68.

Heavy Engineering Corporation, Ranchi.—The Heavy Engineering Corporation which was entrusted with the setting up of four projects has completed a sizeable part of the work in respect of Heavy Machine Building Plant (Ranchi), Foundry Forge Plant (Ranchi) and Coal Mining Machinery Plant (Durgapur). These three projects have gone into partial production from the latter half of 1963-64.

Heavy Machine Building Project.—The project which is being established with Russian collaboration is designed to produce 80,000 tonnes of machinery items per year in the first phase. Pilot production commenced in some sections in November, 1963. It produced during 1963-64, 640 tonnes of machinery including cranes, structurals and non-standard equipment. Against the target of 4,394 tonnes set for the year 1964-65 the actual production was 3,208 tonnes. The plant was scheduled to be completed by December, 1966.

Foundry Forge.—The plant is being developed since April, 1960 with technical collaboration and credit assistance from Czechoslovakia. It will supply forgings and castings to Heavy Machine Building Project and Heavy Machine Tools Project. The plant is expected to be completed by the middle of 1968.

Coal Mining Machinery Project.—The plant at Durgapur is being established with Russian collaboration. The project went into partial production in November, 1963, starting with the manufacture of belt conveyors and multi-stage pumping sets. It was likely to be completed by the end of 1965. Project authorities have taken steps to diversify the production programme to make up the deficiency in orders for coal mining

machinery. They have entered into collaboration with Poland for setting up of a Design and Engineering organisation for coal washeries.

Heavy Machine Tools Project.—The progress on this plant which is being set up at Ranchi with Czech collaboration has been comparatively slow. The entire civil works were expected to be ready by the end of 1965. The project was expected to commence pilot production towards the close of 1966 but some assembly work of CKD components was scheduled to start by the end of October, 1966. This project is now expected to be completed by the end of 1967.

Hindustan Machine Tools Ltd.—In 1963-64 both the units of the Hindustan Machine Tools at Bangalore reached their near full capacity and produced 1,983 machines valued at about Rs. 9.25 crores. Encouraged by the progress made by the company since the opening of its first factory in 1955, the Hindustan Machine Tools Ltd. in 1961 offered to build three more factories in the line during the Third Five Year Plan period. The unit in Pinjore (Punjab) with a capacity of 1,000 machines was commissioned in October, 1963. By the end of March, 1965 it had produced about 60 milling machines. The unit at Kalamassary (Kerala) went into production in October, 1964 and over a period of about six months produced about 40 precision lathes. Both these units have been set up with an investment of about Rs. 7.5 crores each. Construction work on the fifth unit in Hyderabad started in May, 1964 and it was expected to go into production towards the end of 1965. All the four factories including the expansion unit at Bangalore were planned and built entirely by Indian personnel without any foreign technical collaboration. While the capital cost of the second unit at Bangalore and Kalamassary unit was entirely met by the company from internal resources, that of units at Pinjore and Hyderabad has been provided by the Government. The Hindustan Machine Tools Ltd. produced machines worth Rs. 13 crores in 1964-65 against Rs. 10.5 crores in the previous year. When all the five units will be in production, the total output is estimated to reach Rs. 25 crores per annum during 1967.

Heavy Electricals Plant, Bhopal.—This unit is being developed in collaboration with Messrs. Associated Electrical Industries of U.K. with whom a collaboration agreement was signed in 1955. The plant is being built to have an ultimate installed capacity of electrical equipment worth Rs. 63 crores per annum. Production in this plant started in 1960-61. The output was low in the first two years, being Rs. 25.52 lakhs in 1961-62 and Rs. 1.17 crores in 1962-63 and picked up from 1963-64 when it rose to Rs. 4.05 crores. The main items produced are switchgear, transformers, power capacitor and some railway traction equipment. The original target set for 1964-65 for the manufacture of electrical equipment worth Rs. 8.45 crores was cut back to Rs. 6.45 crores, mainly on account of shortage of

imported materials and components and labour trouble that broke out during March, 1964. The production in 1964-65 was estimated at Rs. 6.02 crores. The project will spill over into the Fourth Plan.

The implementation of three new heavy electrical units at Hardwar, Hyderabad and Tiruchirapalli has been entrusted to a new company, the Bharat Heavy Electricals Ltd., which was incorporated in November, 1964. The Heavy Electrical Equipment Plant at Hardwar being set up in collaboration with USSR is designed to manufacture steam turbines and generators and large-sized industrial electric motors. The project is expected to be ready by the end of 1968. By the close of 1964-65 about 60 engineer-trainees out of a total of 138 had returned after undergoing advanced training in the USSR.

Heavy Power Equipment Plant, Ramachandrapuram (Andhra Pradesh).—This project, which is being developed with Czech assistance, is designed to produce annually 800 MW of steam turbines and turbo-alternators per annum in sizes up to 100 MW units. The progress of civil works has been slow due to difficult terrain. The progress of production of 12 MW turbo set has been slow on account of delay in the receipt of design documentation. The plant was expected to start production by the end of August, 1966, the main cause of delay being that the scope of the project had been revised. The plant which commenced pilot production in December, 1965 has taken up the manufacture of components, jigs, tools and fixtures.

High Pressure Boiler Plant, Tiruchirapalli.—This project is also being established with Czech assistance and it is intended to produce 12 boilers for a total output of 750 MW, boiler fittings and package boiler units, valued at Rs. 22 crores per annum. The work on the project was expected to be completed by September, 1966. About 150 technicians were undergoing advanced training in Czechoslovakia. The plant commenced pilot production in May, 1965.

Fertilizer Corporation of India Ltd.—Besides the two fertilizer factories working at Sindri and Nangal, the Fertilizer Corporation of India was entrusted with the task of setting up four units at Trombay, Namrup, Gorakhpur and Korba. The Trombay Fertilizer factory had been virtually completed.

The work on fertilizer unit at Gorakhpur gathered momentum during 1964-65. The land had been acquired and the contracts for civil works were awarded. Orders had been placed on Messrs. T.E.C. of Japan for the supply of steam generation plant, as well as the main plant. The plant will have an installed capacity for the production of 80,000 tonnes of nitrogen per year and is expected to be commissioned in 1967.

The work on Namrup fertilizer project could not proceed according to schedule as the original site had to be abandoned due to unsuitable soil

conditions. An alternative site had been selected and the soil investigation work completed. N.B.C.C. had been assigned the task of civil works. The plant is likely to be commissioned by the end of 1967.

Indian Drugs and Pharmaceuticals Ltd.—The company was entrusted in 1961 with setting up four projects, including the Antibiotics Plant at Rishikesh, the Synthetic Drugs Plant at Hyderabad, the Surgical Instruments Factory at Madras and Phyto Chemicals Plant in Kerala. The Phyto Chemicals project had to be dropped in 1964 as the economies of the project were very unfavourable. The civil work in respect of the Antibiotics Plant at Rishikesh was expected to be completed by the end of 1965 and the plant and equipment were to be installed by the middle of 1966. The plant will have annual capacity of 300 tonnes per year of antibiotics.

The civil work in respect of Synthetic Drug Project at Sanatnagar (Hyderabad) was sufficiently advanced and a major part of the equipment had been imported. The installation of the plant and machinery was expected to be completed by the middle of 1966. The plant will have a capacity for the manufacture of 850 tonnes per year of synthetic chemicals and pharmaceutical products covering a range of sixteen drugs and 4,500 tonnes per year of intermediates.

The Surgical Instruments Project at Madras had made considerable headway during 1964-65 and was expected to be commissioned by the end of August, 1965. The plant when completed will have capacity for the manufacture of 2.5 million pieces per year of surgical instruments of 166 different types.

Khetri Copper Project.—The establishment of a new unit in the public sector at Khetri (Rajasthan) with an annual capacity of 21,000 tonnes of electrolytic copper was sanctioned in May, 1962. This project was originally taken up in the Third Plan and will now virtually have to be treated as a Fourth Plan project. The scope of the project has been revised and it will now include a flash smelter and a fertilizer unit.

PRIVATE SECTOR

Conditions during the two years, 1963—65 were not very favourable for industrial investment. The capital market continued to experience the sluggish conditions which developed in the wake of emergency and the stringent budget for 1963-64 and onwards. During 1964-65 some recovery was noticed for an interval but for the year as a whole the stock markets were subdued. The Index of Variable Dividend Industrial Securities recorded a decline of 4.3 per cent over the year. The consents given to non-Government companies for capital issues during the year 1964 added up to Rs. 224.8 crores as against Rs. 237.6 crores in the preceding year. The lower figure, however, does not reflect adequately the stalemate in the market for new issues which is indicated by the changes in the composition of securities issued as well as the larger institutional support. There

was some difficulty experienced in raising the requisite resources in the form of risk capital from the open market. Apart from the growing tendency on the part of private enterprise to raise capital in the form of debentures and preference shares, there was a marked increase in the dependence on term-financing institutions particularly for under-writing of shares.

The number of licences issued under the Industries (Development and Regulation) Act, 1951, fell from 1,058 during 1962 to 976 in 1963 and further to 783 in 1964. This may partly be attributed to the new procedure of issuing letters of intent instead of licences, in the first instance. A majority of licences granted were for substantial expansion of the capacity of existing units and the remaining about one-third for setting up new units and for diversification of output. 210 licences were revoked and surrendered during 1964-65 as against 188 in the preceding year due to failure of the parties to take effective measures for implementation of the schemes. The industries mainly affected were cotton yarn, cast iron pipes, structural fabrication, water meters, rayon pulp, etc.

The Capital Goods/HEP Committee gave clearance during 1964-65 for the import of capital equipment of the value of Rs. 114.4 crores. The iron and steel, engineering, automobile and other metal industries accounted for nearly one-half of the total, followed by chemicals, textiles (non-cotton) and electricals. As a result of the recommendations made by the Industries Development Procedure Committee appointed in 1963-64, the procedures of licensing import of raw materials and capital goods, issue of capital and approval of foreign collaboration agreements, etc. have been considerably streamlined and simplified. The system of issuing letter of intent as a preliminary to the issue, at a later stage, of a regular licence has been introduced. In 1964-65, 292 letters of intent were issued.

To bring about improvement in the investment climate, Government announced in December, 1964 an incentive scheme for investments in equity shares of new industrial companies in the form of tax-free credit certificates. The tax credit scheme had since been incorporated in the Finance Act of 1965. Investments in equities of new industrial companies were exempted from wealth tax for a period of five years. Steps were also taken to reinforce the institutional arrangements for providing finance to industry. The Unit Trust of India established in the beginning of 1964 is expected to channel the savings of the middle and low middle income groups for investment in stock market securities. The Trust had collected over Rs. 18 crores up to the end of January, 1965 mostly from the middle-income groups, which was largely invested in shares and debentures. The Trust also provides underwriting facilities for new issues of debentures. With a view to provide financial assistance to new industries on a larger scale and to co-ordinate the activities of various agencies in the field of industrial finance, the Industrial Development Bank was set up in July, 1964. The Industrial Finance Corporation will function as its subsidiary. The Refinance Corporation for industry was also merged with the Industrial Development Bank,

Besides certain specific measures undertaken to encourage private investment in industries, the general policy followed during the period under review was to relax price control measures and to reduce their rigour. Towards the end of 1963, price control over 16 commodities was removed. Steps were also taken to modify and rationalise the price control measures particularly in respect of steel products. Except in the case of pig iron, billets and flat products, price control on other items had been relaxed. The control on prices of tin plate was also done away with. A flexible system for control over the prices of mill-made cotton cloth was introduced, with control over varieties in general use and decontrol of other items. The policy of stimulating industrial production through fiscal measures was continued. To encourage capital formation in certain basic industries which have a long gestation period, a rebate of Corporation Tax (equivalent to 10 per cent of the income-tax and super-tax normally payable) was introduced in the 1964-65 budget.

The Third Five Year Plan had envisaged an inflow of Rs. 300 crores through private foreign investment. The actual inflow was expected to be much less. During 1964, 405 cases of foreign collaboration were approved by Government as compared to 301 in 1963 and 299 in the year 1962. Recently it has been decided to issue "letters of intent" to prospective private foreign investors intending to set up industries in India in collaboration with Indian partners.

The industries in the private sector which marked a higher growth rate during 1964-65 as compared to the achievement in the previous year were automobiles (commercial vehicles, cars and jeeps), motor cycles and scooters, bicycles, sewing machines, electric fans, radio receivers, refractories, mill cloth, sugar and tea. The other industries where the output increased during 1964-65 but at a rate lower than that of 1963-64 were pig iron, finished steel, aluminium, machine tools, paper and paper boards, cement, cotton yarn, jute textiles, etc. The progress of some of the important groups of industries in the private sector is discussed below:

Metallurgical Industries

Iron and Steel.—The production vis-a-vis the capacity of steel ingots, finished steel and pig iron in the private sector was as under:

Item	Unit	1963-64		1964-65	
		Capacity	Production	Capacity	Production
Steel ingots	million tonnes	3.05	3.03	3.05	2.87
Finished steel	million tonnes	2.29	2.24	2.29	2.24
Pig iron	'000 tonnes	254	264	254	274

TISCO had achieved the rated capacity of 2.0 million tonnes of steel ingots (1.5 million tonnes of saleable steel) in 1964-65. The production of

steel ingots at *IISCO* was 0.95 million tonnes against the rated capacity of 1.00 million tonnes. Thus the production of saleable steel during 1964-65 fell short of rated capacity. *TISCO* had submitted proposals to Government for the import of balancing equipment and certain facilities to enable them to maintain the rated production. These proposals were approved by Government. The Indian Iron and Steel Company also submitted proposals for the expansion of capacity from 1.0 to 1.3 million tonnes of steel ingots per annum in the first phase. This scheme was also approved by the Government and the company was granted permission to approach the World Bank for a loan to cover the foreign exchange cost.

Aluminium.—The production of aluminium during 1964-65 was 54.1 thousand tonnes, the increase over the previous year being very small. No fresh capacity of 5,000 tonnes was added to Alwaye during 1964-65 and the installed capacity was fully utilised. Four applicants were granted letters of intent; two for setting up new units and another two for expansion in order to bridge the gap between demand and supply. The new projects at Mettur, Sharavathi, Koyna and Korba were being implemented. The capacity of Hindustan Aluminium Corporation factory at Renukot (Mirzapur District) and of the Indian Aluminium at Alwaye were being expanded.

Copper.—Copper is one of the non-ferrous metals in which there exists a wide gap between demand and supply. During 1964-65 the production was 9,302 tonnes of fire refined copper. About 5,000 tonnes of scrap was also available. The annual capacity of the unit at Ghatsilla in the private sector was being expanded to 16,500 tonnes from 9,000 tonnes.

Zinc.—The entire requirements of zinc are met by imports as no indigenous production has developed so far. During 1963-64 about 85,400 tonnes of zinc was imported. The Metal Corporation of India is setting up a plant of 18,000 tonnes capacity based on zinc ore at Zawar. Besides Cominco-Binani Zinc Ltd., was granted a licence in October, 1962 to set up a second unit.

Engineering Industries.—The private sector was entrusted with the task of manufacturing machinery for textile, sugar, cement, paper, dairy and printing industries. The position regarding production and installed capacity in two years vis-a-vis the Third Plan targets was as follows:

Item	Third Plan Target		Licensed capacity by the end of 1964-65	Installed capacity by the end of 1964-65	Production	
	Capacity	Production			1963	1964
					(Rs. crores)	
Sugar mill machinery	16	14	18	12	5.78	8.07
Textile machinery .	32	29	67	N.A.	19	23
Paper and pulp machinery	8.5	7	23	5.5	1.34	1.45
Cement machinery .	4.5	4.5	18	18.9	1	2

With the progress made so far by the machine building industry, it should now be possible to meet almost all the requirements of sugar and cement industries and most of the requirements of cotton and jute textile industries. The progress made in the production of machinery for paper and pulp industries had been rather slow. The manufacturing of sugar mill machinery was well established. There were seven units in a position to manufacture complete sugar plants. These firms had entered into collaboration agreements with foreign manufacturers. Standardised sugar plants of 1,250 tonnes daily capacity were being produced. In the context of the shortage of foreign exchange, every effort is being made to reduce the foreign exchange content of sugar plants. As the licensed capacity was considered to be sufficient to meet the requirements in the Fourth Plan, the licensing of new units was stopped. Additional capacity might, however, be allowed for selected items of sugar mill machinery.

A large number of units were producing textile machinery and the present licensed capacity was of the order of Rs. 67 crores per annum. Production of textile machinery rose from Rs. 19 crores in 1963 to Rs. 23 crores in 1964 and was expected to rise further to Rs. 27 crores in 1965. The present level of imports was around Rs. 25 crores per annum.

There were sixteen units engaged in the manufacture of paper and pulp machinery and their production was valued at Rs. 1.45 crores in 1964. As against the capacity licensed at Rs. 23 crores per annum, the installed capacity was only Rs. 5.5 crores per annum. The local producers were not yet in a position to undertake turnkey jobs. The level of import of pulp and paper machinery was of the order of Rs. 3 to 4 crores per annum.

There were seven establishments making cement machinery with a total licensed capacity for 12 plants a year valued at Rs. 18 crores. The production in 1964 was estimated at Rs. 2 crores. The scaling down of the import content of indigenous plant was being pursued.

The machine building industry in the private sector was faced with a number of difficulties, specially the paucity of foreign exchange for import of raw materials and components and shortage of building materials like cement and steel. The paper and cement machinery manufacturers were faced with shortage of orders. In the long run the development of machinery manufacturing industry in the country is bound with the progress of the indigenous consuming industries.

Chemicals and Allied Industries

Fertilizers.—In the private sector there were two units in production at Ennore and Varanasi with a capacity of 18,250 tonnes in terms of nitrogen. Two projects were under implementation, one at Visakhapatnam with a capacity of 80,000 tonnes and the other at Baroda with a capacity of 96,000 tonnes both in terms of nitrogen. Besides these, six more units had been approved in principle for implementation, with a total capacity of 6.28 lakh tonnes per year.

Cement.—Significant expansion had been made in the capacity of cement industry which at the end of 1964-65 marked a step-up to 11·2 million tonnes from 9·1 million tonnes in 1960-61. During the period 1961—63 four new units with a capacity of 0·6 million tonnes were set up and besides expansion was effected in the seven existing units. The production in 1964-65 showed a slight increase from 9·4 million tonnes in the preceding year to 9·78 million tonnes. Viewed against the Third Plan target of 13·2 million tonnes, production had failed to maintain the required tempo. The slow pace of growth was mainly attributed to the difficulty in obtaining adequate financial resources and the lack of sites with proved limestone deposits. Steps had been taken to overcome some of these difficulties. A Cement Corporation had been set up in the public sector with the object of carrying out surveys, and prospecting for potential limestone deposits, establishment of capacity for the manufacture of cement and undertaking ancillary activities for developing the cement industry. The price of cement had been de-controlled as an incentive to maximise production within the existing installed capacity and to encourage establishment of additional production capacity.

Textiles

Cotton Textiles.—The cotton mill industry witnessed a favourable trend on the whole during 1964-65 as compared to the previous year. There was a further addition in the spindles and looms, a rise in employment, more intensive utilisation of the existing capacity and a significant increase in the output of both yarn and cloth. This achievement was made possible by the comfortable supply position of raw cotton and larger exports of cotton textiles. These advantages were to some extent counter-balanced by reduced offtake for domestic consumption and increase in the unit cost of output as a result of higher wage bill, increased cost of components and stores and rise in raw cotton prices.

The production of cotton textiles increased from 4,502 million metres in 1963-64 to 4,682 million metres in 1964-65. The production was near full capacity of 2·02 lakh looms. The increased output of mill cloth was accounted for by all the categories, except fine counts, the production of which fell slightly. About 45 per cent of production of popular varieties, e.g. long cloth, dhoties and drills was controlled through price regulation by the Textile Commissioner. The production of cotton yarn in 1964-65 registered significant increase to 957 million kg. from 903 million kg. in 1963-64.

Jute.—Jute Industry made remarkable progress during 1963-64. It surpassed both the production and export targets set for the Third Plan. The production of jute goods during 1963-64 reached 13·54 lakh tonnes exceeding the Third Plan target of 13 lakh tonnes. Export of jute goods in 1963-64 was 9·13 lakh tonnes valued at Rs. 157·42 crores. Stability in

prices of raw jute and jute goods and an abundant supply of raw materials mainly contributed to this excellent performance both on the production and export fronts. The jute industry made further progress in modernisation of the machinery upto the spinning stage.

During 1964-65 further progress was made by the industry both in production and export. Production during 1964-65 touched a new high of 13.83 lakh tonnes and the export increased to 9.63 lakh tonnes valued at Rs. 168.52 crores. However, due to rumours of short crop in Pakistan and other developments overseas, the prices of raw jute and jute goods started rising from July, 1964. To meet the situation, Government took a number of steps like control of trading in raw jute and jute goods future markets, release of substantial quantities from the buffer stock, regulation of purchases by mills and of stocks in the form of statutory maximum purchase quotas and authorisation of import of raw jute from other countries. All these steps assured a regular supply of raw materials to maintain production. The Jute Textile Consultant Board was constituted to advise the Government on all important matters concerning the jute industry.

Consumer Goods Industries

Sugar.—The production of sugar during 1964-65 season was estimated at 32.60 lakh tonnes as compared to 25.69 lakh tonnes in the preceding year. An idea of the trend of production vis-a-vis the installed capacity, consumption and exports during the Third Plan can be had from the table below:

Sugar Year	(lakh tonnes)			
	Installed capacity	Production	Consumption	Exports
1961-62	25.16	27.14	25.87	3.61
1962-63	26.85	21.52	24.88	5.14
1963-64	28.74	25.69	23.36	2.50
1964-65	30.50	32.60*	24.50*	3.50*

*Estimated.

The production during 1963-64 at 2.57 million tonnes was well below the revised lower target of 3.5 million tonnes fixed for that year. The original target was 3.4 million tonnes. The shortfall in spite of the bumper crop in the 1963-64 season was attributed to the diversion of a significant part of the additional output of sugarcane from sugar mills to the manufacture of gur and khandsari the prices of which continued to rule high. As a result, the consumer could not obtain their full requirements of sugar.

The expansion of capacity to 36.2 lakh tonnes per year (in terms of gur) had been projected under the Third Plan. By the end of 1964-65 about 200 factories were working with a capacity of 30.5 lakh tonnes. A new approach to deal with the problems of sugar industry appeared to be necessary. The Government appointed two enquiry committees to look into the problems of the industry. One Committee was set up under the Chairmanship of Shri S. N. Gundu Rao to investigate the problems of uneconomic units. A second Commission of enquiry was set up under the Chairmanship of Dr. S. R. Sen to enquire into: (a) the determination of the price, and the system of distribution of sugar; and (b) the policy regarding licensing of new sugar factories and the expansion of existing sugar factories.

Paper and Paperboard.—The production of paper and paperboard, during 1964-65 increased to 4.93 lakh tonnes from 4.65 lakh tonnes in 1963-64. During the period of four years, 1961—65, 25 new units went into production and three of the existing units were substantially expanded. The capacity increased from 4.1 lakh tonnes to 6.4 lakh tonnes against the Third Plan capacity target of 8.13 lakh tonnes. An idea of the trend of production, consumption and imports during the period 1961—65 can be had from the following table:

(lakh tonnes)			
Year	Production	Consumption	Imports
1961-62	3.67	3.89	0.22
1962-63	3.88	4.11	0.23
1963-64	4.65	4.94	0.29
1964-65	4.94	5.19*	0.25

*Estimated.

Though there was a shortage of special varieties of paper, the supply position in regard to common varieties had been relatively easy during 1964-65. The industry was facing difficulties of securing adequate rupee finance, shortage of cellulosic raw material and lack of deferred payment facilities to buy paper machinery from indigenous sources. Government had taken measures to provide tax reliefs and deferred payment facilities. The requisite financial assistance was being extended by the Industrial Development Bank for purchase of machinery. The problems of ensuring adequate supplies of cellulosic raw material was under continuous study.

MINERALS

Coal.—While there was no increase in coal production in 1961-62 over the level achieved in 1960-61, there was a substantial step-up in 1962-63 (8.6 million tonnes) followed by a moderate increase (2.5 million tonnes) in 1963-64. Consequent on the shortfalls in the output of principal coal consuming industries, the demand for coal started slackening during 1963 with the result that stocks piled up at pit-heads. The slackness persisted during the following year leading to a slowing down of the tempo of development and production in the coal industry. The year 1964-65 ended with a production of 64.38 million tonnes which was less by 1.95 million tonnes as compared to the preceding year. The decline in the output of coking coal was proportionately higher (5 per cent) than in the case of non-coking coal (2 per cent). The output of lignite in Madras State, however, increased steadily from 0.38 million tonnes in 1962-63 to 1.2 million tonnes in 1963-64 and 1.6 million tonnes in 1964-65.

The progress of coal production in the first four years of the Third Plan is indicated in the table below. It is clear that the Third Plan (revised) target of 90 million tonnes would not be achieved.

(million tonnes)

Year	Coking Coal			Non-coking Coal				Grand Total Coal			Lignite Public sector
	NCDC	Pri- vate sector	Total	NCDC	Singa- reni	Pri- vate sector	Total	Public sector	Pri- vate sector	Total	
1961-62	2.91	14.08	16.99	3.14	2.83	32.22	38.19	8.88	46.30	55.18	0.05
1962-63	3.01	14.31	17.32	5.42	3.23	37.48	46.13	11.66	51.79	63.45	0.38
1963-64	3.02	14.47	17.49	5.99	3.47	38.17	47.63	12.48	52.64	65.12	1.21
1964-65	2.76	13.76	16.52	5.50	3.65	37.11	46.26	11.91	50.87	62.78	1.60

While the production increased quantitatively, there has been a declining trend in the output of superior grades, viz., Selected A and B. The output of the inferior grades, particularly Grade I, has shown an increase.

(million tonnes)

Grade	1960-61	1961-62	1962-63	1963-64	1964-65
Selected-A (including grades A, B & C of coking coal)	7.71	7.32	6.81	6.86	6.53
Selected-B (including grades D & E of coking coal)	10.28	9.23	8.15	7.16	6.77
Grade-I (including grades F, G & H of coking coal)	18.54	20.67	25.30	28.07	27.56
Grade-II (including grade HH of coking coal)	9.64	8.26	11.01	10.84	10.11
Grade-III	5.72	5.86	7.72	7.36	6.27
Ungraded (including Singareni coal)	3.83	3.84	4.46	4.83	5.54
TOTAL - Coal	55.72	55.18	63.45	65.12	62.78
Lignite	..	0.05	0.38	1.21	1.60

This deterioration in quality may be attributed to two main factors, viz. gradual exhaustion of the more easily workable reserves of better quality coal and the progress of mechanisation in recent years. This trend calls for specific measures aimed at stepping up the production of superior grades of coal and also for reducing the demand for better grade coal except where quality is essential. The recent establishment of a Fuel Economy Service under the aegis of the National Productivity Council may be expected to contribute in some measure in the latter direction.

As indicated in the statement below, despatches of coal increased steadily during the first three years of the Third Plan; the increase in 1963-64 being 7.3 million tonnes, compared to the level in 1961-62. In 1964-65, with the decline in production, despatches were lower compared to the previous year. This did not, however, mean short-supplies to the consumers generally since they had generally built comfortable stocks.

Year	(million tonnes)
1961-62	50.85
1962-63	56.88
1963-64	58.17
1964-65	57.29

Coal Washeries.—During the period under review, the Kargali washery operated to near capacity. Dugda-I which was commissioned towards the end of 1962 had continuous teething troubles to start with, and later suffered frequent break-downs in the plant due to non-availability of spare parts. The Fuel Research Institute has made an analysis of the poor performance of the Dugda-I washery and the remedial measures suggested in their report are being studied by the management of Hindustan Steel Ltd. The washed coal from this washery was supplied to Rourkela and Bhilai steel plants while the middlings, to begin with were stockpiled. With the completion of transport arrangements by Chandrapura power station to which this washery is linked, the middlings are now being supplied to that power station.

The expansion of Bhojudih washery by 0.8 million tonnes was completed in September, 1963 and it continued to operate at a fairly high pitch during the period under review. The disposal of the high ash by-product has posed a problem to the washery but no satisfactory solution has been found so far.

The construction schedule of the third washery at Pathardhi which was originally expected to be commissioned in August, 1963, was upset due to the delay in the finalisation of the loan agreement with USAID. The

construction of the plant was completed in October, 1963, however, the washery had not gone into commercial production.

In the Third Five Year Plan additional washing capacity was provided at Dugda (2.4 million tonnes), Bhojudih (0.8 million tonnes), Kathara (3 million tonnes), Karanpura (3.6 million tonnes) and one at Central Jharia (3 million tonnes). Except for Bhojudih, the other projects are not likely to be completed before the beginning of the Fourth Plan mainly because of delays in arranging necessary foreign exchange for import of plant and equipment.

Central Ropeways.—The Third Plan originally envisaged the installation of six ropeway systems, including three in Jharia and another three in Raniganj for the transport of sand from the rivers Damodar and Adjoy for stowing in coal mines. The proposal regarding one of the ropeways was dropped on account of the uncertainty in regard to the availability of sand reserves. One of these in Jharia is expected to be completed during 1965-66. The remaining four to be located in Jharia and Raniganj are likely to spillover into the Fourth Plan.

South Arcot Lignite Mining Project

Mining Scheme.—Production of lignite during the year 1962-63 was 0.35 million tonnes and with the commissioning of the other units of the power station, the output increased to 1.21 million tonnes in 1963-64 and further to 1.60 million tonnes in 1964-65. The target of production was originally fixed at 3.5 million tonnes but was subsequently raised to 6.3 million tonnes, keeping in view the requirements of the consuming units and the expansion of thermal power capacity from 250 MW to 600 MW.

The installation of all the five units of the thermal power station (250 MW) had been completed by 1964-65. The sixth unit was commissioned in December, 1965 and the seventh unit which will raise the capacity to 400 MW is expected to be commissioned by about May, 1967.

The erection of the fertilizer plant has been almost completed. The Neyveli Urea Plant commenced operations in March, 1966. Trial production was continuing. The briquetting and carbonisation plant was commissioned in August, 1965 and production of carbonised briquettes was adjusted to the offtake.

Mineral Oil

In the context of the rapidly increasing demand for petroleum products and the heavy drain on foreign exchange which the imports of crude oil and refined products involve in the absence of adequate indigenous supplies, the Third Plan had provided for an intensive programme of oil exploration and production.

It was stipulated that by the end of the Third Plan period, indigenous production of crude oil will reach a level of 6.6 million tonnes and total

production would approximately be 18·3 million tonnes during the Third Plan period. It will be seen from the following statement that actual production during the last four years was lower than what was visualised.

Crude Oil Production
(million tonnes)

1962	1·07
1963	1·66
1964	2·21
1965	3·02

Oil and Natural Gas Commission.—The Third Plan initially made a provision of Rs. 115 crores for the Oil and Natural Gas Commission, but soon after the finalisation of the Plan, an expanded programme of exploration estimated to cost Rs. 202 crores in the five-year period was approved. The actual progress of expenditure during the first four years of the Plan is indicated below:

	(Rs. crores)
1961-62	14·65
1962-63	23·76
1963-64	25·77
1964-65	30·45
TOTAL	94·63

Besides carrying out geological surveys, and geophysical and seismic investigations to locate suitable structures, the Commission undertook deep drilling operations in Ankleshwar, Kalol, Nawagaon (in Gujarat), Rudra Sagar, Lakwa and Teok (in Assam) and in a few other States. Apart from the Ankleshwar and Kalol structures which had already been proved to be oil bearing, the occurrence of oil was discovered in the Rudra Sagar and Lakwa areas. Investigations were also undertaken in the Rajasthan area with the collaboration of the French Petroleum Institute.

Though the physical programme has not proceeded according to schedule, enough exploratory and development work will have been completed to establish a production potential of a little over 3 million tonnes by the end of the Plan period. The actual production of crude oil by the Oil and Natural Gas Commission during the four years 1961—65 is given below:

	(million tonnes)
1961-62	0·04
1962-63	0·45
1963-64	0·72
1964-65	0·78
TOTAL	1·99

Oil India Limited.—The Third Five Year Plan envisaged an annual production of 2.75 million tonnes of crude oil from the Oil India concessions in Assam, sufficient to feed the Gauhati and Barauni refineries. The actual production was lower because the second million tonne stage of the Barauni refinery had not been completed. The first stage of crude oil pipeline from Nahorkatiya to Gauhati was commissioned from April, 1962. The extension of the pipeline to Barauni was completed about one year later and supplies of crude oil to Barauni started in July, 1964. In addition, Oil India supplied a small quantity of crude oil to Digboi to help supplement production from its own oilfield.

Oil India has also started investigations in the extension areas over which they have been given a licence for exploration.

Petroleum Refining.—Taking cognizance of the revised estimate of demand of 16.9 million tonnes for petroleum products, the refinery programme was enlarged to cover: (a) a marginal expansion of the coastal refineries at Bombay, (b) expansion of the capacity of three public sector refineries at Gauhati, Barauni and Koyali by 2.25 million tonnes, and (c) the establishment of a new refinery based on imported crude oil at Cochin with a capacity of 2.50 million tonnes.

The refinery at Gauhati was commissioned in the beginning of 1962 and the first million tonne stage of the Barauni unit towards the middle of 1964. These two refineries are in operation. While the construction of the first million tonne stage of Koyali was in progress, that of the second million tonne stage of Barauni will be taken up soon.

Gauhati-Siliguri Pipeline.—The 420 km. pipeline for transporting petroleum products from Gauhati to Siliguri was inaugurated in December, 1964. It transported 150,817 tonnes of oil products till March, 1965 from Gauhati to Siliguri.

Haldia-Barauni-Kanpur Pipeline.—This pipeline, which was under construction, might be divided in two sections. The 520 km. Haldia-Barauni Section was so designed that in addition to moving petroleum products it could also be used, if necessary, to transport crude oil between these two points. The 670 km. pipeline will carry petroleum products from Barauni to Kanpur. The Haldia-Barauni pipeline was likely to be completed by the end of 1966. The Barauni-Kanpur pipeline which was ready in March, 1966 had been tested. The total cost of the project was estimated at Rs. 27 crores.

Iron Ore Projects

The Kiriburu project which was to provide 2 million tonnes of iron ore for export to Japan (through Visakhapatnam) was ready for production from the beginning of 1964. Since the ore handling facilities at the port had not been completed, the mine could not reach full production,

as visualised earlier. Besides, the excessive generation of "fines" created problems for which special measures had to be adopted. Shipments at the target level of 2 million tonnes were expected to commence from the beginning of 1966-67.

The project report for deposit No. 14 in Bailadila having been approved, the development is under way. This project when completed will provide 4 million tonnes of ore for export to Japan through Visakhapatnam port.

Mineral Surveys

During the period under review, the Geological Survey of India and the Indian Bureau of Mines carried out investigations, followed by drilling operations on workable mineral deposits in a number of States. The list covers iron ore, copper, gold, tungsten, salt and limestone.

ANNEXURE I

Average of the Monthly Indices of Industrial Production

(Base: 1956 = 100)

	1961	1962	1963	1964
I. Mining and Quarrying	147.3	161.5	175.9	169.1
II. Manufacturing	134.9	146.6	157.4	170.1
(All manufactures)				
1. Cotton Textiles*	108.5	109.4	115.6	123.3
2. Jute*	89.6	110.4	117.2	121.0
3. Footwear, other wearing apparel and made up textile goods	166.0	180.4	214.4	212.2
4. Wood and Cork except manufacture of furniture	150.2	169.0	194.8	202.6
5. Paper and Paper products	181.9	190.9	226.8	237.8
6. Leather and Fur products	115.6	125.2	149.1	138.4
7. Rubber products	157.4	169.5	187.0	198.1
8. Chemicals and chemical products	170.5	184.2	201.4	223.5
9. Petroleum products	156.5	169.2	196.6	217.2
10. Non-metallic mineral products	180.8	220.2	204.6	216.0
11. Basic Metal	181.6	225.0	259.1	260.6
(a) Iron and Steel	188.0	230.9	269.5	270.8
12. Metal products	152.3	179.1	218.5	225.8
13. Machinery except electrical machines	268.7	293.2	364.5	411.1
14. Electrical machinery, apparatus, appli- cances and supplies	183.2	211.1	237.7	282.4
15. Transport equipment	130.8	151.4	150.9	192.5
III. Electricity	198.8	233.4	257.9	297.2
General Index	138.3	150.5	162.5	174.7

*Index relates to spinning, weaving and finishing of cotton textiles and jute respectively.

ANNEXURE II

Target and progress of selected industries—Third Five Year Plan

Industry	Unit	1960-61		1961-62		1962-63		1963-64		1964-65		1965-66	
		Actual		Actual		Actual		Actual		Actual		Target	
		Cap.	Prod.	Cap.	Prod.	Cap.	Prod.	Cap.	Prod.	Cap.	Prod.	Cap.	Prod.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
<i>Metallurgical and Engineering Industries</i>													
1. Steel Ingots . . .	Million tonnes	6.1	3.4	6.1	4.3	6.1	5.4	6.1	5.9	6.1	6.1	10.2	9.3
2. Finished Steel . . .	"	4.6	2.3	4.5	2.9	4.5	4.0	4.6	4.3	4.8	4.4	7.6	6.8
3. Pig Iron for sale . . .	"	1.1	1.1	1.1	1.02	1.1	1.1	1.1	1.16	1.1	1.0	1.5	1.5
4. Aluminium . . .	'000 tonnes	18.2	18.3	27.5	19.9	53.4	42.6	54.0	54.0	54.0	54.1	88.5	81.0
5. Cotton Textile Machinery	Rs. crores	12.0	10.4	12.5	12.5	13.0	13.0	19.0	18.5	22.0	21.6	22.0	20.0
6. Paper Machinery . . .	"	3.7	0.01	4.0	0.5	4.9	0.9	5.0	1.3	5.5	1.7	8.5	6.5
7. Cement Machinery . . .	"	1.1	0.6	4.5	0.9	5.3	0.7	N.A.	0.96	N.A.	2.2	4.5	4.5
8. Automobiles . . .	'000 Numbers	53.7	55.0	53.7	54.5	53.7	53.9	55.2	56.4	74.4	70.8	100.0	100.0
9. Motor Cycles/Scooters . . .	"	23.0	17.6	24.0	19.1	30.0	23.6	36.0	26.8	52.8	37.3	48.0 to 60.0	50.0
10. Ball and Roller Bearing . . .	Million Numbers	1.7	3.2	3.5	3.3	3.5	4.0	5.7	5.2	8.9	5.9	11.0	15.0
11. Non-Ferrous Metals . . .													
(a) Copper . . .	'000 tonnes	8.9	8.9	9.0	9.0	9.0	9.48	9.96	9.96	9.96	9.40	22.0	20.0
(b) Zinc . . .	"	..	..	..	..	..	..	..	..	..	..	15.0	15.0
(c) Lead . . .	"	6.0	3.7	6.0	3.2	6.0	3.4	6.0	3.5	6.0	3.5	6.0	3.5
12. Steel Castings . . .	"	39.0	34.0	43.5	40.0	52.2	43.6	58.8	50.0	82.4	54.6	200.0	200.0
13. Steel Forgings . . .	"	43.0	35.0	48.0	48.0	56.6	53.0	70.4	55.8	74.6	57.0	200.0	200.0
14. Machine Tools . . .	Rs. crores	8.0	7.0	8.9	9.3	11.3	12.6	16.97	20.1	32.0	20.0	30.0	30.0
15. Power Driven Pumps . . .	'000 Numbers	128	105	137	129	146.5	131.1	144.0	154.5	144.0	184.0	184.0	150.0

<i>Chemical Industries</i>													
16. Nitrogenous Fertilizers	. '000 tonnes of N	161.5	99.0	240.7	144.9	381.3	177.6	381.3	222.0	381.3	240.0	1016	812
17. Phosphatic Fertilizers	. " P ₂ O ₅	58.4	54.0	89.7	66.0	129.6	80.6	147.4	107.5	158.67	130.9	508	406
18. Sulphuric Acid	. '000 tonnes	536.0	361.0	563.87	430.4	777.0	484.9	862.9	601.9	1048.8	695.0	1778	1524
19. Soda Ash	. "	273.0	148.0	268.0	188.2	268.0	236.2	296.4	274.6	329.8	287.2	540	457
20. Caustic Soda	. "	126.0	99.0	124.0	123.3	124.8	121.1	202.0	163.0	250.0	191.8	406	345
21. Paper and Paperboard	. "	418.0	350.0	410	365	483	393	549	464.5	643.0	493.0	833	711
22. Newsprint	. "	30.0	23.3	30.0	24.8	30.0	26.0	30.0	30.4	30.0	29.3	152.4	128
23. Cement	. Million tonnes	9.4	7.97	9.7	8.03	9.7	8.33	9.7	9.43	11.3	9.78	15.3	13.2
24. Automobile Tyres	. Million Numbers	1.61	1.49	1.87	1.59	2.41	1.76	2.18	1.97	2.50	2.16	4.5	3.85
25. Cotton Textiles	. Million metres*	1.99	4649	1.99	4663	2.0	4500	2.02	4502	2.02	4676	2.25	5300
26. Sugar**	. Million tonnes	2.25	3.03	2.50	2.71	2.70	2.15	2.87	2.57	3.10	3.26	3.56	3.56
27. Sulpha Drugs	. Tonnes	366	145	399	156	399	196	465	237	521	276	1000	1000
28. Penicillin	. MMU	55.0	39.7	65.0	50.18	65.0	62.3	80.0	93.61	105.0	81.4	120	120

*Capacity in lakh looms and production in million metres.

**Relates to sugar year, i.e. 1st November to 31st October.

CHAPTER VII

VILLAGE AND SMALL INDUSTRIES

The objectives of the development programmes for village and small industries are to create employment opportunities on a large scale at relatively small capital cost, to meet a substantial share of the increased demand for consumer goods and simple producers' goods, to facilitate fuller utilisation of resources of capital and skill and to promote dispersal of industries in small towns and rural areas. Moreover, small industries by giving a chance to new entrepreneurs from middle levels of society as well as cooperatives to get a start in the industrial field, are considered an important means for diffusing national income more widely and fairly.

The programmes as implemented over the last four years have contributed in some measure in realising some of these objectives. In the Third Plan, it was estimated that village and small industries will provide whole time employment for about 9 lakh persons and part-time and fuller employment for about 8 million persons. It is now roughly estimated on the basis of outlays in the public sector and investment in the private sector that additional whole-time employment had been created for about 4.6 lakh persons and part-time for about 1.3 million persons during the first four years of the Plan period, in addition to over 6 million persons who continue to be provided with fuller and part-time employment. During the period under review, there was a considerable increase in the production of small scale industries. They have also made a significant contribution to meeting certain defence requirements. The foreign exchange earnings through the export of handloom and silk fabrics, handicrafts and coir goods doubled over the first four years of the Plan, having increased to about Rs. 49 crores in 1964-65, as compared to about Rs. 25 crores in 1960-61 (see Annexure at the end of the Chapter). The progress achieved in the dispersal of industries and development of ancillaries, however, had not been satisfactory. The implementation of rural industries projects initiated during 1962 was considerably delayed. The number of industrial cooperatives and their membership, however, showed a significant increase during the period under review.

In the light of achievements upto the end of 1964-65, it was expected that the targets of production of handloom cloth and silk and of employment for the Third Plan would be nearly achieved by 1965-66. The principal reasons for slow progress in the development programmes for certain industries, particularly small-scale industries, handicrafts and industrial estates, were shortage of certain raw materials and power and marketing difficulties. The supply of raw materials was not only inadequate but irregular and there was a considerable time-lag in some cases

between the issue of quotas and their actual delivery. Given adequate and regular supply of scarce raw materials and equal access to power and finance, the small scale sector in industries had a fair chance to compete with the large-scale sector in many fields.

Progress of Expenditure

It will be seen from the table below that the pace of expenditure on programmes for the development of small industries slowed down in 1962-63. This was attributed to the national emergency but the expenditure picked up during the two-years under review. To some extent, the slow progress of expenditure was also due to diversion of funds allotted to village and small industries to other heads of development in some of the States.

Progress of Expenditure under Village and Small Industries (1961—65)

(Rs. crores)

Industry	Third Plan provision	1961-62 (actuals)	1962-63 (actuals)	1963-64 (actuals)	1964-65 (anticipated)	1961—65 Total
Handloom Industry (including powerlooms) .	38.00	5.45	4.66	5.55	5.67	21.33
Khadi and Village Industries	92.40	15.70	17.21	16.63	18.22	67.76
Sericulture	7.00	0.57	0.82	0.69	1.03	3.11
Coir Industry	3.15	0.26	0.35	0.26	0.48	1.35
Handicrafts	8.60	0.89	0.89	0.80	1.34	3.92
Small Scale Industries	84.60	10.78	9.96	12.31	14.61	47.66
Industrial Estates	30.20	3.36	4.04	5.18	7.05	19.63
	263.95	37.01	37.93	41.42	48.40	164.76
Rural Industries Projects	..	..	0.03	0.77	1.66	2.46

Production Targets

Although no precise targets had been fixed for different sections of the decentralised sector of the cotton textile industry, a combined production target of 3,185 million metres was indicated in the Third Plan for handloom, powerloom and khadi industries. The total production of cloth in the decentralised sector was estimated at about 2,937 million metres in 1963 and 3,147 million metres in 1964. Thus, it was expected that the production target of 3,185 million metres for the last year of the Plan would be achieved. According to a recent study, while the annual production of cloth by the powerlooms was of the order of 950 million metres, the output of handloom cloth was estimated over 1,910 million metres, as compared to the provisional target of 2,550 million metres fixed by the All-India

Handloom Board. It is likely that the production of handloom cloth might fall short of the provisional target. The main reasons for the probable shortfall were difficulties in obtaining regular supplies of yarn and inadequate flow of financial assistance for working capital through the central financing agencies.

Physical Achievements during 1961—65

Industry	Unit	1960-61	1961-62	1962-63	1963-64	1964-65
Powerloom and handloom cloth*	Million metres	2,013	2,372	2,412	2,876	3,066
Cotton khadi	"	50.0	58.0	67.0	62.5	72.0
Raw silk*	Million kgs.	1.5	1.7	1.8	1.8	1.9
Industrial estates (completed)†	Number	66	89	113	141	235

*Figures relate to calendar years.

†Cumulative totals.

The production of khadi of all varieties was expected to increase from 59 million metres in 1960-61 to about 145.6 million metres in 1965-66. Against this, the production of khadi cloth in 1964-65 was estimated at nearly 81 million metres, comprising 72 million metres of cotton khadi, 6.8 million metres of woollen khadi and 1.9 million metres of silk khadi. A substantial shortfall in the production of khadi is likely at the end of the Plan period. Some of the reasons for the slow progress were the considerable time taken in reorganising the programme which involved selection of 'gram ekais', difficulties in renovation and activation of the Ambar Char-khas. Production of both mulberry and non-mulberry silk was estimated to have increased from 1.5 million kgs. in 1960 to 1.9 million kgs. in 1964, as against the target of about 2.3 million kgs. indicated for the end year of the Plan.

Credit and Finance

Under the State Aid to Industries Acts/Rules, the State Governments disbursed loans amounting to Rs. 3.1 crores during 1963-64 and Rs. 3.6 crores during 1964-65; thus, bringing the total advances, in the first four years of the Third Plan period to about Rs. 14 crores. Apart from the credit made available from the Plan outlay in the public sector, the State Financial Corporations also sanctioned loans from their own funds, amounting to about Rs. 11 crores at the end of March, 1964. The credit limit sanctioned by the State Bank of India increased from Rs. 8.85 crores at the end of March, 1961, to Rs. 24.20 crores at the end of March, 1964, and further to Rs. 34.26 crores upto the end of March, 1965. During the period under review, the Bank also started advancing medium-term loans and instalment credit. Under the credit guarantee scheme of the Reserve Bank of India, guarantees for loans amounting to Rs. 66.3 crores had been issued upto

the end of June, 1965, as compared to Rs. 16.60 crores upto the end of March, 1963. The Reserve Bank also continued to provide credit facilities to the central financial agencies for meeting the working capital requirements of the handloom weavers' societies and a total amount of Rs. 9.94 crores had been drawn by the societies during the two years 1963—65

Industrial Cooperatives

The number of industrial cooperatives increased to 43,518 in 1962-63, as compared to 33,256 in 1961. During this period, the membership increased from 2.56 millions to 2.85 millions and the working capital from Rs. 49.50 crores to Rs. 80.87 crores, respectively. The report of the Second Working Group on Industrial Cooperatives which was set up in September, 1962, to review the present position and to recommend special programmes for the Third Plan and also to suggest lines of development in the Fourth Plan period, was still under consideration.

Rural Industries Projects

The programme relating to intensive development of small industries in selected rural areas was initiated as a Centrally sponsored scheme in 1962, with a view to evolving effective techniques and methods which could be extended progressively to other areas with a large incidence of unemployment and underemployment. To start with 45 projects were taken up, each project area to cover three to five development blocks with a population of 3 to 5 lakhs. The implementation of the programme really began from the year 1964-65. The late start was due to delays in completing the surveys, formulating the projects and gearing of the machinery for implementation by the State Governments. During the period under review, expenditure of the order of Rs. 77 lakhs and Rs. 166 lakhs was incurred during 1963-64 and 1964-65 respectively under various items of the programme including training, setting up of common facility service centres, advance of loans to industrial units etc.

By the end of 1964-65, 261 new training centres and demonstration parties had been organised in most of the project areas which provided training facilities in 27 different trades. These centres had an enrolment capacity for about 4,000 trainees; however, the number on roll during 1964-65 was 3,200. A noteworthy feature of the training programme was the arrangement for in-plant training and deputation of artisans to well known and recognised institutions situated outside the project areas. About 125 common facility service centres, covering some twenty-one industries were set up in the project areas, of which only one-fourth had started working by the end of 1964-65. The remaining 93 centres were in various stages of construction. It is too early to assess the working of the projects and express an opinion regarding the contribution of the programme in creation of a favourable climate for development of industries in the rural areas.

Handloom and Powerloom Industries

A great majority of cotton handlooms have been brought within the cooperative fold. By the end of 1964-65, there were 11,843 registered handloom weavers' cooperative societies with a membership of 12·7 lakhs which covered 13·86 lakh looms out of a total of about 21 lakh looms. A special Enquiry Committee set up in 1963 to review the progress of the powerloom industry and to formulate proposals for the Fourth Plan, submitted its report in June, 1964.

Khadi and Village Industries

A notable development during the period under review was the introduction from April, 1964 of the scheme for free weaving subsidy in place of the rebate on sales of cotton khadi. The scheme envisages subsidy to the extent of the weaving charges on ordinary cloth. Under the scheme, a person who produces cotton and also spins yarn, gets the cloth almost free. On the other hand, one who does not produce cotton but spins yarn, gets cloth at approximately the price of cotton. The scheme has been introduced on an experimental basis for a period of two years in the first instance.

In pursuance of the programme undertaken in the Third Plan for securing integrated rural development for selected compact areas, about 1,270 'gram ekais' had been approved by the Khadi and Village Industries Commission upto the end of March, 1964. During the year 1964-65, the Commission extended its activities to the border areas and also to the areas having a preponderance of population of the weaker sections. Further steps were taken to coordinate the developmental activities of the various organisations in the field and special patterns of assistance were evolved to suit local conditions.

At the end of March, 1963, 60 per cent of the total number of the Ambar Charkhas distributed were reported to be idle as compared to some 40 per cent two years earlier. To reduce the number of idle charkhas, about 80,806 Ambar Charkhas were renovated over a period of four years, 1961—65. The activation/renovation programme has, however, proceeded at a slow pace. In consultation with textile engineers, a new type of charkha which would be more economical in working had been produced, and put on trial. The Central Research Institute for Village Industries continued to conduct experiments and research for developing improved production techniques and also fabricating new tools and equipment for village industries.

The production of most of the village industries at the centres assisted by the Khadi and Village Industries Commission, particularly leather, gur and khandsari, palm-gur, non-edible oils and soaps, bee-keeping, cottage match and hand-made paper industries registered appreciable increases during 1964-65, as compared to the preceding year; except in the case of processing of cereals and village oil industries where production declined.

The progress in the development of khadi and village industries during the last four years was, however, slow mainly due to the time taken in organisation of 'gram ekais', modification of training programmes and marketing difficulties in respect of certain industries, etc.

Sericulture

The total value of exports of silk fabrics and silk waste which increased from Rs. 1.8 crores in 1962 to Rs. 2.6 crores during 1963, showed a slight decline in 1964. This was mainly because of a fall in exports of silk waste and mulberry silk fabrics. During 1963-64, the Sericultural Research Institutes were re-organised on the lines recommended by the Sericultural Research Coordination Committee. The prices of different sericultural products in 1964-65 registered a downward trend, except for tussar. A schedule of standards for the tussar fabrics was formulated and a scheme was also introduced for quality-marking of pure silk fabrics. The programme for modernisation of filature made further progress and the first cooperative filature with 30 basins was established at Dehra Dun in September, 1964.

Coir Industry

The total exports of coir fibre, yarn and manufactures were valued at Rs. 11.66 crores during 1964-65, as compared to Rs. 12.08 crores in the preceding year. The fall was mainly due to a decrease in the volume and prices of coir yarn exported. However, the value of exports of the other coir products registered an increase of over 10 per cent in 1964 over the previous year. The scheme of voluntary pre-shipment inspection of coir mats introduced in May, 1963 has gained popularity. One factory for the production of rubbersied coir started functioning in Tirunelveli and five more units were in different stages of construction at the end of 1964-65. Sales of coir products through the sales depots and show-rooms set up by the Coir Board increased from Rs. 6.3 lakhs in 1962-63 to about Rs. 8 lakhs in 1964-65.

Handicrafts

The value of exports of handicrafts including jewellery, precious stones and carpets increased from about Rs. 9.7 crores in 1960-61 to nearly Rs. 26.0 crores in 1964-65. The sales of handicrafts through the Government-assisted organizations and State emporia and sales depots in the country was estimated to have gone up from Rs. 2.7 crores in 1960-61 to about Rs. 3.2 crores in 1964-65. A study covering 9 emporia was carried out and the recommendations made for enhancing their sales were brought to the notice of the concerned agencies. In 1963-64, handicrafts worth Rs. 1.71 crores were quality-marked, as against Rs. 1.35 crores in 1962-63.

For the first time, National Awards were instituted to give recognition to exceptional merit in craftsmanship and designing. In 1964-65, National Awards were given to 14 distinguished craftsmen. About 1,600 designs were

evolved/re-styled during the two years 1963-64 and 1964-65 by various Design Development Centres run by the All-India Handicrafts Board, of which about 65 per cent were reported to have been accepted for commercial purposes. These measures have helped in changing progressively handicrafts products from elaborate and decorative ones to more functional, simple and moderately priced products, to meet increasing demand from within and outside the country.

Shortages of raw materials, particularly non-ferrous metals, paucity of trained personnel and poor organisation were stated to be the main problems experienced during the period under review.

Small Scale Industries

The small scale sector has continued to grow alongside the large-scale sector despite various handicaps, in particular shortages of imported and also certain indigenous raw materials. As compared to nearly 57,000 small scale units registered with the States' Industries Directorates, upto August, 1963, about 75,000 units had been registered by the end of March, 1965. The registration being voluntary, did not represent a full count of the small units. Besides, entrepreneurs belonging to the middle-level of society, a large number of educated and technical personnel with background in certain industries had also established small scale industries. A number of new units were engaged in production of items requiring higher technology and skills.

As regards the supply of scarce raw materials, a Committee was appointed by the Ministry of Industry and Supply in 1964 to make recommendations for securing equitable distribution of available scarce raw materials among the large, medium and small scale sectors and for ensuring their proper utilisation. The Committee submitted its report in May, 1965. One of the main recommendations of the Committee was that the scarce raw materials should be distributed equitably, without reference to the sector to which the units belonged, subject to the overall priorities of their end-products. The Committee's recommendations were under consideration of the Government. In the meanwhile, studies were also undertaken with a view to examining the possibilities of starting new industries based on local raw materials.

The Central Small Industries Organisation continued to render industrial extension service through Small Industries Service Institutes and Extension Centres in the States and Union Territories. In addition to technical assistance and information for starting new industries, the extension service also provided training in industrial management and various trades.

The National Small Industries Corporation continued to supply machinery on hire-purchase basis to small industrialists. The value of machines, both indigenous and imported, thus supplied, nearly doubled

from Rs. 3.4 crores in 1962-63 to Rs. 6.5 crores in 1963-64. The figure fell to a little over Rs. 4 crores during 1964-65 mainly owing to the foreign exchange difficulties. The number of machines delivered under this scheme in 1964-65 was 2,475 as compared to 3,060 in 1963-64. The Corporation also continued to assist small industries in the Government Stores Purchase programme. The number of items reserved for exclusive purchase by the Central Government Departments from the small units increased from 63 in 1963 to 70 in 1964. The total value of purchases from small industries by the Central Government Departments (including Railways) was Rs. 22.6 crores in 1964-65, as compared to Rs. 37.4 crores in the preceding year. Of these, the value of contracts secured by small industries with the assistance of the National Small Industries Corporation was Rs. 17.3 crores and Rs. 34.2 crores, respectively in the two years.

The Corporation continued to provide assistance to small scale industries in respect of purchase on favourable terms of components produced by Bharat Electronics Ltd. and of machine tools and electric motors manufactured by the Government units, including the Proto-type Production and Training Centres. The Corporation exported 7.6 lakh pairs of leather shoes, valued at Rs. 2.12 crores, over a period of about three and half years, ending November, 1964. The work connected with the export of leather shoes has since been transferred to the State Trading Corporation

Industrial Estates

The Third Plan envisaged setting up of 300 new industrial estates apart from the completion of about 60 estates carried over from the Second Plan period. The progress of the programme is broadly indicated in the following statement:

	As on 31st March, 1964	As on 31st March, 1965
Number of Industrial Estates		
—sanctioned	343	428
—functioning	120	154
—completed but not functioning	55	81
—under various stages of construction	168	193
Number of Sheds in Estates		
—completed	4,310	5,188
—allotted	3,551	4,302
—occupied	3,272	3,794
—working	2,543	3,134
Estimated Annual Production (Rs. crores)	34.0	41.0
Employment Provided ('000 numbers)	29.5	46.6

A review of this programme indicates that out of 428 estates sanctioned upto the end of 1964-65, 154 (36 per cent) were functioning and 81 (nearly 20 per cent) were completed but had not yet started functioning. There were delays in the occupation of factory sheds after they had been allotted. While 84 per cent of the total number of completed sheds had been allotted and 73 per cent of them were occupied, only 60 per cent of the total number completed had started working. The number of sheds allotted as percentage of estates completed was stated to be the lowest in rural estates. The delays in the functioning of the estates and under-utilisation of the installed capacity were mainly due to shortage of raw materials, unsuitable location and absence of integrated planning.

The working of industrial estates has disclosed that those located in urban areas had greater chances of success since they attracted entrepreneurs much more easily. On the other hand, the estates situated in semi-urban and rural areas did not possess enough pull and consequently were utilised haltingly. The experience gained so far emphasises the need for integrated planning of these estates.

ANNEXURE

Value of Exports, 1960-61 to 1964-65

(Rs. crores)

	1960-61	1961-62	1962-63	1963-64	1964-65
Handloom*	5.01	4.79	6.65	6.89	9.12
Silk	1.37	1.52	1.81	2.59	2.49
Handicrafts†	9.69	19.34	21.53	24.00	25.84
Coir-fibre, yarn and Manufactures	8.67	11.33	12.10	12.08	11.66
TOTAL	24.74	36.98	42.09	45.56	49.11

*The term handloom refers to cotton fabrics of standard type.

†Including jewellery, precious stones and carpets. The trade classification of handicrafts items, which were being mixed up previously with other items, was widened in 1961 at the instance of the All India Handicrafts Board. The number of handicrafts items was increased from 110 to 130 from 1st April, 1961.

CHAPTER VIII

TRANSPORT AND COMMUNICATIONS

Satisfactory progress was made on the development programmes of transport and communications during the third and fourth year of the Third Plan. The transport situation in the country which was difficult at the time of formulation of the Third Plan began to ease towards the end of the year 1962 and recorded a significant improvement in 1963-64. The rate of growth of traffic on the railways slowed down during the year 1964-65 mainly because of slackening of demand for coal and shortfalls in the production of steel and in the programme for export of iron ore. The capacity offered by the railways during the year tended to remain somewhat ahead of demand and the railways had no difficulty in meeting the requirements in respect of movement of coal, iron and steel and other bulk commodities.

After the emergency which began in the latter half of 1962, the plans for transport and communications were reviewed. Road programmes were strengthened in relation to requirements in the north-east region and in view of the need to develop the main arterial routes. A road transport organisation was established by the Central Government for the maintenance of essential supplies in the Assam North Bengal area. It was also decided to construct a broad gauge railway line from Siliguri to Jogigopa. The line was sanctioned during 1963-64 and was completed and opened to traffic in May, 1965. Steps were also taken to ensure speedier implementation of the more important programmes already included in the Plan.

Against the original provision of Rs. 1,486 crores for transport and communications in the Third Plan, the cost of programmes in the Plan, was reckoned at Rs. 1,630 crores. After the Mid-term Appraisal of the Plan the cost of the programmes was estimated at Rs. 2,070 crores, the increase of Rs. 440 crores being accounted for mainly by specific additions to the proposals already embodied in the Third Plan. The expenditure during

the first four years of the Third Plan, that is, till the end of 1964-65, amounted to Rs. 1,639 crores, as shown in the table below:

Outlay on Transport and Communications
(1961—65)

(Rs. crores)

Programme	Plan provision	Estimated cost of programmes		Expenditure				
		Original estimate	Revised	1961-62	1962-63	1963-64	1964-65	Total 1961-65
1	2	3	4	5	6	7	8	9
<i>Transport</i>								
Railways*	890.0	940.0	1196.0	175.6	249.0	301.9	314.2	1040.7
Roads	272.0	324.1	470.0	63.8	72.4	92.1	101.5	329.8
Road transport	25.0	26.0	27.0	4.3	3.4	4.6	8.3	20.6
Shipping	56.8	57.6	57.6	7.1	4.1	4.2	13.0	28.4
Inland water transport	5.5	7.5	8.7	0.2	0.9	0.3	1.1	2.5
Ports and harbours	86.5	105.1	131.8	13.3	15.8	23.0	24.8	76.9
Lighthouses and lightsnips	6.0	6.0	6.0	1.2	0.7	1.0	0.5	3.4
Tourism	7.7	7.7	7.7	0.9	0.7	0.7	0.9	3.2
Other transport	1.5	1.5	1.5	..	..	..	..	..
Civil air transport†	58.0	58.0	55.8	13.6	8.6	6.1	12.6	40.9
SUB-TOTAL: Transport	1409.0	1533.5	1962.1	280.0	355.6	433.9	476.9	1546.4
<i>Communications</i>								
Posts and Telegraphs	66.6	77.6	85.4	12.0	17.5	24.9	25.8	80.2
Broadcasting	7.0	11.0	11.0	1.0	1.6	1.8	1.5	6.1
Other communications	3.4	7.7	11.0	1.2	1.7	1.8	1.6	6.3
SUB-TOTAL—Communications	77.0	96.3	107.4	14.4	20.8	28.5	28.9	92.6
GRAND TOTAL	1486.0	1629.8	2069.5	294.4	376.4	462.4	505.8	1639.0

*These figures do not include the expenditure met from the Depreciation Reserve Fund of the Railways.

†Including meteorology.

RAILWAYS

The railway development programme in the Third Plan was drawn up in relation to traffic target of 249.4 million tonnes expected to be reached in 1965-66. However, at the time of Mid-term Appraisal of the Plan it was reckoned that owing to shortfalls anticipated in the produc-

tion of steel, coal and cement industries, the originating traffic in the last year of the Plan might not exceed 245.2 million tonnes. Measures were accordingly introduced during 1964-65 for rephasing the various programmes particularly those relating to electrification, new lines, line capacity works and acquisition of rolling stock so that the implementation of the programmes might proceed more closely with the expected growth of traffic demands. A review of the traffic trends made in January, 1965 revealed that the originating traffic in 1965-66 might be of the order of 206 million tonnes. As against this, the rolling stock capacity likely to be developed by the end of the Third Plan was expected to be adequate for carrying 215 to 220 million tonnes of traffic per annum.

The growth of traffic during the year 1964-65 has been considerably less than was expected at the time of formulation of the Annual Plan proposals of the Ministry of Railways for the year. It was then estimated that the traffic might increase from 191.1 million tonnes in 1963-64 to 208.4 million tonnes in 1964-65, i.e., by about 17 million tonnes. However, the actual traffic in 1964-65 was 193.8 million tonnes, the increase in traffic over the previous year being only 2.7 million tonnes.

Growth of Freight Traffic on the Railways

(million tonnes)

	1960-61	1961-62	1962-63	1963-64	1964-65		
	Actuals	Actuals	Actuals	Actuals	Forecast	Actuals	
	1	2	3	4	5	6	7
1. Coal							
(a) Steel plants	8.2	9.6	10.5	10.9	12.4	10.7	
(b) Railways	19.5	20.1	22.2	22.2	60.7	22.0	
(c) Other users	22.7	24.2	28.7	31.0			
SUB-TOTAL	50.4	53.9	61.4	64.1	73.1	62.7	
2. Steel Plants							
(a) Raw materials (except coal)	10.5	12.9	15.5	15.3	16.3	15.7	
(b) Finished products	3.8	4.3	5.6	6.6	6.6	6.5	
SUB-TOTAL	14.3	17.2	21.1	21.9	22.9	22.2	
3. Iron ore for export	2.6	2.5	3.2	3.6	4.9	3.9	
4. Cement	6.5	6.7	6.9	7.2	7.9	7.7	
5. Railways' own materials (excluding coal)	17.0	14.8	17.2	21.3	22.3	23.1	
6. All other goods	65.4	65.5	69.0	73.0	77.3	74.2	
TOTAL	156.2	160.6	178.8	191.1	208.4	193.8	

The shortfall in the expected increase in traffic in 1964-65 against the earlier forecast was due to the following factors:

- (i) There was a decline in the production of finished steel at I.I.S.C.O., Bhilai and Rourkela;
- (ii) The programme relating to coal washeries did not materialise according to schedule;
- (iii) Movement of coal during 1964-65 was partly affected because the stocks with the users which had been built up earlier were allowed to be used up; and
- (iv) The demand for loco coal also declined because the traffic on the railways did not increase according to expectations.

Expenditure on railway development programmes during the first four years of the Plan amounted to Rs. 1,322 crores (including expenditure on depreciation account) distributed between the various programmes as under:

Programme	(Rs. crores)		
	Cost of the programme		Expenditure
	Original	Revised	1961-65
Rolling stock	510	576	414.99
Line capacity works	183	281	247.56
Electrification	70	98	55.45
New lines	147	206	171.54
Track renewals and other works	415	420	432.64
TOTAL	1,325	1,581	1,322.18

Progress of expenditure on the railway programmes was on the whole satisfactory. The shortfall in the case of electrification programme was mainly in respect of imported locomotives which had already been ordered but for which payments were to be made on delivery.

As against the revised programme of acquisition of 2,070 locomotives, 157,133 wagons (in terms of four-wheelers) and 8,601 coaching vehicles in the Third Plan period, the acquisition during the first four years amounted to 1,459 locomotives, 111,283 wagons (in terms of four-wheelers) and 6,595 coaching vehicles. The Diesel Locomotive Works, Varanasi which went into production during 1964-65 manufactured 10 locomotives with indigenously built chasis and imported components in addition to assembling of 12 diesel locomotives received in knocked down condition. The manufacture of electric locomotives has been organised at the Chittaranjan Locomotive Works and 27 electric locomotives were produced during 1964-65. Production of wagons in terms of four-wheelers increased from 31,608 in 1963-64 to 34,542 in 1964-65. The Integral Coach Factory produced 632 coach shells in 1964-65.

The following table shows progress made on the more important programmes of the Railways:

Programme	Third Plan target		Achievement
	Original	Revised	1961—65
Electrification (route kilometres)	1,760	1,770	1,360
Doubling of track (kilometres)	2,560	3,220	2,720
New lines (kilometres)	2,400	2,200	1,131

The sections which were electrified during the first four years of the Plan include: (1) Durgapur-Gaya, (2) Gaya-Mughalsarai, (3) Mughalsarai-Dagmagpur, (4) Sealdah-Ranaghat; Dum-Dum-Bongaon; Ranaghat-Krishnagarh, (5) Burdwan-Manhar; Dum-Dum-Belmuri; Dankuri-Belanagar, (6) Rajkharwan-Dongoaposi; Asansol-Sini; Tatanagar-Rourkela, (7) Tatanagar-Ninipura, (8) Gardhrubeshwar-Joychandipahar, (9) Ramkanali-Chowrashi and Damodar-Radhanagar, (10) Rourkela-Birmatrapur and (11) Madras (Egmore)-Tambaram (3rd line) and Tambaram-Villupuram. Among the new lines which were completed upto the end of 1964-65 are: (1) the broad gauge link between Calcutta and Siliguri via Farakka, (2) Hatia-Nowagaon-Bondamunda and Nowagaon-Purnapani lines to serve the steel and heavy engineering plants, (3) Sambalpur-Titilagarh and Bimlagarh-Kiriburu lines for movement of iron ore to Visakhapatnam for export, (4) Robertsganj-Garhwa Road line to serve new industries and to bypass the congested Mughalsarai yard, and (5) North Lakhimpur-Gogamukh line.

ROADS

The total cost of road development programmes originally included in the Third Plan was Rs. 324 crores—Rs. 244 crores for programmes in the State Plans and Rs. 80 crores for those in the Central sector. The road programme was strengthened considerably after the emergency in 1962. Also a new major project for construction of a lateral road from Bareilly to Amingaon at an estimated cost of Rs. 110 crores was taken up for development of the border areas and also to serve strategic needs.

The Third Plan envisaged an overall addition of 40,000 kilometres of surfaced roads in the country. The Plan target was achieved by the end of 1964-65, because of addition of new schemes to the road programme after the emergency. Under the programme for the national highways, about 500 kilometres of missing links and 45 major bridges were constructed during the first four years of the Plan. In addition, a number of sections of the existing national highways covering a length of about 3,600 kilometres were improved.

ROAD TRANSPORT

In the Third Plan the number of commercial vehicles was expected to increase from 224,440 as at the end of 1960-61 to 365,000 by the end of 1965-66. During the first four years of the Plan, the number of commercial vehicles is estimated to have gone up to 303,200. The following table indicates the year-wise increase in trucks and buses on the road separately:

At the end of	Number of commercial vehicles on the road		
	Total	Trucks	Buses
1960-61	224,441	167,649	56,792
1961-62	248,656	189,096	59,560
1962-63	277,968	215,408	62,560
1963-64	290,694	224,181	66,513
1964-65 (estimated)	303,200	235,000	68,200

PORTS AND HARBOURS

There has been a significant increase in the traffic handled at ports since the commencement of the Third Plan. From 33.8 million tonnes in 1960-61 the traffic at major ports increased in 1964-65 to 41.8 million tonnes excluding Mormugao port and 48.4 million tonnes including Mormugao. At the intermediate and minor ports which are about 170 in number, the traffic increased from 6.6 million tonnes in 1960-61 to 8.3 million tonnes in 1964-65.

The main schemes at the Calcutta Port in the Third Plan were the reconditioning and strengthening of the quay walls of the Kidderpore Docks, purchase of floating craft and extension of King George's Dock arm. In the first four years of the Plan, all the quay walls of the Kidderpore Docks were reconditioned and most of the floating craft were received. The extension of one arm of the King George's Docks was in progress.

At the Bombay Port the principal schemes undertaken were the dredging of the main harbour channel, the dock expansion scheme and the Ballard Pier extension scheme. Dredging of the main harbour channel was intended to facilitate the entry into the port of deep draft oil tankers and other deep draft vessels. The scheme was to be completed in three phases, of which the first two were completed by 1964-65. The dock expansion scheme envisaged construction of four additional berths at the Alexandra Docks, deepening of three existing berths and provision of a new jetty for ferry and harbour launches. Contracts for the main civil engineering works were awarded. Contracts were also given out for the Ballard Pier extension scheme, which would provide an additional berth for passenger-cum-cargo traffic.

At the Madras Port the main scheme relating to the construction of the wet dock was completed. At Cochin Port, the construction of four additional berths was completed.

The main scheme at the Visakhapatnam Port provided for the construction of four additional berths and an ore loading plant to handle exports of iron ore to Japan from Kiriburu and Bailadilla ore deposits. For several reasons, progress on the scheme was behind schedule.

At Kandla Port, among other schemes, construction of a new berth was completed.

SHIPPING

Thanks to the availability of credit on suitable terms, there was a substantial addition to the shipping tonnage of the country during the first four years of the Third Plan. Against the target of a net addition of about 2.0 lakh grt in the Third Plan, the actual net addition made upto 1964-65 was 5.4 lakh grt. The Indian tonnage which stood at 8.57 lakh grt at the end of 1960-61 increased to about 14 lakh grt at the end of 1964-65; the coastal tonnage increased from 2.92 lakh grt to 3.95 lakh grt and the overseas tonnage from 5.65 lakh grt to 10.05 lakh grt. In addition, about 6.25 lakh grt of shipping tonnage was on order which was expected to materialise in the next two years or so.

Coastal traffic increased substantially after 1961, mainly because coal movement was stepped up and there was also a significant increase in the traffic in general cargo. The coal movement by coast which was 1.1 million tonnes in 1960-61 increased to about 2 million tonnes in 1962-63 and stood at 1.5 million tonnes in 1964-65.

INLAND WATER TRANSPORT

In the field of inland water transport, comparatively small progress was made. In February, 1965, the Government acquired a controlling interest in the equity capital of the Rivers Steam Navigation Company. A Directorate of Inland Water Transport was set up at the Centre to advise Central and State Governments on the development of inland water transport in the country. A higher Inland Water Transport Training scheme was introduced at the training centre, Calcutta. The construction of Pandu port was nearing completion.

CIVIL AIR TRANSPORT

At the end of 1964-65 the Civil Aviation Department maintained 82 aerodromes. The main achievements during the first four years of the Third Plan relating to works at aerodromes were completion of the new aerodrome at Raxual, development of Madras airport for the use of heavy inter-continental jet aircraft, construction of a new freight block at Bombay (Santa Cruz) and terminal buildings at Agra, Trivandrum, Baroda, Kumbhiram and Mohunbari aerodromes. In regard to aeronautical communications, the progress in the purchase and installation of equipment was slow on account of difficulties of foreign exchange.

The programme of Air India in the Third Plan provided for acquisition of four additional jet aircraft and construction of a jet engine workshop at Santa Cruz. The programme was completed by the end of 1964-65. The Corporation was able to increase the frequency of operation on a number of routes over the first four years of the Plan. The capacity of Air India in terms of available tonne kilometres increased from 162 million in 1960-61 to 329 million in 1964-65 i.e. by 103 per cent while traffic in terms of revenue tonne kilometres increased during this period from 76 million to 157 million i.e. by 101 per cent.

The Indian Airlines acquired during the first four years of the Third Plan ten Fokker Friendship aircraft, four second hand Viscounts and four Caravelle aircraft. The overall capacity of the Indian Airlines during the first four years increased from 113 million tonne kilometres in 1960-61 to 157 million tonne kilometres in 1964-65 i.e. by 39 per cent while the traffic in terms of revenue tonne kilometres increased during the period from 83 million to 109 million i.e. by about 31 per cent.

COMMUNICATIONS

Progress in the development programme of the Posts and Telegraphs Department has been satisfactory. The Plan provided for installation of 300,000 new telephone connections and opening of 1,200 new exchanges and 2,000 public call offices. Over the first four years of the Plan 303,000 new telephone connections were installed and 1,050 new exchanges and 1,387 public call offices were opened. Over the five years of the Third Plan the targets are likely to be exceeded and it is expected that it may be possible to provide 410,000 new connections and about 1,300 new exchanges. An important scheme included in the telecommunications programme relates to laying of coaxial cables on the trunk routes. The programme provided for completion of 6,150 kilometres of coaxial cables during the period of the Plan. In addition microwave radio links are programmed on a number of routes totalling in all 2,550 kilometres. Some of the sections were expected to be commissioned in the last year of the Third Plan. Difficulties were experienced on account of non-availability of cables in the first two years. It has been decided to expand the capacity of the Hindustan Cables from 3,300 kilometres per annum to 8,000 kilometres per annum and also to set up another unit for the manufacture of communication cables in the Fourth Plan.

The Indian Telephone Industries had programmed for production of 200,000 exchange lines (nominal) and 220,000 telephone instruments by 1965-66. During 1964-65, 155,000 exchange lines and 155,304 telephone instruments were manufactured. It was also decided to take up the production of crossbar equipment at the factory. By the middle of 1965-66 the

factory was expected to develop a capacity for manufacture of about 5,000 lines of crossbar equipment.

The Hindustan Teleprinters Ltd. manufactured 1,088 teleprinters during the year 1964-65. It has been decided to expand the capacity of the factory for meeting the requirements of Posts and Telegraphs, Defence and other users. It is expected that by 1966-67 the production will increase to 3,000 teleprinters.

BROADCASTING

The programme for broadcasting in the Third Plan provided, *inter alia*, for extension of medium wave services, strengthening of external services and provision of community listening sets. In view of the emergency, some adjustments were made in 1962 in the location of transmitters provided for in the programme. A scheme was formulated for supply of community listening sets in villages on an accelerated scale. Achievements during the first four years of the Plan included setting up of five additional radio stations and auxiliary centres and increase in the power of existing transmitters at eight centres. External services were strengthened by addition of two additional transmitters. Under the community listening scheme, about 27,000 new sets were supplied in rural areas. Steps were also taken for strengthening the television centre at Delhi in order to be able to provide a daily programme.

CHAPTER IX

SCIENTIFIC RESEARCH AND NATURAL RESOURCES

SCIENTIFIC AND INDUSTRIAL RESEARCH

During the period under review, the laboratories of the Department of Atomic Energy and the Council of Scientific and Industrial Research were engaged, *inter alia*, in solving problems of defence interest which were brought to the fore as a result of emergency. Special efforts were made to finish the projects of industrial importance. A brief account of the important research projects successfully completed is given below:

Department of Atomic Energy

The most important event during the period 1963—65 was undoubtedly the commissioning of the fuel re-processing plant. The plant was designed and built by Trombay Establishment staff and is one of the most advanced types of chemical plants operated entirely by remote control.

A pilot plant for producing reactor grade zirconium metal, primarily for sheathing fuel elements for power reactors, was designed, built and commissioned by Atomic Energy Establishment, Trombay.

An electron beam furnace, the first of its kind to be designed and built in India, went into operation. A freeze drying unit for blood plasma, designed and built at Trombay was installed at the Haffkine Institute, Bombay.

An induction plasma torch, also the first of its kind in India, was successfully developed and produces temperatures higher than can be obtained by chemical combustion. The torch can be put to a variety of purposes such as crystal growing, welding, cutting, chemical synthesis and spray coating.

Luminous compounds were developed as a substitute for imported luminous compounds by activating specially prepared zinc sulphide phosphors with promethium 147. Siltation studies using the radioactive tracer technique were carried out in the Hoogly River and in the ports of Karwar, Mormugao and Mangalore.

India entered the export market and supplied radioisotopes to various countries including Australia, Ceylon, France, Ghana, South Korea and Afghanistan. An electron spectrometer and associated electronic assemblies were sent to the Philippines under a joint International Atomic Energy Agency Research Project of South East Asian countries.

Tata Institute of Fundamental Research

During the year a CDC 3600—160 A computer system financed from a loan made available by the U.S. Agency for International Development,

was installed and commissioned as a national facility. This is rendering service to about 53 major research institutions/universities in the country. During March-April, 1965, an extensive international collaborative programme of high altitude balloon flights known as International Quiet Sun Year—Equatorial Expedition, was carried out from Hyderabad under the joint sponsorship of the Department of Atomic Energy and the US National Science Foundation.

Physical Research Laboratory, Ahmedabad

The laboratory continued its research programme in the field of cosmic rays, ionospheric physics and interplanetary space. The major activity of the laboratory was the development of pay loads for the rocket-borne experiments to be carried out from the Thumba Equatorial Rocket Launching Station.

High Altitude Laboratories

The facilities at the High Altitude Research Laboratory at Gulmarg in Jammu and Kashmir were utilised by the Atomic Energy Establishment, Physical Research Laboratory and a number of other research institutes and laboratories to conduct studies on time variation of cosmic rays, etc.

Tata Memorial Hospital

From detailed studies it was concluded that cancer of mouth and throat are very common in India and this was found to have a direct bearing on certain local habits and customs.

Space Research

India's Space Research Programme was launched at the Thumba Equatorial Rocket Launching Station with the successful launching of a Nike-Apache rocket with a sodium vapour payload. By the end of March, 1965, twenty more rockets with different types of payloads were successfully launched, including three rockets during November, 1964, as a part of an international project for simultaneous synoptic launchings of sounding rockets in various parts of the world to obtain simultaneous measurements of winds and turbulence in the ionosphere in the region between 80 and 200 kilometres above the earth.

Council of Scientific and Industrial Research

The Council had been pursuing its scientific and industrial research programme initiated during the Third Five Year Plan. The Regional Research Laboratory, Bhubaneswar and the Structural Engineering Research Institute, Roorkee, were the new additions to research institutions. Mafatlal Industrial and Technological Museum was established at Bombay. In addition to six Co-operative Research Associations dealing with textiles,

silk and art silk, rubber and paints, four research associations each for plywood, tea, wool and cement were established. The technical sections of the Council were strengthened and organised in separate units.

The Third Reviewing Committee under the Chairmanship of Dr. A. Ramaswamy Mudaliar reviewed the work and progress of the Council and recommended lines on which its activities should be directed in the national perspective.

A brief account of more important achievements of economic significance or having a vital bearing on defence is given below:

N. C. L. Poona.—Cashewnut shell liquid; an indigenous material, had been modified to yield many useful products, like cation exchange resin, surface active agent, heat transfer fluids and surface coatings, etc. Sodium tripoly phosphate had been successfully used for removing uranium impurities from rare earths.

N. P. L., New Delhi.—Know-how had been developed for the manufacture of many electronic components like silver-mica capacitors, ceramic capacitors, carbon and ceramic rods, soft and hard ferrites and piezoelectric ceramics.

C. F. R. L. Jeolgora.—Based on the process developed at the Institute, a 10 ton/hr. briquetting plant had been installed in Srinagar for briquetting of locally occurring lignite. It would provide acceptable domestic fuel for the people of Kashmir. In a two-step carbonization process, metallurgical coke had been obtained from non-coking coals.

C. G. C. R. I., Calcutta.—The entire demand of the country for optical glass, including that of defence establishments, was met from the production plant of the Institute. Cerium stabilised lead glass blocks were produced for use in Atomic Energy hot cells. Mica waste has been processed to yield many products like wet ground mica, mica insulating bricks, mica paints and mica greases.

C.F.T.R.I., Mysore.—A variety of pre-cooked, dehydrated, compressed and ready-to-eat products were developed particularly for defence requirements.

N. M. L., Jamshedpur.—A coinage alloy based on aluminium—magnesium was developed in collaboration with the Government of India Mint, Bombay.

C. D. R. I., Lucknow.—Talazoline was produced on pilot plant scale to meet the defence requirements.

C. R. R. I., New Delhi.—The 'reactive surkhi' and 'lime reactive surkhi' manufactured on pilot plant scale were utilised with advantage in the construction of buildings.

C. E. C. R. I., Karaikudi.—Porous carbon electrodes had been developed for air depolarised cells required for railways. The material was imported so far. A 1650 amp cell for producing sodium metal had been designed and worked continuously.

C. L. R. I., Madras.—Process had been developed for the manufacture of dry ready-to-wet sausage casings from mammalian intestines.

C. B. R. I., Roorkee.—Methods were worked out for the manufacture of good bricks from black cotton soil, building lime from sugar 'press mud' and expansion joint filler from C.N.S.L. and coconut pitch.

C. E. E. R. I., Pilani.—A prototype of television receiving set had been successfully developed. Four-point resistivity probes had been manufactured and supplied to research institutes and universities.

C. S. & M. C. R. I., Bhavnagar.—Pilot plants for the production of alginic acid and agar—agar from marine algae had been established and operated.

R. R. L., Hyderabad.—Know-how for the production of hydrazine sulphate and hydrazine hydrate, used in the manufacture of antitubercular medicines, was developed and released to industry.

R. R. L., Jammu.—A method for isolation of solasodine from solanum aviculare and its production on a large scale was developed.

C. M. E. R. I., Durgapur.—A flake ice machine incorporating advanced techniques had been designed and developed.

C. P. H. E. R. I., Nagpur.—An economical double pot system had been developed for continuous disinfection of well water.

C. S. I. O., Chandigarh.—Six optical systems had been designed and released to industry for exploitation.

I. I. P., Dehra Dun.—Liquid paraffin had been prepared from used turbine oil.

R. R. L., Jorhat.—A plywood adhesive having specifications similar to the imported urea—formaldehyde resin had been prepared.

A. T. I. R. A., Ahmedabad.—The notable achievement was the development of a commercial process for producing drip dry or wash and wear cotton fabrics. A simple prototype doffing machine suitable for high production work had been made.

S.A.S.M.I.R.A., Bombay.—Nylon bulletproof cloth had been developed for defence personnel in front line of attack, for use as inner vests.

Ministry of Education (Scientific Departments)

The Survey of India was allotted Rs. 80 lakhs for the establishment of research development cells in geodesy, cartography and photogrammetry, but the schemes have not yet been implemented. During the Third Plan four new schemes were sanctioned costing Rs. 5.8 crores. Of these, the first two viz., expansion and mechanisation of Survey of India and

strengthening of training facilities, have made some progress while the last two viz., pre-investment surveying and mapping with assistance from U.N.S.F. and the project for setting up a photo-interpretation institute, had just started.

The Botanical Survey of India had established a Central Regional Station at Allahabad and a second orchidarium at Coimbatore while the Zoological Survey of India had set up divisions in ecology, wild life conservation and paleozoology.

The Anthropological Survey of India had started socio-cultural and anthropometric surveys. A sum of Rs. 10 lakhs was allocated to the National Atlas Organisation for the preparation of National Atlas in the Third Plan period.

Vigyan Mandir Scheme, aimed at introducing science to village population had not made much progress and lately it had been transferred to State Governments. The research institutions aided by the Ministry continued their research activities during the period under review.

NATURAL RESOURCES

A number of useful studies were carried out during the years 1963-64 and 1964-65 under the aegis of the Committee on Natural Resources which was set up in December, 1961, to assess the available information regarding the natural resources of the country and to identify gaps in it, and to arrange for the formulation of co-ordinated programmes for survey of natural resources in different parts of the country. A brief account of these studies is given below:

Land Resources.—An important study undertaken by the Committee was a review of organisations concerned with the survey of natural resources. The other studies finished during the year 1963-64 related to wastelands (including saline, alkali and water-logged land), cotton, coconut and groundnut, utilisation of urban wastes and survey and utilisation of agricultural and industrial by-products and wastes. Studies were also completed during 1964-65 on land resources, arecanut and cashewnut. Other studies which were initiated during this period were survey and reclamation of ravines in India, soil conservation measures in catchment areas (above dams of river-valley projects) and low unit yield of rice and wheat.

Forest Resources.—The Committee undertook during 1964-65 studies on forest raw-materials for pulp paper, newsprint and other forest-based industries, fuelwood trends and prospects, and wild life preservation.

Mineral Resources.—The Studies on mineral resources which were taken up during the period 1963—65 were 'Investigation of Copper, Lead, Zinc and Antimony-bearing Regions of India', 'Coal Mine Fires, Subsidence and Problems of Mine Working', 'Competitive Position of Major Indian Export Minerals in World Markets', 'Aerial Photographic and Aero-magnetic Surveys of the Promising Mineralised Areas', 'Titanium' 'Phosphate

Deposits of India' and 'Bauxite Deposits of India'. Out of these, the first mentioned was completed during 1964-65, the other studies were in progress.

Water Resources.—The Committee also took up studies of ground water resources, use of water for domestic and industrial purposes and control of water pollution.

Energy Resources.—An Energy Survey Committee was appointed by the Government of India in 1963 to assess the energy resources from various sources viz., coal, oil, electricity, non-commercial fuels, etc. and to indicate a possible pattern of a co-ordinated development programme to meet the energy demand of the country. The report of the Committee was nearly ready at the end of 1964-65.

CHAPTER X

EDUCATION

The most important feature of the period under review was the expansion of educational facilities at all stages, particularly in the field of secondary education and technical education. There was also a significant increase in enrolment in the universities and colleges. In spite of the considerable expansion that has taken place, the disparity in the education of boys and girls has continued at all stages, so have the regional disparities in the availability of educational facilities as also the disparity between rural and urban areas.

The incoming tide of students in schools accompanied by a shortage of trained teachers and buildings had brought about a general deterioration in the quality of education reflected in the overcrowding of classes and unfavourable teacher-pupil ratios. Even the expansion programme of primary education had made inadequate progress and a shortfall, therefore, was anticipated in the Third Plan target. At the secondary stage, though actual enrolment had exceeded the targets, the quality had suffered as in the case of primary education. The expansion of higher education without relating it to the manpower requirements of the country, had created imbalances which are reflected in the increase in educated unemployment on the one hand and shortages of qualified personnel in certain categories on the other. As regards technical education, shortages of teachers and imported equipment had together contributed to a lowering of the standard of education. The measures so far taken to remove these deficiencies and weaknesses in both general and technical education had not yet produced the desired results. A careful balance has to be maintained between general and technical education and in the field of general education between primary and higher stages.

Outlays

Out of total plan provision of Rs. 560 crores for general and technical education, the expenditure during four years is estimated at Rs. 418 crores or 74.7 per cent of the total. The details are given in the following Table. It will be seen that relatively there was an excess expenditure under scholarships and miscellaneous programmes* in fact under these

* The sub head Miscellaneous covers physical education, NCC, ACC, Sainik Schools, languages, education of the economically backward classes, educational development of Mizo districts (Assam) and Uttar Khand (Uttar Pradesh) etc.

two sub-heads the total plan allocations were exceeded by the year 1964-65. The proportion of expenditure incurred in the four years under elementary education, social education and cultural programmes would be less than the average for general education as a whole. For technical education the proportion was lower than in the case of general education. The excess expenditure under scholarships and miscellaneous programmes was mainly due to the introduction of certain new schemes such as free education to economically backward classes, loan scholarships and increased outlays for some of the schemes included in the Third Plan, such as NCC and improvement of emoluments of teachers.

*Progress of expenditure under Education
Centre and State/Union Territories*

(1961—65)

(Rs. crores)

Sub-head	Third Plan Outlay 1961-66	1961-62 (Actuals)	1962-63 (Actuals)	1963-64 (Actuals)	1964-65 (Likely expen- diture)	1961--65	
						Total expendi- ture	Col. 7 as percen- tage of Col. 2
1	2	3	4	5	6	7	8
Elementary Education . . .	237.00	20.88	28.02	38.40	48.59	135.89	65.6
Secondary Education . . .	81.00	10.92	16.39	19.65	26.34	73.30	90.5
University Education . . .	77.90	13.50	15.30	15.03	18.99	62.82	80.6
Social Education	6.00	0.46	0.46	0.45	0.60	1.97	32.8
Miscellaneous	23.00	4.81	5.65	9.66	15.43	35.55	154.6
Cultural Programmes . . .	10.00	1.18	1.24	1.16	1.42	5.00	50.0
Scholarships (Centre) . . .	4.10	0.13	0.30	1.09	3.06	4.58	111.7
N.C.E.R. & T.	9.00	0.29	1.18	1.19	1.52	4.18	46.4
TOTAL—General Education .	418.00	52.17	68.54	86.63	115.95	323.29	77.3
Technical Education	142.00	18.57	21.71	24.46	30.32	95.06	66.9
GRAND TOTAL	560.00	70.74	90.25	111.09	146.27	418.35	74.7

Note—The figures of expenditure for the years 1961-62 to 1964-65 are exclusive of education of the handicapped. However, the outlay shown in Column 2 under "Miscellaneous" includes the provision under this sub-head.

GENERAL EDUCATION

The Third Plan targets of additional enrolment at the primary, middle and secondary stages and the achievements in the first four years are indicated in the table below:

Additional Enrolment at the Elementary and Secondary Stages
(1961—65)

Stage	(enrolment in lakhs)								
	1961-66 tar- gets	1961-62 (ac- tuals)	1962-63 ac- tuals	1963-64 ac- tuals	1964-65		1961-65		
					target	anti- cipat'd	total	Col. 8 as % of Col. 2	
	1	2	3	4	5	6	7	8	9
Classes I—V (Primary)	153.0	33.77	28.79	30.63	34.27	33.08	131.27	85.8	
Classes VI—VIII (Middle)	34.6	8.96	7.49	7.77	9.18	8.69	32.91	95.1	
Classes IX—XI (Higher Secondary)	16.5	4.55	4.36	5.45	4.69	4.57	18.93	114.7	

As against the target for 1964-65 to enrol 34.27 lakhs additional children at the primary stage, only 33.08 lakhs were expected to be enrolled. This was mainly because of the lower achievement in the enrolment of girls. As the number of boys enrolled would be higher than the target, the disparity already existing between boys and girls would be enhanced. The increase in a single year, however, was not reflected in any perceptible change in the proportion of boys and girls at the primary stage. The major shortfall in the achievement of enrolment targets in classes I—V would occur in seven States, including Andhra Pradesh, Assam, Bihar, Madhya Pradesh, Orissa, Rajasthan and West Bengal. In regard to enrolment of girls, while the targets would be exceeded in Kerala, Maharashtra, Punjab and Uttar Pradesh and just about achieved in Jammu and Kashmir, Madras and Mysore, there would be a substantial shortfall in the remaining eight States.

The position in regard to the enrolment for boys and girls at the three stages is indicated in the table below. The figures in brackets indicate percentages to total.

Year	(enrolment in lakhs)					
	Classes I—V		Classes VI—VIII		Classes IX—XI	
	Boys	Girls	Boys	Girls	Boys	Girls
1	2	3	4	5	6	7
1960-61	235.9 (67)	114.0 (33)	50.7 (76)	16.3 (24)	23.4 (81)	5.5 (19)
1963-64	295.0 (66)	153.2 (34)	67.7 (74)	23.5 (26)	34.3 (79)	9.0 (21)
1964-65	313.3 (65)	168.0 (35)	74.0 (74)	26.0 (26)	37.7 (79)	10.2 (21)
Plan target (1965-66)	301.2 (61)	195.2 (39)	70.0 (72)	27.5 (23)	35.7 (78)	9.9 (20)

It will be seen that some progress had been achieved during the first four years in reducing the disparity between boys and girls' education at all the three stages. The gap between enrolment of boys and girls was narrower at the primary stage, however, the progress made during the four years was slightly better at the secondary stage.

Elementary Education

In 1963-64 the Central Government sanctioned accelerated Central assistance of Rs. 2 crores for the appointment of additional teachers in elementary schools on a matching basis in order to provide conditions which will help sustain the momentum of expansion created and to keep the children in schools. A recent review of the progress of elementary education has revealed that while in some States targets would be exceeded, in other States there would be a shortfall. As a consequence, the regional imbalances in the matter of enrolment at the elementary stage would be accentuated. It was noted that the State Governments had made lesser provision for elementary education programmes within the Education Plan as a whole or had diverted funds for elementary education to other sub-heads.

To improve the quality of education, State Institutes of Education were set up in all the States (except Nagaland) with cent per cent Central assistance, by the end of 1964-65. These Institutes are expected to conduct training courses and research, publish educational literature and reading material and provide extension services to the elementary schools.

The mid-day meals programme which was initiated during the Second Five-Year Plan to encourage school attendance was in operation in eight States and covered about 8.5 million children. Apart from the CARE, the UNICEF and the Catholic Relief Services donated free milk powder.

The West German Government agreed to give as free gift, three printing presses for printing text-books for school children. These are being set up at Bhubaneswar, Mysore and Chandigarh. As in earlier years, about 10,000 tonnes of paper was received as gift from Sweden and Australia to provide free text books to needy children.

Further efforts were made for improvement of emoluments and service conditions of teachers during the period under review. Almost all the States have revised the pay scales of teachers. In U.P. and Bihar, however, there is still considerable difference in the salary scales of teachers employed in Government and non-government schools. The State Governments were advised to extend the triple-benefit scheme to teachers working in non-government schools.

Secondary Education

The increase in the number of secondary schools and of enrolment had gone so much beyond expectations that the targets had to be revised in an effort to cope with the expanding enrolment, by diverting funds from

the schemes designed for qualitative improvement of education. The Third Plan appraisal carried out in 1963-64 indicated that the original estimate of additional enrolment at the secondary stage might be revised from 16.5 lakhs to about 23 lakhs. By the end of 1964-65, the additional enrolment was of the order of 19 lakhs.

During 1964-65, a Centrally sponsored scheme was introduced under which the States are assisted to improve science education and to provide school libraries in the secondary schools. It was also envisaged to have a State Unit of Science Education in each State for the promotion and improvement of science teaching in schools at all stages. In 1964-65, 100 schools were selected for the establishment of science clubs. Steps were also taken to prepare a programme of reorganising and expanding the teaching of general science for classes I to XI in the schools, in cooperation with UNICEF.

The Centrally sponsored scheme of strengthening multipurpose schools introduced about three years back has not made much headway. By the year 1964-65, only 13 experimental multipurpose schools in the States/ Union Territories had been opened.

University Education

Student enrolment in all subjects in the universities and colleges went up to 15.28 lakhs in 1964-65, recording an increase of 10.4 per cent over the previous year. There has been rapid expansion of facilities for Arts, Science and Commerce courses at the collegiate and university stage. The enrolment in these faculties, which stood at 7.32 lakhs (excluding intermediate colleges) in 1960-61 rose to 10.83 lakhs in 1964-65 showing an annual increase of about 12 per cent over the last four years. The number of colleges for Arts, Science and Commerce, rose from 1,050 to 1,615 during the same period. Private colleges preponderated accounting for about 76 per cent of the total. The number of universities, which was 45 in 1960-61 increased to 62 (excluding 9 'deemed') by the year 1964-65. In the latter year alone 200 new colleges and seven universities were established.

During the last five years there had been some increase in the percentage of enrolment in science and commerce and to a lesser extent in engineering and technology, medicine and agriculture. The faculties of arts (including oriental learning) and law showed a decline. There was also some increase in the number of women students at the University stage—the percentage rising from 17.3 in 1960-61 to 19.5 in 1964-65.

For general improvement and coordination of standards of higher education, the University Grants Commission has been giving grants for strengthening of teaching staff, purchase of books and of scientific equipment, extension of library and laboratory facilities, construction of hostels and staff quarters, etc. To encourage the pursuit of knowledge and to improve the

quality of post-graduate education and research, 26 University Departments were selected to be developed as centres of advanced studies. These centres function on an all-India basis and provide facilities to scholars of outstanding ability for advanced study and research. The expenditure incurred for this purpose during 1964-65 was Rs. 33 lakhs as compared to Rs. 11 lakhs in the previous year.

Special attention was given to the development of affiliated colleges since they account for about 85 per cent of the total enrolment at the university stage. Assistance was given during the year 1964-65 to 66 colleges for development of humanities and to 82 colleges for the development of science education and research.

In order to provide opportunities to teachers to acquaint themselves with current developments in their respective fields of knowledge and modern curricula and opportunities for exchange of ideas, summer schools and seminars were organised. With a view to attracting and retaining capable teachers in universities and colleges, assistance was provided for the improvement of salary scales of college and university teachers. About 4,000 teachers working in 461 colleges have benefited from this scheme since its inception about ten years back.

Fourteen rural institutes have so far been established to provide higher education to the rural youth and inculcate in them a spirit of service to community besides training them for careers in programmes of rural development. The total enrolment in these institutes increased from 2,506 to 3,214 and the outturn from 538 to 901 between the years 1961 and 1964. The need for reviewing the curriculum of studies of the rural institutes has been felt specially from the viewpoint of giving a better chance of employment to the diploma holders and to enable them to seek admission to various university courses.

TECHNICAL EDUCATION

The progress of expansion of facilities for degree and diploma courses in engineering and technology during the first four years of the Third Plan is shown in the following Table.

Expansion of Technical Education

Year	Degree			Diploma		
	Institu- tions	Admission capacity	Out- turn	Institu- tions	Admission capacity	Out- turn
1	2	3	4	5	6	7
1960-61	102	13,820	5,700	195	25,800	7,970
1961-62	111	15,850	7,030	209	27,670	10,350
1962-63	114	17,070	8,400	231	30,830	12,050
1963-64	118	21,040	9,100	248	38,710	12,940
1964-65	131	23,760	9,460	264	46,240	15,200
Plan target (1965-66)	117	19,140	12,000	263	37,390	19,000

The admission capacity for the year 1963-64 includes 3,750 additional seats for degree courses and 5,360 for diploma courses in the existing institutions sanctioned under an emergency scheme approved by the Technical Manpower Committee of the Cabinet. In addition to the number of polytechnics given in the above table, 15 polytechnics exclusively for girls with an annual admission capacity of 1,540 students have started functioning against the Third Plan target of 22 institutions with an annual intake of 1960 girls.

There was a heavy shortfall in expenditure under technical education, as compared to the budget estimates during the first three years of the Plan. The position in this respect, however, improved considerably during 1964-65. As a result of the rapid expansion of facilities, without proportionate increase in the provision of physical facilities, technical institutions were faced with shortages of buildings, hostels, teaching staff and essential equipments. According to an assessment of progress made recently, the shortages were more acute of hostel accommodation and equipments. The slow progress of construction activities was due to the general ban on new construction imposed in the wake of the national emergency. The programme of import of equipment was upset on account of foreign exchange difficulties. It is estimated that allotment of foreign exchange was around 23 per cent of the requirements during the four-year period, 1961-65. Most of the State Governments have agreed to implement the Centrally sponsored scheme for revision of pay scales for teachers in the technical institutions. The award of fellowships to attract fresh graduates to the teaching profession has not produced encouraging results. Out of 278 teacher-trainees who were selected for fellowships, only half of the total number joined the training programme. The question of making these fellowships more attractive is under consideration. A scheme has also been formulated for setting-up four regional centres for training of teachers for polytechnics. Under the programme for expansion of facilities for specialised studies, the National Institute for Training in Industrial Engineering has already started functioning at Bombay. The Institutes of Management at Ahmedabad and Calcutta have completed the arrangements to start the first post-graduate course in Business Administration from the next academic session.

Development of Languages

Additional provision to the extent of about one crore rupees was made in 1964-65 for assistance to voluntary organisations, appointment of Hindi teachers and award of scholarships for studies in Hindi. During 1964-65, three new Hindi teachers' training colleges were set up in Mysore, Andhra Pradesh and West Bengal. The programme of preparation, translation and publication of standard works in Hindi was continued with added vigour.

Physical Education

A Committee under the Chairmanship of Dr. H. N. Kunzru was set up in 1959 to make recommendations on the coordination and integration of schemes in the fields of physical education, recreation and youth welfare.

The Committee submitted its report in December, 1963. It has recommended that at the school stage there should be an integrated programme woven into the fabric of educational system consisting broadly of a basic curriculum compulsory for all, and also an optional curriculum. This recommendation has been accepted by the Central Government. Under the new programme known as National Fitness Corps, about 6,500 National Discipline Scheme Instructors are expected to be in position by the end of 1964-65. In addition, 5,000 of the in-service physical education teachers would receive reorientation training.

Under the scheme of Labour and Social Service and Social Service Camps, a large number of camps were organised by the Bharat Sewak Samaj, Directorate of NCC, Bharat Scouts and Guides and the State Governments. The Kunzru Committee has recommended that the educational institutions should be fully responsible for organising and running labour and social service camps.

Scholarships

The National Scholarship Scheme for post-matric education was instituted in 1961-62 and the target was to provide 2,400 scholarships annually. Subsequently with the amalgamation of the schemes of post-graduate scholarships for humanities and sciences and additional awards for Nagaland, the total number of scholarships was raised to 2,650. During the year 1964-65, all the sanctioned scholarships were awarded.

Under the scheme for award of scholarships to the meritorious children of primary and secondary school teachers for post-matric studies, started about four years back, 500 scholarships are awarded each year. In 1964-65, all the scholarships were utilised.

The national loan scholarship scheme which was introduced in 1963-64, provides for award of interest free loan scholarships to meritorious and needy students, tenable for the completion of the course. A special privilege is extended to those loanees who will join the teaching profession after completing their studies. There was poor response for awards in the first year due to the ignorance of the eligible candidates and to overcome this, the State Governments were asked to adopt remedial measures. As a result of the steps taken, the response has considerably improved and about 20,000 scholarships were awarded during 1964-65.

Social Education

A sum of Rs. 6.2 crores was provided in the Third Plan under Social Education against which only Rs. 2 crores were spent in the first four years on such items as development of library service in Delhi, National Book Trust and training of social education workers. A substantial shortfall in expenditure is indicated under this sub-head. This is explained by the fact that the main provision for social education is included in the Community Development budget and secondly the impact of emergency in the field of general education was pronounced on activities concerning cultural programmes and social education.

CHAPTER XI

HEALTH AND WATER SUPPLY

The broad objectives laid for the Third Five Year Plan in respect of health and family planning programmes were to expand health services, to bring about progressive improvement in health of the people and thus to create conditions favourable to greater efficiency and production. An increased emphasis was to be laid on preventive public health services. While the control of communicable diseases and improvement of environmental sanitation, especially water supply would continue to receive due attention, the Plan accorded very high priority to family planning.

The following table shows the Plan outlay under different heads, excluding water supply and sanitation and the actual expenditure during the period 1961—65 :

(Rs. crores)						
Programme	Plan Outlay (1961—66)	Expenditure				Total (1961 65)
		1961-62	1962-63	1963-64	1964-65	
Family Planning	27.00	1.38	2.69	3.40	5.79	13.26
Medical Care	61.70	8.10	8.56	8.32	12.91	37.89
Control of Communicable Diseases	70.50	17.83	20.58	20.85	20.70	79.96
Education, Training and Research	56.30	8.72	11.39	13.15	16.85	50.11
Other schemes (including I.S.M., etc.)	21.00	2.19	1.97	2.31	2.97	9.44
TOTAL	236.50	38.22	45.19	48.03	59.22	190.66

NOTE : The details regarding physical targets and achievements are given in Annexure I.

As against the total Third Plan provision of Rs. 236.50 crores, the actual expenditure for the first four years of the Plan was about Rs. 190.66 crores which works out to about 81 per cent of the total Plan outlay. There has been progressive increase of expenditure during this period.

During the two years under review, good progress had been made in respect of various health programmes. Measures adopted for the eradication of malaria and smallpox in recent years yielded beneficial results. Institutional facilities for medical care had shown a marked expansion. As against the Third Plan target of 75 medical colleges, 81 medical colleges were established by the end of 1964-65 and their annual intake increased to 10,277 as against the Plan target of 8,000.

Although there had been considerable development in the field of health and in the related services during recent years, certain deficiencies were easily discernable. There was a paucity of well-equipped modern

hospitals, doctors and nurses in relation to the needs of the population especially in the rural areas. The concentration of doctors in many urban areas continued in contrast to the rural areas where medical provision lagged behind that in urban areas. Progress in the control of some of the communicable diseases, such as tuberculosis was hampered on account of shortage of medical personnel and modern equipment.

Family Planning

In view of the great need for stabilising the growth of population, family planning was undertaken as a key programme. From a modest beginning in the First Five Year Plan, the programme had made a steady progress, particularly in the urban areas. The financial provision under this head increased to about Rs. 27 crores in the Third Five Year Plan as compared to Rs. 5 crores in the Second Plan and Rs. 65 lakhs in the First Plan. It was clear at the very outset that money alone could not help restrict the rate of growth of population and it would be necessary to create a dynamic and flexible organisation to popularise family planning. In the Third Five Year Plan, a four-point programme of action to implement family planning programmes had been suggested, comprising of education and motivation, provision of services, training and research. Administrative and institutional arrangements had to be made at the Centre and in the States in order to establish a network of educational and extension services. Efforts were also necessary to enlist the cooperation of voluntary agencies and private doctors and midwives in this complex task.

The revised programme envisaged the strengthening of the primary health centres by the integration of maternity and other services to constitute a family welfare planning unit. By the end of 1964-65, 15,808 family planning advice and contraceptive supply centres had been established, including 13,902 centres in the rural areas. Out of total 15,808 centres, 7,701 were regular family welfare planning centres with full-time staff and the remaining 8,107 contraceptive distribution centres in the existing medical institutions and with voluntary workers and/or depot holders. Regional officers had been appointed to assist the State Governments in implementing the family planning programmes. For training programme, 16 centres had been started in various States and besides training facilities had been established at the All-India Institute of Hygiene and Public Health, Calcutta. The Central Family Planning Institute, New Delhi has been strengthened to function as a major technical source for training, demonstration and research. Training and research facilities in demographic, communication and biological fields have also been developed.

About 150 sterilisation units had been established in different parts of the country and in the coming years it is proposed to provide one sterilisation unit in every district. The total number (cumulative) of sterilisation operations performed till March, 1965 was 848,532. Licences for the

manufacture of rubber contraceptives have been issued to more than a dozen firms. Chemical contraceptives manufactured in the country had been tested and found satisfactory. The recent introduction of IUCD (commonly described as loop) had evoked encouraging response from some sections of the population. It was expected to achieve the target of 10 lakh IUCD insertions by the end of March, 1966.

To sum up, the family planning programme has expanded during recent years. It raises many complex issues and visible results cannot be achieved over a short period. The initial resistance has worn off but real success can come only after the programme catches on with the vast rural population. The crucial task is to bring about a change in the climate of public opinion and basic attitudes that every married couple will accept birth control as a duty to themselves, to their family and to the community.

Primary Health Centres, Hospitals and Dispensaries

Institutional facilities for medical care in both rural and urban areas had shown considerable expansion during the two years under review. The number of hospitals and dispensaries increased from 12,600 in 1960-61 to 14,562 by the end of December, 1964. It was expected that the Third Five-Year Plan target of 14,600 hospitals and dispensaries and 240,100 beds would be achieved.

The primary health centres constitute focal points in the rural areas for providing preventive and curative health services in an integrated form. The main services provided by these centres are medical care, maternity and child health services, health education, control of communicable diseases, environmental sanitation, collection of vital statistics and family planning. The objective had been to establish one primary health centre in each Block or a total number of 5,200 centres all over the country by the end of the Third Five-Year Plan. By March, 1965, a total number of 4,500 centres had been established. It was important that the Plan target should be fulfilled since the success of health programmes as a whole would depend to a large extent on the proper functioning of these centres. The staffing presents the main difficulty in increasing the number of primary health centres. It is reported that 466 centres out of the total 4,500 or more than one-tenth are without doctors. The shortage of doctors and other medical personnel is attributed to lack of incentives and inadequate and unsuitable housing and poor communications in the rural areas. The sub-centres of primary health centres which cater for maternity and child health as well as family planning programme, have also to be brought up to the mark.

Control of Communicable Diseases

The two major programmes of eradication of malaria and smallpox had not progressed, according to schedule, and were likely to spillover into the Fourth Plan.

Malaria.—The National Malaria Eradication Programme launched in April, 1958 covers three operational phases, viz., the attack phase (spraying), consolidation (during which surveillance starts) and maintenance. Out of 392 units established so far (excluding 1.2 units allotted to Srinagar) 208.98 units would be in “consolidation” phase during 1964-65 and 79.01 in the “maintenance” phase. The remaining 104.01 would be in the “attack” phase. Based on the recommendations of Appraisal Teams which visited most of the States early in 1964, spraying was withdrawn from certain unit areas with a population of 72 million and they entered into the “consolidation” phase.

Smallpox.—Under the Smallpox Eradication Programme, which was started in 1962, 154 eradication units were functioning in various parts of the country. It was estimated that by the end of 1964 about 66 per cent of the population had been vaccinated. The overall coverage reached by the end of March, 1965 was about 78 per cent. In some States where a higher coverage had been obtained, efforts were being made to push it further up. The net result of the efforts made so far had been a lowering of the incidence of the disease. It was expected that the “attack” phase of the programme would be completed by the end of 1965-66. Steps have to be taken to consolidate these gains by an extensive programme of health education and more systematic programme of vaccination, both primary and re-vaccination.

Trachoma.—A campaign was launched in March, 1963 against trachoma which is a serious public health problem in Punjab, Rajasthan, northern Gujarat and parts of Uttar Pradesh and Bihar. The programme was also continued on a limited scale as part of a Centrally assisted scheme, in certain districts of Jammu and Kashmir and Madhya Pradesh where the incidence of trachoma was more than 50 per cent. Fifty control units were in operation during 1963-64 and 6 more were established in Uttar Pradesh, bringing the total to 56 at the end of 1964-65. More voluntary organizations with experience of eye work are being encouraged and assisted to take up this work.

Tuberculosis.—There were 425 T.B. clinics at the end of 1964-65, as compared to 220 in 1960-61. Of these 425 clinics, 126 were adequately staffed and properly equipped to undertake T.B. Control programme. The aim was to establish at least one T.B. centre in every district by the end of the Third Plan. Free drugs are being supplied for domiciliary treatment of tuberculosis. Recent sample surveys have indicated that 1.5 per cent of the population was suffering from tuberculosis; of these 25 per cent were open cases with tubercule bacilli in their sputum. The number of T.B. beds increased from 26,500 in 1960-61 to 34,517 by the end of 1964.

Leprosy.—The Leprosy Control Programme was started about ten years back. The number of leprosy cases in the country was estimated at 25 lakhs. About 291 million persons were living in the endemic areas. There were

170 leprosy control units and 586 SET (Survey, Education and Treatment) centres in operation during 1964-65. It was expected that by the end of Third Plan, 178 leprosy control units and 717 SET centres and 10 training centres for para-medical workers would be established to cover a population of about 50 millions. Good progress in leprosy control was reported from Andhra Pradesh and Madras which accounted for about half of the total number of such cases. However, in some other States, which were also affected by the disease, the need of leprosy control measures was not yet sufficiently appreciated.

Venereal Diseases.—Little progress had been made in the establishment of V.D. clinics since the danger of the infection did not seem to have been adequately realised. This is clear from the fact that only 32 clinics have been established during the first four years of the Third Plan.

Goitre.—Goitre is prevalent in the whole of northern sub-mountainous region of India. Good progress has been made in the control of this disease mainly through the production and supply of iodized salt in place of ordinary salt. The cost of iodisation is met by the Government. The capacity for production of iodized salt which was about 28,040 tonnes was to be further expanded. It was expected that during the Third Plan period the incidence of the disease would be reduced to small proportions in the main endemic areas.

Medical Education and Training Programmes

The number of medical colleges rose from 79 in 1963-64 to 81 in 1964-65 as against the Third Plan target of 75 and the number was expected to increase to 87 by the end of the Third Plan period. Concurrently, the annual admissions into the medical colleges rose to 10,277 in 1964 and was expected to increase further to 10,625 by the end of the Third Plan as against the target of 8,000. Twenty-one post-graduate Departments had been established in the existing medical colleges during the first four years of the Third Plan. A new post-graduate institute was to be started at Pondicherry. It was also proposed to start post-graduate research training institutes at Hyderabad and Bombay in addition to the post-graduate institutes functioning at Chandigarh, Calcutta and New Delhi.

During the period under review, stress was laid on the quality of medical education and maintenance of proper standards of admissions into the medical colleges. Planning Commission had advised the State Governments and Union Territory Administrations against the opening of new medical colleges unless proper equipment and adequately qualified staff could be provided. The Indian Medical Council Act had been amended in that context and the Council had been empowered to inspect the teaching practice in the individual medical institutions.

Training of Nurses.—Training facilities for auxiliary nurse-midwives who would ultimately replace midwives in primary health units and elsewhere were considerably stepped up in the Third Plan. The number of training schools for nurses increased from 202 at the end of 1961 to 222 in March, 1964. The number of students under training rose from 11,433 to 15,084 during the same period. It was expected that by the end of Third Plan period, about 45,000 trained nurses would be available.

Indigenous Systems of Medicine, etc.—A provision of Rs. 9·8 crores was made in the Third Plan for the development of indigenous systems of medicine, homoeopathy and nature cure. During the period under review, a post-graduate training centre in Indian Medicine was established at Banaras Hindu University. The Department of History of Medicine in the Osmania Medical College at Hyderabad was upgraded and a Panchakarma Research Unit was established at Bombay. An important development during 1964-65 was the implementation of the composite drug research scheme formulated by the Central Council of Ayurvedic Research and the Indian Council of Medical Research. In 1962 Government of India constituted a Shuddha Ayurvedic Education Committee. The Committee's report was considered by the Central Council of Health and the curriculum and syllabus formulated by the Committee were recommended for adoption. The Council also accepted the recommendation regarding the setting up of an Ayurvedic Board to advise the Central and State Governments on matters relating to Ayurvedic education. A committee which was recently appointed to formulate Unani syllabus and curriculum of studies submitted its report. The Ayurvedic Pharmacopoeia Committee was at work; meanwhile a Unani Pharmacopoeia Committee had also been appointed.

Drug Control.—The Drugs Act was amended so as to bring cosmetics, Ayurvedic, Unani and Homoeopathic medicines within its purview. The provisions in the legislation were strengthened so as to make them more deterrent and difficult to evade. The Drugs and Cosmetics (Amendment) Act, 1964 was brought into force from 27th July, 1964.

Implementation of Health Programmes

One of the principal bottlenecks in the expansion of health services relates to lack of resource planning with reference to individual projects. This was evidenced in the lack of equipment and of certain essential drugs and the difficulty in the procurement of building materials. In the case of Centrally sponsored schemes, difficulties were also experienced by some States in providing their share of funds. There has been a tendency in some States to divert funds from health schemes to other heads of development. The benefits of institutional facilities for medical care established in the rural areas were postponed in many cases on account of delays in recruiting staff. This was partly due to lack of adequate scales of pay and of suitable working conditions especially in the matter of residential accommodation.

WATER SUPPLY AND SANITATION

Safe and sufficient supplies of water constitute an important measure for ensuring proper environmental hygiene and are, therefore, necessary for economic and social development. The provision of community water supply and sewerage facilities should be considered together since they form stages of an essential public service. In the Third Plan, Rs. 105.30 crores were allocated for water supply and sanitation schemes under the National Water Supply and Sanitation Programmes, comprising Rs. 89.30 crores for urban schemes and Rs. 16.00 crores for rural schemes.

Urban Water Supply and Sanitation

According to the 1961 Census, out of a total of 2,690 towns, the number of towns which had a water system either in operation or under implementation was about 670. Only about one-third of the total urban population (34 per cent) had adequate water supply facilities. As regards urban sewerage facilities, only 160 towns had such facilities either in operation or under implementation; most of the former being restricted to limited areas. Only about one-fifth of the urban population (21 per cent) was adequately served by sewerage facilities. With the rapid growth of industrialisation and urbanisation, the need for extending water supply and sewerage facilities is bound to be sharply felt as there is already a backlog in the integrated development of both the services.

Most of the 402 urban water supply schemes and 103 sewerage schemes, estimated to cost Rs. 81.5 crores and approved during the first two Plans had been completed and the remaining few were expected to be completed soon. In addition, 369 water supply and 106 sewerage projects estimated to cost Rs. 88.3 crores were accepted during the Third Plan period, up to the end of June, 1965. A large number of these projects were likely to materialise early. As against the Third Plan provision of Rs. 98 crores for National Water Supply and Sanitation Schemes (urban), the progress of expenditure is indicated below:

	(Rs. crores)		
1961-62	13.90
1962-63	17.32
1963-64	14.64
1964-65	20.74
		TOTAL	66.60

Over the first four years of the Plan, Rs. 66.6 crores have been spent against the Plan provision of Rs. 89 crores. The delays in implementation and shortfall in expenditure were mainly due to the difficulty of obtaining supplies of materials and equipment, including cast iron pipes, cement, pumping sets, electric motors and certain appurtenances which are

being imported. A Study Group was constituted by the Committee on Plan Projects in 1964 to identify the major causes responsible for delays and to recommend the lines along which systematic planning and phasing of materials required for urban water supply and sanitation schemes should be undertaken. The Study Group attributed delays in execution of the schemes mainly to shortage of pipes particularly small diameter ones, lack of operational planning on an adequate scale, diffusion of the limited resources available over a large number of schemes, and some degree of failure of co-ordination in planning and implementation between the Centre and the States. It is reckoned that the problem of procuring adequate supply of materials, especially small diameter pipes and cement will continue to be fairly difficult during the Fourth Plan period. The Study Group made certain recommendations to overcome these problems, which deserve attention of the concerned agencies and departments both at the Centre and in the States.

It is in the interest of sound development of water supply and sanitation, as in the case of several other fields that only such number of schemes should be undertaken that can be justified in terms of available resources, both physical and financial. A major bottleneck relates to financing and management of water supply and drainage projects. In many cases, the available funds are insufficient even for proper operation and maintenance, quite apart from finding money for improvement or expansion of water supply and sewerage facilities. The urban schemes are largely financed on a 100 per cent loan basis under the National Water Supply and Sanitation Programme. It has been the experience that the practice of making "token" starts on many schemes simultaneously leads to waste and escalation of costs and often results in poor implementation.

The provision of drainage and sewerage in towns and cities needs greater attention. The absence of integrated development of water supply and sewerage facilities is generally due to lack of sufficient financial support for drainage and sewerage projects. While water supply can be operated on a profitable basis, sewerage schemes by and large are a financial liability. It is, therefore, necessary to ensure that the two utility services taken together should be operated generally on a 'no loss no profit basis'.

The control of water pollution has assumed great importance in the context of rapid industrialisation and urbanisation. A comprehensive draft enactment for water pollution control has been prepared for the consideration of State Governments and the concerned Central Ministries.

Rural Water Supply

Rural water supply schemes have been taken up in the main under programmes for community development, welfare of backward classes and local development works. These are supplemented by the National Water Supply and Sanitation Programme shown under Health, which relates to

the works requiring a measure of technical skills in design and construction. The National Programme is concerned primarily with schemes of piped or protected water supply and is mainly undertaken by Public Health Engineering Departments of States. Under this programme, priority is given to areas of acute water scarcity and salinity and where water-borne diseases are endemic. Apart from these schemes, there are about a dozen special schemes of rural water supply in certain States which are financed with assistance from WHO and UNICEF.

Recently, the Ministry of Community Development and Cooperation has initiated a quick survey of drinking water supply facilities in the rural areas. The survey, which so far has covered four lakh villages/hamlets in eleven States and six Union Territories has revealed that about 125,000 villages/hamlets or about one-third of the total have inadequate water supply and another one lakh villages and hamlets have sources of supply which are not hygienic. This being a quick survey, the definitions and criteria were not precise enough and a detailed survey will be necessary to get a more accurate picture.

During the Third Five Year Plan period, 753 schemes of rural water supply with an estimated cost of Rs. 13.32 crores were approved up to the end of March, 1965. Expenditure under the various programmes during the first four years of the Plan is indicated in the following statement. It may be mentioned that the figures of expenditure shown here are very rough estimates except in the case of National Water Supply and Sanitation Schemes. Data in respect of physical achievements of the programmes during the period under review are not available.

(Rs. crores)

Programme	Third Plan Provision (1961-66)	Expenditure			
		1961-62 (Actuals)	192-63 (Actuals)	1963-64 (Actuals)	1964-65 (Anticipated)
1	2	3	4	5	6
Community Development*	12 to 13	5.49	4.99	4.13	4.17
Welfare of Backward Classes†	3 to 4	0.40	0.55	0.38	0.72
Local Development Works	35.0	5.10	4.08	4.45	4.26
National Water Supply and Sanitation (Rural)	16.0	3.31	2.81	2.66	4.76‡
Special Investigation Divisions	..	..	0.02	0.11	0.50
TOTAL	66 to 68	14.30	12.45	11.73	14.41

* The expenditure under Community Development relates to Health and Rural Sanitation programme as a whole; separate figures for rural water supply are not available.

† Excludes expenditure on water supply schemes in Tribal Development Blocks.

‡ In addition a sum of Rs. 1.84 crores was transferred from the provision of Rs. 5 crores for 1964-65 under Local Development Works programme to the Ministry of Health for the execution of rural piped water supply schemes

Till recently, available data relating to water supply in rural areas was meagre and patchy and therefore could not provide a workable basis

for formulating and carrying out a detailed nation-wide programme. It was in this context that the Central Government more than two years back, sponsored a scheme for the establishment of Special Investigation Divisions in the States for collecting data in regard to rural water supply position and problems specially in areas of scarcity and where water-borne diseases were endemic. Good progress has been made in this direction and all the States, except Jammu and Kashmir and Bihar have set up such Investigation Divisions. Considering the size of the problem, however, much leeway has to be made before safe water supplies can be made available to a substantial majority of the rural population.

The acute shortage of small diameter pipes and cement and inadequate organization are the main obstacles. There is still not enough data available regarding possible sources of water supply in the rural areas. Till recently, most of the States were not equipped with technical personnel for the preparation of designs of rural projects. This deficiency has now been made good to some extent but the existing arrangements for preparation of designs and execution of projects are still inadequate. The implementation of four different rural water supply programmes has resulted in a multiplicity of operational agencies and there is a certain lack of co-ordination between them. At the Centre, this problem has been solved to a great extent through the setting up of a co-ordination committee, but the problems relating to coordination exist at the State, district and block levels also and need to be tackled on an urgent basis.

Annexure I
Physical Targets and Achievements—Health and Family Planning
(1961—65)

Item	Unit	At the					1964-65 (likely)	Third Plan Target
		end of Second Plan	1961-62]	1962-63]	1963-64			
1	2	3	4	5	6	7	8	
1. Beds	Numbers	185,600	193,270	202,000	212,000	229,000	240,100	
					(a)			
2. Primary Health Centres	"	2,800	3,050	3,442	4,100	4,500	5,200	
					(b)			
3. Medical Colleges	"	57	66	71	79	81	75	
4. Annual Intake : (Colleges)	"	5,800	6,850	7,620	N.A.	10,277	8,000	
5. Doctors (in-service/practice)	"	70,000	72,000	75,000	76,400	82,343	81,000	
6. Nurses	"	27,000	29,400	32,200	36,000	39,000	45,000	
						(c)		
7. Auxiliary Nurse-Midwives and Midwives	"	19,900	22,525	25,430	28,000	31,000	48,500	
8. Health Visitors	"	1,500	2,170	2,960	3,036	N.A.	3,500	
9. Sanitary Inspectors	"	6,000	8,200	11,000	12,000	14,000	19,200	
10. National Malaria Eradication Programme	Units							
(a) Attack phase	"	390	390	250.03	162.70	104.01	..	
					(d)	(e)		
(b) Consolidation phase . . . . .	"	..	..	140.47	228.30	208.98	..
(c) Maintenance phase . . . . .	"	..	..	..	..	79.01	..
TOTAL	"	390	390	390.50	391.00	392.00	390	
11. Family Welfare Centres								
(a) Regular Centres (f)	Numbers							
(i) Rural	"	1,379	1,658	2,072	2,700	6,436	6,100	
(ii) Urban	"	757	938	976	984	1,265	2,100	
SUB-TOTAL (a)	"	2,136	2,596	3,048	3,684	7,701	8,200	
(b) Contraceptives Distribution Centres (g)								
(i) Rural	"	1,864	1,864	4,755	6,538	7,466	..	
(ii) Urban	"	330	330	1,101	1,115	641	..	
						(h)		
SUB-TOTAL (b)	"	2,194	2,194	5,856	7,653	8,107	..	
TOTAL : (a)+(b)	"	4,330	4,790	8,904	11,337	15,808	..	

(a) Rough estimate.

(b) By June, 1964.

(c) Registered qualified.

(d) Of these 120.70 units were in pre-consolidation phase.

(e) Plus 1.25 units for Srinagar which would start functioning in 1965-66.

(f) Centres where full-time staff for family planning work is provided.

(g) Located in the existing medical institutions or with voluntary workers/depot holders with no separate staff for family planning work.

(h) The decrease in number in 1964-65 as compared to the preceding year was due to conversion of some of the centres into regular family planning centres.

CHAPTER XII

HOUSING AND URBAN AND RURAL PLANNING

With rapid growth of population and increasing industrialisation and urbanisation, the problem of housing had assumed large dimensions and poses a serious challenge. The overall performance in this respect during the first four years of the Plan was not as satisfactory as it might have been, keeping in view the physical and financial limitations. The housing effort put in by both Government and private enterprise fell much short of the needs of the general population and more particularly of the industrial workers, dwellers of slums and other weaker sections of the community. The slow pace of progress in housing had been partly due to inadequate financial provisions made in the annual plans of the States and the diversion in many cases of even the small provisions to other heads of development. Many towns did not have Master Plans regulating the land use for various purposes. The greatest impediment in the implementation of housing programmes, however, has been the rising price of land in urban areas. In the Third Five Year Plan emphasis was placed on acquisition and development of land on a large scale with a view to increasing the supply of developed land speedily and at reasonable rates. The steps taken in this direction were inadequate and un-coordinated, with the result that this fundamental obstacle to solving the housing problem remained practically undiminished.

A provision of Rs. 142 crores was made for housing and urban development in the Third Plan. In addition, the Life Insurance Corporation had proposed to invest about Rs. 60 crores in housing schemes over the Third Plan period. The total expenditure under housing and urban and rural planning during the first four years, 1961—65 amounted to Rs. 83.17 crores, being about 58.5 per cent of the Plan provision. The details regarding progress of expenditure under various schemes are given in Annexure I.

It was reckoned that the proposed investment of Rs. 142 crores would enable the construction of over four lakh houses (408,500) over the Third Plan period. The expenditure incurred during the two years 1963-64 and 1964-65, was Rs. 18.18 crores and Rs. 25.53 crores respectively, resulting in the construction of 49,690 houses/tenements and development of 15,907 plots. The physical targets laid for the Third Plan and achievements in the first four years, 1961—65 are given in Annexure II.

The table below shows at a glance the progress made during the four-year period in respect of certain important schemes:

Scheme	Unit	Third Plan Target	Achievement (1961—65)	Percentage of Col. 4 to 3
1	2	3	4	5
Subsidized Industrial Housing	Number of houses	73,000	44,687	61·2
Low-Income Group Housing	„	75,000	32,478	43·3
Slum clearance	Number of tenements	126,000	27,473	21·8
Village Housing	Number of houses	125,000	20,330	16·3

The slow pace of achievement during the two years 1963—65 was in part due to the difficult supply position of essential building materials such as cement and steel, following the onset of emergency in October, 1962. Other reasons for the slow progress of individual schemes have been analysed under relevant heads.

The Working Group on Housing and Urban and Rural Planning which was set up in 1963 to assess the requirements of housing in urban and rural areas and to suggest physical and financial targets for the Fourth Plan, submitted its reports towards the end of 1964. The recommendations of the Group were generally accepted by the Housing Ministers' Conference, held at Chandigarh in December, 1964. A Committee with Prof. M. S. Thacker as Chairman was appointed to suggest measures necessary for speeding up acquisition of land for housing schemes and also to suggest the lines on which the existing housing schemes might be integrated into one or more broad schemes. The Committee has since submitted its report to the Ministry of Works and Housing.

With effect from about the middle of December, 1964, the State Governments were permitted to sanction housing projects upto 25 per cent in excess of the Third Plan allocations for housing so as to minimise the time lag between sanction and execution of housing programmes and to facilitate full utilisation of funds. The question of setting up of a Central Housing Board which would coordinate and support the activities of the State Housing Boards besides attracting private capital to housing was still under consideration.

As regards the utilisation of L.I.C. funds for housing, the following table shows the progress of expenditure in the first four years of the Plan. The figures in brackets show the expenditure incurred on land acquisition and

development programme in the States which is included in the progress of expenditure figures.

Year	(Rs. crores)
1961-62	6.00 (Nil)
1962-63	11.35 (4.87)
1963-64	12.65 (3.55)
1964-65	15.00 (2.68)
TOTAL	45.00 (11.10)

In addition to the amounts shown in the brackets, a sum of one crores of rupees was spent during 1964-65 on acquisition and development of 7,505 acres of land within the Union Territories from Plan provision.

Subsidized Industrial Housing Scheme

The subsidized industrial housing scheme which is being implemented by three agencies, namely State Governments, private employers and co-operative societies of industrial workers has not made much headway particularly in so far as the performance of the employers is concerned. It is realised that much progress cannot be achieved in improving the housing conditions of industrial workers unless the employers accepted the obligation of providing housing accommodation to a large number of their employees. To induce the employers to build more houses, the Housing Ministers' Conference held in 1964, proposed that they might be given 100 per cent financial assistance—25 per cent subsidy and 75 per cent loan, in lieu of the existing 75 per cent assistance from the Government. This recommendation is under consideration. If even after this gesture, the employers feel reluctant to undertake construction of houses for the workers, the question whether a statutory obligation should be placed on them will have to be considered. All industrial establishments with a paid up capital of Rs. 20 lakhs or more might be put under legal obligation to construct houses for 50 per cent of their workers over a period of ten to fifteen years. Also in the case of existing industries, land for workers' housing to the extent necessary, would have to be made available to the employers by the Government at reasonable rates. For new industries, the employers should earmark in their industrial projects sufficient land for the purpose.

A provision of Rs. 29.8 crores was made for the Industrial Housing Scheme in the Third Five Year Plan. It was expected that this amount would enable the construction of some 75,000 tenements. During the two years 1963-64 and 1964-65 an outlay of Rs. 6.78 crores was approved for the construction of 15,755 tenements. The actual expenditure during this period amounted to Rs. 7.32 crores and the construction of about 15,084 tenements was completed. From 1st April, 1964, ceiling costs of houses under

the scheme were raised by about 15 per cent. In terms of physical achievement, the total number of tenements completed over the first four years of the Plan (1961—65) was 44,687 or about 61 per cent of the target laid down for the entire Third Plan period. The performance of Maharashtra, Gujarat, Bihar, Uttar Pradesh, West Bengal and the Union Territory of Delhi was better than the others.

Low Income Group Housing Scheme

There is considerable demand for loans under the low income group housing scheme. The income limit for loans under the programme is Rs. 500 per month and the amount of loan is restricted to 80 per cent of the cost of a house including land, subject to a maximum loan of Rs. 10,000 for building a house. The State Governments and Union Territories can also utilise upto one-third of the allocations under this scheme for the construction of rental houses for the economically weaker sections of the community i.e. those whose income is Rs. 250 per month and below in Bombay, Calcutta and Delhi, Rs. 200 per month and below in other capital towns and Rs. 175 per month and below elsewhere. The Central Government gives a subsidy towards the cost of the houses to the extent of 25 per cent.

A provision of Rs. 35.2 crores was made in the Third Five Year Plan for the completion of 75,000 houses under this scheme. For the year 1963-64, an outlay of Rs. 3.46 crores was approved for the construction of 7,100 houses. The actual expenditure incurred was Rs. 3.29 crores and 6,246 houses were completed. For the year 1964-65, an outlay of Rs. 5.51 crores was approved for the construction of 6,275 houses. The estimated expenditure was Rs. 4.78 crores and 7,540 houses were completed. During the first four years of the Plan, about 33 per cent of the target number of houses were completed. In view of rise in the cost of land, development materials and labour, the ceiling costs of houses under this scheme were raised by about 15 per cent with effect from 1st April, 1964.

Middle Income Group Housing Scheme

This scheme in the States is being financed from funds provided by the Life Insurance Corporation of India. Individuals whose income is between Rs. 6,000 and Rs. 15,000 per annum and cooperatives of persons who are included within this income bracket, are eligible to get loans upto 80 per cent of the cost of a house, subject to a maximum of Rs. 20,000. From 1959 to the end of 1964, loans amounting to Rs. 26.39 crores were sanctioned under the scheme for the construction of 16,295 houses. The amount actually disbursed was Rs. 19.60 crores and the number of houses completed 10,226 over a period of six years.

For Union Territories an outlay of Rs. 2.50 crores was approved for the Third Five Year Plan for the construction of 1,300 houses. The actual

expenditure incurred over a period of four years upto 1964-65 was estimated at Rs. 180.08 lakhs resulting in the construction of 868 houses. The scheme has been very popular.

Rental Housing Scheme for State Government Employees

This scheme is financed entirely from the funds provided by the Life Insurance Corporation. The State Governments sanctioned Rs. 14.59 crores during the six year period from 1959 to 1964 for the construction of 14,457 houses. As against this, the actual expenditure amounted to Rs. 10.67 crores for the construction of 9,488 houses.

Plantation Labour Housing Scheme

A provision of Rs. 70 lakhs was made in the Third Five Year Plan for the scheme. It was estimated that about 3,200 tenements would be constructed with this outlay. During the two-years 1963—65, a provision of Rs. 28.80 lakhs was made for the construction of about 1,189 tenements. The actual expenditure incurred was Rs. 8.51 lakhs only resulting in the construction of 293 tenements.

This scheme introduced in the Second Five Year Plan has made very little progress mainly because of the lack of interest shown by the planters. The special Working Group set up by the Ministry of Labour and Employment on plantation labour housing made a thorough study of the housing conditions of plantation labour and came to the conclusion that the financial burden on the industry had increased since the target for the construction of houses at the rate of 8 per cent per annum of the resident workers was laid down in the year 1951. It would be necessary therefore to provide financial assistance to the industry to enable it to fulfil the statutory obligations. Against a total number of 452,000 tenements required to be constructed by the end of 1962, some 240,000 tenements of the approved standard had been completed. The Group suggested two-fold financial relief to the industry, namely, grant of 25 per cent subsidy as in the case of Employers' projects under industrial housing and higher rates of depreciation allowance for the purpose of income-tax and agricultural income-tax rebates. While the recommendation regarding subsidy was accepted by Government and would be given effect to during the Fourth Five Year Plan, the recommendation regarding depreciation allowance was under consideration.

Slum Clearance and Improvement Scheme

The problem of slums in and near growing towns is a matter of serious concern. Municipalities and Corporations in recent years have been engaged in carrying out detailed surveys to ascertain the magnitude and nature of the task. The problem of slum clearance and improvement suggests three general considerations. Firstly, these areas have to be made fit for human habitation. This could be done either by carrying out certain

improvements in the slum areas, such as provision of water supply, drainage, street lights, paved streets, baths, latrines, etc., or if the areas were not capable of improvement, then by wholesale clearance and reconstruction. Secondly, protection has to be given to slum dwellers against eviction from the present premises. In most cases, the structure and/or land belong to private owners who are generally anxious to evict the tenants and get vacant possession of the property since there has been a considerable appreciation in land prices. Thirdly, provision has to be made for the re-housing of slum dwellers in improved or reconstructed structures carrying a reasonable rent.

To deal with these and allied matters in the areas of Union Territories, the Slum Areas (Improvement and Clearance) Act was enacted in 1956. The State Governments were also advised to enact a similar legislation for their areas. Eight States including Andhra Pradesh, Assam, Madhya Pradesh, Madras, Mysore, Punjab, Uttar Pradesh and West Bengal have already passed the necessary legislation and six others, namely, Bihar, Gujarat, Maharashtra, Kerala, Orissa and Rajasthan are also taking steps in this direction.

An outlay of Rs. 28.6 crores was approved for slum clearance in the Third Five Year Plan and subsequently with the inclusion of *Jhuggis* and *Jhonpris* removal scheme of Delhi, this figure was increased to Rs. 35.84 crores. Slum clearance and improvement has not made satisfactory progress. Meantime the slums have continued to grow apace and new ones have come into being. During the two years an outlay of Rs. 15.37 crores was approved with a target of construction of 40,900 tenements. The likely expenditure was about Rs. 14.34 crores and some 9,751 tenements were completed and 15,907 plots were developed during this period.

A number of difficulties were experienced in implementing the Slum Areas (Improvement and Clearance) Act, 1956 and, therefore, it was decided to amend it. The main impediments in the way of quicker progress are:

- (i) Difficulties in the clearing of slum areas and acquisition of land required for the re-housing of slum dwellers;
- (ii) General reluctance on the part of slum dwellers to move far from areas in which they were residing; and
- (iii) Lack of sufficient interest shown in slum clearance and improvement by the Municipal Corporations and other Local Bodies.

It is expected that with the recent amendment of the Act, some of the main difficulties in the speedy implementation of the slum clearance programmes would be removed. The main features of the amendment are as under:

- (i) The competent Authority can ask the owner of a slum area to improve or re-construct it according to the plans and specifications approved by the Authority;

- (ii) In cases where the buildings are improved or re-constructed by the owners of slum areas, the Competent Authority has been given the power to place old tenants in occupation of those premises at concessional rents, if the tenants elect to re-occupy them;
- (iii) The owner of a slum area cannot institute a suit of eviction against the tenant without the permission of the Competent Authority; and
- (iv) Government has been given the power to acquire slum areas at a much lower rate than that payable under the Land Acquisition Act.

In addition to the six major cities, the slum clearance and improvement programmes have been undertaken in a number of smaller towns and cities. Greater stress is being laid on improvement of slum areas and provision of basic amenities to slum dwellers as distinct from slum clearance so that with the limited resources available, maximum benefit could be given to the largest number. It, however, appears necessary that the State Governments should arrange for early socio-economic surveys of the slum areas, to designate certain areas for conservation, rehabilitation and clearance as part of a comprehensive Master Plan or interim General Plan for the towns. This will enable the Local Body to distinguish those areas which are to be conserved, improved or redeveloped and those for which improvement schemes are to be undertaken. In view of the rise in the cost of land, development materials and labour, the ceiling costs of houses under this scheme were raised by about 15 per cent with effect from 1st April, 1964.

Village Housing Scheme

This scheme envisages re-modelling of selected villages on an aided self-help basis and was introduced in 1957. Out of 5,000 villages selected under the scheme, 3,500 villages have been surveyed and layout plans have been drawn up for 2,800 of the total. Loans are advanced to villagers upto 66 $\frac{2}{3}$ per cent of the cost of a house, subject to a maximum of Rs. 2,000 per house.

The Third Five Year Plan emphasised that the main object of village housing scheme was to help create healthy environmental conditions for all sections of the village population and for balanced development of rural life as a whole, and that rural housing was intrinsically a part of community development. The point was also made that a specific programme for rural housing as such, was intended to supplement the resources of community development programme at the block and village levels by way of assistance in the form of technical advice, administration, provision of improved designs and layouts, better use of materials and to a limited extent, provision of finance.

An outlay of Rs. 12.70 crores was indicated in the Third Plan for the construction of 125,000 houses under this scheme. A sum of Rs. 1.86

crores was provided during the two years 1963-64 and 1964-65 for the construction of 12,777 houses. As against this, an expenditure of Rs. 1.44 crores was estimated to have been incurred on the construction of 10,274 houses. The slow progress of the scheme was stated to be due to several factors. It laid emphasis on re-planning of the whole village, which though a desirable objective, has not been found practicable on account of the general unwillingness of the villagers to part with their ancestral land that is required for the purposes of Master Plans. A sizeable section of the village population is still inclined to consider investment in a house as unproductive. The State Governments had generally accorded a low priority to this scheme.

The living conditions of the landless agricultural workers were far from satisfactory and needed special attention. One third of the financial provision made for the village housing scheme was earmarked for provision of house sites for landless agricultural workers in villages in which they formed a fairly large part of the population. The entire expenditure on this programme was to be borne by the Central Government. In November, 1962, the Central Government further decided to grant subsidies to the States for provision of streets and drains in selected villages. These programmes have not, however, made much progress. Only four States, Andhra Pradesh, Rajasthan, Mysore and Maharashtra have taken steps in this direction.

ANNEXURE I

Progress of expenditure under Housing and Urban and Rural Planning
(1961—65)

(Rs. lakhs)

Scheme	Third Plan Provision 1961—66	Actual Expenditure				Total 1961-65
		1961-62	1962-63	1963-64	1964-65	
1	2	3	4	5	6	7
1. Subsidised Industrial Housing	2980·00	553·27	437·35	302·65	429·14	1722·41
2. Low Income Group Housing	3520·00	543·64	421·11	329·31	478·28	1772·34
3. Plantation Labour Housing	70·00	2·37	1·48	4·62	3·89	12·36
4. Slum Clearance (including Jhugis & Jhonpris)	3584·00	396·37	586·40	652·41	782·15	2417·33
5. Village Housing	1270·00	59·35	85·48	50·73	92·84	288·40
6. Town Planning— States	240·00	30·23	29·78	26·89	61·77	148·67
Centre	300·00	8·38	11·11	24·57	70·00	114·06
7. Urban Development	1230·00	141·13	221·29	158·33	384·52	905·27
8. Land Acquisition and Development in Union Territories	950·00†	125·00	172·00	180·68	100·00	577·68
9. Middle Income Group Housing in Union Territories	250·00	25·90	36·59	53·50	64·00	180·08
10. Dock Labour	200·00*	..	..	..	20·00	20·00
11. Experimental Housing — Research and Statistics	100·00	..	..	..	0·30	0·30
12. Other Schemes	180·00	15·04	42·50	33·91	66·36	157·81
TOTAL	14874·00†	1900·77	2045·09	1817·60	2553·25	8316·71

† Includes a provision of Rs. 350 lakhs for State Governments.

* The revised outlay was shown at Rs. 60 lakhs.

† Includes a sum of Rs. 724 lakhs provided later for Jhuggis and Jhonpris removal scheme of Delhi.

ANNEXURE II

Physical Targets and Achievements—Housing Schemes

Scheme	Unit	Third Plan	Actual achievement			Anticipated achievement 1964-65	Total 1961-65
		Target (1961-66)	1961-62	1962-63	1963-64		
1	2	3	4	5	6	7	8
1. Subsidized Industrial Housing	Number of houses	73,000	16,708	12,895	7,182	7,902	44,687
2. Low Income Group Housing	..	75,000	10,278	8,414	6,246	7,540	32,478
3. Plantation Labour Housing	..	3,200	218	138	48	245	649
4. Slum Clearance (including Jhuggis & Jhonpris)	Number of tenements	126,000	3,957	13,765	4,008	5,743	27,473
	Number of plots	..	1,775	1,758	7,589	8,318	19,440
5. Village Housing	Number of houses	125,000	4,781	5,275	6,473	3,801	20,330
6. Land Acquisition and Urban Development in Union Territories	acres	..	5,916	5,436	7,500	7,505	26,357
7. Middle Income Group Housing for Union Territories	Number of houses	1,300	83	283	210	292	868
8. Dock Labour	..	5,000	..	..	..	..	..
TOTAL: Houses and Tenements		4,08,500	36,025	40,770	24,167	25,523	126,485
Plots		..	1,775	1,758	7,589	8,318	19,440
Acres		..	5,916	5,436	7,500	7,505	26,357

CHAPTER XIII

WELFARE OF BACKWARD CLASSES AND SOCIAL WELFARE

WELFARE OF BACKWARD CLASSES

The Third Plan provided Rs. 114 crores for the welfare of backward classes. Of this amount, on a preliminary view, Rs. 42 crores were intended for schemes of educational development, Rs. 47 crores for economic uplift and Rs. 25 crores for health, housing and other schemes. During 1963-64, the expenditure incurred was Rs. 17.21 crores and during 1964-65, Rs. 24.86 crores, distributed as given below:

	(Rs. crores)	
	1963-64	1964-65
Scheduled Tribes	8.27	13.35
Scheduled Castes	6.77	8.80
Other backward classes	1.96	2.48
Aid to voluntary organisations	0.21	0.23
TOTAL	17.21	24.86

The expenditure incurred by the Centre rose from Rs. 6.37 crores in 1963-64 to Rs. 9.91 crores in 1964-65 and by the States from Rs. 10.84 crores to Rs. 14.95 crores. In terms of programme, during 1964-65 the expenditure incurred on education amounted to Rs. 9.66 crores compared to Rs. 7.64 crores in the preceding year. Economic development programmes were sharply stepped up in the fourth year of the Third Plan, expenditure rising from Rs. 6.55 crores to Rs. 12.26 crores. The number of post-matric scholarships increased between the two years from around 72,500 to 82,000. During 1963-64 and 1964-65 respectively 100 and 111 additional Tribal Development Blocks were taken up.

SOCIAL WELFARE

The allocations made from year to year for social welfare since the onset of the emergency have been smaller than the Third Plan had envisaged. Expenditure during 1963-64 amounted to Rs. 3.5 crores and in 1964-65 to about Rs. 3.8 crores. Despite this limitation, efforts were made to implement various programmes provided for in the Plan. During 1963-64 four Integrated Child Welfare Projects were sanctioned, bringing the total number of such projects to 17. Expenditure incurred by the Central Social Welfare Board amounted to Rs. 1.78 crores in 1963-64 and to Rs. 1.91 crores in 1964-65. The principal items in the Board's programme were

grants for Welfare Extension Projects coordinated with Community Development Programme, grants for women's organisations for Welfare Extension Centres transferred to them, grants-in-aid to voluntary organisations and condensed educational courses for adult women, socio-economic programme, holiday homes for children and welfare projects (urban). Social and Moral Hygiene and after-care schemes undertaken as part of the social defence programme accounted for expenditure of Rs. 36.5 lakhs in 1963-64 and Rs. 49.3 lakhs in 1964-65. The total outlay for the programme implemented directly by the Department of Social Security otherwise than through the Central Social Welfare Board amounted to Rs. 2.17 crores during 1963-64 and to Rs. 1.89 crores during 1964-65.

CHAPTER XIV

LABOUR POLICY AND PROGRAMMES

Industrial Relations

The Government's policy continued to be one of promotion of constructive cooperation between labour and management on the basis of voluntary arrangements. The Industrial Truce Resolution adopted immediately after the declaration of emergency in October, 1962, brought about a favourable change in the attitude of parties towards each other. The number of man-days lost due to work-stoppages which is an indicator of the climate of industrial relations rose to 77 lakhs in 1964 as compared to 33 lakhs in 1963. The figure fell to 62 lakhs during 1965. The favourable trend obtaining during the two years 1961—63 was reversed in 1964 due to developments in the economic sphere, particularly, the steep rise in the prices of food articles and other basic necessities of life. Attempts to exploit temporary strains in the economy also contributed to the deterioration in the labour-management relations.

The deterioration in the industrial relations situation was noticeable both in the Central and State spheres. In the Central sphere, the situation was somewhat disturbed in banking industry and in the ports of Visakhapatnam, Madras and Mormugao. Of the work-stoppages in the public sector undertakings, the more important ones were in Heavy Electricals Ltd.; Bhopal, the Fertilizer Corporation of India Ltd., Sindri, and the Hindustan Steel Ltd. The situation was peaceful in the defence establishments and Railways. In coal mines, in all, 96 strikes took place in 1964 as compared with 60 strikes in 1963. Most of them were, however, of a small duration, as in the previous year. In the non-coal mines, work-stoppages accounted for a time-loss of 1.2 lakh man-days in 1964 which was higher than in the previous year. The deterioration in the industrial relations situation in the State sphere was shared by a number of industries. A number of textile units remained closed at the end of 1964, rendering nearly 17,000 workers redundant as against 6,000 workers in 1963. The closures were mainly due to financial difficulties and un-economic working. Measures taken to provide relief to working class included: (i) revision of wage structures, (ii) opening of consumer cooperative stores/fair price shops, and (iii) improving the working of the Code of Discipline.

Workers' Participation in Management

The scheme of workers' participation in management made some progress. As against 53 units covered at the end of 1962-63, Joint-Management Councils were working in 97 units—36 in the public sector and 61

in the private sector by the end of March, 1965. These Councils envisaged under the scheme of workers' participation in management seek to foster closer and fuller association of workers in management on a formally defined basis. Experience has shown that the successful working of Joint-Management Councils results in better industrial relations, a more stable labour force, increased productivity, reduction in waste, better profits and a closer understanding between the management and the workers.

Workers' Education Programme

The workers' education programme continued to make satisfactory progress. During the period under review, the number of regional workers' education centres went up from 22 to 27 and of sub-regional centres from 23 to 38. The cumulative number of workers trained increased from 56,587 at the end of March, 1963 to 213,502 at the end of March, 1965. A Committee was set up to evaluate the impact of the scheme on the working class, with a view to making recommendations on the subject for inclusion in the Fourth Plan. The Panel on Literacy among Industrial Workers appointed by the Committee on Plan Projects submitted its report in November, 1964.

Wages

In the organised sector, wages continued to be determined mainly through tripartite Wage Boards. During the period under review, four new Wage Boards were set up for the iron ore mining, limestone and dolomite mining, engineering industries and for ports and docks. Second Wage Boards were also constituted for cotton textiles, and cement industries. The total number of workers who derived benefit from Wage Boards or were likely to do so is about 40 lakhs.

Social Security

Since the beginning of the Third Five Year Plan, the Employees' State Insurance Scheme had been extended to about 10 lakh workers, bringing the total coverage to 29.6 lakhs at the end of 1964-65 as compared to 23.4 lakhs at the end of 1962-63. The Government has set up a tripartite committee to evaluate the working of the scheme in all its aspects.

The Employees' Provident Fund Scheme continued to make rapid progress. The total number of factories/establishments covered under the Act at the end of March, 1965 was 29,578 with 42.09 lakh subscribers as against 22,413 establishments having 35.17 lakh subscribers at the end of March, 1963. With effect from 1st January, 1963, the statutory rate of provident fund contribution was raised to 8 per cent in the establishments employing 50 and more persons. The number of industries covered under the enhanced rate, upto the end of March, 1965 was 30 as compared to four at the end of March, 1963. The question of similar increases in the

rate of contribution in certain other industries was also under consideration. A Working Group was also set up for formulating retirement pension scheme, including family pension for workers covered by existing provident fund schemes.

Working Conditions

Provision of suitable working conditions continued to be secured through strict enforcement of labour legislation. A scheme for the grant of National Awards was instituted for rewarding useful suggestions from workers for improving productivity. A scheme was put into operation for the grant of national safety awards and another scheme was prepared to provide suitable incentives to workers in those establishments where absenteeism had recorded a significant fall. A scheme for the setting up of a National Safety Council was also drawn up with a view to promote safety education and propaganda in mines. The welfare funds for coal and mica miners were continued to be utilised for the welfare of workers engaged in those industries. A similar fund was also started for iron ore miners during the year 1964-65. The medical, housing, educational and other facilities provided under the various funds were extended. A number of training programmes in various subjects such as mines and factory inspection, manpower problems, vocational and apprenticeship training, employment-market information, social security and industrial safety were conducted by the central and regional labour institutes, the Council of Industrial Safety, the productivity centres and the training-within-industry centre under the organisation of Chief Adviser, Factories.

Labour Welfare Programme

The Plan provides Rs. 67 crores for various labour welfare programmes. Among these programmes, a high priority has been given to craftsmen training and allied schemes. During the period under review, 82 new industrial training institutes were set up. Against 231 industrial training institutes with a capacity of 62,000 seats at the end of March, 1963, there were 313 institutes with a capacity of 97,638 as on 31st March, 1965. Under the scheme of part-time classes for industrial workers, 3,490 seats were introduced by the end of 1964-65. The training of apprentices under the Apprentices Act, 1961 commenced from 1st January, 1963. So far, 127 industries have been brought under the purview of the Act. The training programme for craft instructors has also kept pace with the expansion of craftsmen training facilities. Preliminary steps were taken with a view to reorganising cluster-type training centres into rural industrial training institutes for meeting the requirements of skilled personnel in the rural areas. Two institutes for training of maintenance personnel in mining industry were set up. A Central Staff Training and Research Institute was established with a view to imparting training to higher category personnel engaged in various training programmes. Manpower and employment service with particular emphasis on employment market information was also

further developed. A central institute for research and training in employment service was set up at Delhi with a view to training personnel engaged under employment service organisation. A central institute for training in industrial relations to impart specialised in-service training to the officers of the industrial relations machinery both at the Centre and in the States began operating in Delhi from September, 1964.

On the basis of the progress already made, it is expected that the Plan targets will be fully achieved, at least in the most important programmes i.e. training of craftsmen and workers' education. Other schemes included under this sub-head in the State Plans also continued to make progress according to the phased programme.

CHAPTER XI

PUBLIC COOPERATION AND PARTICIPATION

In a democratic set-up public opinion and public cooperation constitute the motivating force and sanction behind planning. There are great possibilities in an under-developed economy for stimulating public enthusiasm and organising public cooperation in constructive channels for common betterment. These immense possibilities have been realised only to a small extent in India and considerable leeway has to be made before the people can be involved into the process of social and economic growth. Viewed in this light, the task of winning public cooperation and participation for the Plans has to be interpreted in a wider sense and not in the restricted terms of giving financial and other assistance to voluntary organisations for specific schemes from funds provided under the Plan. A climate of national endeavour has to be created in which each individual and group can find his or her berth, in which life can grow richer and fuller. To enlist voluntary effort and participation it is necessary *inter alia* that the people's requirements for essential consumption are met at reasonable prices. The upward trend in the price level and cost of living have to be kept under control, otherwise inertia and frustration might take the place of energetic support for planned development.

The Third Five Year Plan provided a sum of Rs. 8.2 crores for various schemes of public cooperation, mainly for strengthening voluntary agencies and to enable them to undertake larger responsibilities. The following statement shows the outlay in the Central and State Sectors together, during the four years 1961—65.

Outlay under Public Cooperation Schemes

		(Rs. lakhs)			
		1961-62	1962-63	1963-64	1964-65
Grants	. . . . .	14.89	27.26	24.54	25.21
Loans	. . . . .	16.80	30.50	12.95	20.50
TOTAL		31.69	57.76	37.49	45.71

During the first four years of the Third Plan, the total disbursement amounted to about Rs. 1.73 crores or about 20 per cent of the Plan provision. During the Second Plan the programme of Public Cooperation was entirely in the Central Sector. In the Third Plan it was, in part, decentralised and the State Governments were invited to participate in the activities. It took some time for the States to make the necessary administrative arrangements. The voluntary organisations entrusted with the

implementation of the programme were also not in a position to build up their cadre of workers to adequate levels. Since the onset of emergency since 1962, public cooperation schemes have been accorded comparatively a low priority. These factors and also the delay in the setting up of the Central Institute of Research and Training in Public Cooperation mainly accounted for the shortfall in expenditure.

The progress made in respect of the various schemes of Public Cooperation during the two years under review is indicated below:

Lok Karya Kshetras (Rural).—This programme was initiated in 1958 with the object of building initiative and leadership for undertaking local programmes. There were 370 Lok Karya Kshetras at the end of 1964-65 as compared to about 350 in 1963-64.

The main activities of the Kshetras comprised digging of compost pits, field channels for utilisation of irrigation facilities, repairing and cleaning of tanks and wells and construction and repair of roads, etc., on the basis of voluntary labour (shramdan) and with local resources. Other activities undertaken by the Kshetras included balwadis and nursery schools, tailoring and craft classes for women, library and reading rooms and adult education classes. In Gujarat State the Kshetras have helped in the execution of a large number of drinking water schemes. Experience has shown that better results can be achieved when a Lok Karya Kshetra is run by a voluntary agency in active association with an educational institution. About 35 Kshetras out of the total number of 370 were allotted to 17 educational institutions. The programme was being implemented by 27 voluntary organisations and 17 educational institutions. During the period under review emphasis was laid on consolidation and evaluation rather than expansion of the programme.

Lok Karya Kshetras (Urban).—By the end of 1963-64, 38 Kshetras were functioning in the urban areas and the number rose to 51 in 1964-65. The programme covered about a dozen States besides the Union Territories of Delhi and Pondicherry and was being implemented by the Bharat Sewak Samaj in close collaboration with Municipal Corporations/Municipalities and educational institutions. The Kshetras represented a good beginning in the field of urban community development. Besides the usual activities associated with the Kshetras, production-cum-training centres, consumer cooperatives and industrial cooperatives had been organised on a self-help basis. For the improvement of conditions in the slum areas, while emphasis was laid on self-help, the Kshetras provided assistance and guidance to slum-dwellers on the means to promote their own welfare.

Night Shelters.—The Bharat Sewak Samaj was running four night shelters on a self-help basis and the Municipal Corporation another nine in Delhi. The shelters maintained by the Bharat Sewak Samaj were more popular because of the provision of radios, indoor games and supply of blankets to the inmates. A Sub-Committee appointed by the Union

Ministry of Works and Housing had recommended that the Delhi Municipal Corporation should open at least 17 more shelters by the year ending 1965. It had also suggested that the management of all the night shelters might be entrusted to voluntary social organisations like the Bharat Sewak Samaj as there were distinct advantages in following such a course.

Urban Community Development.—The scheme for starting pilot projects for urban community development was approved during 1964-65 and it was decided that the Ministry of Health might take up 20 such projects during the year 1965-66. Provision was made in this connection for some preparatory work during 1964-65. While the Lok Karya Kshetras in urban areas are being run by the voluntary organisations, these projects will be implemented by the Municipal Corporations/Municipalities on the basis of self-help. The main objective of the programme is to assist the relatively under-privileged and vulnerable sections of the urban population to obtain the maximum benefit from the facilities and services provided by the local authorities.

Research and Training.—There were two regional Lok Karya Training Centres at Delhi and Trivandrum where wholetime and part-time workers drawn from the rural and urban Kshetras were provided short-term training. During the year 1964-65, ten training courses were organised and 410 workers got the training as against 529 workers trained in a dozen courses during 1963-64.

In July, 1963 a proposal to establish a Central Institute of Research and Training in Public Cooperation at Delhi was approved in principle by the Planning Commission. The Institute is intended to undertake research studies and surveys in public cooperation and to strengthen the voluntary organisations and other non-official agencies by providing them suitable facilities for research, training and evaluation. It will also help in the preparation of their development plans.

Bhartiya Grameen Mahila Sangh.—The Sangh continued its programme of building leadership among rural women for organising women's programmes with local resources. During the year 1964-65 special attention was given to organising training camps in the border areas.

National Consumer Service.—The Service was sponsored in 1963 as a non-official Price Intelligence Service in Delhi and has now developed into a National Consumer Service. The activities were enlarged to include the study of consumer problems, organisation of consumer councils and promotion of consumer cooperative stores. The service collected useful data pertaining to trade malpractices such as adulteration, hoarding and underweighing. The activities of the National Consumer Service which were confined to the metropolis to start with, were extended to two States, Andhra Pradesh and Madhya Pradesh during the year 1964-65.

Sabarkantha Field Study Project.—The study of the Sabarkantha district administration was undertaken by the Planning Commission in collaboration with the State Government of Gujarat. The objective was to study the existing administrative procedures and suggest ways and means to eliminate procedural defects, administrative bottlenecks and malpractices resulting in hardships to the common man. The draft report was considered by a Committee of Direction presided over by the Chief Minister of Gujarat. It was decided that a study in depth of the working of the Panchayati Raj should be made and that the suggestions and recommendations made in the draft report should be more concrete.

Planning Forums.—The number of Planning Forums in colleges and Universities increased from 712 in 1963-64 to 846 in the following year. The forums engaged themselves in such activities as holding of lectures, debates, seminars, and essay competitions on Plan problems and other current topics. They also conducted socio-economic surveys of villages and slum areas besides rendering useful service to the local communities. The other activities undertaken were organisation of plan information centres, Plan exhibitions, book banks for lending text books to poor students, family planning campaigns, etc. The Planning Forum of Ahmednagar College, Ahmednagar in Maharashtra continued its programme of adopting a group of ten neighbouring villages for undertaking sustained development work. This experiment has created more than local interest and the Planning Commission has proposed that one such project may be attempted in each State.

Prohibition.—A Study Team was set up by the Planning Commission to undertake a study of the working of prohibition and to suggest measures for its effective implementation. The Team submitted its report (in two volumes) in 1964. The recommendations made by the Team would come up for consideration by the Government after the comments from all the State Governments were received.

Construction Service of Voluntary Organisations.—The Bharat Sewak Samaj Construction Service which was established a few years back has made steady progress in executing civil and defence works. The main objects of the construction service are to bring about economies in construction costs, ensure better deal for the workers engaged in the building industry and help the voluntary organisations to build up funds to carry out their normal community welfare activities. The B.S.S. Construction Service and its State Units had so far undertaken construction works in eight States and two Union Territories. During 1963-64 works of the value of about Rs. 3 crores were executed and of an equal amount in the following year. Good progress was made on the construction of the barrage work on the Yamuna in Delhi during 1964-65. The Bharat Sewak Samaj had been running ten brick kilns in Delhi, Uttar Pradesh, Bihar and Orissa and it had recently set up two crushers in Delhi for the supply of crushed metal. Experience gained during the past few years had shown that execution of

construction works through voluntary organisations helped in countering the rise in the prices of building materials to some extent and reducing the construction costs generally.

Other activities.—The Encyclopaedia of Social work in India which would give comprehensive information about the working of voluntary organisations engaged in social work and various facets of social work had been prepared and was under print. The Association for Moral and Social Hygiene in India continued the programme of organising training-cum-seminars for both officials and non-officials concerned with the programme of moral and social hygiene.

CHAPTER XVI

ADMINISTRATION

The Third Five Year Plan had outlined a series of recommendations bearing on the strengthening of administration, improvement of procedures and better management of public enterprises. To implement these proposals, a Committee on Administration under the chairmanship of the Cabinet Secretary was set up at the Centre. Similar Committees under the chairmanship of Chief Ministers were proposed for the States.

Early in 1964, a Department of Administrative Reforms was constituted within the Ministry of Home Affairs. The Department initiated a number of studies pertaining to organisation, methods of work and procedures. Several of these studies have now become available and action to implement the recommendations has been initiated. Among the organisations investigated are the office of the Chief Controller of Imports and Exports, Directorate General of Technical Development, Directorate General of Supplies and Disposals and the Central Public Works Department. The Department of Administrative Reforms also keeps in touch with progress in the administrative field in the States.

Under the aegis of the Committee on Plan Projects, within the Planning Commission, a Management and Administration Division was set up in the middle of 1964. On the management side, the object is to develop application of modern techniques of management control and to this end a number of studies of public sector projects were completed. In the field of development administration special attention has been given to pilot studies on performance budgeting and intensive area administration.

Within the Ministry of Home Affairs, a Central Vigilance Commission was established early in 1964 with a view to combating corruption.

The emergency towards the latter part in 1962 threw a heavy burden on the administration at all levels and placed the machinery under considerable strain.

Activities pertaining to training of administrative personnel initiated earlier were expanded during the years under review both at the Centre and in the States.

