



ANNUAL PLAN

1971-72

GOVERNMENT OF INDIA
PLANNING COMMISSION

PPC 193/3000



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CONTENTS

	PAGE
INTRODUCTION	
1 APPROACH	1
2 PLAN IN OUTLINE	11
3 FINANCING THE PLAN	63
PROGRAMMES OF DEVELOPMENT	
4 AGRICULTURE	76
5 ANIMAL HUSBANDRY, DAIRYING, FISHERIES AND FORESTS	110
6 COOPERATION AND COMMUNITY DEVELOPMENT	130
7 FOOD AND NUTRITION	139
8 IRRIGATION AND FLOOD CONTROL	153
9 POWER	168
10 VILLAGE AND SMALL INDUSTRIES	192
11 INDUSTRY AND MINERALS	197
12 TRANSPORT AND COMMUNICATIONS	238
13 EDUCATION	254
14 SCIENTIFIC RESEARCH AND NATURAL RESOURCES	260
15 ENERGY DEVELOPMENT	274
16 HEALTH AND FAMILY PLANNING	278
17 HOUSING, URBAN DEVELOPMENT AND WATER SUPPLY	289
18 SOCIAL WELFARE	302
19 WELFARE OF BACKWARD CLASSES	309
20 LABOUR AND EMPLOYMENT	313
21 OTHER PROGRAMMES	313
APPENDIX	325

INTRODUCTION

THE Annual Plan for 1971-72 presented in this Document has been finalised within the broad framework set out in the Fourth Five Year Plan (1969-74) which was placed before the Parliament in May 1970.

2. Initial steps for the formulation of the Annual Plan 1971-72 were taken by the Planning Commission in the month of August 1970. A modified procedure was followed for the preparation of the Annual Plans both of the States as well as of the Union Territories. Working Groups comprising representatives of the Planning Commission, Central Ministries and State Governments were set up for different sectors and sub-sectors of development instead of the usual pattern of constituting two Working Groups, one for agriculture and the other for irrigation and power. Detailed guidelines for the formulation of the Annual Plan proposals were drawn up by these Working Groups and forwarded to the State Governments. However, in view of the limited time, representatives of the State Governments could not be associated at this stage. The proposals formulated by the State Governments on the basis of these guidelines were examined in depth by each working Group in which State representatives also participated. Programme Advisers in the Planning Commission made their recommendations in the light of the reports of these Working Groups after necessary consultation with the concerned officials in the States. This was followed by a final round of discussion during December 1970 and January 1971, between the Planning Commission and the Chief Ministers of individual States. Discussion with the officials of the State Governments had been held earlier in October and November 1970, for an assessment of their financial resources.

3. The Central Ministries were asked in September 1970, to formulate proposals relating to the Central sector and Centrally sponsored schemes. These proposals were examined in the Planning Commission and the discussions with the Ministries were held during November 1970 to

(ii)

January 1971. The Ministry of Finance (Expenditure) and the Associated Finance of the Ministry concerned were also associated with these discussions. The Interim Budget presented in March 1971, and the Final Budget presented in May 1971, were based on the discussions held in the Planning Commission and the decision taken on the provisions for 1971-72.

4. In the subsequent chapters the details of the programmes and schemes under implementation or to be implemented during the year by the Central Ministries, State Governments and the Union Territories are outlined. Developmental activities in the private sector are also broadly covered.

5. The outlays adopted in this Document for the Central and Centrally sponsored schemes take into account the outlays incorporated in the Central Budget for 1971-72 as presented in May 1971 Budget (Final). A complete list of projects/schemes together with their outlays for Central and Centrally sponsored programmes is also appended. As regards States and Union Territories, the outlays adopted are those which have emerged after discussions with the representatives of the State Governments and finally recommended by the Planning Commission.

CHAPTER 1

APPROACH

THE achievement of the Annual Plan for 1970-71 though generally satisfactory was uneven in respect of specific objectives. The output of foodgrains exceeded the Annual Plan target by a substantial margin but that of raw cotton and raw jute lagged behind. The rate of growth of industrial production receded and fell short of the Plan target. The overall growth of the economy remained subdued and the rate of increase in national income could not reach the target. The ratio of domestic savings to national income did not show any improvement though, as a result of increase in the ratio of draft on foreign savings, investment as a percentage of national income registered an increase over the previous year. There was a marked step-up in the volume of public investment but private investment remained sluggish and did not maintain the previous year's tempo. Exports improved their performance further and substantially exceeded the target set for the year. The downward trend in imports was reversed and there was a decline in foreign exchange reserves in contrast to the addition in the previous year. The level of employment in organised industry and Government, registered a further improvement and measures to promote welfare of weaker sections were intensified.

1.1. The Annual Plan for 1971-72 was prepared against this background. It was conditioned by the experience in 1970-71, and specifically aimed at the following objectives:

1. To increase the rate of investment to 12.5 per cent and the rate of domestic savings to 11 per cent.
2. To step up net investment in the public sector by 15 per cent over the level in 1970-71.
3. To achieve a growth rate of around 5 per cent in national income through increases in agricultural and industrial production planned for the year.

4. To arrest further rise in prices through more efficient fiscal and monetary management and adaptation of physical controls.
5. To bring about a 7 percent growth in exports through further diversification in terms of commodities as well as destination.
6. To generate larger employment opportunities and to secure their widest possible distribution.
7. To reduce economic and social disparities through redistributive fiscal policies and extension of the role of public agencies in the fields of production, distribution and trade.

Savings and Investment

1.2. The ratio of domestic savings to national income during 1970-71 remained around the level reached in the preceding year. There was, however, an improvement in the ratio of draft on foreign savings to national income. Both these taken together accounted for a rise in the ratio of investment to national income to around 12 per cent. This was because of a marked step up in the public investment both in absolute amount and as a proportion of national income. Private investment, on the contrary, tended to remain sluggish. In view of these trends the Annual Plan for 1971-72 set the target to raise the ratio of investment to national income to 12.5 per cent. To realise this public investment is planned to be further raised by 15 per cent over the level reached in 1970-71 and domestic savings stepped up to 11 per cent of national income.

Agricultural Production

1.3. Foodgrains production reached a new high in 1970-71. At the estimated level of 107.8 million tonnes it was higher by 8.3 per cent over the level of 99.5 million tonnes in 1969-70. This achievement over-reached the Annual Plan target of 106 million tonnes. The production of oil seeds also exceeded the Plan target and increased by 19 per cent to 9.2 million tonnes. The production target of 13.2 million

tonnes in respect of sugarcane was also achieved. Cotton and jute output at 4.6 and 4.9 million bales respectively, however, fell short of the Annual Plan targets and was lower than the preceding year's level by 18 and 14 per cent.

1.4. The Annual Plan for 1971-72 aims at a further step-up in to grain production to 112 million tonnes. The target for raw cotton production is fixed at 6.5 million bales and for raw jute at 6.4 million bales. A moderate increase in the output of oilseeds is also planned. To attain these targets, production programmes are to be further extended. The area under high yield varieties of foodgrains is to be increased by 23 per cent to 18 million hectares. An additional area of 1.9 million hectares is to be covered by the multiple cropping programme. A crash programme of cotton production is planned on the basis of the concentrated area approach. Various promotional measures are devised to improve consumption of chemical fertilisers and their balanced use. Larger institutional credit is proposed to be arranged through public sector banks, cooperative credit societies and term-lending institutions. The area under minor irrigation is to be further extended.

Industrial Production

1.5. There was, however, a set-back in industrial production and the rate of growth of industrial output fell from 6.8 per cent in 1969-70 to 3.5 per cent in 1970-71. While capacity constraint prevented the increase in output of some industries such as paper, newsprint, automobiles, tyres and tubes, lower utilisation of existing capacity in a number of industries resulted from the shortage of raw materials, particularly raw-cotton, raw-jute, steel and non-ferrous metals. Inadequacy of demand emerging from insufficient step-up in investment adversely affected the expansion in the output of railway wagons, textile machinery, machine tools etc. Operational difficulties and deterioration in industrial relations caused a decline in steel output and transport bottlenecks slowed down the growth of output of coal and iron ore.

1.6. The Annual Plan for 1971-72 emphasises the need for improving capacity utilisation besides speedy completion of the projects and

sanctioning of additional capacity in several industries including fertilizers and steel. To meet shortages the supply of raw-cotton, oil-seeds, steel, non-ferrous metals and chemicals is to be augmented through imports. Better maintenance of plants, reorientation of personnel policy particularly in respect of top management, improvement in operational efficiency and economy in inventory holdings are stressed to improve the performance of public undertakings. Public investment is also proposed to be stepped up in order to increase capacity utilisation in intermediate and capital goods' industries suffering from slack in demand. These measures are expected to accelerate the rate of growth of industrial production.

National Income Growth

1.7. The fall in output of raw-cotton and raw-jute together with the depressed rate of growth of production from large and medium industries adversely affected the generation of income in other sectors. The overall growth of the economy remained subdued during 1970-71 and the stipulated rate of increase of 5.5 per cent in national income was not realised. Consistent with the increase in the levels of agricultural and industrial production resulting from the programme in the Annual Plan for 1971-72, the target for the rate of growth has been set at 5 per cent of national income.

Prices

1.8. The pressure on prices which emerged during 1969-70 continued throughout 1970-71. The average index of whole-sale prices for 1970-71 was higher by 5.5 per cent over the preceding year. The rise in prices during 1970-71 resulted from the inadequacy of supply relative to the demand for industrial raw-materials and manufactures. The price index for 'industrial raw-materials' was up by 9.6 per cent, 'chemicals' by 8.6 per cent and 'manufactures' by 7.9 per cent. Shortages of raw-cotton, raw-jute, oilseeds, steel and non-ferrous metals in relation to demand from manufactures exerted an upward pull on the general price index directly as well as through prices of manufactures. Foodgrain

prices registered a small fall of 0.7 per cent and was, unlike past years, not a major force behind the upward pressure on wholesale prices during 1970-71. The price situation was in some measure influenced by the larger increase in money supply. In 1970-71 money supply increased by 12 per cent as against an increase of 10.5 per cent in 1969-70. Expansion of bank credit to Government mainly accounted for the relatively faster increase in money supply. Deficit financing rose from Rs. 58 crores in 1969-70 to Rs. 365 crores in 1970-71.

1.9. The Annual Plan for 1971-72 reiterates the urgency for stabilising prices. Towards this end, stress has been laid on effective implementation of programmes and policies for increasing agricultural and industrial production, on the building up of the buffer stock of foodgrains, and on planned operations by the Food Corporation of India, Jute Corporation and Cotton Corporation in the concerned markets for foodgrains, raw-jute, and raw cotton with a view to ironing out wide fluctuations in their prices. Advance action for timely and adequate imports of raw materials based on anticipations of likely shortages has been recommended. The need for more efficient monetary and fiscal management and adaptation of physical control with a view to improving their effectiveness has also been emphasised.

Foreign Trade

1.10. The growth of exports during the first five months of 1970-71 was poor, but this was more than made up by the sharp expansion in exports during the period September to December 1970. In the year 1970-71 as a whole, exports aggregated to Rs. 1535 crores,¹ recording an increase of Rs. 122 crores or 8.6 per cent over the preceding year. The rate of growth in exports was not only in excess of the Annual Plan target of 7 per cent, but more than double of the growth rate of 4.1 per cent recorded in 1969-70.

1.11. The disappointing performance of exports during the first five months of 1970-71 was due to both domestic and external factors.

¹According to Customs data.

Apart from the dock-strike in the Calcutta Port during May-July 1970 which adversely affected exports in these months, the growth of exports slowed down because of supply constraints on basic inputs, such as steel, non-ferrous metals and raw cotton. On the external front, there was stagnation in the demand for some of our export commodities, particularly jute carpet backing, hides, skins and leather, and cotton yarn. In order to check the downward trend in exports, the Government took a number of measures particularly with a view to improving the supply of essential raw materials to export industries. As a result of these measures, as also of increased domestic output of raw-materials, exports, expanded substantially in the rest of the year. A wide range of commodities, both traditional and non-traditional, contributed to the overall increase in export earnings during the year. Increases were particularly marked in the case of tea sugar, oil cakes, iron ore and engineering goods. Moderate increases were also recorded in chemicals and allied products, mill-made cotton piece-goods, coffee, spices, mineral fuels and lubricants and manganese ore. On the other hand, there was a sharp decline in exports of jute manufactures, leather and leather manufactures (excluding footwear). Exports were also appreciably smaller in the case of cotton yarn, fruits and vegetables, hides and raw skins.

1.12. In the area of export promotion, a major development during the year was the presentation of the Export Policy Resolution to Parliament in July 1970. This stressed the need for accelerating export earnings at a high rate so as to quicken the country's progress towards self-reliant growth. In pursuance of the Export Policy Resolution, the Government set up a new organisation, namely, the Trade Development Authority, in July 1970, to assist individual firms to build up their exports through a package of personalised services in the field of trade information, market research and analysis, production and sales promotion. The 25 per cent *ad valorem* export duty on export of coir fibre was abolished with effect from July 30 1970. The year also saw the establishment of new institutions in order to promote exports of specified items. These were the Cashew Corporation and the Projects and Equipment Corporation.

1.13. While exports recorded a substantial increase in 1970-71 imports increased by only Rs. 24 crores to Rs. 1626 crores¹ in 1970-71—an increase of 1.5 per cent over the preceding year. However, this increase in imports represented a reversal of the declining trend in imports which had set in from 1966-67. Foodgrains imports recorded a further decline of Rs. 48 crores to Rs. 213 crores in 1970-71 as a result of increased foodgrains production in the country. On the other hand, as against a decline of 14.7 per cent in non-food imports in the preceding year, these imports recorded an increase of 5.4 per cent in 1970-71—from a level of Rs. 1341 crores to Rs. 1413 crores. Items registering substantial increases in imports were iron and steel, non-ferrous metals, and raw cotton. The substantially larger imports of iron and steel during the year were necessitated by the shortfall in domestic production and increased imports of copper and other non-ferrous metals were needed to meet the increase in domestic demand arising mainly from the rural electrification programme. The larger imports of raw cotton are attributable to the decline in domestic production.

1.14. To promote fuller utilisation of indigenous capacity the Import Policy for 1970-71 banned imports of 159 items or groups of items and restricted imports of another 56 items. These included certain types of ball bearings, small tools, machine tools, electrical instruments, textile machinery accessories, drugs, medicines and chemicals. Simultaneously licensing of imports of raw materials in short supply like steel, raw cotton was further liberalised.

1.15. With a substantial expansion in exports and a small increase in imports, the trade deficit during 1970-71 declined to Rs. 91 crores as compared to a deficit of Rs. 189 crores in 1969-70 and Rs. 551 crores in 1968-69 and foreign exchange reserves were drawn down by Rs. 89 crores.

1.16. The Annual Plan for 1971-72 expects a substantial rise in non-food imports in view of the pick up in the growth of industrial production planned for the year. As foreign aid utilisation is not likely to be

¹According to Customs data.

very much larger, a further growth of exports is necessary if depletion in foreign exchange reserves is to be avoided. It is in this context that the target of a 7 per cent growth in exports has been set for 1971-72 and further diversification of exports in terms of commodities as well as destination has been stressed.

Employment

1.17. The level of employment, as indicated by the Employment Market Information, registered a further increase during the year but the rate of growth in employment opportunities is not likely to exceed that attained in the preceding year. Industrywise, all the sectors with the exception of plantation and mining shared this increase in the level of employment. Further steps to accelerate generation and diversification of employment opportunities in the urban and rural sectors are proposed to be taken during 1971-72. A provision of Rs. 25 crores has been made for promoting employment of 700 engineers, 12500 agricultural graduates and diploma holders and 30,000 teachers. For creating additional employment in rural areas a two-pronged drive to distribute surplus land and to launch a comprehensive rural works programme for improving the quality of land is proposed. A provision of Rs. 50 crores for the crash programme to promote employment in rural areas has been made in the Central Budget for 1971-72. This will generate rural employment in addition to that resulting from the Plan programmes for extending the coverage of green revolution in terms of crops and areas.

Social Justice

1.18. During 1970-71 Central taxes on income and wealth were further enhanced and excise duties on luxury and semi-luxury items were stepped up with a view to reducing disparities in income, wealth and consumption. This process is to be carried forward in 1971-72 also. The Commission set up to enforce the Monopolies and Restrictive Trade Practices Act began its operations and credit policy of nationalised commercial banks was reoriented to provide credit to the neglected sectors of agriculture, small scale industry, small transport operators, retail

trade and professionals on relatively cheaper terms. A scheme for charging differential interest rates for differently placed classes of borrowers was also formulated. An integrated rural credit scheme has also been worked out with a view to linking supply of credit with provision of inputs for agriculture, extension services, and production, storage, processing and marketing of farm output. Industrial policy was modified in February 1970 with a view to discourage the growth of big business and encourage dispersal of entrepreneurial activities. Backward districts were identified and a scheme for the grant of financial assistance from term-lending institutions on concessional terms and capital subsidy from the Central Government for the establishment of industries in these districts was prepared. The activities of State Trading Corporation in the field of direct imports and exports were extended and a model bill for the imposition of ceiling on urban property was prepared by the Central Government and circulated to the States for further action.

1.19. As part of the programme for reducing disparities in rural economy and providing larger employment opportunities, development agencies for small farmers and landless labourers were established. Work on the projects for small farmers, sub-marginal cultivators and agricultural labourers was continued in 1970-71, and will be further expanded during 1971-72. This will include notably 45 projects approved under the small farmers' development scheme and 30 projects under the scheme of marginal farmers and agricultural labourers. Similarly work on 9 projects for the development of dry areas initiated in 1970-71 would be strengthened and remaining 15 projects would also be taken up during 1971-72. Organisational and personnel changes needed to step up progress of these programmes are also contemplated.

1.20. Funds of the financial institutions and cooperatives will be increasingly used to support small producers, both agriculturists and industrialists. The area of operation by public agencies is also proposed to be further extended by covering new financial and trade activities. The constitutional and legal hurdles in the way of implementing mea-

asures to promote social justice are also proposed to be removed through amendment of existing laws and fresh enactments where called for. A provision of Rs.10 crores has been made on the special nutrition projects for the children in slums and tribal areas. The activities of the recently started Housing and Urban Development Finance Corporation and the progress of the mobile hospitals scheme in rural areas are steps planned towards improving the quality of life in the country.

CHAPTER 2

PLAN IN OUTLINE

THE Annual Plan for 1971-72, the third year of the Fourth Five Year Plan (1969-74), has been finalised keeping in view the overall objectives of the Fourth Plan has reflected in the physical targets and financial outlays. It has been stressed on the State Governments as well as on the Central Ministries that the generation of employment opportunities should constitute an important element in the strategy of the Annual Plan for 1971-72. In order to secure a wider spatial distribution of employment opportunities, emphasis has been given on accelerating the process of dispersal of development to encompass increasingly the more backward regions and weaker sections of the population.

2.2. High priority has been given to full utilisation of existing capacities, completion of works which are in advanced stage of construction and expansion of existing capacities to levels required for present and future development in preference to the initiation of new schemes. Since the allocation of outlays in several sectors like agriculture, roads, communications, village and small industries, elementary education, water supply and welfare of backward classes had been relatively low in the initial years, step up in outlays for these programmes has been considered necessary to avoid sectoral imbalance and to ensure that the development in all sectors moves in unison as contemplated in the Fourth Plan. The State Governments were asked to lay stress on greater dispersal of industrial activities, increase in the tempo of programmes supplemental to agricultural development, formulation of district Plans and the taking up of pilot projects for small farmers, marginal farmers and landless labour, dry farming areas, drought prone areas, etc. The need for identification of the backward areas in each State and their specific problems has been emphasised so that purposeful programmes could be drawn up for their development.

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Plan Outlay

2.3. The Annual Plan for 1971-72 envisages an outlay of Rs. 3157.68 crores, which forms 19.8 per cent of the Fourth Plan outlay in the public sector. This shows a step up of 11.9 per cent over the outlay and 13.0 per cent over the anticipated expenditure for the preceding year 1970-71. The distribution of Plan outlay for 1971-72 in respect of Centre, Centrally sponsored schemes, Union Territories and States is shown in table 2.1. The figures of Plan outlays for two years are inclusive of funds available from financial institutions for programmes included in the public sector.

TABLE 2.1 : *Plan Outlay by Centre, Centrally Sponsored Schemes, Union Territories and States for 1971-72, 1970-71 and 1969-74*

(Rs. crores)					
sl. no.	sector	plan outlay (1969-74)	1970-71		1971-72 plan outlay
			plan outlay	anticipated expenditure	
(0)	(1)	(2)	(3)	(4)	(5)
1	centre	8089.76	1456.09	1298.60	1559.16
2	centrally sponsored	780.93	118.78	113.18	141.50
3	union territories	425.00	78.74	81.58	69.11
4	states	6616.47 ¹	1168.59	1300.08	1387.91
5	<i>total</i>	15912.16	2822.20	2793.44	3157.68

¹Includes unallocated amount of Rs. 5 crores.

Note : Outlay for Himachal Pradesh for 1971-72 has been included under States and for 1970-71 under Union Territories. This pattern has been followed throughout the document.

2.4. It will be seen that the Plan outlay for 1971-72 for Central schemes is higher by about Rs. 103 crores as compared to the Plan outlay for 1970-71 and by Rs. 261 crores as compared to anticipated expenditure for that year. In case of Centrally sponsored schemes it is up by about

Rs. 23 crores as compared to Plan outlay and by Rs. 28 crores as compared to anticipated expenditure. The Plan outlay for Union Territories (excluding Himachal Pradesh) is higher by about Rs. 7.4 crores as compared to outlay and by about Rs. 7.1 crores as compared to anticipated expenditure for 1970-71. In case of States (including Himachal Pradesh) the Plan outlay is higher by about Rs. 202 crores as compared to the outlay and by about Rs. 68 crores as compared to anticipated expenditure for the preceding year.

2.5. Table 2.2 below gives the percentage distribution of the data presented in table 2.1.

TABLE 2.2 : Percentage Distribution of the Plan Outlay for 1971-72 and 1970-71

sl. no.	sector	1970-71			1971-72		
		outlay as percentage of Fourth Plan outlay	expenditure as percentage of Fourth Plan outlay	expenditure as percentage of 1970-71	outlay as percentage of Fourth Plan outlay	outlay as percentage of 1970-71 outlay	outlay as percentage of expenditure
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	centre	18.0	16.1	89.2	19.3	107.1	120.1
2	centrally sponsored	15.2	14.5	95.3	18.1	119.1	125.0
3	union territories	18.5	19.2	103.6	16.3	87.8	84.7
4	states	17.7	19.6	111.2	21.0	118.8	106.8
5	<i>total</i>	17.7	17.6	99.0	19.8	111.9	113.0

2.6. Plan outlay in respect of States and Union Territories for 1971-72 is Rs. 1457.02 crores. Including the outlay on Centrally sponsored schemes to be fully financed by the Centre and which will directly benefit

the States, the outlay in States and Union Territories will form more than 50 per cent of the total Plan outlay for 1971-72. The distribution of the Plan outlay by individual States along with the quantum of Central Assistance to be provided to them during 1971-72 is given in table 2.3. The distribution of outlay by Union Territories is given in table 2.4.

TABLE 2.3: *Plan Outlay for 1971-72—States*

(Rs. crores)				
sl. no.	states	central assistance	states' own resources	total plan outlay
(0)	(1)	(2)	(3)	(4)
1	Andhra Pradesh	48.00	39.00	87.00
2	Assam	36.56	5.65	42.21
3	Bihar	67.60	29.13	96.73
4	Gujarat	31.60	63.94	95.54
5	Haryana	15.70	44.93	60.63
6	Himachal Pradesh	19.50	1.32	20.82
7	Jammu and Kashmir	29.00	1.79	30.79
8	Kerala	35.00	25.00	60.00
9	Madhya Pradesh	52.40	38.06	90.46
10	Maharashtra	49.10	129.64	178.74
11	Meghalaya	7.44	0.51	7.95
12	Mysore	34.60	35.40	70.00
13	Nagaland	7.00	1.04	8.04
14	Orissa	32.00	16.33	48.33
15	Punjab	20.20	59.16	79.36
16	Rajasthan	44.00	18.55	62.55
17	Tamil Nadu	40.40	39.80	80.20
18	Uttar Pradesh	105.20	103.95	209.15
19	West Bengal	44.20	15.21	59.41
20	<i>total</i>	719.50	668.41	1387.91

TABLE 2.4 : *Plan Outlay for 1971-72—Union Territories*

(Rs. lakhs)		
sl. no.	union territory	plan outlay
(0)	(1)	(2)
1	Andaman and Nicobar Islands	342.90
2	Chandigarh	192.00
3	Dadra and Nagar Haveli	48.00
4	Delhi	3433.35
5	Goa, Daman and Diu	810.00
6	Laccadive, Amindivi and Minicoy Islands	48.00
7	Manipur	572.10
8	NEFA	385.00
9	Pondicherry	280.00
10	Tripura	799.23
11	<i>total</i>	6910.58

2.7. The distribution of the Plan outlay for 1971-72 by major heads of development along with the corresponding Plan outlay and the anticipated expenditure for 1970-71 is given in Table 2.5. The distribution of Plan outlay for 1971-72 and anticipated expenditure for 1970-71 by heads of development for the Centre, Centrally sponsored schemes, Union Territories and States are given in Annexure 2.1. The distribution of Plan outlay in respect of Centre for 1971-72 and anticipated expenditure for 1970-71 by various major heads and sub-heads of development are given in Annexure 2.2. Similar information in respect of Centrally sponsored programme is given in Annexure 2.3. The outlays for 1971-72 by major heads and sub-heads of development for different States and Union Territories are given in Annexure 2.4 and 2.5 respectively. The anticipated expenditures for 1970-71 by major heads and sub-heads of development in respect of States and Union Territories are given in Annexure 2.6 and 2.7 respectively.

**TABLE 2.5 : Outlay for 1971-72 and Outlay and Expenditure for 1970-71
by Major Heads of Development**

(Rs. crores)

sl. no.	head of development	Fourth Plan outlay	annual plan 1970-71		annual plan 1971-72 outlay
			outlay	anticipated expenditure	
(0)	(1)	(2)	(3)	(4)	(5)
1	agriculture and allied programmes	2713.77	470.89 (17.4)	536.84 (19.8)	554.16 (20.4)
2.	irrigation and flood control	1094.22	203.45 (18.6)	226.91 (20.7)	231.62 (21.2)
3.	power	2460.44	482.41 (19.6)	514.58 (20.9)	528.97 (21.5)
4	village and small industries	291.32	43.44 (14.9)	45.14 (15.5)	46.30 (15.9)
5	industry and minerals	3335.24	622.33 (18.7)	494.45 (14.8)	609.32 (18.3)
6	transport and communications	3230.19	556.00 (17.2)	524.91 (16.3)	632.15 (19.6)
7	education	824.24	123.13 (14.9)	125.20 (15.2)	157.74 (19.1)
8	scientific research	140.26	23.61 (16.8)	19.24 (13.7)	27.23 (19.4)
9	health	434.76	63.45 (14.6)	66.78 (15.4)	74.14 (17.1)
10	family planning	315.00	52.00 (16.5)	47.24 (15.0)	60.60 (19.2)
11	water supply and sanitation	410.28	63.30 (15.5)	71.93 (17.5)	83.80 (20.4)

TABLE 2.5—(Contd.)

(0)	(1)	(2)	(3)	(4)	(5)
12	housing, urban and regional development	242.92	42.49 (17.5)	48.86 (20.1)	54.26 (22.3)
13	welfare of backward classes	141.13	21.64 (15.3)	26.03 (18.4)	30.22 (21.4)
14	social welfare	41.41	5.45 (13.2)	5.62 (13.6)	17.25 (41.7)
15	labour welfare and craftsmen training	39.70	6.90 (17.4)	5.61 (14.1)	7.00 (17.6)
16	other programmes	192.18	41.51 (21.6)	34.10 (17.7)	42.92 (22.3)
17	<i>total</i>	15912.16¹	2822.20 (17.7)	2793.44 (17.6)	3157.68 (19.8)

¹Includes unallocated amount of Rs. 5 crores.

Note : Figures in brackets indicate percentage to Fourth Plan Outlay. The figures of outlay adopted for 1970-71 are those given in the 1970-71 Annual Plan Document 2.8. Table 2.6 gives the anticipated physical achievements and targets set for 1971-72 as also targets and achievements for 1970-71 and achievements for 1969-70.

TABLE 2.6 : Selected Physical Targets and Achievements

sl. no.	item	unit	1969-70		1970-71		1971-72 target
			target	achievement	target	estimated achievement	
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>agriculture and allied programmes</i>							
1	foodgrains	mill. tonnes	101.00	99.5	106.0	107.8	112
2	oilseeds	"	8.5	7.6	9.0	9.2	9.5
3	sugarcane (gur)	"	12.5	13.4	13.2	13.2	13.2
4	cotton	mill. bales	6.0	5.2	6.5	4.6	6.5
5	jute	"	6.4	5.6	6.7	4.9	6.4
6	high yielding varieties programmes	mill. hectares	10.92	11.41	15.05	14.61	18.00
7	multiple cropping (addl.)	"	1.87	1.52	2.24	1.59	1.90
8	minor irrigation (addl.)	"	1.40	1.49	1.76	1.47	1.60
9	soil conservation on agricultural land (addl.)	"	0.87	1.05	1.20	1.25	1.25
<i>consumption of chemical fertilisers</i>							
10	nitrogenous (in terms of N)	mill. tonnes	1.70	1.36	1.73	1.43	2.00
11	phosphatic (in terms of P_2O_5)	"	0.60	0.42	0.56	0.46	0.80
12	potassic (in terms of K_2O)	"	0.30	0.21	0.25	0.22	0.40
13	plant protection cooperation	"	76.00	34.61	42.32	43.20	50.00
14	short and medium term loans advanced irrigation (major and medium)	Rs. crores	500	534	580	575 to 600	650
15	potential (gross)	mill. hectares	19.47	19.14	20.01	19.75	20.39
16	utilisation (gross)	"	17.65	17.14	18.14	17.68	18.35

Power

17	installed capacity	mill. KW	15.4	16.8	16.49	17.67
18	pump sets energised and minerals	'000 nos.	1181	1609	1629	1959
19	steel ingots	mill. tonnes	7.5	7.6	6.1	7.0
20	finished steel	"	5.5	5.7	4.7	6.0
21	alloy and special steel	'000 tonnes	85.0	170.0	200.0	238.0
22	aluminium	"	145.0	170.0	161.1	170.0
23	copper	"	9.5	9.6	9.3	10.0
24	zinc	"	32.0	28.0	23.4	25.0
25	metallurgical and other heavy equipment machinery	"	30.0	22.0	20.0	25.0
26	agricultural—tractors	'000 nos.	20.0	25.0	20.7	35.0
27	turbines—thermal	mill. KW	0.8	0.70	0.63	0.86
28	turbines—hydro	"	0.25	0.50	0.21	0.31
29	nitrogenous fertilizers (in terms of N)	'000 tonnes	900.0	940.0	830.0	1160.0
30	phosphatic fertilizers (in terms of P ₂ O ₅)	"	340.0	300.0	229.0	260.0
31	sulphuric acid	"	1200	1300	1199	1250
32	coking coal	mill. tonnes	17.0	17.0	18.0	18.0
33	iron ore	"	30.0	32.0	28.0	30.0
34	production of crude petroleum	"	7.3	7.1	6.8	7.5
35	refining capacity in terms of crude throughput	"	18.0	18.0	18.46	19.0
36	machine tools (organised sector)	Rs. million	325	350	426	430
37	ball and roller bearings	mill. nos.	14.0	16.0	17.7	18.0
38	power driven pumps (organised sector)	'000 nos.	350	400	242	400
39	diesel engines (stationary) (orga- nised sector)	"	125	150	67.4	100.0
40	commercial vehicles	'000 nos.	40.0	48.0	47.5	57.0

TABLE 2.6—(Contd.)

(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
41	electric transformers above 33 KV	mill KV	4.5	2.5	5.0	3.0	4.0
42	electric transformers 33 KV and below	"	4.0	3.8	5.0	6.5	7.0
43	electric motors above 200 HP	mill. HP	0.5	0.20	0.30	0.30	0.40
44	electric motors 200 HP and below	"	2.2	2.42	2.40	3.00	3.50
45	paper and paper board	'000 tonnes	650.0	724.0	750.0	758.0	785.0
46	cement	mill. tonnes	13.5	13.81	14.50	14.36	15.50
47	cotton (mill sector)	mill. metres	4500	4192	4350	4200	4300
48	jute textiles	'000 tonnes	1150	944	1250	1050	1100
49	sugar	"	3700	4261	4200	3850	4350
	<i>village and small industries</i>						
50	production of handloom, powerloom and khadi cloth	mill. metres	3500	3600	3900	3760	3900
51	raw silk	mill. kgs.	2.40	2.30	2.50	2.85	3.00
	<i>transport and communications</i>						
52	railways: traffic originating	mill. tonnes	214.0	207.9	217.1	199	208
53	major ports: traffic handled	"	59.0	55.0	60.0	56	58
54	shipping tonnage	mill. grt.	2.40	2.34	2.94 ¹	2.44	2.51
	<i>education</i>						
	<i>additional enrolments in classes</i>						
55	I-V	million	2.17	2.22	3.09	2.77	2.64
56	VI-VIII	"	0.94	0.79	1.41	0.84	0.97
57	IX-XI	"	0.53	0.45	0.73	0.68	0.69
58	university education (arts, science and commerce courses)	"	0.175	0.17	0.260	0.22	0.17
	<i>health</i>						
59	hospitals beds	thousand nos.	261	262	266	266	270
	<i>family planning</i>						
60	sterilization	mill. nos.	3.24	1.42	2.6	1.31	3.0
61	IUCD insertions	"	1.62	0.46	0.9	0.47	1.16

¹Includes acquisition of about 6 lakhs GRT orders which are likely to be placed during 1970-71.

ANNEXURE 2.1

Anticipated Expenditure for 1970-71 and Plan Outlay for 1971-72
by Heads and Sub-heads of Development

sl. no.	head of development	1970-71 (anticipated)				1971-72 (outlay)					(Rs. lakhs)
		centre	centrally sponsored	states	union territories	total	centre	centrally sponsored	states	union territories	
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
<i>agriculture and allied programmes</i>											
1	agriculture research	1084	—	—	—	1084	1544	—	1000	10	2554
2	small and marginal farmers	400	—	—	—	400	900	—	157	—	1057
3	land reforms	—	—	—	—	—	—	—	920	36	956
4	agricultural production	555	504	5152	357	6558	576	948	3805	179	5508
5	minor irrigation	134	—	9834	146	10114	241	—	9832	87	10160
6	soil conservation	2	335	2706	78	3121	1	478	2539	47	3065
7	area development	265	—	399	—	664	320	—	502	—	822
8	animal husbandry	141	22	1108	107	1378	150	70	1410	88	1718
9	dairying and milk supply	748	—	696	43	1487	2098	—	845	31	2974
10	fisheries	170	128	806	82	1186	237	90	898	92	1317
11	forests	56	20	1385	196	1657	79	20	1722	95	1916
12	warehousing, marketing and storage	1723	—	84	9	1816	1315	—	179	14	1508

ANNEXURE 2.1—(Contd.)
(Rs. lakhs)

(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
13	food processing and subsidiary foods	126	6	—	—	132	307	23	—	—	330
14	central support to financial institutions (agricultural sector) ¹	4000	—	—	—	4000	5594	—	—	—	5594
15	buffer stocks	11600	—	—	—	11600	6900	—	—	—	6900
16	cooperation ²	2542	500	2389	88	5519	3205	500	2738	74	6517
71	community development	54	235	2424	102	2825	93	245	1948	65	2351
18	panchayats	—	—	117	16	133	—	—	155	11	169
19	agricultural and allied programmes	23600	1750	27110	1224	53684	23560	2374	28650	832	55416
<i>Irrigation and power</i>											
20	irrigation	255	—	19878	4	20137	305	—	20272	8	20585
21	flood control	136	—	2217 ³	201	2554	202	—	2188	187	2577
22	power	8041	500	41102	1815	51458	9601	700	41366	1230	52897
23	irrigation and power	8432	500	63197	2020	74149	10108	700	63826	1425	76059
<i>Industry and minerals</i>											
24	organised industries	—	—	3558	57	—	—	—	3039	17	—
25	mineral development	45209	—	615	6	49445	57426 ⁴	—	449	1	60932
26	village and small industries	2252	110	1961	191	4514	2279	102	2051	198	4630
27	industry and minerals	47461	110	6134	254	53959	59705	102	5539	216	65562
<i>transport and communications</i>											
28	railways	15277	—	—	—	15277	18000	—	—	—	18000
29	roads	3574	206	7977	1553	13310	5054	380	9286	937	15657
30	road transport	55	—	1595	265	1915	45	—	1815	340	2200

31	ports and harbours	3912	89	270	79	4350	5242	295	224	73	5834
32	shipping	3800	—	—	11	3811	3931	—	—	17	3948
33	inland water transport	237	50	45	36	368	164	47	44	25	280
34	lighthouses	101	—	—	—	101	129	—	—	—	129
35	civil air transport and air corporation	3530	—	26	8	3564	4720	—	25	10	4755
36	tourism	402	—	297	29	728	679	—	268	15	962
37	posts and telegraphs	7631	—	—	—	7631	9400	—	—	—	9400
38	other communications	—	—	—	—	—	411	—	—	—	411
39	broadcasting	302	—	—	—	302	639	—	—	—	639
40	farakka barrage	1134	—	—	—	1134	100	—	—	—	1000
41	transport and communications	39955	345	10210	1981	52491	49414	722	11662	1417	63215

social services

42.	general education and cultural programmes	3359	283	6194	738	10574	3649	231	8726	847	13453
43	technical education	865	218	766	97	1946	933	426	874	88	2321
44	scientific research	1924	—	—	—	1924	2723	—	—	—	2723
45	health	782	2728	2791	377	6678	856	2703	3516	339	7414
46	family planning	550	4174	—	—	4724	578	5482	—	—	6060
47	water supply	12	40	6421	720	7193	29	119	7351	881	8380
48	housing	855	—	2636	194	3685	861	—	2574	294	3729
49	urban development	15	—	982	204	1201	16	—	1490	191	1697
50	welfare of backward classes	—	1126	1390	87	2603	—	1258	1679	85	3022

ANNEXURE 2.1—(Contd.)
(Rs. lakhs)

(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
51	social welfare	222	44	174	22	562	1468	33	199	25	1725
52	labour welfare and crafts- men training	111	—	406	44	561	120	—	464	46	700
53	social services	8795	8613	21760	2483	41651	11303	10252	26873	2796	51224
<i>other programmes</i>											
54	rehabilitation	1366	—	—	—	1366	1273	—	—	—	1273
55	department of statistics	40 ^a	—	42	8	90	108	—	73	10	91
56	Registrar General's Office	62	—	—	—	62	70	—	—	—	70
57	DGS&D	—	—	—	—	—	3	—	—	—	3
58	statistics	182	—	42	8	152	181	—	73	10	264
59	information and publicity	54	—	93	34	181	188	—	133	39	360
60	state capital projects	—	—	610	75	685	—	—	571	140	681
61	special and backward areas	—	—	441	—	441	—	—	838	—	838
62	evaluation machinery	—	—	11	1	12	—	—	17	2	19
63	expansion of printing capacity	86	—	—	—	86	174	—	—	—	174
64	research programme committee	7	—	—	—	7	8	—	—	—	8
65	miscellaneous	2	—	400	78	480	2	—	609	64	675
66	other programmes	1617	—	1597	196	3410	1826	—	2241	225	4292
67	<i>grand total</i>	129860	11318	130008	8158	279344	155916	14150	138791	6911	315768

^aARC only.

^bIncluding LDB

^cIncludes funds subsequently given to Assam on the recommendations of the Central Team.

^dIncludes Rs. 28 crores for RFC, Rs. 12.53 crores for D.V.C. and Rs. 19 lakhs for Neyveli Thermal Station expansion.

^eIncludes Rs. 65 crores on account of financial Institution.

^fLatest estimates Rs. 48.05 lakhs.

ANNEXURE 2.2

*Plan Outlay on Central Scheme for 1971-72
and Anticipated Expenditure during 1970-71*

		(Rs. lakhs)	
sl. no.	head of development	1970-71 anticipated expenditure	1971-72 plan outlay
(0)	(1)	(2)	(3)
<i>agriculture and allied programmes</i>			
1	agriculture	1084	1544
2	small and marginal farmers	400	900
3	land reforms	—	—
4	agricultural production	555	576
5	minor irrigation	134	241
6	soil conservation	2	1
7	area development	265	320
8	animal husbandry	141	150
9	dairying and milk supply	748	2098
10	fisheries	170	237
11	forests	56	79
12	warehousing, marketing and storage	1723	1315
13	food processing and subsidiary foods	126	307
14	central support to financial institutions (agricultural sector)	4000	7444
15	buffer stocks	11600	6900
16	cooperation	2542	1355
17	community development	54	93
18	total agriculture and allied programmes	23600	23500
<i>irrigation and power</i>			
19	irrigation	255	305
20	flood control	136	202
21	power		
22	Ministry of I & P	4219 ¹	5948 ¹
23	D.V.C.	1040	1253

¹Including outlay for REC.

ANNEXURE 2.2—(Contd.)

(0)	(1)	(2)	(3)
24	deptt. of mines and metals	93	19
25	deptt. of atomic energy	2689	2381
26	<i>total—power</i>	8041	9601
27	<i>total—irrigation and power</i>	8432	10108
<i>industry and minerals</i>			
28	<i>organised industries and mineral development</i>		
29	Department of Steel	18763	22000
30	Department of Mines	5552	7987
31	Ministry of Industrial Development	1618	2991
32	Department of Chemicals	6816	7532
33	Department of Petroleum	6555	6951
34	Ministry of Foreign Trade	555	6118
35	Ministry of Finance	3981	6964*
36	Ministry of Transport and Shipping	347	821
37	Deptt. of Atomic Energy	1022	1562
38	<i>total—organised industries</i>	45209	57426
39	village and small industries	2252	2279
40	<i>total—industries and minerals</i>	47461	59705
<i>transport and communications</i>			
41	railways	15277	18000
42	roads	3574	5054
43	road transport	55	45
44	ports and harbours	3912	5242
45	shipping	3800	3931
46	inland water transport	237	164
47	lighthouses	101	129
48	civil air transport and air corporations	3530	4720
49	tourism	402	679
50	posts and telegraphs	7631	9400
51	other communications		411
52	broadcasting	302	639
53	farakka barrage	1134	1000
54	<i>total—transport and communications</i>	39955	49414

*Includes Rs. 65 crores on account of financial institutions.

ANNEXURE 2.2—(Contd.)

(0)	(1)	(2)	(3)
<i>social services</i>			
55	general education and cultural programmes	3359	3649
56	technical education	865	933
57	scientific research	1924	2723
58	health	782	856
59	family planning	550	578
60	water supply	12	29
61	housing	855	861
62	urban development	15	16
63	social welfare	322	1468
64	labour welfare and craftsmen training	111	190
65	<i>total—social services</i>	8795	11303
<i>other programmes</i>			
66	rehabilitation	1366	1273
67	department of statistics	40	108
68	registrar general's office	62	70
69	DGS&D	—	3
70	statistics	102	181
71	information and publicity	54	188
72	expansion of printing capacity	86	174
73	research programme committee	7	8
74	miscellaneous	2	2
75	other programmes	1617	1826
76	<i>grand total</i>	129860	155916

ANNEXURE 2.3

*Plan Outlay on Centrally Sponsored Schemes during 1971-72
and Anticipated Expenditure for 1970-71†*

(Rs. lakhs)

sl. no.	head of development	1970-71 anticipated expenditure	1971-72 plan outlay
(0)	(1)	(2)	(3)
<i>agriculture and allied programmes</i>			
1	agricultural production	504	948
2	soil conservation	335	478
3	animal husbandry	22	70
4	fisheries	128	90
5	forests	20	20
6	food processing and subsidiary foods	6	23
7	cooperation	500	500
8	community development	235	245
9	agriculture and allied programmes	1750	2374
10	power	500	700
11	village and small industries	110	102
<i>transport and communications</i>			
12	roads	206	380
13	ports and harbours	89	295
14	inland water transport	50	47
15	transport and communications	345	722
<i>social services</i>			
16	general education and cultural programmes	283	231
17	technical education	218	426
18	health	2728	2703
19	family planning	4174	5482
20	water supply	40	119
21	welfare of backward classes	1126	1258
22	social welfare	44	33
23	social services	8613	10252
24	grand total	11318	14150

ANNEXURE 2.4

Plan Outlay for 1971-72 by Head of Development—States

sl. no.	head of development	Andhra Pradesh	Assam	Bihar	Gujarat
(0)	(1)	(2)	(3)	(4)	(5)
1	agricultural research	44	N.A.	37	94
2	small and marginal farmers	—	N.A.	1	—
3	land reforms	—	N.A.	—	—
4	agricultural production	92	291	179	122
5	minor irrigation	530	255	895	591
6	soil conservation	56	61	85	163
7	area development	230	6	24	25
8	animal husbandry	41	103	61	112
9	dairying and milk supply	60	1	64	24
10	forests	50	64	80	55
11	fisheries	45	25	35	72
12	warehousing and marketing	4	4	6	8
13	<i>I. agricultural programmes</i>	1152	809	1607	1286
14	cooperation	200	75	125	111
15	community development	—	62	220	96
16	panchayats	150	12	5	4
17	<i>II. cooperation and community development</i>	350	149	350	205
18	irrigation	1900	123	2449	2176
19	flood control	—	537	220	174
20	Power	3400	756	2450	2370
21	<i>III. irrigation and power</i>	5300	1416	5119	4720
22	large and medium industries	140	224	113	228
23	mineral development	10	15	70	104
24	village and small industries	128	100	122	43
25	<i>IV. industry and mining</i>	278	339	305	375
26	roads	320	453	615	405
27	road transport	45	99	75	200
28	ports and harbour	10	—	—	105

ANNEXURE 2.4—(Contd.)

sl. no.	head of development	Haryana	Jammu & Kashmir	Kerala	Madhya Pradesh
(0)	(1)	(2)	(3)	(4)	(5)
29	other transport	—	23	3	—
30	tourism	6	6	5	13
31	<i>V. transport and communications</i>	381	581	698	723
32	general education	350	356	665	488
33	technical education	40	41	32	32
34	health	100	145	250	160
35	water supply	385	123	335	365
36	housing	169	27	130	180
37	urban development	40	43	20	10
38	welfare of backward classes	132	105	115	150
39	social welfare	6	12	2	10
40	labour and labour welfare	11	17	44	28
41	<i>VI. social services</i>	1233	869	1583	1423
42	statistics	3	3	3	2
43	information and publicity	1	9	6	9
44	state capital projects	—	—	—	500
45	special and backward area	—	—	—	251
46	evaluation machinery	2	1	1	—
47	others	—	45	1	60
48	<i>VII. miscellaneous</i>	6	58	11	822
49	<i>grand total</i>	8700	4221	9673	9554

¹Included under animal husbandary.

ANNEXURE 2.4—(Contd.)

sl. no.	head of development	Haryana	Jammu & Kashmir	Kerala	Madhya Pradesh
(0)	(1)	(6)	(7)	(8)	(9)
1	agriculture research	120	40	36	35
2	small and marginal farmers	—	—	5	17
3	land reforms	—	8	170	83
4	agricultural production	125	132	204	304
5	minor irrigation	196	150	275	800
6	soil conservation	35	31	42	300
7	area development	10	—	—	15
8	animal husbandry	67	100	70	130
9	dairying and milk supply	61	13	26	50
10	forests	36	51	84	220
11	fisheries	7	6	192	40
12	warehousing and marketing	1	—	4	20
13	<i>I. agricultural programmes</i>	658	531	1108	2014
14	cooperation	88	40	132	315
15	community development	20	14	100	150
16	panchayats	6	6	20	20
17	<i>II. cooperation and community development</i>	114	60	252	485
18	irrigation	891	121	525	1680
19	flood control	250	100	130	10
20	power	1847	750	1725	1910
21	<i>III. irrigation and power</i>	2988	971	2380	3600
22	large and medium industries	65	82	244	122
23	mineral development	3	40	1	45
24	village and small industries	72	72	219	128
25	<i>IV. industry and mining</i>	140	194	464	295
26	roads	895	465	325	700
27	road transport	126	75	100	60
28	ports and harbour	—	—	18	—
29	other transport	4	—	10	—
30	tourism	19	75	10	10
31	<i>V. transport and communication</i>	1044	615	463	770

ANNEXURE 2.4—(Contd)

(0)	(1)	(6)	(7)	(8)	(9)
32	general education	349	160	344	491
33	technical education	40	14	50	60
34	health	288	82	180	250
35	water supply	290	195	557	400
36	housing	50	50	110	250
37	urban development	—	15	29	10
38	welfare of backward classes	40	13	28	280
39	social welfare	14	6	4	20
40	labour and labour welfare	20	10	20	31
41	<i>VI. social services</i>	1091	545	1322	1792
42	statistics	3	5	4	2
43	information and publicity	13	6	3	10
44	state capital projects	—	—	—	71
45	special and backward areas	—	146	—	—
46	evaluation machinery	Neg.	1	1	—
47	others	12	5	3	7
48	<i>VII. miscellaneous</i>	28	163	11	90
49	<i>grand total</i>	6063	3079	6000	9046

Neg.—Negligible

ANNEXURE 2.4—(Contd.)

sl. no.	head of development	Mahara-shtra	Mysore	Nagaland	Orissa
(0)	(1)	(10)	(11)	(12)	(13)
1	agricultural research	242	40	2	11
2	small and marginal farmers	131	3	—	—
3	land reforms	9	—	—	30
4	agricultural production	150	407	39	229
5	minor irrigation	1250	563	1	347
6	soil conservation	830	180	8	33
7	area development	85	54	—	15
8	animal husbandry	76	68	19	72
9	dairying and milk supply	140	55	4	11
10	forests	233	100	28	74
11	fisheries	90	73	4	45
12	warehousing and marketing	20	15	—	5
13	<i>I. agricultural programmes</i>	3256	1558	100	872
14	cooperation	435	279	13	80
15	community development	20	20	21	80
16	panchayats	378	—	5	5
17	<i>II. cooperation and community development</i>	813	299	39	165
18	irrigation	2800	1397	—	515
19	flood control	—	—	—	45
20	power	4680	1695	65	1700
21	<i>III. irrigation and power</i>	7480	3092	65	2260
22	large and medium industries	356	171	61	183
23	mineral development	20	10	9	75
24	village and small industries	117	113	13	69
25	<i>IV. industry and mining</i>	493	294	83	323
26	roads	1161	315	230	266
27	road transport	290	—	27	31
28	ports and harbour	75	15	—	1
29	other transport	5	—	—	5
30	tourism	25	5	4	10
31	<i>V. transport and communications</i>	1556	335	261	313

ANNEXURE 2.4—(Contd.)

sl. no.	head of development	Maharashtra	Mysore	Nagaland	Orissa
(0)	(1)	(10)	(11)	(12)	(13)
32	general education	1517	291	73	299
33	technical education	150	60	9	17
34	health	150	160	42	142
35	water supply	1700	550	72	135
36	housing	320	180	28	23
37	urban development	240			
38	welfare of backward classes	121	100	—	87
39	social welfare	19	17	3	3
40	labour and labour welfare	45	34	—	17
41	<i>VI. social services</i>	4262	1392	247	873
42	statistics	7	4	3	10
43	information and publicity	6	18	5	6
44	state capital projects	—	—	—	—
45	special and backward area	—	—	—	—
46	evaluation machinery	—	1	1	1
47	others	1	7	—	10
48	<i>VII. miscellaneous</i>	14	30	9	27
49	<i>grand total</i>	17874	7000	804	4833

¹Included under Agricultural Production.

²Included under Animal Husbandry.

ANNEXURE 2.4—(Contd.)

sl. no.	head of development	Punjab	Rajas- than	Tamil Nadu	Uttar Pradesh
(0)	(1)	(14)	(15)	(16)	(17)
1	agricultural research	63	13	n.a.	146
2	small and marginal farmers	—	—	n.a.	—
3	land reforms	—	5	n.a.	415
4	agricultural production	238	42	350	538
5	minor irrigation	347	300	689	2130
6	soil conservation	84	36	70	428
7	area development	1	30	—	—
8	animal husbandry	124	58	40	123
9	dairying and milk supply	120	25	48	66
10	forests	67	50	81	21
11	fisheries	8	12	150	256
12	warehousing and marketing	7	3	13	52
13	<i>I. agricultural programmes</i>	1059	574	1441	4175
14	cooperation	122	67	209	334
15	community development	33	58		237
16	panchayats	10	8	182	37
17	<i>II. cooperation and community develop- ment</i>	165	133	391	608
18	irrigation	495	1711	500	2688
19	flood control	200	50		205
20	power	3596	2000	2426	7977
21	<i>III. irrigation and power</i>	4291	3761	2926	10871
22	large and medium industries	94	167	250	345
23	mineral development	3		10	22
24	village and small industries	79	13	300	275
25	<i>IV. industry and mining</i>	176	180	560	642
26	roads	600	170	280	900
27	road transport	348	5	135	150
28	ports and harbour	—	—	—	—
29	other transport	16	—	—	—
30	tourism	8	10	1	16
31	<i>V. transport and communications</i>	972	185	416	1066

ANNEXURE 2.4—(Contd.)

(Rs. lakhs)

(0)	(1)	(14)	(15)	(16)	(17)
32	general education	404	410	610	1167
33	technical education	14	10	92	182
34	health	128	181	250	644
35	water supply	220	583	750	465
36	housing	74	117	325	260
37	urban development	14	5	40	30
38	welfare of backward classes	40	73	120	201
39	social welfare	9	9	24	22
40	labour and labour welfare	27	10	27	80
41	<i>VI. social services</i>	930	1398	2238	3051
42	statistics	5	3	8	3
43	information and publicity	11	12	4	4
44	state capital projects	—	—	—	—
45	special and backward areas	—	—	36	400
46	evaluation machinery	—	3	—	1
47	others	5	6	—	94
48	<i>VII. miscellaneous</i>	21	24	48	502
49	<i>grand total</i>	7936	6255	8020	20915

ANNEXURE 2.4—(Contd.)

(Rs. lakhs)

Head of Development		West Bengal	Himachal Pradesh	Meghalaya	Total
(0)	(1)	(18)	(19)	(20)	(21)
1	agricultural research	45	29	3	1000
2	small and marginal farmers	—	—	—	157
3	land reforms	13	24	3	920
4	agricultural production	164	155	44	3805
5	minor irrigation	450	47	17	9832
6	soil conservation	26	53	18	2539
7	area development	7	—	—	502
8	animal husbandry	97	29	19	1410
9	dairying and milk supply	60	19	3	845
10	forests	43	131	20	1722
11	fisheries	61	8	4	898
12	warehousing and marketing	10	7	—	179
13	<i>I. agricultural programmes</i>	976	502	131	23809
14	cooperation	70	25	18	2738
15	community development	71	40	22	1948
16	panchayats	12	5	—	155
17	<i>II. cooperation and community development</i>	153	70	40	4841
18	irrigation	301	—	—	20272
19	flood control	257	4	5	2188
20	power	1600	381	38	41366
21	<i>III. irrigation and power</i>	2158	385	43	63826
22	large and medium industries	147	36	11	3039
23	mineral development	2	5	5	449
24	village and small industries	133	33	26	2051
25	<i>IV. industry and mining</i>	282	74	42	5539
26	roads	250	611	325	9286
27	road transport	9	35	5	1815
28	ports and harbour	—	—	—	224
29	other transport	3	—	—	69
30	tourism	14	24	7	268
31	<i>V. transport and communications</i>	276	670	337	11662

ANNEXURE 2.4—(Contd.)
(Rs. lakhs)

(0)	(1)	(18)	(19)	(20)	(21)
32	general education	575	112	75	8726
33	technical education	16	11	4	874
34	health	270	69	25	3516
35	water supply	110	74	42	7351
36	housing	120	40	2	2574
37	urban development	890 ¹	43	10	1490
38	welfare of backward classes	58	16	—	1679
39	social welfare	13	3	3	199
40	labour and labour welfare	36	7	—	464
41	<i>VI. social services</i>	1218	375	161	26873
42	statistics	2	1	2	73
43	information and publicity	2	5	3	133
44	state capital projects	—	—	—	571
45	special and backward areas	—	—	5	838
46	evaluation machinery	3	Neg	1	17
47	others	1	—	30	609
48	<i>VII. miscellaneous</i>	878	6	41	2241
49	<i>grand total</i>	5941	2082	795	138791

¹Includes Rs. 870 lakhs for CMBP.

ANNEXURE 2.5

Plan Outlay for 1971-72 by Heads of Development—Union Territories

(Rs. lakhs)

sl. no.	head of development	Andaman and Nicobar Islands	Chandigarh	Dadra and Nagar Haveli	Delhi	Goa, Daman and Diu	Laccadive Amindive and Minicoy Islands
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	agricultural research	—	N.A.	N.A.	—	2.91	N.A.
2.	small and marginal farmers	—	N.A.	N.A.	—	—	N.A.
3.	land reforms	—	N.A.	N.A.	—	31.50	N.A.
4.	agricultural production	4.41	0.25	7.50	16.05	42.83	38.3
5.	minor irrigation	0.33	0.50	2.50	13.00	19.78	—
6.	soil conservation	1.45	—	3.00	2.58	10.53	—
7.	area development	—	—	—	—	—	—
8.	animal husbandry	2.64	5.00	0.65	21.30	18.75	1.60
9.	dairying and milk supply	0.71	6.00	0.60	—	11.45	—
10.	forests	15.96	0.40	1.00	—	14.91	—
11.	fisheries	0.56	—	—	5.61	28.70	17.87
12.	warehousing and marketing	—	—	—	1.40	0.91	—
13.	<i>I. agricultural programmes</i>	26.06	12.15	15.25	60.00	182.27	23.30
14.	cooperation	1.19	0.25	0.50	13.59	22.72	3.60
15.	community development	2.80	0.25	2.40	—	12.00	2.04
16.	panchayats	0.60	—	—	1.00	3.77	—
17.	<i>II. cooperation and community development</i>	4.59	0.50	2.90	14.59	38.49	5.64
18.	irrigation	—	—	—	—	1.50	—
19.	flood control	—	—	—	120.00	6.80	—

ANNEXURE 2.5—(Contd.)

(Rs. lakhs)

(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
20	power	10.48	35.00	5.00	725.00	112.00	6.40
21	<i>III. irrigation and power</i>	10.48	35.00	5.00	845.00	120.30	6.40
22	large and medium industries	—	—	—	—	1.00	—
23	mineral development	—	—	—	—	1.50	—
24	village and small industries	0.70	4.50	1.03	123.00	11.24	1.72
25	<i>IV. industry and mining</i>	0.70	4.50	1.03	123.00	13.74	1.72
26	roads	74.50	2.50	12.00	270.00	96.08	—
27	road transport	7.91	—	—	300.00	—	—
28	ports and harbour	64.00	—	—	—	5.20	—
29	other transport	17.00	—	—	—	25.00	—
30	tourism	0.90	0.08	—	—	7.22	—
31	<i>V. transport and communications</i>	164.31	2.58	12.00	570.00	135.50	—
32	general education	24.00	11.00	5.50	492.40	75.20	7.37
33	technical education	—	6.10	—	40.00	21.54	—
34	health	6.93	5.70	2.00	173.04	60.67	2.89
35	water supply	93.76	0.50	2.00	603.00	130.00	—
36	housing	3.83	2.50	1.90	250.34	15.00	0.10
37	urban development	—	—	—	172.00	0.06	—
38	welfare of backward classes	1.23	—	—	21.25	4.01	0.25
39	social welfare	0.20	—	0.15	18.00	1.10	—
40	labour and labour welfare	0.28	1.37	—	32.32	3.18	—
41	<i>VI. social services</i>	131.23	27.17	11.53	1802.35	310.76	10.61
42	statistics	0.07	0.1000	0.23	3.23	1.45	—
43	information and publicity	1.27	—	0.044	14.50	3.00	—
44	state capital projects	—	110.00	—	—	—	—
45	evaluation machinery	—	—	—	0.41	0.49	0.18
46	others	4.19	—	—	0.25 ¹	6.00	0.15
47	<i>VII. miscellaneous</i>	5.53	110.10	0.27	18.41	10.94	0.33
48	<i>grand total</i>	342.90	192.00	48.00	3433.35	810.00	48.00

¹for public cooperation.

ANNEXURE 2.5—(Contd.)
(Rs. lakhs)

sl. no.	head of development	Manipur	NEFA	Pondicherry	Tripura	Total
(0)	(1)	(8)	(9)	(10)	(11)	(12)
1	agricultural research	0.75	0.20	0.51	6.00	10.37
2	small and marginal farmers	—	—	—	—	—
3	land reforms	—	—	3.69	1.00	36.19
4	agricultural production	20.25	16.87	13.50	52.98	178.47
5	minor irrigation	7.60	5.05	13.00	25.00	86.76
6	soil conservation	3.50	5.69	4.71	16.00	47.46
7	area development	—	—	—	—	—
8	animal husbandry	6.57	14.00	3.95	14.00	88.46
9	dairying and milk supply	2.15		3.00	7.00	30.91
10	forests	8.03	32.17	—	22.50	94.97
11	fisheries	8.00	3.00	18.67	10.00	92.41
12	warehousing and marketing	—	1.70	0.96	9.00	14.03
13	<i>I. agricultural programmes</i>	56.85	78.68	61.99	163.48	680.03
14	cooperation	9.08	8.27	3.98	10.50	73.68
15	community development	5.60	22.00	3.56	9.00	64.63
16	panchayats	1.81	—	—	6.50	13.68
17	<i>II. cooperation and community development</i>	16.49	30.27	12.54	26.00	152.01
18	irrigation	4.00	—	2.13	0.40	8.03
19	flood control	20.00	—	16.35	23.60	186.75
20	power	66.72	29.17	15.71	225.00	1230.48
21	<i>III. irrigation and power</i>	90.72	29.17	34.19	249.00	1425.36
22	large and medium industries	10.00	0.65	4.23	1.00	16.88
23	mineral development	—	—	—	—	1.50
24	village and small industries	15.00	8.95	8.40	23.15	197.69
25	<i>IV. industry and mining</i>	25.00	9.60	12.63	24.15	216.07
26	roads	205.00	125.60	23.00	128.00	936.68
27	road transport	12.00	—	—	20.00	339.91
28	ports and harbour	—	—	4.14	—	73.34
29	other transport	—	10.10	—	—	52.10
30	tourism	1.00	—	3.96	2.00	15.16
31	<i>V. transport and communication</i>	218.00	135.70	31.10	190.00	1417.19
32	general education	70.00	37.85	31.00	71.29	846.61
33	technical education	3.00	—	2.98	14.50	88.12

ANNEXURE 2.5 (Contd.)
(Rs. lakhs)

(0)	(1)	(8)	(9)	(10)	(11)	(12)
34	health	40.00	13.67	14.24	20.00	339.14
35	water supply	12.50	6.00	25.29	7.20	881.25
36	housing	4.25	—	12.90	3.00	293.82
37	urban development	3.22	—	7.46	8.00	190.74
38	welfare of backward classes	16.60	—	5.08	37.00	85.42
39	social welfare	1.30	—	2.00	1.79	24.54
40	labour and labour welfare	0.47	2.62	4.10	1.50	45.84
41	<i>VI. social services</i>	151.34	60.14	126.05	164.28	2795.48
42	statistics	1.70	1.52	0.35	1.32	9.99
43	information and publicity	5.00	6.00	1.15	8.30	39.26
44	state capital projects	—	—	—	—	110.00
45	evaluation machinery	—	—	—	0.20	1.28
46	others	7.00	33.92 ^a	—	12.50	64.01
47	<i>VII. miscellaneous</i>	13.70	41.44	1.50	22.23	224.54
48	<i>grand total</i>	572.10	385.00	280.00	799.23	6910.58

^aRs. 33.00 lakhs for settlement of ex-servicemen.

ANNEXURE 2.6

Anticipated Expenditure for 1970-71—States

(Rs. lakhs)

Sl. no.	head of development	Andhra Pradesh	Assam	Bihar
(0)	(1)	(2)	(3)	(4)
1	agricultural production	1444	291	331
2	minor irrigation	527	255	747
3	soil conservation	58	58	50
4	area development	180	5	26
5	animal husbandry	38	82	50
6	dairying and milk supply	59	13	60
7	forests	45	64	80
8	fisheries	43	29	30
9	warehousing and marketing	3	2	12
10	<i>I. agricultural programmes</i>	1097	799	1386
11	cooperation	61	89	97
12	community development	170	67	281
13	panchayats		10	4
14	<i>II. cooperation and community development</i>	231	166	382
15	irrigation	2205	127	2072
16	flood control		720	248
17	power	3653	701	2678
18	<i>III, irrigation and power</i>	5858	1548	4998
19	large and medium industries	252	233	161
20	mineral development	11	13	56
21	village and small industries	116	82	101
22	<i>IV. industry and mining</i>	379	328	318
23	roads	163	389	536
24	road transport	45	115	90
25	ports and harbours	10	—	—
26	other transport	—	16	—
27	tourism	6	7	2

ANNEXURE 2.6 (Contd.)
(Rs. lakhs)

(0)	(1)	(2)	(3)	(4)
28	<i>V. transport and communications</i>	226	527	628
29	general education	222	304	454
30	technical education	25	27	32
31	health	78	184	263
32	water supply	205	82	352
33	housing	44	15	124
34	urban development	28	32	15
35	welfare of backward classes	149	95	78
36	social welfare	4	9	1
37	labour and labour welfare	8	17	37
38	<i>VI. social services</i>	763	765	1356
39	statistics	1	3	2
40	information and publicity	1	8	4
41	states capital projects	—	—	—
42	special and backward areas	—	—	—
43	evaluation machinery	2	—	1
44	others	—	41	—
45	<i>VII. miscellaneous</i>	4	52	7
46	<i>grand total</i>	8558	4185	9075

ANNEXURE 2.6—(Contd.)
(Rs. lakhs)

sl. no.	head of development	Gujarat	Haryana	Jammu and Kashmir
(0)	(1)	(5)	(6)	(7)
1	agricultural production	242	286	188
2	minor irrigation	621	194	159
3	soil conservation	553	33	32
4	area development	1	—	—
5	animal husbandry	100	59	76
6	dairying and milk supply	26	61	6
7	forests	54	31	37
8	fisheries	73	6	2
9	warehousing and marketing	8	—	—
10.	<i>I. agricultural programmes</i>	1277	670	500
11	cooperation	120	78	31
12	community development	96	16	21
13	panchayats	4	—	5
14	<i>II. cooperation and community development</i>	220	94	57
15	irrigation	2059	615	118
16	flood control	32	160	151
17	power	2320	2077	601
18	<i>III. irrigation and power</i>	4411	2852	1170
19	large and medium industries	204	35	75
20	mineral development	80	1	45
21	village and small industries	49	64	61
22	<i>IV. industry and mining</i>	333	100	182
23	roads	377	760	421
24	road transport	168	126	63
25	ports and harbours	175	—	—
26	other transport	—	14	—
27	tourism	13	19	107
28	<i>V. transport and communications</i>	733	919	593
29	general education	420	323	155
30	technical education	30	38	25
31	health	134	190	90
32	water supply	285	240	152
33	housing	100	61	60

¹Included under Agricultural Production.

ANNEXURE 2.6—(Contd.)
(Rs. lakhs)

(0)	(1)	(5)	(6)	(7)
34	urban development	8	—	11
35	welfare of backward classes	92	31	10
36	social welfare	8	7	5
37	labour and labour welfare	23	15	6
38	<i>VI. social services</i>	1100	895	492
39	statistics	2	2	2
40	information and publicity	5	7	2
41	state capital projects	52	—	—
42	special and backward areas	277	—	114
43	evaluation machinery	—	—	1
44	others	36	5	9
45	<i>VII. miscellaneous</i>	848	14	128
46	<i>grand total</i>	8922	5544	3121

ANNEXURE 2.6—(Contd.)

		(Rs. lakhs)		
sl. no.	head of development	Kerala	Madhya Pradesh	Maha-rashtra
(0)	(1)	(8)	(9)	(10)
1	agricultural production	280	290	465
2	minor irrigation	295	662	1291
3	soil conservation	37	370	1083
4	area development	--	2	57
5	animal husbandry	54	96	43
6	dairying and milk supply	16	36	119
7	forests	81	150	182
8	fisheries	152	23	67
9	warehousing and marketing	2	8	14
10	<i>I. agricultural programmes</i>	917	1631	5321
11	cooperation	124	330	484
12	community development	100	334	
13	panchayats	15	10	400
14	<i>II. cooperation and community development</i>	239	674	884
15	irrigation	676	1170	2791
16	flood control	129	5	
17	power	1849	1850	4576
18	<i>III. irrigation and power</i>	2654	3025	7376
19	large and medium industries	200	135	338
20	mineral development	1	20	9
21	village and small industries	226	53	127
22	<i>IV. industry and mining</i>	427	208	474
23	roads	420	470	1181
24	road transport	60	62	439
25	ports and harbours	23	--	46
26	other transport	23	--	3
27	tourism	9	7	25
28	<i>V. transport and communications</i>	535	539	1674
29	general education	330	264	735
30	technical education	28	60	97
31	health	118	182	80
32	water supply	415	351	1837

ANNEXURE 2.6—(Contd.)

(Rs. lakhs)

(0)	(1)	(8)	(9)	(10)
33	housing	134	134	590
34	urban development	29	14	43
35	welfare of backward classes	21	213	54
36	social welfare	3	15	15
37	labour and labour welfare	21	18	30
38	<i>VI. social services</i>	1099	1251	3481
39	statistics	2	2	4
40	information and publicity	4	2	5
41	state capital projects	—	81	
42	special and backward areas	—	—	
43	evaluation machinery	1	—	
44	others	7	14	1
45	<i>VII. miscellaneous</i>	14	99	10
46	<i>grand total</i>	5885	7427	17211

ANNEXURE 2.6—Contd.)
(Rs. lakhs)

sl. no.	head of development	Meghalaya	Mysore	Nagaland	Orissa
(0)	(1)	(11)	(12)	(13)	(14)
1	agricultural production	40	460	42	260
2	minor irrigation	14	718	12	200
3	soil conservation	15	168	14	22
4	area development	—	50	—	8
5	animal husbandry	17	61	21	63
6	dairying and milk supply	23	61	—	—
7	forests	18	116	18	50
8	fisheries	3	84	5	30
9	warehousing and marketing	—	10	—	3
10	<i>I. agricultural programmes</i>	110	1728	116	635
11	cooperation	15	295	10	88
12	community development	25	18	21	64
13	panchayats	—	2	5	4
14	<i>II. cooperation and community development</i>	40	315	36	156
15	irrigation	—	2294	—	495
16	flood control	—	—	—	25
17	power	37	1804	53	1660
18	<i>III. irrigation and power</i>	73	4098	53	2180
19	large and medium industries	11	172	121	261
20	mineral development	7	5	7	240
21	village and small industries	25	72	15	53
22	<i>IV. industry and mining</i>	43	249	143	554
23	roads	400	315	192	301
24	road transport	5	—	25	15
25	ports and harbours	—	15	—	1
26	other transport	—	—	—	4
27	tourism	4	5	4	7
28	<i>V. transport and communications</i>	409	335	231	328
29	general education	75	275	73	199
30	technical education	3	38	6	13
31	health	16	150	40	163
32	water supply	41	475	58	94
33	housing	2	176	10	133
34	urban development	10	—	12	24

ANNEXURE 2.5—(Contd.)
(Rs. lakhs)

(0)	(1)	(11)	(12)	(13)	(14)
35	welfare of backward classes	—	68	—	76
36	social welfare	3	11	3	4
37	labour and labour welfare	—	32	—	23
38	VI. <i>social services</i>	150	1235	202	733
39	statistics	—	1	2	9
40	information and publicity	2	18	5	4
41	state capital projects	—	—	—	—
42	special and backward areas	5	—	—	—
43	evaluation machinery	—	—	1	—
44	others	34	5	—	6
45	VII. <i>miscellaneous</i>	41	24	8	19
46	<i>grand total</i>	830	7984	775	4605

ANNEXURE 2.6—(Contd.)
(Rs. lakhs)

sl. no.	head_of development	Punjab	Rajasthan	Tamil Nada
(0)	(1)	(15)	(16)	(17)
1	agricultural production	137	85	372
2	minor irrigation	311	268	671
3	soil conservation	87	47	65
4	area development	1	—	65
5	animal husbandry	63	48	33
6	dairying and milk supply	59	11	50
7	forests	45	44	74
8	fisheries	7	48	174
9	warehousing and marketing	—	2	14
10	I. <i>agricultural programmes</i>	710	513	1518
11	cooperation	200	71	135
12	community development	240	65	222
13	panchayats	7	8	
14	II. <i>cooperation and community development</i>	447	144	357
15	irrigation	341	1737	493
16	flood control	250	40	—
17	power	2781	1762	2984
18	III. <i>irrigation and power</i>	3372	3539	3477
19	large and medium industries	89	69	392
20	mineral development	2	85	9
21	village and small industries	133	21	355
22	IV. <i>industry and mining</i>	224	175	1796
23	roads	435	150	781
24	road transport	123	5	43
25	ports and harbours	—	—	—
26	other transport	9	—	—
27	tourism	4	24	8
28	V. <i>transport and communications</i>	571	179	432
29	general education	294	338	574
30	technical education	11	10	92
31	health	120	118	249
32	water supply	145	430	663
33	housing	85	123	371
34	urban development	10	—	39

ANNEXURE 2.6—(Contd.)
(Rs. lakhs)

(0)	(1)	(15)	(16)	(17)
35	welfare of backward classes	32	59	271
36	social welfare	7	8	27
[37	labour and labour welfare	24	8	13
38	VI. <i>social services</i>	728	1094	2900
39	statistics	4	22	6
40	information and publicity	4	5	
41	state capital projects	—	4	—
42	special and backward areas	—	—	45
43	evaluation machinery	4	2	—
44	others		1	102 ^a
45	VII. <i>miscellaneous</i>	12	14	153
46	<i>grand total</i>	6064	5658	9032

^aPublic Cooperation and Local Development.

ANNEXURE 2.6—Contd.)
(Rs. lakhs)

sl. no.	head of development	U.P.	W. Bengal	Total
(0)	(1)	(18)	(19)	(20)
1	agricultural production	986	253	5152
2	minor irrigation	2129	760	9834
3	soil conservation	389	25	2706
4	area development	—	5	399
5	animal husbandry	1166	94	1108
6	dairying and milk supply	63	53	696
7	forests	256	40	1385
8	fisheries	17	53	806
9	warehousing and marketing	—	7	84
10	I. <i>agricultural programmes</i>	3956	1290	22170
11	cooperation	101	60	2389
12	community development	223	71	2434
13	panchayats	33	10	117
14	II. <i>cooperation and community development</i>	357	141	4940
15	irrigation	2300	385	19878
16	flood control	200	257	2217
17	power	7573	1843	41102
18	III. <i>irrigation and power</i>	10073	2485	63197
19	large and medium industries	683	127	3558
20	mineral development	21	3	615
21	village and small industries	257	111	1961
22	IV. <i>industry and mining</i>	961	241	6134
23	roads	910	294	7977
24	road transport	100	9	1595
25	ports and harbours	—	—	270
26	other transport	—	2	71
27	tourism	35	11	297
28	V. <i>transport and communications</i>	1045	316	10210
29	general education	719	439	6194
30	technical education	163	65	766
31	health	424	210	2791

ANNEXURE 2.6—(Contd.)
(Rs. lakhs)

(0)	(1)	(18)	(19)	(20)
32	water supply	460	130	6421
33	housing	270	214	2636
34	urban development	270	701 ¹	982
35	welfare of backward classes	77	64	1390
36	social welfare	12	32	174
37	labour and labour welfare	95	36	406
38	VI. <i>social services</i>	2220	1987	21760
39	statistics	3	1	42
40	information and publicity	5	3	93
41	state capital projects	—	—	610
42	special and backward areas	—	—	441
43	evaluation machinery	—	3	11
44	others	102	33	400
45	VII. <i>miscellaneous</i>	110	40	1597
46	<i>grand total</i>	18722	6410	13000

¹Includes Rs. 663 lakhs for Calcutta Metropolitan District scheme.

ANNEXURE 2.7

Anticipated Expenditure for 1970-71—Union Territories

(Rs. lakhs)

sl. no.	head of development	Andaman and Nicobar Islands	Chandi- garh	Dadra and Nagar Haveli
(0)	(1)	(2)	(3)	(4)
1	agricultural production	5.43	0.25	6.92
2	minor irrigation	0.15	0.50	4.13
3	soil conservation	0.24	--	3.01
4	animal husbandry	2.12	8.30	0.63
5	dairying and milk supply	0.36	—	0.60
6	forests	14.44	0.44	1.72
7	fisheries	0.61	0.10	—
8	warehousing and marketing	—	—	—
9	<i>I. agricultural programmes</i>	23.35	9.59	17.01
10	cooperation	1.30	—	0.58
11	community development	3.73	0.17	2.00
12	panchayats	0.40	—	—
13	<i>II. cooperation and community development</i>	5.43	0.17	2.58
14	irrigation	—	—	—
15	flood control	—	—	—
16	power	8.25	40.00	6.00
17	<i>III. irrigation and power</i>	8.25	40.00	6.00
18	large and medium industries	—	—	—
19	mineral development	—	—	—
20	village and small industries	0.45	4.50	1.03
21	<i>IV. industry and mining</i>	0.45	4.50	1.03

ANNEXURE 2.7—(Contd.)
(Rs. lakhs)

(0)	(1)	(2)	(3)	(4)
22	roads	90.00	2.00	23.81
23	road transport	8.46	—	—
24	ports and harbours	53.88	—	—
25	other transport	11.38 ¹	—	—
26	tourism	1.03	2.83	—
27	<i>V. transport and communications</i>	164.75	4.83	23.81
28	general education	25.82	11.00	6.49
29	technical education	—	5.71	—
30	health	8.32	8.80	4.65
31	water supply	82.34	1.67	2.00
32	housing	—	—	—
33	urban development	2.40	4.00	1.35
34	welfare of backward classes	1.21	—	—
35	social welfare	0.36	—	0.08
36	labour and labour welfare	0.87	2.33	—
37	<i>VI. social services</i>	120.82	33.51	14.37
38	statistics	0.04	0.04	0.22
39	information and Publicity	1.62	—	0.07
40	state capital projects	—	75.00	—
41	evaluation machinery	—	—	—
42	others	1.35	—	—
43	<i>VII. miscellaneous</i>	3.01	75.04	0.29
44	<i>grand total</i>	326.06	167.64	65.29

¹ Shipping

ANNEXURE 2.7—(Contd.)

(Rs. lakhs)

sl. no.	head of development	Delhi	Goa Daman and Diu	Himachal Pradesh
(0)	(1)	(5)	(6)	(7)
1	agricultural production	11.47	76.35	161.82
2	minor irrigation	24.52	18.65	52.84
3	soil conservation	4.25	3.00	47.50
4	animal husbandry	18.03	20.25	28.29
5	dairying and milk supply	—	14.31	16.71
6	forests	—	15.70	110.00
7	fisheries	0.56	25.80	8.00
8	warehousing and marketing	1.75	3.01	¹
9	I. <i>agricultural programmes</i>	60.58	177.07	425.16
10	cooperation	15.00	12.18	25.00
11	community development	—	15.42	43.50
12	panchayats	1.00	3.77	5.50
13	II. <i>cooperation and community development</i>	16.00	31.37	74.00
14	irrigation	—	0.50	—
15	flood control	135.00	4.50	4.75
16	power	742.37	98.62	454.56
17	III. <i>irrigation and power</i>	877.37	103.62	459.31
18	large and medium industries	—	7.50	25.00
19	mineral development	—	1.20	4.60
20	village and small industries	75.00	11.11	42.50
21	IV. <i>industry and mining</i>	75.00	19.81	72.10
22	roads	246.42	95.59	636.50
23	road transport	200.00	—	35.00
24	ports and harbours	—	14.52	—
25	other transport	—	35.92	—
26	tourism	—	7.68	14.00
27	V. <i>transport and communications</i>	446.42	153.71	685.50
28	general education	385.99	69.52	65.00
29	technical education	33.54	24.87	9.00
30	health	160.98	57.65	48.00
31	water supply	415.00	105.41	64.50
32	housing	140.09	11.30	10.00

¹Included under Agricultural Production.

ANNEXURE 2.7—(Contd.)
(Rs. lakhs)

(0)	(1)	(5)	(6)	(7)
33	urban development	181.00	3.55	13.46
34	welfare of backward classes	25.00	5.98	8.00
35	social welfare	14.95	1.55	2.00
36	labour and labour welfare	25.05	5.49	7.00
37	VI. social services	1381.60	285.32	226.96
38	statistics	1.60	1.03	0.35
39	information and publicity	7.40	3.35	5.00
40	state capital projects	—	—	—
41	evaluation machinery	0.53	0.47	0.13
42	others	0.35	8.00	12.05
43	VII. miscellaneous	9.88	12.85	17.53
44	grand total	2866.85	783.75	1960.56

ANNEXURE 2.7—(Contd.)

(Rs. lakhs)

sl. no.	head of development	Laccadive and Minicoy Islands	Manipur	NEFA
(0)	(1)	(8)	(9)	(10)
1	agricultural production	3.13	17.22	12.85
2	minor irrigation	—	7.50	4.53
3	soil conservation	—	3.14	4.80
4	animal husbandry	1.38	6.67	8.56
5	dairying and milk supply	—	2.10	—
6	forests	—	7.26	30.00
7	fisheries	15.38	7.98	2.31
8	warehousing and marketing	—	—	—
9	<i>I. agricultural programmes</i>	19.89	51.87	63.05
10	cooperation	4.27	11.27	8.54
11	community development	0.60	5.60	20.00
12	panchayats	—	1.81	—
13	<i>II. cooperation and community development</i>	4.87	18.68	28.54
14	irrigation	—	—	—
15	flood control	—	20.00	—
16	power	7.20	53.75	20.81
17	<i>III. irrigation and power</i>	7.20	73.75	20.81
18	large and medium industries	—	1.60	1.30
19	mineral development	—	—	—
20	village and small industries	1.52	25.23	9.02
21	<i>IV. industry and mining</i>	1.52	26.83	10.32
22	roads	3.78	165.51	137.46
23	road transport	—	12.00	—
24	ports and harbours	—	—	—
25	other transport	—	—	7.55
26	tourism	—	1.03	—
27	<i>V. transport and communications</i>	3.78	178.54	145.01
28	general education	5.40	52.67	31.67
29	technical education	—	2.82	—
30	health	2.38	36.42	23.83
31	water supply	—	10.98	11.49

ANNEXURE 2.7 (Contd.)
(Rs. lakhs)

(0)	(1)	(8)	(9)	(10)
32	housing	0.05	3.50	—
33	urban development	—	2.21	—
34	welfare of backward classes	0.25	8.70	—
35	social welfare	—	0.43	—
36	labour and labour welfare	—	0.46	1.00
37	VI. social services	8.08	117.59	67.99
38	statistics	—	1.66	1.67
39	information and publicity	0.04	3.50	4.50
40	state capital projects	—	—	—
41	evaluation machinery	0.15	—	—
42	others	0.04	8.50	43.11
43	VII. miscellaneous	0.23	13.66	49.28
44	grand total	45.57	480.93	385.00

ANNEXURE 2.7—(Contd.)**(Rs. lakhs)**

sl. no.	head of development	Pondicherry	Tripura	Total
(0)	(1)	(11)	(12)	(13)
1	agricultural production	14.74	46.61	356.79
2	minor irrigation	12.24	21.01	146.07
3	soil conservation	4.39	7.85	78.18
4	animal husbandry	4.06	8.36	106.65
5	dairying and milk supply	6.44	2.32	42.84
6	forests	—	16.43	195.99
7	fisheries	15.32	6.54	83.60
8	warehousing and marketing	—	4.00	8.76
9	<i>I. agricultural programmes</i>	57.19	113.12	1017.88
10	cooperation	2.50	7.00	87.64
11	community development	2.84	8.00	101.86
12	panchayats	—	4.26	16.74
13	<i>II. cooperation and community development</i>	5.34	19.26	206.24
14	irrigation	3.70	—	4.20
15	flood control	11.67	25.58	201.50
16	power	20.32	362.75	1814.63
17	<i>III. irrigation and power</i>	35.69	388.33	2020.33
18	large and medium industries	20.26	1.00	56.66
19	mineral development	—	—	5.80
20	village and small industries	5.76	14.78	190.90
21	<i>IV. industry and mining</i>	26.02	15.78	253.36
22	roads	21.83	130.48	1553.37
23	road transport	—	10.00	265.46
24	ports and harbours	10.08	—	78.48
25	other transport	—	—	54.85
26	tourism	1.36	0.76	28.69
27	<i>V. transport and communications</i>	33.26	141.24	1980.85
28	general education	30.40	54.81	738.17
29	technical education	4.59	16.56	97.09

ANNEXURE 2.7—(Contd.)
(Rs. lakhs)

(0)	(1)	(11)	(12)	(13)
30	health	11.17	15.00	377.20
31	water supply	21.48	5.42	720.29
32	housing	19.04	2.50	194.23
33	urban development		3.61	203.83
34	welfare of backward classes	3.27	34.35	86.76
35	social welfare	0.70	1.29	21.36
36	labour and labour welfare	2.00	0.34	44.04
37	VI. social services	92.65	133.88	2482.97
38	statistics	0.09	0.82	7.52
39	information and publicity	1.25	7.05	33.78
40	state capital projects	—	—	75.00
41	evaluation machinery	—	—	1.28
42	others	—	5.14	78.54
43	VII. miscellaneous	1.34	13.01	196.12
44	grand total	251.49	824.62	8157.75

CHAPTER 3

FINANCING THE PLAN

The following table shows the scheme of financing the Annual Plan for 1971-72 in the public sector, together with the pattern of financing the Plan outlays in 1969-70 and 1970-71 and the scheme of financing the Fourth Plan as a whole:

TABLE 3.1: *Plan Outlay and its Financing*

(Rs. crores)					
		Fourth Plan estimates	1969-70 actuals	1970-71 latest estimates	1971-72 Annual Plan estimates
(0)	(1)	(2)	(3)	(4)	(5)
1	<i>domestic budgetary resources</i>	8734	1250	1319	1539
2	balance from current revenues at 1968-69 rates of taxation	1673 ¹	158 ¹	157 ¹	182 ¹
3	contribution of public enterprises at 1968-69 fares, freights and tariffs				
4	railways	265	27	— 19	—35
5	posts and telegraphs	225	40	36	42
6	IDC, ARC, DVC and central power/generation units	259	17	33	55
7	others	1280	169	144	171
8	retained profits of Reserve Bank	202	8	47	60
9	loans from public by the central and state governments (net)	1415	211	285	268
10	borrowings by financial institutions including FCI:				
11	food corporation of India	155	—	116	19
12	others	250	22	14	39

¹Inclusive of state's share in additional taxation by the Centre.

TABLE 3.1—(Contd.)
(Rs. crores)

(0)	(1)	(2)	(3)	(4)	(5)
13	small savings	769	129	191	180
14	annuity deposits, compulsory deposits, prize bonds and gold bonds	—104	—34	—18	—17
15	state provident funds	660	156	144	151
16	miscellaneous capital receipts (net)	1685	347	189	478
17	additional resource mobilisation centre ^a	3198	101	429	725
18	centre ^a	2100	139	309	544
19	1969-70 measures	725	129	141	150
20	1970-71 measures		10	168	197
21	1971-72 measures	1375	—	—	197
22	measures to be adopted in subsequent years		—	—	—
23	states	1098	52	120	181
24	1969-70 measures	414	52	87	94
25	1970-71 measures		—	33	58
26	1971-72 measures	684	—	—	29
27	measures to be adopted in subsequent years		—	—	—
28	loans from LIC and state enterprises market borrowings (gross)	506	126	313	146
29	LIC loans to state governments for housing and water supply	100	18	20	29
20	market borrowings of state enterprises	258	75	68	80
31	LIC loans to state enterprises	148	33	45	37
32	total domestic budgetary resources	12438	1567	1881	2464

^aNet of states' share.

(0)	(1)	(2)	(3)	(4)	(5)
33	budgetary receipts corresponding to external assistance	2614	574	547	461
34	other than PL 480	2234	356	425	349
35	PL 480 assistance	380	218	122	112
36	deficit financing	850	58	365	233
37	<i>aggregate resources</i>	15902	2199	2793	3158

It will be seen that the total Plan outlay in the public sector in 1969-70 and 1970-71 is estimated at about Rs. 4992 crores. The contribution of domestic budgetary resources towards the financing of this outlay is estimated at Rs. 3448 crores, or 69 per cent of the total Plan outlay. External assistance is estimated at Rs. 1121 crores, or 23 per cent of the Plan outlay, while deficit financing amount to 423 crores or 8 per cent of the Plan outlay.

3.2. The Annual Plan for 1971-72 provides for Plan outlay of Rs. 3158 crores in the public sector. To finance this outlay, greater reliance is placed on domestic resources. External assistance is expected to contribute only Rs. 461 crores, or 15 per cent of total resources as against 23 per cent in the first two years of the Fourth Plan. The Central and State Governments are expected to raise Rs. 2464 crores from their domestic budgetary resources while the balance of Plan outlay amounting to Rs. 233 crores is to be met by deficit financing. The proportion of domestic budgetary resources and deficit financing to Plan outlay works out to 78 per cent and 7 per cent respectively.

3.3. The resources estimates indicated above provide for an expenditure of only Rs. 60 crores on relief of evacuees from East Bengal against which credit has been taken for receipts of Rs. 20 crores by way of assistance from foreign countries. The net provision made from domestic resources is thus Rs. 40 crores. To the extent the actual expenditure on evacuees, net of foreign aid, turns out to be higher than the provision of Rs. 40 crores just mentioned, it will be necessary to raise additional resources through various means, including further economies in non-Plan

expenditure, in order to safeguard the availability of resources for the Plan.

3.4. The detailed picture of financing Plan outlays at the Centre and in the States is shown in the Annexure. Brief comments on the estimates for 1971-72 in respect of individual items of Plan financing are given below.

Balance from Current Revenues

3.5. The balance for the Plan in 1971-72 from the current revenues of the Central and State Governments at 1968-69 rates of taxation, but inclusive of the States' share in the additional taxation undertaken by the Centre since 1969-70, is estimated at about Rs. 182 crores.

3.6. At the Centre, the balance from current revenues at 1968-69 rates of taxes is estimated at Rs. 44 crores. This shows a deterioration of Rs. 154 crores as compared to the estimate for 1970-71. Receipts from Central taxes in 1971-72 at 1968-69 rates are expected to show an increase of Rs. 204 crores over the preceding year's level while non-tax revenue is expected to rise by Rs. 71 crores. A part of the increase in revenue receipts is, however, expected to be offset by larger transfers to States by way of their share in Central taxes. Besides, non-Plan expenditure is expected to show an exceptionally large increase, mainly on account of the provision made for non-Plan schemes for rural employment and employment of technically trained and educated persons (Rs. 75 crores), relief of evacuees from East Bengal (Rs. 40 crores, net of assistance from abroad) and increase in food subsidy (Rs. 12 crores).

3.7. In the States, the balance from current revenues at 1968-69 rates of State taxes (but inclusive of the share in additional taxation undertaken by the Centre since 1969-70) is estimated at about Rs. 138 crores, which shows an improvement of Rs. 17.9 crores over the preceding year's level. Of this improvement, Rs. 145 crores is explained by the increase in the States' share in Central taxes, inclusive of the share in fresh taxation by the Centre in 1971-72. The rest of the improvement represents

the net effect of growth of receipts from State taxes and non-tax revenue on the one hand and increase in non-Plan expenditure on the other.

Contribution of Railways

3.8. The contribution of railways towards the financing of their development programme in 1971-72 at 1968-69 fares and freight charges is estimated at about (—) Rs. 35 crores as against (—) Rs. 19 crores in 1970-71. The revenues of the railways at 1968-69 rates of fares and freight charges are expected to increase by Rs. 40 crores. But this is expected to be more the offset by increases in operating expenses, current replacement expenditure and dividend payment to the Central Government. The increase in operating expenses is due mainly to the anticipated growth of traffic and also due to the full year's effect of the increase in daily allowances sanctioned with effect from January, 1971.

Contribution of Posts and Telegraphs

3.9. The contribution of Posts and Telegraphs towards the financing of their development programme in 1971-72 at 1968-69 postal tariffs is estimated at about Rs. 42 crores, as against Rs. 36 crores in 1970-71. The improvement is accounted for mainly by an increase in revenue receipts, partially offset by an increase in working expenses.

Resources of IDC, ARC, REC, DVC and Central Power Generation Units

3.10. The total resources of the Indian Dairy Corporation, Agricultural Refinance Corporation, Rural Electrification Corporation, Damodar Valley Corporation and the Central power generation units in 1971-72 are estimated at about Rs. 55 crores as against Rs. 33 crores in 1970-71.

Other Enterprises

3.11. The contribution of other enterprises of the Central Government is expected to show a marked increase in 1971-72, due mainly to the anticipated improvement in capacity utilisation, better inventory control and other improvements in operational efficiency. The contribution of State Governments' enterprises at 1968-69 rates of electricity charges

and bus fares is, however, expected to be lower than in the preceding year, due mainly to the full years' effect of the revision of emoluments of employees sanctioned in 1970-71. Credit for the yield from revision of electricity tariffs and bus fares has been taken under additional resource mobilisation.

Retained Profits of Reserve Bank

3.12. The Reserve Bank is expected to provide about Rs. 60 crores from its retained profits towards financing the programmes of agricultural and industrial development. Of this, Rs. 10 crores would represent loans to State Governments for participation in the share capital of co-operatives.

Loans from Public by the Central and State Governments

3.13. Net receipts of the Central and State Governments from loans from public in 1971-72 are estimated at about Rs. 268 crores as against Rs. 285 crores in 1970-71. This is mainly because loan repayments due in 1971-72 are substantially larger than in the preceding year. Net receipts of the Centre from loans from public in 1971-72 are estimated at Rs. 168 crores and those of the States at Rs. 100 crores.

Borrowings by Financial Institutions and the Food Corporation

3.14. The Food Corporation borrowed about Rs. 116 crores from the banking system in 1970-71 for addition to its buffer stocks. In 1971-1972, it is expected to borrow a further amount of Rs. 19 crores from the banking system for this purpose. Besides, borrowings of financial institutions from the market in 1971-72 are estimated at Rs. 39 crores.

Small Savings

3.15. There was a large spurt in small savings collections in 1970-71 when they touched the level of about Rs. 191 crores. This was partly due to increase in interest rates and investment in postal time deposits by the Employees' Provident Fund. Making allowance for the fact that some of the increase in small savings in 1970-71 was due to certain factors of a

temporary nature, the estimate for 1971-72 has been taken at Rs. 180 crores.

Annuity Deposits, Compulsory Deposits, Prize Bonds and Gold Bonds

3.16. These items are expected to involve a net outgo of about Rs. 17 crores in 1971-72.

State Provident Funds

3.17. The net accretion to State provident funds in 1971-72 is estimated at about Rs. 89 crores at the Centre and at Rs. 62 crores in the States, i.e. a total of Rs. 151 crores. This shows an improvement of Rs. 7 crores over the latest estimate for 1970-71.

Miscellaneous Capital Receipts

3.18. Net receipts from miscellaneous capital sources are estimated at about Rs. 478 crores for 1971-72, or Rs. 289 crores more than in 1970-71. At the Centre, the improvement over the preceding year's level is estimated at as much as Rs. 411 crores, due mainly to lower provision for special accommodation to States, smaller loans for natural calamities, curtailment of non-Plan capital outlay and loans and advances and larger inflow under deposits, funds etc. In the States, on the other hand, net miscellaneous capital receipts are expected to show a deterioration of Rs. 122 crores. This is partly due to the lower credit taken for special accommodation and other non-Plan assistance from the Centre.

Additional Resource Mobilisation

3.19. The yield in 1971-72 from the measures adopted by the Centre in 1969-70 and 1970-71 for raising additional resources is estimated, net of State's share, at about Rs. 347 crores while that from the measures adopted by the States is estimated at Rs. 152 crores.

3.20. The fresh measures adopted by the Centre in 1971-72 are ex-

pected to yield, net of States' share, about Rs. 197 crores in this year and Rs. 267 crores in a full year, as shown below:

TABLE 3.2 : *Additional Resource Mobilisation by the Centre in 1971-72*

(Rs. crores)			
sl. no.		estimated yield in 1971-72 ¹	estimated yield in full year ¹
(0)	(1)	(2)	(3)
1	income tax	11.0	20.0
2	wealth tax	—	14.5
3	corporation tax	16.0	22.0
4	union excise duties	120.6	142.0
5	import duties	54.0	64.0
6	tax on passenger travel	3.4	7.5
7	changes in postal charges registration and parcel fees, telegraphs and telephone tariffs, etc.	7.2	10.8
8	changes in railway fares and freight charges	26.2	35.0
	<i>total</i>	238.4	315.8
9	<i>deduct:</i> states' share	41.0	48.5
10	net receipts of centre	197.4	267.3

¹After allowing for the cost of concessions announced subsequent to the presentation of the Central Budget for 1971-72.

The State Governments had agreed, in the discussions held with the Planning Commission, to undertake fresh resource mobilisation of Rs. 29 crores in 1971-72. The details of the measures to be adopted by them were not worked out.

Negotiated Loans and State Enterprises, Market Borrowings (gross)

3.21. Gross market borrowings by State enterprises, mainly State Electricity Boards, are estimated at Rs. 80 crores in 1971-72 as against Rs. 68 crores in 1970-71. Loans from the Life Insurance Corporation to State enterprises are estimated at Rs. 37 crores. Besides, another Rs. 29 crores are expected to be made available by the Life Insurance Corporation to State Governments from financing housing and water supply schemes.

Budgetary Receipts Corresponding to External Assistance

3.22. The budgetary receipts corresponding to external assistance (excluding grants for relief of evacuees from East Bengal) are estimated at Rs. 461 crores in 1971-72 as against Rs. 547 crores in 1970-71. The assistance under PL 480 is estimated at Rs. 112 crores and the other aid at Rs. 349 crores.

Deficit Financing

3.23. Deficit financing has been placed at Rs. 233 crores for 1971-72 as against a substantially higher figure of Rs. 365 crores in 1970-71.

Assistance for State Plans

3.24. The Central assistance allocated for State Plans in 1971-72 is Rs. 720 crores. Of this, Rs. 20 crores is for the Plan of Himachal Pradesh, which became a State in January 1971. The Central assistance allocated for the Plans of other States is Rs. 700 crores, which represents one-fifth of the total assistance envisaged for these States for the five-year period of the Fourth Plan.

Concluding Remarks

3.25. The budgets presented by the State Governments for 1971-72 show an overall deficit of Rs. 205 crores¹. To some extent, this is due to the fact that the Maharashtra and Bihar budgets traditionally do not take credit for market borrowings. This has the effect of inflating the budget deficits of these States by about Rs. 27 crores. Besides, the budget deficits of many States do not take credit for the share of these States in the fresh taxation undertaken by the Centre in the current year. The bulk of the remaining deficit in State budgets is attributable to the fact that a number of States have budgeted for larger Plan outlays than those approved by the Planning Commission and provided for additional commitments in respect of revision of emoluments of State Government employees, teachers, etc. It will be necessary for the States concerned to devise measures to cover their deficits.

¹This does not take into account the overdrafts on the Reserve bank outstanding at the end of 1970-71. The changes in the outstanding overdrafts in 1969-70 and 1970-71 have been taken into account in the calculation of deficit financing for these year.

ANNEXURE 3.1

Plan Outlay and its Financing

sl. no.		(Rs. crores)		
		Fourth Plan estimates		
		centre	states	total
(0)	(1)	(2)	(3)	(4)
1	<i>domestic budgetary resources</i>	7232	1502	8784
2	balance from current revenues at 1968-69 rates of taxation	1625	48 ¹	1673
3	contribution of public enterprises at 1968-69 fares, freights and tariffs :			
4	railways	265	—	265
5	posts & telegraphs	225	—	225
6	IDC, ARC, DVC and central power generation units	259	—	259
7	others	785	495	1280
8	retained profits of reserve bank	165	37	202
9	loans from public by the central and state governments (net)	900	515	1415
10	borrowings by financial institutions including FCI :			
11	food corporation of india	155	—	155
12	others	250	—	250
13	small savings	274	495	769
14	annuity deposits, compulsory deposits, prize bonds and gold bonds	(—)104	—	—104
15	state provident funds	343	317	680
16	misc. capital receipts (net)	2090	—405	1685
17	<i>additional resources mobilisation</i>	2100	1098	3198
18	by centre ²	2100	—	2100
19	1969-70 measures)	725	—	725
20	1970-71 measures)			
21	1971-72 measures)	1375	—	1375
22	measures to be adopted in subsequent years			

ANNEXURE 3.1—(Contd.)

(Rs. crores)

(0)	(1)	(2)	(3)	(4)
23	by states	—	1098	1098
24	1969-70 measures	—	414	414
25	1970-71 measures			
26	1971-72 measures	—	684	684
27	measures to be adopted in subsequent years			
28	loans from LIC and states' enterprises market borrowings (gross)	—	506	506
29	LIC loans to state governments for housing and water supply	—	100	100
30	market borrowings of states' enterprises	—	258	258
31	LIC loans for state enterprises	—	148	148
32	<i>total domestic budgetary resources</i>	9332	3106	12438
33	<i>budgetary receipts corresponding to external assistance</i>	2614		2614
34	other than PL 480	2234	—	2234
35	PL 480 assistance	380	—	380
36	deficit financing	850	—	850
37	<i>aggregate resources</i>	12796	3106	15902
38	assistance for state plans	—3500	3500	—
39	<i>resources for the plan</i>	9296	6606	15902

¹Inclusive of States' share in fresh taxation by the Centre since 1969-70.

²Net of share of States.

(Rs. crores)								
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
—	52	52	—	120	120	—	181	181
—	52	52	—	87	87	—	94	94
—	—	—	—	33	33	—	58	58
—	—	—	—	—	—	—	29	29
—	—	—	—	—	—	—	—	—
—	126	126	—	133	133	—	146	146
—	18	18	—	20	20	—	29	29
—	75	75	—	68	68	—	80	80
—	33	33	—	45	45	—	37	37
1046	521	1567	1343	538	1881	1796	668	2464
574	—	574	547	—	547	461	—	461
356	—	356	425	—	425	349	—	349
218	—	218	122	—	122	112	—	122
89	—31	58	231	134	365	233	—	233
1709	409	2199	2121	672	2793	2490	668	3158
—606	606	—	—628	628	—	—720	720	—
1103	1096	2199	1493	1300	2793	1770	1388	3158

CHAPTER 4

AGRICULTURE

I. OUTLAYS AND TARGETS

Outlays

In the Annual Plan 1971-72, an outlay of Rs. 554.16 crores has been provided for the programmes of agriculture and allied sectors. This involves a substantial step-up over the previous year's outlay of Rs. 470.90 crores. The following is the break-up of the outlay between Centre, States and Union Territories:

TABLE 4.1 : *Plan Outlay for 1971-72*

				(Rs. crores)	
sl. no.		1970-71 (expenditure)	1971-72 (Plan outlay)		
(0)	(1)	(2)	(3)		
1	centre	236.00	235.60		
2	centrally sponsored	17.50	23.74		
3	states	271.10	286.50		
4	union territories ^a	12.24	8.32		
5	<i>total</i>	<i>536.84</i>	<i>554.16</i>		

4.2. The detailed composition of Plan outlay for 1971-72 by main heads of development is indicated in table 4.2. in

TABLE 4.2 : *Outlays on Agriculture and Allied Programmes by Main Heads of Development—1971-72*

(Rs. lakhs)

Sl. no.	head of development	centre	centrally sponsored	states	union territories	total
(0)		(1)	(2)	(3)	(4)	(5)
1	research and education	1544		1000	10	2554
2	agricultural production	576	948	3805	179	5508
3	development of small farmers and agricultural labour	900	-	157	-	1057
4	land reform	-		920	36	956
5	minor irrigation	241		9832	87	10160
6	soil conservation	1	478	2539	47	3065
7	area development	320		502		8221
8	animal husbandry	150	70	1410	88	1718
9	dairying and milk supply	2098	-	845	31	2974
10	fisheries	237	90	898	92	1317
11	forests	79	20	1722	95	1916
12	warehousing, marketing and storage	1315	-	179	14	1508
13	food processing and subsidiary food	307	23	-	--	330
14	buffer stocks of agricultural commodities	6900			--	6900
15	central support to financial institutions	5594			-	5594
16	cooperation	3205	500	2738	74	6517
17	community development	93	245	1948	65	2351
18	panchayats	-	-	155	14	169
19	<i>total</i>	23560	2374	28650	832	33416

Targets of Production

4.3. The targets of production of foodgrains and major commercial crops for 1971-72 along with the estimated achievements in 1970-71 are shown in table 4.3.

TABLE 4.3: Targets of Production of Foodgrains and Major Commercial Crops

Sl. No.	item	unit	1970-71		1971-72
			target	estimated achievement	target
(0)	(1)	(2)	(3)	(4)	(5)
1	foodgrains	million tonnes	106	107.8	112
2	oilseeds	lakh tonnes	90	91.6	95
3	sugarcane (gur)	..	132	131.93	132
4	cotton	lakh bales	65	45.56	65
5	jute	.	67	49.05	64

4.4. Targets of important development programmes envisaged for 1971-72 together with the estimated achievement for 1970-71 are given below:

TABLE 4.4 Targets of Selected Development Programmes

sl. no.	programme	unit	1970-71		1971-72
			target	anticipated achievement	target
(0)	(1)	(2)	(3)	(4)	(5)
1	high yielding varieties programme	million hectares	15.05	14.61	18.00
	rice	..	5.66	5.50	7.00
	wheat	..	5.88	5.89	6.90
	maize	..	0.56	0.51	0.50
	jowar	..	1.18	0.94	1.20
	bajra	..	1.77	1.77	2.40
2	multiple cropping (additional)	..	2.24	1.59	1.90
3	minor irrigation (additional)	..	1.76	1.47	1.60
4	soil conservation on agricultural lands (additional)	..	1.20	1.25	1.25

(TABLE 4.4: *Contd.*)

(0)	(1)	(2)	(3)	(4)	(5)
5	consumption of chemical fertilisers	million tonnes			
	nitrogenous (in terms of N)	„	1.73	1.43	2.00
	phosphatic (in terms of P ₂ O ₅)	„	0.56	0.46	0.80
	potassic (in terms of K ₂ O)	„	0.25	0.22	0.40
6	plant protection	million hectares	42.32	43.20	50.00

State-wise break-up of the targets for these programmes is shown in Annexures 4.1 to 4.7

II. GENERAL PROGRAMMES OF AGRICULTURAL DEVELOPMENT

Agricultural Research and Education

4.5. In the Annual Plan 1971-72, a sum of Rs. 25.54 crores has been included for programmes of agricultural research and education. Bulk of the provision (Rs. 15.44 crores) is in the Central Sector of the Plan for schemes to be implemented by ICAR. The main break-up of ICAR schemes is as follows:

TABLE 4.5: *Plan Outlay for ICAR Schemes*

Sl No		(Rs. crores)
1	all-India co-ordinated research projects	2.42
2	Central Research Institutes	4.17
3	other research schemes	3.39
4	agricultural universities	4.50
5	other educational schemes	0.96
	<i>total</i>	15.44

4.6. It may be pointed out that the provisions indicated above involve a substantial step up over the previous year as the Annual Plan 1970-71 had allocated only Rs. 10.50 crores for these schemes. The details on the projects of ICAR are given in Annexure 4.8.

4.7. During 1971-72, research on different crops would be continued under the all-India coordinated research projects for crop improvement being operated at the Central Institutes, Agricultural Universities and State Research Stations. In regard to rice, several new varieties were introduced in 1970-71. While these would be sought to be extended over a larger area, extensive research will be continued to evolve high-yielding strains suited for upland areas as well as areas with water logging conditions. As far as wheat is concerned, research is proposed to be intensified for improving the quality of the grain as well as the nutritive value in 3-gane varieties of wheat. In Maize, one of the reasons for the slow extension of area under hybrid maize has been comparative length of the duration of the crop. Hence, in 1971-72, particular attention is proposed to be paid to evolution of shorter duration hybrid maize.

4.8. Under the all-India coordinated pulses improvement project, which is being strengthened by the addition of scientific staff at a higher level of technical competence and by increasing the number of regional centres for taking up work in the different pulse growing zones, short duration high yielding varieties of the pulses evolved under this programme will be intensively tested for release for general cultivation. As the incidence of pests and diseases has proved to be a great limiting factor in breaking the yield barriers in pulse production, greater attention will be bestowed on the identification and utilisation of resistant genetic stock in the breeding programmes to evolve varieties with built-in resistance to some of the important pests and diseases. The already resistant material available will be widely tested to assess their agronomic traits.

Oilseeds

4.9. The all India coordinated improvement project on oilseeds will be strengthened during this period by the addition of scientists at a higher level of technical competence at five of the main important centres. The work under the different oilseeds, which was coordinated by a single Project Coordinator all through the country, will be assisted by 3 Associate Project Coordinators. This addition is expected to yield very fruitful coordination and supervision of the workdone under all oilseed crops.

The new oilseed crop sunflower, which has proved in the preliminary trials as a suitable crop for growth in this country, will be tested widely both in the Rabi and Kharif seasons to estimate the yield potentials of the imported Russian strain as a prelude to releasing them for general cultivation.

Cotton

4.10. In the field of cotton research, considerable progress has been achieved during past years. Mention can be made of the extra long staple varieties like, MCU-5 and Sujata which was released under the project for irrigated areas. During the year under review special emphasis will be given for locating suitable high yielding strains for the rainfed areas in the various regions. Already some success has been achieved by the identification of varieties like Reba-B-50 and evolution of varieties like Bharati and Buri-147. This work will be intensified and varieties suited for drought areas will be identified.

4.11. Besides research on crop improvement, attention will continue to be paid to problems concerned with improving the efficiency of various inputs such as land, water, fertiliser and machinery. The coordinated projects which had been taken up during 1970-71 will be continued and a few new projects will be initiated for the first time. Facilities at the Central Arid Research Institute are proposed to be strengthened. Under the All India Coordinated Dry-land Research project, research has started at 24 centres. This work will be sought to be intensified during 1971-72. Similarly, it is intended to carry forward similar research under the All India Coordinated Research Project for Water Management with a view to evolving suitable water management practices and development of cropping patterns. In 1971-72, it is also contemplated that action would be initiated to implement some of the recommendations made by Panel for Irrigated Farming set up by the Planning Commission.

4.12. Under Agricultural Education, the major scheme relates to establishment and development of agricultural universities. By 1970-71, 13 agricultural universities had been set up in 12 States. Legislation for two new agricultural universities were enacted in Kerala and Tamil Nadu towards the end of 1970-71. It is expected that these universities and one

in Gujarat would start functioning from 1971-72. In addition to the provision made in the State Plans, a sum of Rs. 4.5 crores has been provided in the Central Plan to enable the ICAR to give assistance to these Universities for selected items of development. A provision of Rs. 30 lakhs has also been made in the Annual Plan to enable the ICAR to assist in upgrading the facilities in selected agricultural and veterinary colleges.

Farmers' Education and Extension Training

4.13. Apart from rather limited programmes of farmers' education taken up under the State Plan, the main thrust of effort will continue to be under the Centrally sponsored sector of the Plan. Upto 1970-71, a Centrally sponsored programme of farmers' training and education had been taken up in 80 districts where high-yielding varieties preponderate. During 1971-72, it is proposed to extend the programme to 20 more such districts. This would complete the target of coverage of districts envisaged in the Fourth Plan. The contents of this programme will continue to include organisation of discussions groups among farmers and farm women and production-cum-training centres.

4.14. One of the crucial programmes concerning farmers' education relates to national demonstrations to be laid out by research scientists. During 1970-71, this programme was operating in 49 districts. It is expected that in 1971-72 the coverage of the national demonstration programme will extend to 75 districts. The emphasis on these demonstrations will be to establish the production potential of each unit area of land per year through multiple cropping supported by a package of improved practices.

4.15. Under extension training, the various programmes relating to pre-service training of gram sevaks, gram sevikas and extension officers will be continued during 1971-72. In addition, it is proposed to upgrade 16 gram sevak training centres and organise a number of short-term in-service training courses for extension functionaries.

Improved Seeds

4.16. As in the past, the responsibility for producing foundation

seed continued to rest entirely on the National Seeds Corporation, As far as certified seed is concerned, public, cooperative and private agencies are expected to play a growing part. The National Seeds Corporaion has a programme of producing certified seed of hybrid and certain varieties of all-India importance. Another public sector agency, namely, the State Farms Corporation aims at producing about 68,000 quintals of certified seeds during 1971-72. Apart from the existing seven farms which this Corporation is managing, the Corporation has a programme of organising two new farms-one in Mizo hills and the other in Punjab. The Terai Development Corporation, which is a consortium of the Pantnagar Agricultural University and the seed producers, has a plan to produce certified seed of cereals and soyabean over 9,500 hectares.

4.17. The work of production of certified seeds will also be partly handled in the seed multiplication farms organised by the State Governments. During 1971-72, in the State Plans, a provision of about Rs. 3.5 crores has been made for strengthening the irrigation and other facilities at these farms. Some of the State Governments have also provided for establishment of specialised seed godowns. Such godowns are also proposed to be established by National Seeds Corporation and Terai Development Corporation.

4.18. An important aspect of the seed development programme relates to regulation of the quality of seeds. Various State Governments have already set up the machinery for enforcement of the Seed Act. It is, expected that this machinery will become operational during 1971-72, In this context, the State Governments plan to devote greater attention to training programmes of farmers, seed traders and staff enforcement machinery. A number of States in their Plans for 1971-72, have also provided for strengthening the seed testing facilities.

Fertilisers and Manures

4.19. The consumption of chemical fertilisers during 1970-71 has shown only a marginal increase (6 per cent) over the consumption during 1969-70 although the supply position has been generally adequate. The progress and problems of consumption of chemical fertilisers are being

critically examined with a view to removing the bottlenecks. The targets of consumption for 1971-72 set for the States are shown in Annexure. Efforts would be made to keep the supply position adequate. The system of distribution of fertilisers has been further liberalised by allowing the Central Fertiliser Pool to sell directly to cooperatives, agro-industries corporations, zila parishads and private dealers.

4.20. The State Plans provide a sum of Rs. 2.40 crores for strengthening the soil testing facilities, demonstration of balanced fertiliser use in cultivators' fields, construction of storage facilities and application of soil conditioners such as lime. The Central Plan provides a sum of Rs. 40 lakhs for the construction of storage at ports and for buffer-stocking at strategic points for facility of movement of fertilisers to areas of consumption. Godowns at Ahmedabad, Surat, Bombay and Visakhapatnam are under construction. A Central Fertiliser Control Laboratory will be established which will train the inspecting staff of the State Governments in drawing and analysing fertiliser samples for quality control.

4.21. For development and utilisation of local resources organic manures, schemes are included in the State Plans. Rural compost production during 1970-71 was 154 million tonnes and target in 1971-72 is 165 million tonnes. The coverage under green manuring during 1970-71 is estimated to be at 10.44 million hectares; while the target of 1971-72 is 11.00 million hectares. Under the urban compost scheme, 5.30 million tonnes of town compost production is targetted for 1971-72 as against anticipated production of 4.74 million tonnes in 1970-71.

Plant Protection

4.22. Plant protection measures will be extended to cover 50 million hectares (gross) during 1971-72. Under the Centrally sponsored scheme, initiated during 1970-71, aerial spraying will be carried out in selected endemic areas covering 7 lakh hectares during 1971-72 with a view to bringing down the incidence of pests. In addition to spraying in endemic areas, aeriels spraying of pesticides will be extended during the year to cover 16 lakh hectares against 6.76 lakh hectares in the preceding year.

4.23. During 1970-71, it was proposed to take up two new pilot projects (i) evaluation and demonstration of use of pesticides in various crops and (ii) establishment of parasites and predators for the biological control of pests and weeds. These projects which could not be taken up during 1970-71 would be started during 1971-72. The aim of the farmer is to introduce biological control of pests and weeds as a supplement to chemical methods. Under the second project, the efficacy and economics of weed control using pesticides would be demonstrated to the farmers. In addition, a new Central sector 'pest and disease surveillance' scheme will be taken up during 1971-72 with the object of early detection of minor eruptions of pests and diseases to enable the authorities concerned to take timely control measures.

Agricultural Implements and Machinery

4.24. The State Plans provide a sum of Rs. 0.69 crores for the demonstration of new agricultural implement, research and development. The Central Plan provides for expanding the training programmes in farm machinery, utilization, repair and maintenance at the existing tractor training centres at Budni and Hissar. A third centre is proposed to be set up during 1971-72. The training in the repair and maintenance of agricultural implements and small tools would continue to be imparted at 46 workshop wings attached to the Gram Sevak training centres.

4.25. The State Agro-Industries Corporation have already been set up in all States except Nagaland Meghalaya. These Corporations will continue to handle the distribution of agricultural machinery including imported tractors. The provision of custom services to the farmers for agricultural machinery, which have so far been rather inadequately provided by most of the Corporations is expected to receive increased attention during 1971-72. It is also contemplated that Agro-industries Corporations will endeavour to assist engineer-entrepreneurs in the establishment of agro-service centres.

Minor Irrigation

4.26. In the Annual Plan 1971-72, a provision of Rs. 101.60 crores

has been made for development of minor irrigation. In addition to this public sector outlay, it is contemplated that institutional finance of the order of Rs. 130 crores would be made available for financing private investment in minor irrigation. It is estimated that various minor irrigation programmes including private investment are likely to bring about 0.62 million hectares of new area under irrigation during 1971-72. The rural electrification programme is expected to make further headway during 1971-72. As against the anticipated energisation of 2.87 lakh pumpsets in 1970-71, it is expected that 3.4 lakh pumpsets will be energised during 1971-72 partly from Plan outlays and partly with the help of institutional finance.

4.27. It is proposed to intensify scientific ground water investigation. In 11 States, ground water cells have been set up and these are proposed to be strengthened. In the Centre, the Ground Water Board is at present operating through five divisions located at Ambala, Varanasi, Ahmedabad, Madras and Ranchi. It is proposed to add three new projects during 1971-72.

Water Management

4.28. During the Fourth Plan a number of water and soil management pilot projects are proposed to be taken up in compact blocks of about 4045 hectares or so in such areas as have been characterized by a high percentage of unutilized irrigation potential. Three regional water management projects were in operation in 1969-70 with technical collaboration from USAID, one each in Tungabhadra (Mysore), patiala (Punjab) and Dorhighat (U.P.). Four additional pilot projects were sanctioned in 1970-71, one each in Rajasthan Canal Project (Rajasthan), Girnar (Maharashtra), Kakrapar (Gujarat) and Salandi (Orissa). These additional projects could not be implemented due to certain financial and procedural difficulties. Implementation of these projects would be taken up during 1971-72. A Plan allocation of Rs. 20 lakhs has accordingly been made for the next year. Results thrown up by the first three pilot project have provided useful guidelines for the extension staff on cropping pattern, water conservation, land shaping designs suitable for different soils and crops and field drainage.

Soil Conservation

4.29. Soil conservation on agricultural lands is the most important programme in the State plan sector. Against the Fourth plan target of 5.65 million hectares, the actual/anticipated achievements in 1969-70 and 1970-71 were 1.05 million hectares and 1.25 million hectares respectively. In the Annual plan 1971-72, it is expected that this programme will be taken up in an area of 1.25 million hectares. As far as possible this programme is intended to be continued on the basis of the water-shed/sub-water-shed planning.

4.30. Under a Centrally sponsored scheme, soil conservation in the catchment areas is being carried out with the object of reducing the rate of siltation in the reservoir. So far, this programme was being undertaken in 13 major river valley projects. During 1971-72, it is intended to be taken up work in three more projects. In the Fourth plan, under this scheme, the total area to be covered was targeted at 6 lakh hectares. So far, the actual/anticipated achievement of 1969-70 and 1970-71 was 71,000 and 1,10,000 hectares respectively. During 1971-72, the work will be taken up in an area of 1,10,000 hectares.

4.31. Under another Centrally sponsored scheme, pilot projects for reclamation of ravine land in Uttar Pradesh, Madhya Pradesh, Rajasthan and Gujarat have been initiated to determine the technical and economic feasibility of large scale ravine reclamation. During the first year of the plan, not much progress was made and only preliminary technical details could be collected. During 1970-71, an area of about 1,630 hectares was surveyed and 525 hectares was actually reclaimed for agriculture and afforestation. The target for 1971-72 is to reclaim 1000 hectares.

4.32. Under another Centrally sponsored scheme, soil survey has been taken up in five IADP districts, namely, Ludhiana, Sambhalpur, Raipur, West Godavari and Thanjavur. During 1970-71, an area of about 5 lakh hectares was surveyed. For 1971-72, the target is to undertake a survey of about 10 lakh hectares.

Agricultural Credit

4.33. The performance of cooperative credit structure during the Annual plan 1971-72 is indicated in a separate chapter on cooperative and Community Development. Next to cooperatives, the Plan visualises the commercial banks as constituting the most important source of institutional finance for agricultural production and investment. There was considerable expansion in the financing of agricultural programmes by the public sector commercial banks during 1970-71. The outstanding from these banks by way of direct finance stood at Rs. 206.52 crores at the end of June 1971 as against Rs. 38.02 crores and Rs. 106.38 crores at the end of June 1969 and 1970 respectively. In addition, the banks had provided another Rs. 134.80 crores by way of indirect finance by the end of June 1971. In 1971-72, efforts would be made to further step up the activities of the public sector commercial banks by way of advances for agriculture and also by opening new branches in the rural areas, particularly in the unbanked areas. It is expected that the outstandings of the public sector banks in the agricultural sector would reach a level of Rs. 300 crores (direct financing) by the end of June 1972. In addition it is estimated that the banks would provide another Rs. 200 crores by way of indirect finance.

4.34. During 1971-72, it is expected that in regard to long-term agricultural credit, the activities of the land development banks and the commercial banks would be supplemented in a significant measure by the Agricultural Refinance Corporation. During 1971-72, it is expected that the ARC would be disbursing refinance loans to the extent of about Rs. 58 crores as against Rs. 25 crores in the preceding year. This step up is largely due to the fact that the ARC will be acting as the channel of World Bank/IDA credit assistance in respect of seven projects which have already been agreed upon. The Corporation has decided to continue the facility offered to the State Governments to make a reduced contribution of 10 per cent to the special development debentures to be floated by the central land development banks for financing of minor irrigation schemes sanctioned by the Corporation. In respect of schemes submitted by small farmers development agencies, the Corporation contemplates to provide 100 per cent and no contribution for the State Governments to the special development debentures would be expected.

Agricultural Marketing

4.35. For the schemes falling in the State Plan sector, an outlay of Rs. 155 lakhs has been provided in the Annual Plan 1971-72. These schemes largely relate to regulation of markets and provision of some support for development of marketing facilities. For the schemes to be implemented in the central sector, an outlay of Rs. 51 lakhs has been provided in the Annual Plan 1971-72. This provision is intended to be used for establishment of five new Agmark laboratories, in addition to strengthening of seven existing laboratories. Measures will also be taken to strengthen the live stock marketing cell set up in the Directorate of Marketing. During 1971-72, it is proposed to extend compulsory export quality control to a number of other commodities such as minor spices, tamarind and mushrooms. Preliminary work in connection with the establishment of a Central Agmark Research and Training Institute at Nagpur will also be completed during 1971-72.

Storage and Warehousing

4.36. The Food Corporation of India had an owned storage capacity of 28.10 lakh tonnes at the beginning of 1970-71. It was programmed to construct the spill-over works of 10.20 lakh tonnes and new works of 12.0 lakh tonnes during 1970-71. A provision of Rs. 13.56 crores was made in the budget for 1970-71 for payment to FCI as equity for the construction of godowns. The actual construction during 1970-71 was, however, of the order of 6.42 lakh tonnes only making a total of owned capacity at 34.52 lakh tonnes at the beginning of 1971-72. In addition, the Corporation had the hired storage capacity of 27.98 lakh tonnes at the close of 1970-71 making a total of 62.50 lakh tonnes storage accommodation with them for the storage of foodgrains. Land availability had been one of the bottlenecks in the expeditious completion of the construction programmes. It is envisaged that during 1971-72 Food Corporation of India will be constructing about 13 lakh tonnes new storage capacity and the balance of 14.75 lakh tonnes, the spill-over works. A provision of Rs. 17 crores has been made in the Plan for 1971-72 to be provided to Food Corporation of India for the purpose.

4.37. At the beginning of 1970-71 the Central Warehousing Corporation had an owned storage capacity of about 2.76 lakh tonnes. In addition, the CWC had a capacity of 4.90 lakh tonnes in Andhra Pradesh and Tamil Nadu for the use of FCI and State Governments. The total storage accommodation of the CWC at the beginning of 1970-71 was thus 7.66 lakh tonnes at 67 centres. The CWC had a programme to construct 81,400 tonnes of storage capacity including the backlog of 35,400 during the year 1970-71. A provision of Rs. 70 lakhs was provided for in the budget for 1970-71 besides a balance of Rs. 78.47 lakhs available with CWC as the shortfalls of the previous two years. During 1970-71 the CWC could, however, construct the storage capacity of 50,400 tonnes bringing the total of owned storage capacity at the beginning of 1971-72 to 8.16 lakh tonnes. During 1971-72, the CWC propose to construct godowns of the capacity of 60,000 tonnes at the following ten centres:

	(tonnes)
Hyderabad	5,000
Jamnagar	10,000
Bhavnagar	5,000
Anand	5,000
Raipur	5,000
Mansa	5,000
Madras	10,000
Rampur	5,000
Sambalpur	5,000
Bombay	5,000

An outlay of 1.25 crores has been provided in the Plan for 1971-72 for the purpose.

4.38. The Indian Grain Storage Institute, Hapur with its two sub-centres, one each at Bapatla (Andhra Pradesh) and Ludhiana (Punjab) has been established for the collection of existing research results in grain storage and handling carried out by different institutions and universities in India, to investigate the nature and extent of losses caused by insects and rodents to develop improved controlled techniques and

storage structures suitable for various climatic regions, to train personnel required for various levels in grain storage and handling and to demonstrate developed storage methods to farmers and cooperatives, etc.

4.39. The scheme of save grain campaign has been taken up since 1969 to undertake extensive training, demonstration and publicity programmes for educating the various agencies handling foodgrains and developing the techniques of scientific storage to eliminate wastage of foodgrains. During 1971-72, it is envisaged to conduct five training courses (30 trainees in each course) for farmers and traders in scientific storage; training the personnel managing seed farms; practical disinfection by undertaking free demonstration of the techniques of proper storage and pest control and publicity of the measures helpful in eliminating wastage of foodgrains in storage by supplying free literature, holding exhibitions, display of poster and hoardings etc.

III. PROGRAMMES FOR SPECIFIC CROPS

High-yielding Cereal Varieties Programme

4.40. The following table shows the anticipated achievement of 1970-71 and the target for 1971-72 in respect of various cereal crops under the high-yielding varieties programme :

TABLE 4.6 : *Achievements and Targets—High-yielding Varieties Programmes*

		(million hectares)	
sl. no.	crop	1970-71 anticipated achievement	1971-72 target
(0)	(1)	(2)	(3)
1	paddy	5.90	7.00
2	maize	0.51	0.50
3	jowar	0.94	1.20
4	bajra	1.77	2.40
5	wheat	5.89	6.90
6	<i>total</i>	14.61	18.00

It will be observed that in respect of paddy, bajra and wheat, the Annual Plan 1971-72 envisages a substantial step-up in area coverage under the high-yielding varieties. For maize, the target is more or less maintained at the current level of achievement. This is on account of the fact that hybrid maize is encountering a series of technical difficulties such as comparatively longer duration of the crop and inability to withstand water-logging. An addition, there are various marketing and pricing problems impeding extension of hybrid maize. With regard to hybrid jowar, while the Annual Plan 1971-72 will witness some increase over the previous year, the increase anticipated is rather marginal considering that the Fourth Plan target is fixed at a level of 3.20 million hectares.

4.41. Apart from extension of area average, the principal task in the Annual Plan 1971-72 concerns measures which need to be taken up to bridge the gap between the yield potential of various new rice varieties and the yield actually obtained. Considering that a number of new varieties will be taken up in 1971-72 over substantial areas, it will be necessary for extension agencies to make a concerted effort for successful execution of the programme by streamlining arrangements for supplies, services and credit. As regards hybrid maize and jowar, it is proposed to subject the programme relating to these crops to a close examination and review during 1971-72.

Multiple Cropping

4.42. During 1971-72, in respect of multiple cropping, two varieties of programme are envisaged. The first is a general programme of extension of multiple cropping which has been in operation since the commencement of short duration of high-yielding varieties programme. The other is a special programme in the centrally sponsored sector or pilot projects on multiple cropping. As far as the first programme is concerned, the Fourth Plan envisages a target of 9 million hectares. Against this target, the achievement in the first year is about 1.52 million hectares and the anticipated achievement for 1970-71 is reported at 1.59 million hectares. The target adopted by the States aggregate to an all-India figure of 1.92 million hectares.

4.43 Under the Centrally sponsored scheme of pilot projects on multiple cropping, 52 C.D. blocks have been selected for implementation. These blocks will, in due course, cover a total cultivated area of about 10 lakh hectares. The pilot projects have been designed to demonstrate the various components of an effective multiple cropping programme in terms of organisation, physical inputs, technical support and infrastructure facilities. It is expected that the agricultural universities and other research organisations will be providing requisite research support. In each block covered by the pilot projects, the coverage is intended to be undertaken in a phased manner.

Cotton

4.44. During 1971-72, for development of cotton, besides some limited provisions which have been made in the State Plans, the main thrust of effort will be in the form of programmes in the Centrally sponsored sector of the Plan. The programmes already taken up since the beginning of the Fourth Plan will be continued. These programmes include demonstrations on seed and plant protection, foliar application of urea and mass plant protection campaign. Another continuing programme relates to package areas whose coverage would be extended from 4.79 lakh hectares in 1970-71 to 5.73 lakh hectares in 1971-72.

4.45. The most significant development in 1971-72 would be the launching of a new intensive cotton district programme. This programme has been recently approved and will involve a Fourth Plan Outlay of about Rs. 15 crores. Under this programme, intensive development activities would be taken up in six districts, namely, Ferozepur and Bhatinda (Punjab), Hissar (Haryana), Sriganganagar (Rajasthan), Baroda (Gujarat) and Coimbatore (Tamil Nadu), which, between them, account for nearly 52 per cent of the total irrigated cotton area of the country. The main strategy for securing additional production in those areas would consist of :

- (i) Coverage of the entire area by pure seed, ensuring optimum plant population and adoption of other important cultural practices;

- (ii) Application of full recommended dose of fertilisers including foliar application of area alongwith new chemicals like Cycocel;
- (iii) Adoption of the recommended schedule of plant protection on prophylactic basis;
- (iv) Adoption of new varieties.

4.46. In addition to the six irrigated cotton districts, work will be taken up on a pilot basis in compact areas in seven rainfed districts, namely, Khargone (Madhya Pradesh), Surindernager (Gujarat) Yeotmal and Akola (Maharashtra), Kurnool (A.P.), Dharwar (Mysore) and Tirunelveli (Tamil Nadu). In each of these districts, about 2,000 hectares will be taken up for pilot demonstrations involving the use of various known techniques while another 18,000 hectares will be taken up for demonstration of a few selected techniques.

Jute

4.47. In the Annual Plan 1971-72, the programme so far envisaged relates to continuation of the on-going schemes. A package programme concerned with the demonstration of the use of production inputs in a package is proposed to be extended for an area of about 36,000 hectares in 1970-71 to about 90,000 hectares in 1971-72. Another on-going programme concerns demonstrations on multiple cropping to be organised in suitable irrigated areas. Foliar spraying of urea on jute which is reported to have resulted in an increase in yield is proposed to be extended so as to cover an area of about 14,000 hectares by both aerial and ground spraying during 1971-72.

Oil Seeds

4.48. A Centrally sponsored scheme for maximising production of groundnut, introduced in the year 1966-67 in three States, was extended to 14 States in the year 1970-71. It covered an estimated area of 1.6 million hectares. During 1971-72, the scheme will be extended to three more States and will cover a total area of 2.25 million hectares. For the development of castor, composite demonstrations with short duration, high-yielding

varieties were undertaken in 14 States in 1970-71. These will be continued during 1971-72. Another scheme for the development of castor was taken up in Andhra Pradesh with the object to adopt package approach for obtaining additional production. Production of pure seed of short duration high yielding variety and laying out demonstrations. The package approach was applied to about 5,000 hectares during 1970-71 and the coverage target for 1971-72 has been fixed at 46,000 hectares. Besides, schemes for the demonstrations and plant protection in respect of rapeseed-mustard in eight States, Niger demonstrations in Madhya Pradesh, Soyabean demonstration with exotic high-yielding varieties in 13 States were undertaken during 1970-71 and will be continued during 1971-72.

4.49. In respect of soyabean development, a crash programme is proposed to be taken up in Madhya Pradesh, Uttar Pradesh, Gujarat and Maharashtra where good potentialities exist for the large-scale cultivations of soyabean without displacement of other crops. The target of coverage for the year 1971-72 has been fixed at 45,000 hectares. Eventually it will be extended to about 4 lakh hectares. Another scheme for pilot demonstrations in respect of sunflower with exotic short duration high yielding and high oil containing varieties is proposed to be launched in 12 States. These demonstrations will cover an area of 1,8000 hectares.

Sugarcane and Sugarbeet

4.50. The strategy for raising production of sugarcane continues to be the same as adopted in the preceding year, viz., increase in the average yield per unit area through intensive development programme in the development zones around sugar factories in all the States. In respect of other areas the ongoing programmes concerning the provision of adequate irrigation facility, supply of improved seed and fertilisers as well as extension of plant protection measures including heat treatment of seed will be continued during 1971-72 also.

4.51. A schemes for the development of sugarbeet as an alternate source of white sugar has been taken up. In Rajasthan this crop was sown on 150 hectares during the year 1970-71. Programme for the year 1971-72 aims at extension of area under the crop in Rajasthan to 800 hec-

tares. Besides, one sugar factory in Maharashtra has also set up a sugar-beet processing plant. To feed the plant sugarbeet was grown in 40 hectares in 1970-71. In 1971-72, it is proposed to cover 200 hectares under sugarbeet in the area of this sugar factory. The programme also includes organisation of demonstrations on nearly 200 hectares in the two States.

Tobacco

4.52. Under the programme for development of V.F.C. tobacco in the light soil areas as kharif crop, an additional area of over 5000 hectares is to be brought under the crop during the year 1971-72 in the States of Andhra Pradesh, Mysore, Gujarat, U.P. and Tamil Nadu. The Annual Plan provides for subsidy on tobacco seedlings, construction of barns and wells, installation of sprinkler irrigation units and pesticides. Besides schemes relating to the conduct of exploratory trials in the States of Maharashtra, Bihar, Orissa and West Bengal to find out potentialities of growing V.F.C. tobacco and production of exportable quality of wrapper tobacco in West Bengal, are to be continued during 1971-72.

Coconut

4.53. Production and supply of quality planting material and establishment of elite seed farms will continue to be the main planks of coconut development programme in the central sector during 1971-72. One elite seed farm has been set up in Mysore and there is a proposal to set up such farms in other coconut growing States. In the states' sector emphasis is being laid on short-term measures like augmentation supply of planting material, use of fertilisers and adopting of plant protection measures. There is also a programme for expansion of area under coconut cultivation by reclaiming kayal lands of Kerala, the swampt area of Tamil Nadu and to utilise extensive paddy field bunds in Andhra Pradesh.

Cashewnut

4.54. In the Central sector, ongoing schemes for development of cashewnut include production of cashew, air layers, demonstrations for popularising improved cultivation practices and adoption of prophylactic plant protection measures. There is also a scheme for conducting mar-

keting surveys. These will be continued during the year 1971-72. In addition, two new schemes for package programme on about 5,000 hectares in departmental plantations in the States of Andhra Pradesh, Mysore, Kerala, Orissa and Tamil Nadu and expansion of area for new plantations by 2,500 hectares in Andhra Pradesh, Mysore, Orissa and Tamil Nadu are being taken up. The State sector schemes envisage expansion of area under cashew, production of planting material, adopting of package of practices, area and production surveys and pilot projects for utilisation of cashew apple.

Horticulture

4.55. Programmes for horticulture development under the Central sector mainly relate to the development of banana and walnut for export purposes. The scheme for banana development envisages coverage of an area of 16,000 hectares under the dwarf cavendish variety of banana by the end of the Fourth Plan. The other scheme relating to walnut development proposes to cover 4000 hectares. In respect of vegetables, onion development programme is to be taken up to encourage the production of white and light skinned varieties for purposes of dehydration and export. An area of 1200 hectares is proposed to be covered under the crop in Maharashtra state. These schemes are expected to be taken up from the year 1971-72. Schemes in the States sector include extension of area under fruits and vegetables and development of nurseries.

IV PROGRAMME FOR SPECIAL CLASSES AND AREAS

Small Farmers, Marginal Farmers and Agricultural Labourers

4.56. As a part of the programme for reducing the disparities in the rural economy between different classes of producers as also for providing larger employment opportunities, particularly for the small farmers, marginal farmers and agricultural labourers, the Fourth Five Year Plan envisages the setting up of development agencies for the small but potentially viable farmers and similar agencies for the marginal farmers and landless agricultural labourers. In all, 87 projects are envisaged during the Fourth Plan. There will be 46 projects for the potentially viable small farmers with an outlay of Rs. 47.5 crores which will benefit the marginal farmers and agricultural labourers. The main functions of the Agencies under the two sets of projects would, in main, be to identify the problems of the small farmers in the preparation of appropriate programmes for them, to provide assistance for ensuring availability of inputs, services and credit and to evaluate the progress of this programme from time to time. The Agencies would also render assistance to small farmers in respect of services like land levelling, renting of machinery and provision of marketing facilities. With a view to stimulating the flow of cooperative credit to these category of farmers, the above scheme also envisages a provision for grants to cooperative credit institutions.

4.57. During 1970-71, 45 projects were approved under the Small Farmers Development Agencies and work had already started in all the projects. Under the marginal farmers and agricultural labourers scheme, 30 projects were sanctioned and Agencies started working. As against the sanctioned amount of Rs. 3 crores, a expenditure of Rs. 67 lakhs was incurred in 1970-71 under the SFDA's. Though the sanctioning of the projects by the Centre has been quite fast, the implementation

by the States has been rather poor. The progress shown by some of the SFDA's namely, Purnea, Sabarkantha, Chindwara, Bilaspur, Mysore, Bidar, Badaun, Partapgarh and Rai Bareilly, has been satisfactory. But the projects did not make much progress in West Bengal, Orissa, Assam and Bihar. Under the Agencies for Marginal Farmers and Agricultural Labourers, sanctions for about Rs. 1 crore were issued by the end of 1970-71.

4.58. During 1971-72, all the projects under the SFDA and the MEAL would be in operation. An outlay of about Rs. 10.57 crores has been provided in the Plan for 1971-72 for both the sets of projects indicated above for providing assistance to these farmers for undertaking schemes which would be production-oriented, e.g. land-levelling and tractor ploughing, soil conservation, construction of wells, installation of pumping sets, etc. To supplement the income of the farmers, ancillary programmes like distribution of milch animals, poultry birds and sheep rearing etc. are being taken in an increased measures.

4.59. As the success of the above programme depends mainly on the availability of credit in an adequate measure, detailed credit plans for the SFDA areas are proposed to be prepared during 1971-72. On the basis of project reports as presented by the State Govts. the estimated investment credit (medium and long-term) during the period of operation of the projects is placed at a minimum of Rs. 5 to 6 crores and the short-term credit in the last year at Rs. 3 crores. Barring a few States like Maharashtra, Gujarat, Punjab, Tamil Nadu, the major portion of the credit in these projects will have to come from commercial banks in view of the weak nature of the cooperatives in the remaining project areas. This will be particularly so in the Eastern States. The role of commercial banks in these projects, therefore, assumes considerable significance. In the guidelines on financing of agriculture recently issued by the Reserve Bank, nationalised commercial banks have been asked to pay special attention to the financing of small farmers in SFDA areas and also to use that expertise in financing small farmers else-where. It would, therefore, be of utmost importance that during 1971-72 various steps are taken to equip the financial institutions for financing the SFDA's.

Pilot Projects for Dry Farming

4.60. Areas with an annual rainfall varying between 375 mm. and 1125 mm. would come within the operational scope of the programme. During the Fourth Plan period, 24 pilot projects are envisaged to be taken up as a Centrally sponsored scheme. These will be taken up in 12 States as given in the Annexure. These projects are linked up with the Research Centres on dry land agriculture. Each pilot project will cover a compact area of about 8,000 acres in a phased manner, 2,000 acres each year. The extension of the coverage will however, depend upon the success of the initial phase.

4.61. An outlay of Rs. 2 crores was provided in 1970-71 against which an expenditure of Rs. 0.45 crore was incurred. Only 9 pilot projects that is, one each in the State of Andhra Pradesh, Gujarat, Haryana, Madhya Pradesh, Maharashtra, Mysore, Rajasthan, Tamil Nadu and Uttar Pradesh were sanctioned. However, due to the late sanctioning of the scheme and inordinate delay in some cases in the issue of sanctions by the State Governments, not much progress was achieved in terms of physical targets. The slow progress is also attributed to various other factors like the delay in the appointment of the staff and their training. During 1971-72, the remaining 15 projects would be taken up. 13 projects have already been sanctioned, one each in Andhra Pradesh, Bihar, Gujarat, Haryana, Jammu and Kashmir, Madhya Pradesh, Maharashtra, Orissa, Tamil Nadu and two each in Mysore and Uttar Pradesh. Proposals for two new projects in Rajasthan are still awaited and it is expected that these projects will also be taken up during 1971-72.

Development of Desert Areas

4.62. A Central sector scheme of desert development has been formulated under which pilot projects involving schemes of soil conservation, afforestation, minor irrigation, and agricultural development are being taken up in the arid regions of Gujarat, Haryana and Rajasthan. A provision of Rs. 2.00 crores has been made for this scheme in the Fourth

Plan period to take up specified items of work, depending on the suitability of the area selected, in compact and well defined areas. Under this scheme funds are provided by the Central Government but the projects are to be executed by the State Government. A budget provision of Rs. 50.00 lakhs was made for the year 1970-71 and it is expected that it may be utilised in full. An equal amount is being provided for the year 1971-72. The programmes is already in execution in all the three States of Rajasthan, Gujarat, and Haryana. Apart from these pilot projects, these States are also getting substantial benefits of schemes initiated under the Rural Works Programme in chronically drought affected areas in selected districts throughout the country.

Development of Selected Command Area

4.63. The Fourth Plan provides for area development schemes in 10 selected command areas, viz., Tungabhadra (Mysore) Nagarjunasagar (Andhra Pradesh), Kosi (Bihar), Kangsabati (West Bengal), Rajasthan Canal (Rajasthan), Mahi-Kandana (Gujarat), Tawa (Madhya Pradesh), Jayakwadi State I (Maharashtra), Cauvery Delta (Tamil Nadu) and Pochampad (Andhra Pradesh). Under this programme regulated markets would be located at suitable centres and all-weather roads built to link them up with surrounding production areas. Expenditure on these works would be met from the Central sector. Other inputs like credit, seeds, fertilisers, pesticides and agricultural machinery and services like soil survey, land levelling and land shapping, determination of proper irrigation practice and cropping patterns, processing industries etc., improved administrative arrangements so vital for the integrated development command area would be provided by the concerned State Government. During 1969-70, which was the first year of the programme, the progress was rather slow. The programme has, however, gained considerable tempo during 1970-71 and is now in operation in Kosi, Tungabhadra, Nagarjunasagar, Rajasthan Canal and Mahi-Kandana. The anticipated expenditure during 1970-71 is Rs. 2.50 crores. During 1971-72, it is proposed to extend the programme to cover Pochampad, Kangsabati, Cauvery and Tawa. A Plan provision of Rs. 3.00 crores has been made for the year.

ANNEXURE 4.1

*Targets for the Production of Food-grains and Major
Commercial Crops during 1971-72*

sl. no.	state/union territories	food-grains (lakh tonnes)	oil-seeds (lakh tonnes)	cotton (lakh bales)	jute (lakh bales)	sugarcane (gur) (lakh tonnes)
(0)	(1)	(2)	(3)	(4)	(5)	(6)
1	Andhra Pradesh	88	12	2	—	12
2	Assam	23	1		11	1
3	Bihar	101	1		9	7
4	Gujarat	37	17	18		3
5	Haryana	44	1	4	—	8
6	Jammu and Kashmir	10	Neg		—	—
7	Kerala	15	Neg	Neg		1
8	Madhya Pradesh	112	6	5		2
9	Maharashtra	80	9	15		14
10	Meghalaya	2		Neg	Neg	—
11	Mysore	61	8	6		8
12	Nagaland	1				Neg
13	Orissa	60	2		4	2
14	Punjab	73	4	9		6
15	Rajasthan	71	4	5		1
16	Tamil Nadu	71	12	5	—	10
17	Uttar Pradesh	190	18	1	2	60
18	West Bengal	80	1		38	2
19	Himachal Pradesh	12				
20	Union Territories	13	Neg	Neg.	1	Neg
21	All-India	1120 ¹	95 ²	65 ³	64 ⁴	132 ⁵

¹The statewise targets aggregate to 114.4 million tonnes but the all-India target for 1971-72 is placed at 112 million tonnes

²The statewise targets aggregate to 9.7 million tonnes but the all-India target for 1971-72 is placed at 9.5 million tonnes.

³The statewise targets aggregate to 7.0 million tonnes but the all-India target for 1971-72 is placed at 6.5 million bales

⁴The statewise targets aggregate to 6.5 million bales, but the all-India target for 1971-72 is placed at 6.4 million bales

⁵The statewise targets aggregate to 13.7 million tonnes but the all-India target for 1971-72 is placed at 13.2 million tonnes

ANNEXURE 4.2

*Targets of Area under High-yielding—Varieties 1971-72
during 1971-72*

		('000 hectares)					
sl no	state/union territories	rice	wheat	maize	jowar	bajra	total
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Andhra Pradesh	900	60	45	120	100	1225
2	Assam	196	30	4	—	—	230
3	Bihar	486	728	101	—	—	1315
4	Gujarat	89	68	19	41	559	776
5	Haryana	50	640	10	—	340	1040
6	Jammu and Kashmir	142	81	14	—	4	241
7	Kerala	400	—	—	—	—	400
8	Madhya Pradesh	300	280	40	120	20	760
9	Maharashtra	285	263	16	728	729	2020
10	Meghalaya	6	1	3	—	—	10
11	Mysore	225	52	105	225	70	677
12	Nagaland	1	—	Neg	—	—	1
13	Orissa	400	12	20	4	—	436
14	Punjab	250	1538	40	—	101	1929
15	Rajasthan	30	520	30	20	400	1000
16	Tamil Nadu	1575	—	9	12	85	1681
17	Uttar Pradesh	797	2200	30	7	26	3060
18	West Bengal	800	400	60	—	—	1280
19	Himachal Pradesh	36	72	60	—	—	168
20	Union Territories	69	36	2	Neg	16	123
21	All-India	7000	6900	500	1200	2400	18000 ¹

¹The statewise target aggregate is 18292 thousand hectares, but the all-India target for 1971-72 is placed at 18000 thousand hectares, (rice-7000, Wheat-6900, maize-500, jowar-1200, bajra-2400, thousand hectares).

ANNEXURE 4.3

Targets of Area under Multiple Cropping during 1971-72

(additional area in '000 hectares)

sl. no.	state/union territories	1971-72 target
(0)	(1)	(2)
1	Andhra Pradesh	225
2	Assam	40
3	Bihar	175
4	Gujarat	80
5	Haryana	80
6	Jammu and Kashmir	20
7	Kerala	10
8	Madhya Pradesh	80
9	Maharashtra	60
10	Meghalaya	—
11	Mysore	50
12	Nagaland	—
13	Orissa	160
14	Punjab	125
15	Rajasthan	225
16	Tamil Nadu	100
17	Uttar Pradesh	354
18	West Bengal	121
19	Himachal Pradesh	15
20	Union Territories	3
21	<i>All-India</i>	1900¹

¹The statewise targets aggregate to 1923 thousand hectares but the all-India target for 1971-72 is placed at 1900 thousand hectares

ANNEXURE 4.4

Target of Consumption of Chemical Fertilisers during 1971-72

('000 tonnes)				
sl. no.	state/union territories	nitrogenous (in terms of N)	phosphatic (in term of P ₂ O ₅)	potassic (in term of K ₂ O)
(0)	(1)	(2)	(3)	(4)
1	Andhra Pradesh	265.0	120.0	20.0
2	Assam	7.5	3.0	2.52
3	Bihar	125.0	50.0	20.0
4	Gujarat	131.0	49.0	7.0
5	Haryana	80.0	15.2	6.0
6	Jammu and Kashmir	8.0	3.0	1.5
7	Kerala	45.0	35.0	35.0
8	Meghalaya	1.5	1.7	0.2
9	Madhya Pradesh	72.0	35.0	8.5
10	Maharashtra	150.0	75.0	50.0
11	Mysore	110.0	84.0	49.0
12	Nagaland	0.2	0.1	Neg.
13	Orissa	50.0	16.0	3.0
14	Punjab	210.0	50.0	26.0
15	Rajasthan	50.0	16.0	3.0
16	Tamil Nadu	230.0	75.0	60.0
17	Uttar Pradesh	410.0	140.0	100.0
18	West Bengal	65.0	25.0	20.0
19	Union Territories	25.4	10.5	6.5
20	All-India	200.00 ¹	800.0 ¹	400.0 ¹

¹The statewide targets aggregate to 2035,807 and 425 thousand tonnes for N₂, P₂O₅, and K₂O but the all-India targets for 1971-72 are placed at 2000,800 and 400 thousand tonnes respectively.

ANNEXURE 4.5

Target of Area covered under Plant Protection during 1971-72

(lakh hectares)

sl. no.	state/union territories	
(0)	(1)	(2)
1	Andhra Pradesh	85.8
2	Assam	1.5
3	Bihar	31.0
4	Gujarat	5.9
5	Haryana	24.0
6	Jammu and Kashmir	1.6
7	Kerala	10.5
8	Meghalaya	0.2
9	Madhya Pradesh	24.0
10	Maharashtra	70.0
11	Mysore	27.1
12	Nagaland	0.1
13	Orissa	8.5
14	Punjab	32.0
15	Rajasthan	35.0
16	Tamil Nadu	50.0
17	Uttar Pradesh	72.5
18	West Bengal	20.0
19	Union Territories	7.9
20	All-India	500.0 ¹

¹The state-wise targets aggregate to 508 lakh hectares, but the all-India target for 1971-72 is placed at 500 lakh hectares.

ANNEXURE 4.6

Targets of Area under Minor Irrigation during 1971-72

(additional area in '000 hectares)

sl. no.	state/union territories	1971-72 target
(0)	(1)	(2)
1	Andhra Pradesh	75
2	Assam	29
3	Bihar	140
4	Gujarat	90
5	Haryana	50
6	Jammu and Kashmir	12
7	Kerala	15
8	Madhya Pradesh	125
9	Maharashtra	125
10	Meghalaya	1.5
11	Mysore	46
12	Nagaland	2
13	Orissa	20
14	Punjab	121
15	Rajasthan	62
16	Tamil Nadu	110
17	Uttar Pradesh	500
18	West Bengal	50
19	Himachal Pradesh	2.4
20	Union Territories	9
	<i>All-India</i>	1594.6

ANNEXURE 4.7

Target of Soil Conservation on Agricultural Land during 1971-72

(additional area in '000 hectares)

sl. no.	state/union territories	1971-72 target
(0)	(1)	(2)
1	Andhra Pradesh	50
2	Assam	6
3	Bihar	15
4	Gujarat	76
5	Haryana	29
6	Jammu and Kashmir	1
7	Kerala	7
8	Madhya Pradesh	200
9	Maharashtra	425
10	Meghalaya	3
11	Mysore	87
12	Nagaland	1
13	Orissa	17
14	Punjab	11
15	Rajasthan	44
16	Tamil Nadu	43
17	Uttar Pradesh	226
18	West Bengal	6
19	Himachal Pradesh	2
20	Union Territories	3
21	<i>All-India</i>	1252

ANNEXURE 4.8

sl. no.	state	ICAR research main and sub-centres	pilot projects district taken up during 1970-71	pilot projects districts to be selected during 1971-72
(0)	(1)	(2)	(3)	(4)
1	Andhra Pradesh	1 Ibrahimpatnam (Hyderabad)	1 Hyderabad	1 Anantpur
		2 Anantpur		
2	Bihar	3 Ranchi		2 Palamau
3	Gujarat	4 Anand	2 Rajkot	3 Amereli
		5 Rajkot		
4	Haryana	6 Hissar	3 Hissar	4 Mohinder- garh (to be attached to IA RI Centre)
5	Jammu and Kashmir	7 Jammu		5 Udhampur
6	Madhya Pradesh	8 Indore	4 Indore	6 Rewa
		9 Rewa		
7	Maharashtra	10 Akola	5 Sholapur	7 Akola
		11 Sholapur		
8	Mysore	12 Hebbal	6 Bellary	8 Hebbal
		13 Bellary		9 Bijapur
		14 Bijapur		
9	Punjab	15 Ludhiana		
10	Rajasthan	16 Jodhpur	7 Jodhpur	10 Udaipur
		17 Udaipur		11 Bhilwara
11	Tamil Nadu	18 Kovilpatti	8 Tirunelveli	12 Tiruchirappalli
12	Uttar Pradesh	19 Jhansi	9 Jhansi	13 Ghazipur
		20 Varanasi		14 Agra
		21 Agra		
		22 Dehradun		
13	Orissa	23 Bhuvaneswar		15 Mayurbhanj
		24 IARI, New Delhi.		

CHAPTER 5

ANIMAL HUSBANDRY, DAIRYING, FISHERIES AND FORESTS

I. ANIMAL HUSBANDRY

Plan Outlay

An outlay of Rs. 17.18 crores has been provided in the Annual Plan 1971-72 for programmes of animal husbandry, as against an anticipated expenditure of Rs. 13.78 crores during 1970-71. This includes Rs. 14.10 crores for programmes in the State Plan sector, Rs. 0.88 crore for Union Territories and Rs. 2.20 crores for schemes in the Central sector.

Cattle Development

5.2. Among the programmes for cattle development, the most important programme relates to Intensive Cattle Development projects which are tied up with major dairy plants. By the end of 1970-71, 46 such projects had been started. During 1971-72, it is proposed to set up 10 additional ICD projects. Seven of them which would be of medium size and would cover a breedable population of 50,000 cows and buffaloes are proposed to be taken up in the States of Andhra Pradesh, Bihar, Haryana, Kerala, Orissa, Punjab and West Bengal. Another three ICD projects of the large type covering a breedable population of 1 lakh are intended to be established in the States of Gujarat, Mysore and Tamil Nadu. In addition, during 1971-72, it is proposed to set up 18 new key village blocks. Each of these blocks is expected to cover the area with 10,000 breedable cows/buffaloes.

5.3. One of the programmes which has been lagging behind so far relates to progeny testing of bulls. The Fourth Plan envisages establishment of 10 units. During the first two years of the Plan, the programme was not implemented. It is, however, contemplated that in 1971-72, progeny testing programme will be initiated in 8 State Cattle Breeding Farms. These farms are located at Chak Ganjaria, Lucknow, Durg (M.P.), Hessarghatta (Mysore) Banwasi (A.P.) Kumhon (Rajasthan)

Junagarh (Gujarat), Gauri Karuna (Bihar) and Hosur (Tamil Nadu). The location of the fifth farm is still to be finalised. A Sire Evaluation Cell is also proposed to be set up to analyse the performance of the bulls used in the progeny testing programme. Another development expected during 1971-72 relates to the Central Frozen Semen Bank at Hessarghatta (Mysore). This station was at an advanced stage of establishment at the end of 1970-71. It is expected to start the freezing work during 1971-72.

5.4. For scientific breeding, the Fourth Plan envisages expansion of the existing Jersey Cattle Breeding Farm at Hessarghatta and establishment of six additional Central cattle farms. Establishment of three of the new farms was sanctioned prior to the Fourth Plan. These farms are at Chiplima (Orissa) for Red Sindhi, Suratgarh (Rajasthan) for Tharparkar and Ankleswar (Gujarat) for Surti buffaloes. During 1970-71, two additional farms, one at Koraput (Orissa) for Jersey cows and the other at Alamadhi (Tamil Nadu) for Murrah buffaloes were sanctioned. During 1971-72, the development work at three farms taken up prior to the Fourth Plan would be continued while it would start at the remaining two farms. It is also contemplated that the site for locating the sixth cattle breeding farm for Holstein-Friesian cows will be finalised.

Food and Fodder Development

5.5. During 1971-72, food and fodder development programme which had so far been lagging behind will be sought to be accelerated. Against the Fourth Plan target of 23 fodder seed production farms, only four farms have been set up so far. During 1971-72, the target is to set up 11 such farms. These will be set up at the rate of one each in the States of Bihar, Gujarat, Haryana, Jammu and Kashmir, Kerala, Meghalaya, Orissa, Tamil Nadu and Manipur and two in Maharashtra.

5.6. While the fodder seed production farms are in the State Plan sector, the Central Sector of the Plan envisages seven regional forage demonstration stations. This programme has not so far made adequate progress. During 1971-72, action is contemplated to develop the regional forage demonstration stations located at Kalyani (West Bengal),

Hissar (Haryana) and Ankleswar (Gujarat). Sanctions have been issued for the establishment of remaining stations at Alamadhi (Tamil Nadu), Suratgarh (Rajasthan) and Manasbal (J&K) and these will be taken up for development.

Sheep Development

5.7. During 1971-72, the Central Sheep Breeding Farm at Hissar will be sought to be development the port of the Government of Australia under Colombo Plan. In addition to 1030 Corriedale sheep imported during 1970-71, it is proposed to import an equivalent number during 1971-72.

5.8. In the Fourth Plan, under the centrally-sponsored sector, seven large sheep breeding farms are envisaged. Three of these farms, one at Verinag (J&K) for Russian-Merino, the other at Mamidipally in Andhra Pradesh for Corriedale and the third at Challakere in Mysore for Dorset breed were taken up in 1970-71 and action to develop these farms will be continued during 1971-72. In addition, it is proposed to take up two more sheep breeding farms during 1971-72.

5.9. Apart from the large sheep breeding farms taken up under the centrally sponsored Plan, the Fourth Plan visualises establishment of 11 new sheep breeding farms under the State Plan Sector. Eight of these farms were taken up in the first two years of the Plan. The remaining three farms are intended to be taken up during 1971-72. In addition, ten of the existing sheep breeding farms are proposed for expansion. An allied programme relates to the establishment of sheep and wool extension centres. Against Fourth Plan target of 64 such centres, 15 centres were set up in the first two years of the Plan. The Annual Plan 1971-72 visualises setting up of 14 such centres. In order to make increased quantities of better quality wool available to the industry and at the same time assure a better price to the sheep breeders, the Fourth Plan visualises that the sheep shearing and wool grading-cum-marketing programme which was originally taken up in Rajasthan should be extended to nine other States. During 1970-71, action was initiated

to extend the scheme to three States, namely, Jammu and Kashmir, Punjab and Haryana. Auction of graded wool was started at Wool Grading Centre, Jammu and Kashmir. It is contemplated that, during 1971-72, such auctions will also be held at wool grading centres located in Punjab and Haryana.

Poultry Development

5.10. Against the Fourth Plan target of 33 intensive egg and poultry production-cum-marketing centres, 14 such centres were taken up in the first two years of the Plan. During 1971-72, it is proposed to set up four additional centres, one each in the States of Andhra Pradesh, Assam, Mysore and West Bengal. Steps would be taken to set up five large hatcheries each with a capacity of 40,000 eggs during 1971-72 at central poultry farms located at Bombay and Bangalore, and state poultry farms at Delhi, Chandigarh and Calcutta. The required number of incubators are being made available by the F.A.O. under Freedom From Hunger Campaign.

Piggery Development

5.11. Out of the seven bacon factories, the ones in the States of Maharashtra, Andhra Pradesh and West Bengal have been commissioned. As regards the factory at Alwar, the installation of equipment and machinery has been completed and test runs are being conducted. Further development would be taken up in 1971-72. The bacon factories at Ranchi and Aligarh are in their last stages of installation and are likely to be commissioned during the year 1971-72. In case of the factory in Kerala, arrangements would be made for the installation of equipment and machinery. Construction work will be completed in respect of pork processing plant in Punjab and a new processing plant has been proposed at Kalimpong in West Bengal.

Animal Health

5.12. The Fourth Plan visualises five animal quarantine and certification service stations. So far, no progress has been made under this scheme. However, in the Annual Plan 1971-72, provision has been made

for setting up one such station at Delhi. Under the Rinderpest Eradication Programme, the Fourth Plan visualises establishment of 60 vigilance units and 50 check posts. By the end of 1970-71, 27 vigilance units and 31 check posts have started functioning in different States. During 1971-72, it is proposed to establish 33 additional vigilance units and 19 check posts.

5.13. Under the Fourth Plan, a target of 872 veterinary hospitals/dispensaries has been visualised. In the first two years of the Plan, 420 such hospitals/dispensaries were taken up. The Annual Plan for 1971-72 visualises 240 such institutions. In addition, it is proposed to upgrade the existing 56 dispensaries into full-fledged veterinary hospitals.

5.14. During 1971-72, provision has been made for strengthening biological products laboratories in several States. A particularly significant development contemplated relates to establishment of a Central Foot and Mouth Virus Vaccine Laboratory at Bangalore. This laboratory will be started by IVRI. The need for such a unit has arisen on account of the increase in the cross-breeding operations being undertaken.

Research

5.15. During the year 1970-71, the research programmes were mainly directed towards development of more productive strains of different species of livestock and poultry through scientific breeding, better nutrition and control of livestock diseases. These programmes will be continued during 1971-72. The coordinated research projects on cattle, buffaloes, sheep and poultry, which were initiated during the year 1970-71, will be executed during 1971-72.

5.16. In 1971-72, the foundation stock of indigenous experimental animals and exotic germ-plasm will be procured for taking up breeding programmes. In the case of cattle, foundation herds of Gir and Ongole will be established in Maharashtra, Madhya Pradesh and Andhra Pradesh. Fourteen high egg laying strains of poultry have been located.

These strains will be tested at four centres in order to select the most suitable strain for taking up breeding programmes. For developing a broiler, strains of meat type birds will be tried for evolving a broiler capable of attaining 1.5 kg. weight at 10 weeks. Arrangements have been finalised for import of Russian Merino from the Soviet Union for taking up a programme of research on improvement of sheep for fine wool. It is also proposed to procure exotic germ plasm of mutton breeds of sheep.

II. DAIRYING AND MILK SUPPLY

Plan Outlay

5.17. Against an anticipated expenditure of Rs. 14.87 crores during 1970-71, a sum of Rs. 29.74 crores has been allocated for programmes of dairying and milk supply in the Annual Plan 1971-72. Of this amount, Rs. 8.45 crores have been provided in the State Plan sector and Rs. 0.31 crore in the Plans of Union Territories. The remaining amount of Rs. 20.98 crores is in the Central Plan. This large step up is due to the expanded activities envisaged for the Indian Dairy Corporation.

Milk Supply Schemes

5.18. The number of milk supply schemes in operation by the end of 1970-71 was 60. During 1971-72, it is proposed to initiate action in respect of 10 new milk supply schemes, two each in Kerala and Madhya Pradesh, one each in Tamil Nadu and Uttar Pradesh and the remaining four in Maharashtra. It is also contemplated that seven spill-over milk supply schemes will be commissioned during 1971-72. One of these is located in Haryana, two in Mysore and the remaining four in Maharashtra. The Annual Plan 1971-72 also contemplates action to increase the installed capacity of seven existing milk plants, one each in Bihar, Haryana, Kerala, Madhya Pradesh, Chandigarh, Mysore and Tripura. Finally, during 1971-72, it is proposed to take measures with a view to enabling 10 existing milk supply schemes to stabilise and consolidate their working. These schemes are one each in Jammu and Kashmir and Rajasthan, two each in Kerala and Tamil Nadu while the rest are in Uttar Pradesh.

Milk Product Factories and Creameries

5.19. By the end of 1970-71, ten milk product factories and creameries were in operation in different States. In 1971-72, it is proposed to initiate establishment of three new milk product factories, one each in Haryana, Punjab and Tamil Nadu. In addition, the Annual Plan 1971-72 contemplates initiation of two creameries, one in Jammu and Kashmir and the other in Meghalaya.

Rural Dairy Centres

5.20. The Fourth Plan contemplates establishment of 43 rural dairy centres. This programme was not progressing satisfactorily so far. Up to the end of 1970-71, establishment of ten centres was taken up. During 1971-72, some acceleration of this programme is contemplated. Action will be taken to establish nine rural dairy centres, one each in Assam, Mysore, Orissa, Uttar Pradesh, Goa, Manipur and Tripura. The remaining two will be located in Punjab.

Delhi Milk Scheme

5.21. The first phase of the expansion of the Central Dairy Plant from 2.55 lakh litres to 3 lakh litres capacity having been completed, the second phase of increase to 4.35 lakh litres would be taken up during 1971-72. This expansion would be financed out of the provision made in the Central Plan for the Delhi Milk Scheme. In addition, it is proposed to set up a second dairy plant at Delhi at an estimated cost of Rs. 4 crores. This will be financed by the funds to be made available by the Indian Dairy Corporation under the project for Milk Marketing and Dairy Development (Operation Flood).

Indian Dairy Corporation

5.22. During the year 1971-72, the Indian Dairy Corporation contemplates to receive a gift of 30,000 tonnes of skimmed milk powder and 10,000 tonnes of butter oil as against 10,500 tonnes of skimmed milk powder and 3,500 tonnes of butter oil received in the previous year. The funds to be generated by the sale of these commodities during 1971-72

are estimated at Rs. 20.70 crores. During 1971-72, the Corporation proposes to utilize the generated funds for financing the following activities :

	(Rs. crores)
(1) expansion of the milk handling capacity of the four cities	0.25
(2) construction of new Dairies	5.25
(5) milk collection and chilling centres	1.09
(4) setting up of new feeder/balancing milk plants	2.28
(5) resettlement of city-kept cattle and buffaloes	3.50
(6) increasing milk production by provision of technical inputs, which will include production of ready-mixed concentrates and greenfodder, artificial insemination, veterinary services and medicines and calf rearing assistance	6.43
(7) organisation of rural procurement of milk	0.39
(8) project planning, implementation and manpower development	0.62
(9) miscellaneous, including unloading, storing and inland transportation of WFP commodities	0.95
<i>total</i>	20.70

Research

5.23. On research schemes pertaining to Dairying included in the Fourth Plan, a sum of Rs. 3.85 lakhs was spent during the year 1970-71. During the year 1971-72, a sum of Rs. 11.43 lakhs has been allocated to accelerate the pace of progress. Under the All India Coordinated Research Project to determine the economics of milk production under the intensive dairy farming conditions in relation to high-yielding varieties of cereals and cash crops, studies on three types of farming, namely

(i) specialised dairy farming; (ii) mixed farming; and (iii) arable farming, will be taken up at the various centres during 1971-72. Under a second project, research will be undertaken on the development of techniques for the manufacture of edible casein and industrial casein from the sub-standard milk. Work will be initiated on the manufacture of dahi powder. Data will be collected in respect of (i) seasonality of milk production (ii) distances involved in the transportation of milk (iii) quality of milk at the various stages (iv) type of plant and its capacity and (v) variations in the quantity of milk handled from day to day and season to season so as to study the technological and economic problems in connection with the operation of liquid milk plants.

III. FISHERIES

Plan Outlay

5.24. In the Annual Plan 1971-72, an outlay of Rs. 13.17 crores has been provided. This is against an anticipated expenditure of Rs. 11.86 crores in the preceding Annual Plan. The break-up of the outlay for 1971-72 is as follows :

TABLE 5.1 : *Outlay on Fisheries*

	(Rs. crores)
states	8.98
union territories	0.92
central and centrally sponsored sector	3.27
<i>total</i>	<i>13.17</i>

Target of Fish Production

5.25. For the Annual Plan 1971-72, a target of fish production of 2.10 million tonnes is envisaged. This is as against an anticipated production of 1.97 million tonnes in 1970-71 and 1.82 million tonnes in 1969-70. A State-wise break-up is given in Annexure 5.1.

Inland Fisheries

5.26. For the development of inland fisheries, the State Plans envisage a number of inter-connected programmes. These relate to

production of spawn, distribution of fry and fingerlings and extension of nursery area for seed production. The following table indicates the Fourth Plan target, the achievement in the first two years and the target for the Annual Plan 1971-72 :

TABLE 5.2: *Achievements and Targets—Fisheries*

Item	Fourth Plan target	achievement in the first two years of the Plan	target 1971-72
production/distribution of fry and fingerlings (millions)	629	235	192
collection/production of spawn (millions)	3165	850	841
nursery area (hectares)	1153	431	408

It will be observed that under the various programmes mentioned above, the Annual Plan 1971-72 visualises a considerable spurt. The State-wise break-up is given at Annexures 5.2, 5.3 and 5.4.

5.27. In addition to the above programmes, some efforts will also be made in the direction of development of reservoirs and improvement of village ponds. In Kerala and West Bengal, a programme for rackish water fish farming in reclaimed swamps is also envisaged. One of the main problems in inland fisheries relates to lack of a suitable leasing policy conducive to fisheries development. Accordingly, the Government of India have constituted a committee to go into the existing leasing policies and to make suitable recommendations with a view to provide facilities and incentives for development of water areas. It is expected that the report of the committee will be available in 1971-72 for consideration.

Marine Fisheries.

5.28. The programme for introduction of mechanised boats constitutes the main plank of marine fisheries development. Under the Fourth Plan, the overall target is 5,100 boats. In the first two years,

the progress in this regard was rather limited as the achievement was estimated to be about 1,500. In 1971-72, it is proposed to give a push to this programme and a target of 1,020 boats has been included. A State-wise break-up of the target is given at Annexure 5.5. It will be observed that bulk of the programme would be undertaken in Kerala, Tamil Nadu and Mysore.

5.29. For deep sea fishing, one of the programmes envisaged in the Fourth Plan related to introduction of 300 fishing trawlers with suitable financial subsidy towards the cost of such trawlers. This programme, however, has not been making much progress. So far, the two consortia of Indian ship builders have been given an order for manufacturing 40 fishing vessels. Out of this, 16 vessels have already been delivered. It is expected that the remaining 24 vessels will be delivered during 1971-72. Deep-Sea fishing Station has acquired six indigenously constructed 57 ft. vessels and one 105 ft. vessel imported from German Democratic Republic during 1970-71. These vessels will be deployed for survey of deep water fishery resources. In addition, it is contemplated that one 73 ft. vessel would be acquired during 1971-72 against Norwegian aid. In addition to the existing sub-Stations for deep sea and off-shores and exploration located at Bombay, Cochin, Tuticorin and Visakhapatnam, three new stations, namely, Kandla, Calcutta and Port Blair will become functional in the first half of 1971. A scheme for investigation of pelagic fisheries on the South-West Coast started functioning from October, 1970 at Cochin. This project, which is assisted by UNDP, will continue to operate during 1971-72. Under the scheme, resources of Sardines and Mackerel will be sought to be surveyed. For exploratory work of the Laccadive Sea, it is expected that a Tuna vessel will be added to the Indo-Norwegian project.

5.30. The Fourth Five Year Plan visualises development of 48 minor fishing ports in addition to major fishing harbours. This scheme has so far been progressing unsatisfactorily. Construction work at the harbours already sanctioned at Bombay, Madras, Tuticorin, Roychowk and Vizhinjam, Karwar and Port Blair will be continued during 1971-72. In addition, small works will be undertaken at a number of minor ports.

It is also proposed to take up fisheries harbour development at Malpe, Honnavar and Ratnagiri for which preliminary project reports have been completed. It is also expected that during 1971-72 preparation of project reports for other sites and survey of new harbour sites in east and west coasts will be continued.

Marketing, Processing and Storage

5.31. During 1971-72, it is expected that 26 ice plants and 23 cold storage will be commissioned in order to facilitate marketing of fish. In addition, 3 ice plants will be taken up for construction. Other marketing facilities proposed to be developed during 1971-72 relate to refrigerated rail vans. It is expected that six such vans will become available for a new service between Delhi and Howrah.

Fisheries Research, Education and Training

5.32. Apart from the research activities to be taken up in the three central research institutes under ICAR, namely, Central Inland Fisheries Research Institute, Barrackpore, Central Marine Fisheries Research Institute, Mandapam and Central Fisheries Technological Research Institute, Ernakulam, fisheries research will also be organised on an inter-disciplinary basis through a number of all-India coordinated research projects. As regards marine fisheries, the accent will be largely on a stock assessment of marine resources to enable evolution of satisfactory management policies to meet the dangers of increased exploitation. Special work on pelagic fisheries is proposed to be undertaken in view of the prospect of development of off-shore fisheries. Inland fisheries research will be mainly devoted to fish culture in both fresh and brackish water for which setting up of suitable farms is envisaged. In the sphere of fisheries education, the Central Institute of Fisheries Education is proposed to be strengthened by setting up a fresh water sub-centre and adding a training vessel.

IV. FORESTS

Plan Outlay

5.33. In the Annual Plan 1971-72, an outlay of Rs. 19.16 crores has been included for programmes of forest development. This is against an anticipated expenditure of Rs. 16.57 crores in 1970-71. The break-up of the outlay for 1971-72 is as follows :

TABLE 5.3 : *Plan Outlay on Forests for 1971-72*

	(Rs. crores)
	Plan outlay (1971-72)
states	17.22
union territories	0.95
centrally sponsored	0.20
centre	0.79
<i>total</i>	19.16

Economic Plantations and Plantations of Quick Growing Species

5.34. Raising of economic plantations for industrial and commercial uses is one of the important schemes included in the State Plan sector. The Fourth Plan envisages a target of 394,000 hectares. Against this target, the achievement in the first two years has been of the order of 94,000 hectares. In the Annual Plan 1971-72, it is proposed to step up the pace of the implementation of this scheme and hence a target of nearly 60,000 hectares has been included. A state-wise break-up is given in the Annexure 5.6. An allied scheme relates to plantation of quick growing species. Target for the Fourth Plan under this scheme is 302,000 hectares. Against this target, the achievement in the first two years was about 90,000 hectares. For the Annual Plan 1971-72, a target of 40,000 hectares has been included involving a slight step-up over the previous year's achievement. A state-wise break-up is given in Annexure. 5.6.

Farm Forestry and Fuel Wood Plantation

5.35. In the Fourth Plan, a target of 75,000 hectares is envisaged for development of farm forestry and fuel wood plantation. This scheme has been making rather slow progress. In the first two years, the achievement was only 21,000 hectares. Even in the Annual Plan 1971-72, the target aimed at is rather limited i.e. 12,000 hectares. This is a reflection of the fact that by and large, State Governments have not accorded sufficient priority to this programme.

Other Programmes of Forests Development

5.36. During the Fourth Plan, it was contemplated that new forest roads to the extent of 40,000 kms. would be constructed. Against this target, the achievement in the first two years was only about 1,870 kms. In the Annual Plan 1971-72, a programme of constructing new forest roads to the extent of 1,440 kms. has been contemplated. A number of other development programmes such as Logging Training Project and the project of pre-investment survey of forest resources will be continued during 1971-72.

Forest Research

5.37. The progress under the programme of forest research has continued to be inadequate, and special effort will be made to step up the programmes of forest research. The expenditure during the two years 1969-71 is about Rs. 18 lakhs, while the proposed outlay for 1971-72 is Rs. 19 lakhs against the total Fourth Plan outlay of Rs. 1.75 crores for forest research. Work on the coordinated research projects relating to fast growing tropical pines and conifers, studies on nutritional aspects of eucalyptus and regeneration of high level conifers will be continued. Implementation of three more coordinated projects on fast growing poplars, genetic improvement of important forest species, and survey of forest pests and diseases of important tree species including their control will be taken up.

ANNEXURE 5.1

Fish Production—Target Achievement

(thousand tonnes)

sl. no.	state	1968-69 achievement base level	Fourth Plan target	1969-70 achievement	1970-71 anticipated achievement	1971-72 target	Remarks
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Andhra Pradesh	180.60	182.92	180.60	188.60£	£195.60	£Provisional
2	Assam	24.50	29.66	24.62	27.00	28.00	
3	Bihar	48.00	68.00	52.00	56.00	60.00	
4	Gujarat	131.00	179.00	139.00	149.00	159.00	
5	Haryana	0.65	2.65	0.81	0.97	1.05	
6	Jammu and Kashmir	5.24	5.44	5.24	6.72	6.80	
7	Kerala	353.15	600.00	385.00	397.00	420.00	
8	Madhya Pradesh	7.60	10.00	8.00	8.50	9.00	
9	Maharashtra	240.00	243.00	242.00	258.00	283.70	
10	Meghalaya						
11	Mysore	130.00	182.00	135.00	200.00	210.00	
12	Nagaland	0.05	0.11	0.06	0.07	0.07	
13	Orissa	25.00	57.50	25.76	27.81	28.71	
14	Punjab	1.80	2.10	1.80	1.82	1.82£	
15	Rajasthan	5.00	12.50	5.20	6.50	8.00	
16	Tamil Nadu	321.00	500.00	294.00	348.00	390.00	
17	Uttar Pradesh	20.00	24.25	21.25	21.48	21.58	
18	West Bengal	241.93	247.68	260.00	241.00 ¹	241.00 ¹	
19	<i>total-states</i>	1735.52	2346.81	1780.77	1938.47	2064.33	
20	<i>union territories</i>	33.34	63.64	35.00	36.00£	36.50£	
21	<i>total-India</i>	1768.86	2410.45	1815.77	1974.47	2100.83	

¹These figures were reported by the State authorities at the time of Annual Plan discussions.

ANNEXURE 5.2

Annual Plan 1971-72—Fisheries Distribution of Fry and Fingerlings

(million)

sl. no.	state	Fourth Plan target	1969-70 & 1970-71 actual achievement/anti. achievement	target 1971-72
(0)	(1)	(2)	(3)	(4)
1	Andhra Pradesh	25	15.22	10.00
2	Assam	69	14.00	20.00
3	Bihar	50	—	—
4	Gujarat	17	4.10	5.50
5	Haryana	10	2.12	2.00
6	Jammu and Kashmir	3	—	—
7	Kerala	8	5.00	5.00
8	Madhya Pradesh	35	25.00	20.00
9	Maharashtra	50	46.17	25.00
10	Mysore	17	15.00	12.50
11	Nagaland	2	—	—
12	Orissa	40	—	—
13	Punjab	8	—	—
14	Rajasthan	16	2.67	10.00
15	Tamil Nadu	120	105.00	60.00
16	Uttar Pradesh	50	—	—
17	West Bengal	109	1.20	21.00
18	<i>total</i>	629	235.46	192.00

ANNEXURE 5.3

Annual Plan 1971-72—Fisheries Collection/Production of Spwan

(million)

sl. no.	state	Fourth Plan target	achievement/likely during 1969-70 & 1970-71	target 1971-72
(0)	(1)	(2)	(3)	(4)
1	Andhra Pradesh	150	16	12.50
2	Assam	400	227.20	250.00
3	Bihar	300	—	—
4	Gujarat	100	13	10
5	Haryana	50	—	8
6	Jammu and Kashmir	15	—	—
7	Kerala	30	7.50	10
8	Madhya Pradesh	300	269	200
9	Maharashtra	90	67.80	45
10	Mysore	100	60	50
11	Nagaland	10	—	—
12	Orissa	500	180.00	101
13	Punjab	50	N.A.	N.A.
14	Rajasthan	100	9.50	25
15	Uttar Pradesh	300	—	—
16	West Bengal	650	N.A.	130
17	<i>total</i>	3165	850.00	841.50

ANNEXURE 5.4

Annual Plan 1971-72—Fisheries Nursery Area

		(hectares)		
sl. no.	state	Fourth Plan target	achievement/likely achievement during 1969-70 & 1970-71	target 1971-72
(0)	(1)	(2)	(3)	(4)
1	Andhra Pradesh	16.10	N.A.	N.A.
2	Assam	120.00	41	70
3	Bihar	80.00	—	—
4	Gujarat	30.00	1	2.50
5	Haryana	20.00	16	14
6	Jammu and Kashmir	4.50	—	—
7	Kerala	50.00	2	20
8	Madhya Pradesh	140	90	70
9	Maharashtra	50	14.10	11
10	Mysore	30	11	6
11	Nagaland	3	—	—
12	Orissa	90	137.20	70
13	Punjab	25	—	—
14	Rajasthan	100	65	60
15	Tamil Nadu	100	—	20
16	Uttar Pradesh	100	—	—
17	West Bengal	195	54	65
18	<i>total</i>	1153.60	431.30	408.50

ANNEXURE 5.5

Annual Plan 1971-72—Fisheries Mechanisation of Boats

sl. no.	states	Fourth Plan target	achievement/likely achievement during 1969-70 & 1970-71	target 1971-72
(0)	(1)	(2)	(3)	(4)
1	Andhra Pradesh	208	55	45
2	Gujarat	600	160	120
3	Kerala	1600	265	300
4	Maharashtra	800	130	105
5	Mysore	385	510 ¹	200 ²
6	Orissa	100	44 ³	—
7	Tamil Nadu	1000	360	250
8	West Bengal	Not fixed	5	No new boat to be mechanised
9	<i>all-India</i>	5127 ³	1529	1020

¹Includes boats which were introduced with the help of institutional credit.

²Includes four trawlers purchased from the Orissa Fisheries Corporation.

³Includes 434 boats to be introduced in various union territories.

ANNEXURE 5.6

Targets for 1971-72 for Important Forestry Schemes

(thousand hectares)

sl. no.	States	plantations of quick growing species	economic plantations for industrial and commercial uses	farm forestry-cum-fuel wood plantations
(0)	(1)	(2)	(3)	(4)
1	Andhra Pradesh	1.20	2.50	0.72
2	Assam	11.40	2.65	—
3	Bihar	1.75	2.80	0.50
4	Gujarat	2.61	2.72	0.80
5	Haryana	0.20	1.34 ¹	0.54
6	Himachal Pradesh	2.20	4.00	0.15
7	Jammu and Kashmir	—	1.00	0.68
8	Kerala	0.70	3.08	0.10
9	Maharashtra	1.06	4.75	0.56
10	Madhya Pradesh	3.00	6.00	0.25
11	Mysore	10.00	7.80	1.20
12	Nagaland	N.A.	N.A.	N.A.
13	Orissa	3.64	3.64	0.20
14	Punjab	0.90	3.00	2.50
15	Rajasthan	—	0.20	0.20
16	Tamil Nadu	2.25	3.00	2.50
17	Uttar Pradesh	14.00	8.88	1.30
18	West Bengal	3.20	0.10	0.04
19	Union Territories	0.50	3.29	0.23
20	All-India	48.61	60.75	12.47

NA—Not available.

¹Includes figures of row kilometres converted into hectares.

CHAPTER 6

COOPERATION AND COMMUNITY DEVELOPMENT

I. COOPERATION

Plan Outlay

In the Annual Plan 1971-72, an outlay of Rs. 65.17 crores has been provided for programmes of cooperative development. This is as against an approved outlay of Rs. 41.91 crores and the anticipated expenditure of Rs. 55.19 crores in the preceding year. The break-up of the outlay of Rs. 65.17 crores included in the Annual Plan 1971-72 is as follows :

TABLE 6.1 : *Plan Outlay on Cooperation*

	(Rs. crores)
state Plan	27.38
union territories	0.74
centrally sponsored schemes	5.00
central sector	32.05
<i>total</i>	<i>65.17</i>

Short and Medium-term Cooperative Credit

6.2. It is estimated that during 1969-70, agricultural credit cooperatives issued short and medium-term loans of the order of about Rs. 539 crores. For the cooperative year ending June, 1971, the firm figures of such advances are not yet available. However, it is anticipated that such advances might be of the order of Rs. 575 to 600 crores. For the Annual Plan 1971-72, the All-India target has been placed at Rs. 650 crores. A State-wise break-up is given in the Annexure 6.1.

6.3. One of the important programmes envisaged in the Fourth Five Year Plan relates to re-organisation and rationalisation of the cooperative short and medium-term credit structure at the primary level. Due to several difficulties, the pace of progress of this programme has not been

satisfactory. In the first year of the Plan, out of about 1,68,000 primary agricultural credit societies, only about 3000 non-viable societies could be eliminated. For 1970-71, it is anticipated that the progress is not likely to be much more substantial. In the Annual Plan 1971-72, further attention will be paid to this aspect. State Governments have been urged to draw up concrete targets of developing selected primary agricultural credit societies, so as to convert them into viable societies.

6.4. During 1971-72, a number of States, where cooperative credit structure at the District and Primary level is particularly weak, intend to take action to re-vitalise some of these institutions particularly by augmenting their share capital base. Accordingly, in the Annual Plan of the States, a provision of about Rs. 17 crores has been made to enable the States to borrow from the long-term operation funds of the Reserve Bank for investment in the share capital of cooperative credit institutions. A number of weak District Central Cooperative Banks have also been identified and special measures for strengthening these banks are under consideration.

6.5. In five States, namely Andhra Pradesh, Haryana, Madhya Pradesh, Mysore and Uttar Pradesh, in 52 selected Districts, where District Central Cooperative Banks are weak, 20 commercial banks have been involved in financing directly the primary agricultural credit societies of those areas. During 1971-72, this programme would be drawn up for expansion of the scheme in some of the other areas also.

Cooperative Long-term Credit

6.6. The long-term ordinary loaning programme of land development banks during 1971-72 is targeted to be of the order of Rs. 160 crores as against a loaning of about Rs. 143 crores during the preceding year. For this purpose, the land development banks are expected to issue ordinary debentures of about Rs. 140 crores and rural debentures of about Rs. 7 crores. In the Annual Plan 1971-72 provision has been made to enable the Central Government to support ordinary debentures to the extent of about Rs. 18.50 crores. In addition to ordinary loaning by the land development banks it is also expected that bulk of the ARC

refinance (estimated at Rs. 58 crores for 1971-72) would also be flowing through the land development banks.

Cooperative Distribution and Production of Inputs

6.7. It is expected that cooperatives will continue to play a significant part in the distribution of agricultural inputs, particularly fertilisers. The share of cooperatives in retail distribution of fertilisers is about 60%. During 1971-72, the target is for cooperatives to distribute fertiliser worth Rs. 300 crores as against Rs. 250 crores worth of fertiliser estimated to have been distributed in the preceding year. A State-wise break-up of the target for 1971-72 is given in the Annexure. In order to facilitate increased distribution of fertilisers, the Annual Plan 1971-72 contains a provision of Rs. 3 crores, for additional investment by the State Governments in the share capital of cooperatives to enable such cooperatives to find the requisite margin money for raising bank finance.

6.8. Negotiations with the prime contractors for construction of ammonia, urea and complex fertiliser plants of the first major fertiliser factory to be set up in the cooperative sector by the Indian Farmer's Fertiliser Cooperative Limited has reached the final stages and the contract has been concluded recently. It is expected that the factory may go into production during 1973-74. The cooperatives have also entered in the field of manufacture of granular fertilisers and 19 such units are being set up with the financial assistance of National Cooperative Development Corporation of which 8 units have already gone into production and the remaining units may go into production during the course of the year 1971-72. Financial assistance is also proposed to be provided by the National Cooperative Development Corporation for the setting up of 2 Soil Testing Laboratories two Seed Producers Processing Societies, 10 Services/Repair Centres for tractors and other agricultural machinery and 2 units of formulation of insecticides and pesticides.

Marketing and Processing

6.9. In the field of marketing, attention will largely be devoted to the strengthening of primary marketing structure through a programme

of revitalisation. A number of State Governments have already completed surveys to identify weak and moribund societies and have chalked out specific programmes for their revitalisation by increasing their membership, share capital and business turn-over. In the programme of revitalisation, priority will be given to the strengthening and development of selected marketing societies located in the High-yielding Varieties Programme areas to enable them to handle the increasing arrivals of agricultural produce in the marketing centres. Increasing attention will also be given to the development of marketing structure in the MFAL and SFDA areas.

6.10. It is expected that cooperatives during the year 1971-72 will market agricultural produce of the order of Rs. 740 crores as against Rs. 655 crores worth of produce during 1970-71. A State-wise break-up is given in the Annexure 6.1. Efforts will also continue to increasingly involve cooperatives in export of agricultural commodities. A target of Rs. 10 crores has been set for the export of agricultural produce through cooperatives for 1971-72 as against Rs. 7 crores for 1970-71. Attention will also be devoted to the implementation of the scheme for the formulation of pools/common cadres of key personnel of cooperative marketing/processing societies and creation of technical and promotional cells in the apex Marketing Federations and the National Federations. In all the States, except Rajasthan, Gujarat and Andhra Pradesh, the pools of key personnel have been created and similarly technical and promotional cells have also been established in all the State Marketing Federations except Nagaland and Jammu and Kashmir. Provision has been made for providing assistance to State and National Marketing Federations for the effective functioning of technical and promotional cells for the year 1971-72.

6.11. By the end of January, 1972, there were 1588 cooperative agricultural processing units for processing various commodities like sugarcane, cotton, paddy, oil seeds, fruits and vegetables, pulses, jute etc. Of these, 1345 units were reported to be installed and the total block investment of these units is estimated to be of the order of Ra. 400 crores. It is expected that 60 more new processing units will be organised during the

year 1971-72. Under a Central Sector Scheme, under which National Cooperative Development Corporation provides block finance through the apex banks/State Governments to processing units of medium and small size, financial assistance of Rs. 125 lakhs was made during the year 1970-71 to various States and a provision of Rs. 2 crores has been made for the year 1971-72 under this scheme. During 1971-72, emphasis will be given to consolidation of the working of the processing units already organised and create facilities for optimum utilisation of their installed capacity.

Consumer Cooperation

6.12. During the year 1971-72, it is expected that cooperatives would distribute consumers articles in their rural areas of the order of Rs. 335 crores as against an anticipated achievement of Rs. 300 crores during 1970-71. At present, cooperatives are mainly dealing in controlled articles as a result of which the volume of business has been declining due to relaxation of controls on food grains and other essential articles of daily use. emphasis will, therefore, be laid on diversifying the consumers activity of cooperatives in the rural areas.

6.13. An institutional net-work of consumers cooperatives has been built up in the urban consumers sector with the organisation of 14,000 primary/retail stores, 80 departmental stores, 371 wholesale central stores, 14 State Consumers Federations and a National Cooperative Consumers Federation. Efforts are now being directed to consolidation and strengthening of existing urban consumers structure at various levels. The programme envisages a re-organisation of wholesale/central stores as multi-unit retail stores with large size retail units and for amalgamation of the viable and potentially viable primaries among themselves or with the wholesale/central stores so that they may be able to improve their viability and undertake business in a wide range of commodities and create the desired impact on the price line in retail trade. Efforts will also be mobilised to diversify the business activity of urban consumers stores. An encouraging progress in this direction has already been made and proportion of non-controlled commodities handled by consu-

mers cooperatives during the year 1969-70 has reached 49 per cent of their total business. The State Governments have made a provision of Rs. 1.09 crores for urban consumers in their Annual Plan 1971-72. A provision of Rs. 11 lakhs has also been made under the Central sector scheme for the rehabilitation of Delhi Super Bazar.

Storage

6.14. During the year 1971-72, it is anticipated that an amount of Rs. 217 lakhs will be spent for construction of about 1200 cooperative godowns. This would bring the total storage capacity in cooperative sector to 2.95 million tonnes by the end of 1971-72 as against the anticipated capacity of 2.8 million tonnes by the end of 1970-71. Efforts will also be made to avail of additional finance from institutional financing agencies like Agricultural Refinance Corporation to meet the increasing storage requirements of cooperatives.

6.15. It is proposed to organise 10 more cold storages in the cooperative sector, thus bringing their total number of 105 by the end of 1971-72. The total capacity of cooperative cold storages will be of the order of 1.4 lakh tonnes consisting about 10 per cent of the total cold storage capacity in the country.

Other Programmes of Cooperative Development

6.16. Special attention will be paid to expand the operations of urban credit societies. Emphasis will be on mobilising savings from low income groups and extending credit facilities to them and also financing small artisans and workers and small-scale industries. The Reserve Bank has already agreed to have loan assistance to State Governments for participating in the share capital of urban banks which will undertake financing of small-scale industries. Efforts will also be concentrated on developing and consolidating cooperatives for weaker sections in the field of dairy, poultry, fisheries etc. Measures will be taken to strengthen federations of these cooperatives and draw up a concrete programme for the integrated development of these cooperatives in compact areas and assist the societies to obtain funds from institutional agencies to enable

them to serve the interests of weaker sections effectively. It is also contemplated to intensify the activities of these cooperatives in the areas covered by the scheme of Small Farmers Development Agency and Agency for Development of Marginal Farmers and Agricultural Labourers. Besides the above programmes, efforts will also be made to develop other types of cooperatives like irrigation cooperatives for small farmers, Rikshaw Pullers' assistance and other transport cooperatives and cooperatives for tribal people to benefit the weaker sections.

Education and Training

6.17. During 1971-72, the training of cooperative personnel at various levels will be continued at Vaikunt Mehta National Institute of Cooperative Management and 13 Cooperative Training Centres. The Member Education Programme for training the members and potential members and the office bearers of cooperative societies will also be continued through over 600 peripatetic training units. It is expected that nearly 400 senior officers of various types, about 300 persons of intermediate categories would be trained in various types of courses including short-term and special courses in marketing, land development, banking audits etc. Efforts will also be made to organise audit courses on regional basis after assessment of the training needs. It is also contemplated to organise diploma course in urban cooperation and consumers cooperation.

II. COMMUNITY DEVELOPMENT AND PANCHAYATI RAJ

Community Development

6.18. The entire rural area in the country has been delimited into 5265 in C.D. Blocks. An outlay of Rs. 20.12 crores has been made in the Plans of the States/Union Territories for the C.D. Blocks during 1971-72 against the anticipated expenditure of Rs. 24.12 crores during 1970-71. In most of the cases, the provision made are below the schematic requirements. For the Panchayati Raj schemes, an outlay of Rs. 169 lakhs has been provided in the Annual Plans of the States and Union Territories for 1971-72 against an anticipated expenditure of Rs. 133 lakhs during 1970-71.

Pilot Research Project in Growth Centres

6.19. Under this scheme it has been envisaged that research and investigation cells in selected areas would be set up with a view to identifying potential growth centres and drawing up plans of infra-structure development. All the 20 base areas for the establishment of the research and investigation cells have been identified in consultation with the State Governments on the basis of certain key indicators of growth. Three of these research and investigation cells have been located in selected research institutions. The project personnel have been appointed by all the cells except those located in West Bengal, Pondicherry and Tripura. 64 out of the total of 80 personnel were provided necessary orientation in three training courses organised during 1970-71 at the National Institute of Community Development, Hyderabad. During the year 1971-72, training courses for the project personnel remaining to be oriented would be organised. Work in connection with the filling up of the questionnaire schedules relating to Block town, village, household, small and village industries etc. has already been taken up in States, where project personnel completed their training. Collection of data its tabulation and analysis and the formulation of project reports are expected to be completed during the year 1971-72. A provision of Rs. 20 lakhs has been made for the scheme for 1971-72.

Orientation Publicity and Literature

6.20. A provision of Rs. 41.50 lakhs has been made in the Annual Plan of 1971-72 for Central sector programmes under the Department of Community Development. The programme will include orientation of village school teachers in Community Development, training of youth workers, production of basic literature and literature for non-officials, prizes competitions schemes for the best gram-sevaks, gramsevikas and villagers, research through universities, smallans and incentive awards to youth workers etc.

ANNEXURE 6.1

Targets for Annual Plan 1971-72

- (i) Short and Medium-term loans by Primary Agricultural Credit Societies.
(ii) Long-term loans by Land Development Banks.
(iii) Cooperative marketing of agricultural produce.
(iv) Fertiliser distribution by Cooperatives.

(Rs. crores)

sl. no.	state	short and medium-term loans	long-term loans	marketing of agricultural produce	fertiliser distribu- tion
(0)	(1)	(2)	(3)	(4)	(5)
1	Andhra Pradesh	32.00	17.00	21.50	15.00
2	Assam	4.00	0.50	4.50	2.00
3	Bihar	22.00	8.00	10.00	12.00
4	Gujarat	72.00	18.00	71.40	27.00
5	Haryana	17.00	4.50	20.00	18.00
6	Himachal Pradesh	4.50	0.50	*	*
7	Jammu and Kashmir	6.00	0.60	0.60	8.00
8	Kerala	27.50	2.50	13.50	10.00
9	Madhya Pradesh	61.00	9.00	30.00	18.00
10	Maharashtra	130.00	30.00	225.00	40.00
11	Mysore	40.00	12.00	42.00	15.00
12	Orissa	18.00	7.50	5.00	8.00
13	Punjab	70.00	9.50	90.00	50.00
14	Rajasthan	23.00	4.50	7.50	8.00
15	Tamil Nadu	61.50	18.00	29.00	26.00
16	Uttar Pradesh	71.00	20.00	155.50	35.00
17	West Bengal	14.00	2.50	7.50	8.00
18	Union Territories	4.80	1.05	7.00	3.00
19	<i>All-India</i>	650.00	160.00	740.00	300.00

*Included in Union Territories

CHAPTER 7

FOOD AND NUTRITION

I. FOOD POLICY AND ADMINISTRATION

Food Situation

The production of foodgrains was 107.8 million tonnes in 1970-71 as against 99.5 million tonnes in 1969-70. The increased level of production has brought about a marked improvement in the food situation which is characterised an easy market availability of foodgrains, general stability in food-prices and comfortable stock position. The seasonal fluctuations in the market in 1970-71 were by and large normal. Internal procurement of foodgrains reached 6.8 million tonnes for the third year in succession. The off-take from the public distribution system declined from 9.5 million tonnes in 1969 to 9 million tonnes in 1970. Stocks of foodgrains held by the Government both Central and States, at the end of March 1971 were about 5.8 million tonnes.

Public Distribution

7.2. During 1971, the public distribution arrangements will be continued to protect the interest of the vulnerable sections of the population and to maintain stability of prices. Consequent on the increased open market availability, pressure on public distributions continued to decline since 1966. The public distribution of foodgrains during the period 1966-70 was as under :

TABLE 7.1 : *Public Distribution of Foodgrains*
(million tonnes)

year	rice	wheat	other grains	total
1966	4.1	8.2	1.8	14.1
1967	3.0	7.4	2.8	13.2
1968	3.2	5.7	1.2	10.1
1969	3.5	5.2	0.8	9.5
1970	3.1	5.4	0.4	8.9

During 1971, the above trend is likely to be maintained. It is estimated that off-take may be 8.5 million tonnes, consisting of 3.3 million tonnes of rice, 5.00 million tonnes of wheat and 0.2 million tonnes of other grains.

Procurement

7.3. The procurement operations were continued at a much higher rate during 1970 as compared to the year 1969. The total procurement of foodgrains in 1970 was about 6.8 million tonnes as against 6.5 million tonnes in 1969. The following figures indicate the progress of procurement cerealwise since 1968 :

TABLE 7.2 : *Procurement of Cereals*

(million tonnes)

year	rice	wheat	coarse grains	total
1968	3.4	2.4	1.0	6.8
1969	3.7	2.4	0.4	6.5
1970	3.1	3.2	0.5	6.8

The procurement in 1971 is estimated to be of the order of 8.2 million tonnes comprising of 3.2 million tonnes of rice, 4.5 million tonnes of wheat and 0.5 million tonnes of coarse grains. The Food Corporation of India proposes to take necessary measures in 1971-72 to maximise procurement of wheat and paddy/rice. A target for the procurement of wheat has been fixed at 4 million tonnes. The Government of India after considering recommendations of the Agricultural Price Commission on price policy for rabi foodgrains for 1970-71 and the views of the Chief Ministers have decided that all possible efforts would be made to achieve the procurement target of 4 million tonnes of wheat during 1971-72 as against the actual procurement of 3.18 million tonnes during 1970-71. The following table indicates the procurement target of wheat during the marketing year (April to March) 1971-72.

TABLE 7.3 : *Procurement Target for Wheat for 1971-72*

('000 Tonnes)

sl. no.	state	procurement target 1971-72
(0)	(1)	(2)
1	Bihar	50
2	Gujarat	40
3	Haryana	600
4	Madhya Pradesh	50
5	Punjab	2600
6	Rajasthan	75
7	Uttar Pradesh	650
8	West Bengal	30
9	<i>All-India</i>	4095

For the 1971-72 wheat marketing season, no minimum support prices have been fixed because of Government's undertaking to purchase whatever quantity is offered for sale at the procurement prices. The decision on the magnitude procurement of rice and coarse cereals will be taken during the course of the year.

Zonal Restrictions

7.4. Ever since the bumper harvest of 1967-68 Government have been constantly reviewing its policy regarding zonal restrictions before each harvest. The movement of barley, gram and pulses is free throughout the country now. Restrictions on coarse grains were also withdrawn in most of the major producing areas. Recently, it has been decided to remove the restrictions on the movement of wheat to Bombay city.

Buffer Stock

7.5. In the Fourth Five Year Plan considerable stress has been laid on the building up of buffer stocks of foodgrains as a major instrument of food policy. The Plan visualises that a buffer stock of 5 million tonnes should be built up by the end of the five year period. During 1968-69,

a start was made towards building up buffer stocks of foodgrains. At the end of March, 1969 there was a closing stock of 4.5 million tonnes of foodgrains with the Central and State Governments. At the end of March 1970, the total stock of foodgrains with the Central and State Governments was 4.2 million tonnes. This was accounted for mainly by the lower off-take through the public distribution system and partly by better procurement. The total stock of foodgrains with the Food Corporation which was 3.7 million tonnes at the beginning of the year had gone up to 4.9 million tonnes at the end of the year 1970-71. It is expected that the off-take under the public distribution system would further decline in the coming years with easier availability of both rice and wheat in the open market. Such a situation would in turn help in building up more buffer stocks. The total releases from out of the Government stocks in 1970 amounted to less than 9 million tonnes as compared to 9.6 million tonnes in 1969 and the expectations are that the public distribution may further decrease to around 8.2 million tonnes during 1971. An outlay of Rs. 69 crores has been provided for financing buffer stock operations in 1971-72.

Food Corporation of India

7.6. In a span of about 6 years, the Food Corporation of India has expanded its activities both in terms of area of operation and volume of purchases and sales. With the transfer of executive functions of the Food Department from 1969-70 to the Corporation, it has become the sole purchase and sales agent of the Central Government. The activities of the Corporation at present extend throughout the country. The estimated purchases, sales and stocks of the Corporation in 1971-72 along with the comparative data for 1970-71 are as under :

TABLE 7.4 : *Purchases, Sales and Stocks of F.C.I.*

	1970-71		1971-72 (Estimate)	
	qty. in lakh tonnes	in crore rupees	qty. in lakh tonnes	value in crore rupees
purchases	88.12	739.14	95.50	806.00
sales	75.35	838.99	70.35	629.00
closing stock	48.57	445.36	73.72	696.00

II. NUTRITION

Plan Outlay

7.7. An outlay of Rs. 45.18 crores was provided in the Fourth Plan for the nutrition programmes in the State and in the Centre together. This outlay has been revised to Rs. 42.51 crores due to the downward revision of outlays of the Ministry of Health and Family Planning. For 1971-72, an outlay of Rs. 7.90 crores has been provided as against the expenditure of Rs. 4.68 crores during 1970-71. Schemes regarding prophylaxis against nutritional anemia in mothers and children and control of blindness in children caused by Vitamin 'A' deficiency of the Ministry of Health and Family Planning have made only small beginning during 1970-71. Other schemes of this Ministry were not taken up for implementation till the end of 1970-71. Similarly, the scheme of 'nutrition feeding of pre-school children through Balahar' implemented by the Department of Social Welfare was commenced only in December 1970. The composite nutrition programme for women and children has made only relatively slow progress during the first two years of the Fourth Plan. A number of nutrition programmes of the Department of Food also could not make headway during the first two years of the Plan. The scheme-wise outlay and expenditure on nutrition schemes for 1969-70, 1970-71 and 1971-72 are given at Annexure I.

Unconventional Protein Foods

7.8. Among the schemes intended for promoting the production of low cost nutritious foods for mass consumption and to replace in part the foreign course aid received from abroad, mention may be made of production of Balahar, weaning foods, protein isolate toned milk and cotton seeds flour. In the integrated nutrition programme set out in the Fourth Plan, production of Balahar secures a big proportion of the outlays (Rs. 7 crores) among the production and processing schemes. A total quantity of nearly 18,000 tonnes of Balahar was produced for utilisation in the feeding programmes of school children during the first two years of the Plan. During 1970-71, production of Balahar has already been

started in Calicut and Calcutta in addition to the existing centres. The Plan outlay for 1971-72 on production of Balahar is Rs. 176 lakhs. A new formula for the production of Balahar has been evolved (70 per cent cereals, 15 per cent groundnut flour and 15 per cent soyafLOUR). It is envisaged that the new formula will be adopted during the second half of 1971-72. A unit for the processing of maize for human consumption is being established by the Food Corporation of India. The unit would be producing corn flour which could be utilised as one of the ingredients of Balahar. The possibility of establishing a unit for commercialisation of Balahar is under examination.

7.9. Under the scheme for production of weaning foods, financial support will be accorded to the Kaira Cooperative Union, Anand. A product bearing the name of 'Bal Amul' is being developed with the assistance from UNICEF, US AID and Kaira Cooperative Union. The objective of the scheme is to provide cheaper 'Bal Amul' for the benefit of those who cannot afford to buy expensive food. A sum of Rs. 10 lakhs has been provided for undertaking market acceptability studies. The Union has already marketed the product 'Bal Amul' in Bombay and Baroda cities. Necessary machinery and equipment are to be provided by UNICEF. Commercial production of 'Bal Amul' is likely to be started after the equipment is installed. An outlay of Rs. 10 lakhs has been provided for the scheme during 1971-72.

7.10. The production of protein isolate toned milk initiated in Bangalore with a daily production of 500 litres per day has now been stepped up to 1,000 litres a day. A total quantity of 1,13,800 litres has so far been produced and has been distributed in child feeding programmes. During 1971-72, it is proposed to increase the production to 5,000 litres per day. It is being examined whether this scheme can be extended to Ernakulam in Kerala State.

Fortification Programmes

7.11. The project for fortification of atta with vegetable protein, Vitamin 'A', minerals nutrients, calcium and iron, was initiated in 1970. A total quantity of about 20,000 tonnes of atta has been produced in 1970.

laboration with flour mills in Bombay and Calcutta and has been distributed to under-privileged groups of both urban and rural population. The programme for 1971-72 is designed to undertake a production of 14 lakh tonnes. The programme for the fortification of salt has not made much progress due to certain technical problems.

Measures for Vulnerable Groups

7.12. In planning for nutritional feeding, pregnant women, infants and young children have obvious priority. Special stress has been laid in the Plan on schemes for the benefit of vulnerable groups. These include applied nutrition programme and composite nutrition programme for women and pre-school children, mid-day meals programme for school children and nutrition feeding programme for tribal areas and slum areas.

7.13. The Fourth Plan envisages that the applied nutrition programme will be taken up in 450 new Blocks. The programme was taken up in 94 new Blocks during 1969-70 and in another 91 Blocks during 1970-71. The scheme aims to develop a coordinated and comprehensive national programme of education and training in applied nutrition with the object of establishing an effective field service to improve the local diets through the production and preservation and use of protective foods. A provision of Rs. 225 lakhs has been made in 1971-72 for this programme. It is proposed to cover another 95 new blocks under this programme during 1971-72.

7.14. The composite programme for women and pre-school children launched during 1969-70 provides for nutrition education in the areas not covered under the applied nutrition programme and the family and child welfare programmes. The scheme contemplates a package of activities of joint endeavour on the part of Central and State Governments. Out of the five components of this programme, two components, namely, nutrition education through Mahila Mandals and strengthening of supervisory machinery for women's programme are in the State Sector. It is proposed to open 300 Balwadis during the year 1971-72 under the Central sector component of the scheme. It has also been proposed

to train about 2400 associate women workers during the year under report. A provision of Rs. 53.89 lakhs has been provided for the three Central sector components of the scheme during 1971-72.

7.15. At present about 11 million school children and 1 million pre-school children are being fed under the mid-day meals programme undertaken by the State Governments. The feeding material for this scheme is generally supplied as aid from abroad. During 1970-71, the value of food supplied by CARE was of the order of Rs. 41 crores. The administrative cost borne by the State Governments on account of this scheme during 1970-71 was roughly of the order of Rs. 6 crores. An outlay of about Rs. 106 lakhs has been proposed for the scheme in 1971-72 as against an expenditure of Rs. 88 lakhs in 1970-71.

7.16. The Department of Social Welfare of the Government of India is implementing programmes for pre-school children. A provision of Rs. 20 lakhs has been made for the scheme of nutrition feeding of pre-school children through Balwadis during 1970-71. About 90,000 children were fed under this programme through about 2,000 Balwadis at a total cost of Rs 6.07 lakhs. The progress of the scheme was slow since the scheme was inaugurated only in December, 1970. The special feeding programme for pre-school children in the age-group of 0-3 years in tribal areas and slum areas of metropolitan cities was launched in 1970-71. The programme target for the year 1970-71 was to supply nutritious food to 6.8 lakh children—3.4 lakhs in tribal areas and 3.4 lakhs in urban slum areas. The budget provision for this programme during 1970-71 was Rs. 4 crores as non-Plan expenditure. Out of this provision, only Rs. 1.5 crores was likely to have been spent in 1970-71 since the programme commenced operation late in July 1970 only. The pace of implementation improved since September 1970. During 1971-72 it is proposed to expand the scope of this programme to include the entire group of pre-school children upto the age of 6 years, as well as expectant and nursing mothers in the tribal development blocks, urban slums of cities having more than 1 lakh population and also in special poverty pockets outside these areas. It is proposed to cover 20 lakh children and

mothers in 1971-72. A provision of Rs. 10 crores has been made in the budget estimates for 1971-72 for this scheme.

Programmes for Fulfilment of Special Needs and Requirements

7.17. The Department of Family Planning are implementing the following nutrition programmes:

- (i) Prophylaxis against nutritional anaemia among mothers and children; and
- (ii) Control of blindness in children caused by Vitamin 'A' deficiency.

These schemes were not commenced during the first year of the Fourth Plan due to certain technical reasons. Against a budget provision of Rs. 40 lakhs approved for the scheme of prophylaxis against nutritional anaemia among mothers and children during 1970-71, supply order for the procurement of 750 million tablets of Folic Acid and Ferrous Sulphate costing Rs. 37.55 lakhs was placed. However, only 237 million tablets costing Rs. 10.77 lakhs were actually made available for supply. As against budget provision of Rs. 8 lakhs during 1970-71 for the scheme —'control of blindness in children caused by Vitamin 'A' deficiency,' supply of 48 lakh doses of Vitamin 'A' solution was procured Centrally at a total cost of Rs. 7.34 lakhs.

Coordination of Nutrition Programmes

7.18. In respect of the overall coordination of the various programmes on nutrition not only of the different departments, but for the country as a whole, the Fourth Plan contemplates that the Planning Commission will have to provide the requisite means of coordination including review and evaluation. The Planning Commission has set up a Coordination Group with representatives of all Ministries/Departments concerned with nutrition programmes in pursuance of this recommendation. During 1970-71, the Commission advised the State Governments to set up Coordination Committees at State level to coordinate and review the various nutrition programmes undertaken by them. The State Govern

ments of Andhra Pradesh, Assam, Bihar, Tamil Nadu, Kerala, Haryana Punjab, Rajasthan, Gujarat, Jammu and Kashmir, Orissa and West Bengal have already set up Nutrition Coordination Committees at the State level. During 1971-72 it is proposed by the Planning Commission to keep a close liaison with these Committees in order to give a lead for the speedy and effective implementation of nutrition programmes in the country.

7.19. A Committee on Pre-School Feeding programmes has been appointed by the Nutrition Coordination Group of the Planning Commission to undertake a close examination of the pre-school feeding programme undertaken as a part of the mid-day meals programme in order to dovetail them suitably with the pre-school feeding programmes of the Social Welfare Department. The feeding programmes undertaken by these Departments will be reviewed after the Report of this Committee is made available.

ANNEXURE 7.1

Outlay and Expenditure on Nutrition Schemes

(Rs. lakhs)							
sl. no.	scheme	Fourth Plan outlay	1969-70		1970-71		1971-72
			Plan outlay	expenditure	Plan outlay	likely expenditure	Plan outlay
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
A Department of Food							
1	production of ground-nut flour and soyabean products	92.00	1.00	0.44	1.00	0.85	20.00
2	plot plant for protein isolate toned milk	40.00	—	—	4.00	0.64	10.00
3	fortification of salt	32.00	1.00	0.71	4.00	—	4.00
4	mobile food and nutrition extension units	60.00	6.00	5.40	7.00	5.55	13.37
5	Institute of Catering Technology and Applied Nutrition	62.80	13.30	12.35	22.00	4.04	—
6	research schemes	10.00	1.20	0.60	1.32	0.59	1.40
7	production of balahar and low cost protein food	670.57	63.00	72.60	50.00	50.00	176.00
8	fruit products and cold storage centres	57.00	—	—	—	—	2.50
9	production of peanut butter	1.00	0.45	—	0.19	—	—
10	fortification of wheat products	50.00	20.00	—	12.60	8.00	20.00
11	audio-visual aids and publicity	30.00	0.40	0.25	2.70	2.22	2.00
12	extension work through voluntary agency						

ANNEXURE 7.1—(Contd.)

(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
13	production of weaning food	20.00	5.00	—	15.00	10.00	5.00
14	community canning and fruit preservation centres	45.20	5.00	4.20	7.40	6.90	
15	nutrition education through commercial channels of modern Bakeries	15.00	—	—	15.00	5.00	5.00
16	cotton seed and flour	15.00	—	—	—	—	—
17	maize, pulses and millets processing	8.00	—	—	—	—	1.25
18	Food Technology Training Centre	39.00	—	—	—	—	1.00
19	fortification of bread	1.00	—	—	—	—	—
20	nutrition and dietary surveys	10.00	—	—	—	—	1.47
21	studies in acceptability of nutritious food	5.00	—	—	—	—	2.00
22	formulation of low cost diet through linear techniques	5.00	—	—	—	—	—
23	drying of groundnut and control of aflatoxin	20.00	—	—	—	—	—
24	upgrading of laboratories and directional expenditure	16.43	—	—	—	—	6.84
	<i>total</i>	1305.00	116.35	96.55	142.21	93.79	271.83
B Department of Health and Family Planning							
25	feasibility test of vitamin and mineral fortification of staple food	3.00	—	—	0.50	—	0.44
26	pilot project for nutrition education through State Nutrition Bureau	3.00	—	—	—	—	—

ANNEXURE 7.1—(Contd.)

(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
27	prophylaxis against nutritional anaemia in mothers and children	200.00	—	—	40.00	10.77	40.00
28	control of blindness in children caused by Vitamin 'A' deficiency	40.00	—	—	8.00	7.34	8.00
	<i>total</i>	246.00	—	—	48.50	18.11	48.44
<i>Department of Community Development</i>							
29	applied nutrition programme	1000.00	150.00	187.15	180.00	230.00	225.00
30	composite programme for women and pre-school children	600.00					
(i)	nutrition education through Mahila Mandals	163.00					
(ii)	strengthening of supervisory machinery for women's programme	47.00					
(iii)	demonstration feeding	316.00					
(iv)	encouragement of economic activities by Mahila Mandals	50.00	66.00	7.35	29.00	28.55	65.00
(v)	training of associate women workers	24.00	4.00	2.41	3.50	3.50	
	<i>total of item 30</i>	600.00	70.00	9.76	32.50	32.05	69.00
	<i>total</i>	1600.00	220.00	196.91	212.50	262.05	294.00
<i>Department of Education</i>							
31	school feeding	500.00	50.00	49.00	66.00	88.32	105.77
<i>Department of Social Welfare</i>							
32	nutrition feeding of pre-school children through Balwadis	600.00	—	—	20.00	6.07	75.00

ANNEXURE 7.1—(Contd.)

(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
33	special nutrition feeding programme for children in 0-6 years and expectant and nursing mothers in slum areas and tribal areas					150.00	1000.00
	<i>grand total</i>	4251.00	386.35	342.46	489.21	468.34	795.04

¹This scheme was not included in the Fourth Plan Document. The grand total given at the end do not take into account the provision for this scheme.

CHAPTER 8

IRRIGATION AND FLOOD CONTROL

Major and Medium Irrigation

Priority has been given in the Annual Plan for 1971-72 to the completion of the schemes which are in an advanced stage of construction. Matching provisions have been made in respect of inter-State Projects. An outlay of about Rs. 20 crores has been provided for new major and medium irrigation schemes. However, in some of the States comparatively small or no provision has been made for the new schemes because of an already full programme of continuing schemes. A provision of about Rs. 5 crores has been made for survey, investigation and research programme in States.

8.2. An outlay of Rs. 205.85 crores has been provided for major and medium irrigation projects in 1971-72 against the Plan outlay of Rs. 180.84 crores and anticipated expenditure of Rs. 201.37 crores during 1970-71. The outlays in 1971-72 for minor irrigation and rural electrification programmes are Rs. 101.60 crores and Rs. 85.99 crores respectively as against the anticipated expenditure of Rs. 101.14 crores and Rs. 94.91 crores respectively during 1970-71. The break up of the outlay by Centre, States and Union Territories is as below :

TABLE 8.1 : *Plan Outlay on Irrigation and Flood Control-Centre, State and Union Territories*

item	(Rs. crores)			
	outlay 1971-72			
	centre	states	union territories	total
<i>irrigation</i>				
major and medium	3.05	202.72	0.08	205.85
minor	2.41	98.32	0.87	101.60
flood control	2.02	21.88	1.87	25.77
rural electrification	39.00	45.71	1.28	85.99

8.3. Annexures 8.1, 8.2 and 8.3 give the State-wise break-up of the outlay for major and medium irrigation schemes, minor irrigation schemes, and flood control programmes respectively.

8.4. It is estimated that an additional potential of 0.64 million hectares would be created during 1971-72. The additional utilisation during this period is expected to be 0.67 million hectares. State-wise position in respect of potential created and its utilisation by the end of 1971-72 is given in Annexure 8.4.

Minor Irrigation

8.5. The programme of minor irrigation schemes will be coordinated with rural electrification schemes for energising pump sets for tube-wells. A provision of Rs. 101.60 crores has been made in 1971-72 for minor irrigation schemes against an outlay of Rs. 92.1 crores and expenditure of Rs. 101.14 crores in 1970-71. Besides the public sector outlay, institutional investments of the order of Rs. 130 crores for private minor irrigation works are expected during 1971-72. In addition, there will be substantial private investment by the cultivators from their own resources. The bulk of the public sector outlay is proposed to be utilised for tube-wells small storage and diversion projects and lift irrigation projects to provide irrigation facilities to small farmers who are not able to have irrigation arrangements of their own. Emphasis is being laid on preparation of compact area schemes after detailed surveys. It is estimated that the minor irrigation schemes to be implemented during 1971-72 from the public sector, institutional and private investment will irrigate 0.68 million hectares of new area. In addition, these schemes will provide irrigation to 0.3 million hectares of area going out of use from the existing irrigated area, and will also stabilise irrigation in another 0.6 million hectares of irrigated area.

8.6. Rural Electrification is an essential supporting programme in order that cheap power is available for lift irrigation. It is expected that the State Electricity Boards would make increasing use of institutional finance such as may be obtained from agencies like Rural Electrification Corporation, in addition to the Plan outlay. In 1969-70 a total of 0.27

million pump sets have been energised. The pump-sets energised during 1970-71 were 0.27 million. During 1971-72, a total of 0.33 million pump sets are expected to be energised. Of this, about 1 lakh pump sets would be out of the Plan finances of the States and Union Territories and balance from institutional finances.

8.7. Expansion of ground water development programme calls for intensive coordinated efforts for scientific ground water investigations. Ground water exploration work at the Centre level is now being handled by the Central Ground Water Board (which has taken over and expanded the functions of the erst-while Exploratory Tube-well Organisation) and the Ground water Wing of the Geological Survey of India. In addition to these, some of the States have set up their own geo-hydrological units to carry out ground water investigation to provide support to programme of utilising ground water resources.

8.8. In December 1970, a model Bill for control and regulation of ground water was circulated to the States. The States are expected to introduce the legislation on the lines of this model Bill in their States.

Flood Control

8.9. Severe flood, causing extensive damage and loss of life, occurred during 1970-71 in the States of Gujarat, Uttar Pradesh and West Bengal. Medium to high flood occurred in Andhra Pradesh, Assam, Bihar, Kerala, Maharashtra and Orissa. The damage due to floods during 1970 was about Rs. 287 crores. Some of the important schemes which were continued or taken up during 1970-71 were the Krishna Godavari Flood Control and Drainage Project in Andhra Pradesh, Dhubri town protection scheme and scheme for protection of Kokilamukhi area in Assam, anti-erosion measures on the river Great Gandak near Chitauai in Uttar Pradesh and Kaliaghaye, Kantakhali and Lower Damodar Drainage improvement schemes in West Bengal. Drainage improvement works completed before the floods of 1970 both in Andhra Pradesh and West Bengal gave considerable relief during the floods by reducing the extent and duration of flooding.

8.10. The anticipated expenditure on flood control, drainage improvements, anti-waterlogging and anti-sea-erosion during 1970-71 was Rs. 25.5 crores against an approved outlay of Rs. 22.6 crores. In addition, an expenditure of Rs. 5.75 crores was incurred outside Plan on Krishna—Godavari Flood Control and Drainage Project.

8.11. For 1971-72 an outlay of Rs. 25.77 crores has been approved for the flood control programme. Important schemes like Embankment on River Tapi in Gujarat (cost Rs. 5.21 crores) East Megrehat Drainage (cost Rs. 2.96 crores), Subernarekha Embankment (cost Rs. 1.28 crores) and first stage of Lower Damodar Improvement (cost Rs. 6.82 crores) in West Bengal and lining of Najafgarh Drain (cost Rs. 2.13 crores) in Delhi have been approved implementation.

8.12. The Government of India have constituted the Brahmaputra Flood Control Board to tackle the problem of recurring floods in Brahmaputra Valley. The Brahmaputra Flood Control Commission has been set up by the Government of Assam for investigating, evolving and implementing comprehensive plan of flood control in Valley under the guidance of the Board. The Government of India have also constituted the North Bengal Flood Control Board which will guide the work of North Bengal Flood Control Commission to be set up by the West Bengal Government for preparing a comprehensive flood Control Plan for North Bengal rivers.

8.13. The flood forecasting centres at Delhi, Gauhati, Balasore, Patna, Jalpaiguri, Surat and Lucknow issued forecasts of the coming floods to the civil authorities during the 1970 floods. These forecasts particularly on the Narmada in Gujarat and Ganga in Bihar were found useful for alerting the people in the vulnerable areas and for organising the relief measures by the State Governments. The flood forecasting which is Central sector programme will be continued during the year 1971-72.

8.14. A brief description of some of the important major irrigation schemes included in the Annual Plan for 1971-72 is given in Annexure 8.5.

ANNEXURE 8.1

Outlays on Major and Medium Irrigation Schemes in 1971-72

		(Rs. crores)
sl. no.	states/union territories	1971-72 Plan outlay
<i>states</i>		
1	Andhra Pradesh	19.00 ¹
2	Assam	1.23
3	Bihar	24.49
4	Gujarat	21.76
5	Haryana	8.91
6	Himachal Pradesh	—
7	Jammu and Kashmir	1.21
8	Kerala	5.25
9	Madhya Pradesh	16.80
10	Maharashtra	28.00
11	Meghalaya	—
12	Mysore	13.97
13	Nagaland	—
14	Orissa	5.15
15	Punjab	4.95
16	Rajasthan	17.11
17	Tamil Nadu	5.00 ¹
18	Uttar Pradesh	26.88
19	West Bengal	3.01
	<i>total-states</i>	202.72
<i>Union Territories</i>		
20	Goa, Daman and Diu	0.015
21	Manipur	0.040
22	Pondicherry	0.0213
23	Tripura	0.004
	<i>total-union territories</i>	0.0803
24	Central schemes	3.05
	<i>grand total</i>	205.853

¹Includes for 'Flood Control' also.

ANNEXURE 8.2

Outlays on Minor Irrigation Schemes in 1971-72

		(Rs. crores)
sl. no.	states/union territories	1971-72 Plan outlay
(0)	(1)	(2)
1	Andhra Pradesh	5.30
2	Assam	2.55
3	Bihar	8.95
4	Gujarat	5.91
5	Haryana	1.96
6	Himachal Pradesh	0.47
7	Jammu and Kashmir	1.50
8	Kerala	2.75
9	Madhya Pradesh	8.00
10	Maharashtra	12.50
11	Meghalaya	0.17
12	Mysore	5.63
13	Nagaland	1
14	Orissa	3.47
15	Punjab	3.47
16	Rajasthan	3.00
17	Tamil Nadu	6.89
18	Uttar Pradesh	21.30
19	West Bengal	4.50
	<i>total-states</i>	98.32
<i>Union Territories</i>		
20	Andaman and Nicobar Islands	0.0033
21	Chandigarh	0.005

¹Includes under agricultural production.

ANNEXURE 8.2—(Contd.)

(0)	(1)	(2)
22	Dadra and Nagar Haveli	0.025
23	Delhi	0.130
24	Goa, Daman, Diu	0.1978
25	Manipur	0.076
26	NEFA	0.0505
27	Pondicherry	0.130
28	Tripura	0.250
	<i>total-union territories</i>	0.8676
29	Central sector	2.41
	<i>grand total</i>	101.5976

ANNEXURE 8.3

Outlays for Flood Control, Drainage, Anti-Waterlogging and anti-sea-erosion schemes in 1971-72

(Rs. crores)

sl. no.	state/union territories	1971-72 Plan outlays
(0)	(1)	(2)
<i>states</i>		
1	Andhra Pradesh	1
2	Assam	5.37
3	Bihar	2.20
4	Gujarat	1.74
5	Haryana	2.50
6	Himachal Pradesh	0.04
7	Jammu and Kashmir	1.00
8	Kerala	1.30
9	Madhya Pradesh	0.10
10	Maharashtra	1
11	Meghalaya	0.05
12	Mysore	-
13	Nagaland	-
14	Orissa	0.45
15	Punjab	2.00
16	Rajasthan	0.50
17	Tamil Nadu	1
18	Uttar Pradesh	2.06
19	West Bengal	2.57
	<i>total-states</i>	21.88

'shown under 'Irrigation'.

ANNEXURE 8.3—(Contd.)

(0)	(1)	(2)
	<i>Union Territories</i>	
20	Dadra and Nagar Haveli	—
21	Manipur	0.20
22	Pondicherry	0.1635
23	Delhi	1.20
24	Tripura	0.236
25	Goa, Daman and Diu	0.068
	<i>total-union territories</i>	1.8675
26	Central schemes	2.02
	<i>grand total</i>	25.7675

ANNEXURE 8.4

State-wise Position Regarding Creation of Irrigation Potential and its Utilisation from Major and Medium Irrigation Schemes

(*000 hectares gross)

sl. no.	state	irrigation from pre-Plan schemes	benefit from plan schemes				benefits to end of 1971-72 pre-Plan schemes	
			at the end of 1971-72 (anticipated)		at the end of 1971-72 (target)		pot.	ult.
			pot.	ult.	pot.	ult.		
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Andhra Pradesh	1676	853	764	906	810	2582	2486
2	Assam	65	30	28	40	38	105	103
3	Bihar	590	1606	780	1765	1004	2355	1594
4	Gujarat	33	514	366	545	405	578	438
5	Haryana	1	936	922	962	943	962	943
6	Jammu and Kashmir	43	23	21	27	23	70	66
7	Kerala	158	195	195	210	210	368	368
8	Madhya Pradesh	512	433	249	445	270	957	782
9	Maharashtra	279	415	216	455	281	734	560
10	Mysore	308	514	460	535	474	843	782
11	Orissas	455	778	659	807	686	1262	1141
12	Punjab	1656*	702	692	707	701	2363	2357
13	Rajasthan	320	895	677	927	732	1247	1052
14	Tamil Nadu	1141	233	229	237	235	1378	1376
15	Uttar Pradesh	1991	1209	1071	1345	1160	3336	3151
16	West Bengal	440	746	684	813	710	1253	1150
<i>total-states</i>		9667	10082	8013	10726	8682	20393	18349

*Included in Punjab.

*Haryana's figures included.

ANNEXURE 8.3

Review of Important, Projects included in the Annual Plan 1971-72

Nagarjunasagar Project (Andhra Pradesh)

The project was sanctioned by the Ministry of I & P for an estimated cost of Rs. 91.12 crores in 1960. The revised estimate of Rs. 163.54 crores had been approved by the Planning Commission in June, 1969. This revised estimate did not include the revised cost of the Canal system, the estimate in respect of which is still to be received from the State. The present estimated cost of the project is reported to be Rs. 200 crores. The ultimate irrigation potential from the project is 831600 hectares. An expenditure of Rs. 168.68 crores is anticipated to have been incurred on the project by the end of 1970-71. For 1971-72 an outlay of Rs. 8.50 crores has been agreed to. The potential and utilisation proposed to be created by the end of 1971-72 are 4,14,000 and 3,96,000 hectares respectively.

2. Tungabhadra High Level Canal (Andhra and Mysore)

It is a joint venture of Andhra Pradesh and Mysore taken up into two stages. Stage I of the project was approved for Rs. 13 crores in 1959. Revised estimate of Rs. 23.53 crores contemplating ultimate irrigation potential of 88,660 hectares was approved in October 1969. The present cost of the project is about Rs. 26 crores. An expenditure of about Rs. 24.80 crores had been incurred on it by the end of 1970-71 and the anticipated potential and utilisation to end of 1970-71 are 83,000 and 62,000 hectares respectively. For 1971-72 an outlay of Rs. 042 crore has been agreed to. The project has been practically completed.

Tungabhadra High Level Canal (Stage II) was approved for Rs. 14.56 crores in January 1967 with an ultimate potential of 95,950 hectares. The work was started in 1966-67 and about Rs. 7.08 crores has been spent

to end of 1970-71. For 1971-72 an outlay of Rs. 2.75 crores has been provided, Rs. 2.0 crores in Andhra Pradesh and Rs. 0.75 crores in Mysore.

3. *Gandak Project (Bihar and Uttar Pradesh)*

The revised estimated cost of the project approved in October 1969 is Rs. 159 crores of which the works in Bihar are estimated to cost Rs. 108.18 crores (including Rs. 12.64 crores for Nepal Benefit works) and in Uttar Pradesh Rs. 50.39 crores (including Rs. 1.05 crores for Nepal Benefit works). The cost has recently gone up to about Rs. 186 crores mainly because of extension of distribution system upto 1 cusec level at project cost and inclusion of drainage scheme in the Irrigation Command in Bihar. The ultimate irrigation potential of the project is 15.4 lakhs hectares of which 15.9 lakh hectares are in Bihar, 2.9 lakh hectares in Uttar Pradesh and 0.6 lakh hectares in Nepal. A sum of Rs. 116.3 crores was anticipated to be incurred by the end of 1970-71 of which Rs. 78 crores pertain to Bihar, Rs. 27.5 crores to Uttar Pradesh and Rs. 10.8 crores to Nepal. For 1971-72 an outlay of Rs. 13.0 crores has been provided in the Plan of Bihar, Rs. 4 crores in the Plan of Uttar Pradesh and Rs. 2 crores for Nepal Benefit works. In Bihar, the potential anticipated to be created by the end of 1970-71 was 3.3 lakh hectares with corresponding utilisation of 0.3 lakh hectares. The target at the end of 1971-72 is to create a potential of 4.3 lakh hectares with a corresponding utilisation of 0.5 lakh hectares. In Uttar Pradesh, the potential and utilisation created by the end of 1970-71 were anticipated to be 0.6 lakh hectare and 0.3 lakh hectare respectively. The target at the end of 1971-72 is to create a potential of 1.6 lakh hectares with a corresponding utilisation of 0.8 lakh hectares.

4. *Ukai Project (Gujarat)*

The project envisages the construction of an earth-cum-masonry dam across the river Tapi in Surat District and a canal system on both banks to irrigate 1.58 lakh hectares and to generate 193 MW of power at 35 per cent load factor. In addition, the scheme will assure supply of irrigation water to an area of 2.28 lakh hectares under the command of Kakrapar project. The project was approved by the Planning Commission in 1961 for an estimated cost of Rs. 58.21 crores. The revised cost is intimated by the State

Government as Rs. 109.83 crores. The cost of Unit I i.e. dam and appurtenant works is stated to be Rs. 69.42 crores, that of Unit II i.e. main canal and Branches Rs. 17.81 crores and the balance amount of Rs. 22.6 crores for Unit III i.e. Hydro-electric installations. A part of the cost of the dam will be ultimately debited to power sector. By the end of 1970-71 an expenditure of Rs. 65.44 crores under irrigation and Rs. 9.78 crores under power was incurred. For 1971-72 an outlay of Rs. 8.60 crores has been provided under irrigation and Rs. 5.00 crores for power portion.

5. *Pong Dam (Beas Unit II)*

The multipurpose project is a joint venture of Punjab, Haryana and Rajasthan. The revised project has been approved by the Planning Commission for an estimated cost Rs. 162.90 crores, excluding the cost of transmission lines in October 1969. Due to higher cost of land compensation the cost of the project is likely to increase by Rs. 27 crores. The project envisages the construction of an earth-cum-gravel dam, 330 ft. high above river bed. The dam will have a gross storage of 6.6 MAF of which the live storages will be 5.6 MAF power house with an installed capacity of 240 MW will be constructed at the end of power tunnels. The expenditure by the end of 1970-71 was Rs. 98.83 crores. For 1971-72 a total outlay of Rs. 18 crores has been provided.

6. *Tawa (Madhya Pradesh)*

The project was approved in 1960 as a multi-purpose for an estimated cost of Rs. 27.10 crores. The irrigation cost was Rs. 20.24 crores with an ultimate irrigation potential of 303,640 hectares. The present revised project submitted by the State Government envisages only irrigation benefits. The revised estimated cost of the project is reported to be Rs. 40.19 crores. The expenditure incurred on the project by the end of 1970-71 was Rs. 14.60 crores. For 1971-72 an outlay of Rs. 4.5 crores has been provided.

7. *Jayakwadi Project (Maharashtra)*

The project was approved for Rs. 38.46 crores in 1965. The ultimate irrigation potential of the project is 141700 hectares. The revised estimated cost of the project is reported to be Rs. 74.36 crores. An expendi-

ture of Rs. 17.15 crores had been incurred on the project by the end of 1970-71. For 1971-72 an outlay of Rs. 8.0 crores has been provided for the project.

8. *Ghataprabha Stage II (Mysore)*

The project was approved for Rs. 13.18 crores in 1959. The revised estimated cost of the project as intimated by the State Government is Rs. 48.53 crores. An expenditure of about Rs. 23 crores had been incurred on the project by the end of 1970-71. For 1971-72 outlay of Rs. 3.5 crores has been agreed to.

The ultimate irrigation potential of the project is 101,000 hectares. The potential and utilisation anticipated by the end of 1970-71 are 73,000 hectares and 59,000 hectares respectively.

9. *Mahanadi Delta Project (Orissa)*

The original cost of the project was Rs. 14.92 crores. In 1965 the cost was revised to Rs. 34.34 crores envisaging irrigation potential to an area of 651,00 hectares. The State Government has recently submitted the revised estimate of the project for Rs. 68.38 crores contemplating an ultimate irrigation potential of 708,500 hectares. This estimate is under scrutiny in the CW&PC. An expenditure of Rs. 34.23 crores was incurred on the project to end of 1970-71. The potential and utilisation to end of 1970-71 was 420,000 hectares and 333,000 hectares respectively. For Annual Plan 1971-72 an outlay of Rs. 3.10 crores has been provided for the project. The potential and utilisation to end of 1971-72 is anticipated to be 445,000 and 348,000 hectares respectively.

10. *Rajasthan Canal Project—Stage I (Rajasthan)*

The approved revised estimated cost of the Stage I of the project is Rs. 110.2 crores, with an ultimate irrigation potential of 596,700 hectares. The revised estimated cost of Stage I has gone up and has been indicated as Rs. 118.88 crores. The expenditure to end of 1970-71 on the project was Rs. 72.84 crores. The potential created and utilisation by the end of 1970-71 were 3,43,000 hectares and 166,000 hectares respectively. For

1970-71 an outlay of Rs. 6.23 crores has been provided. The potential and utilisation anticipated to end of 1971-72 is 363,000 hectares and 202,000 hectares respectively.

11. *Ramganga (Uttar Pradesh)*

This is a multipurpose project approved by Planning Commission in 1959 for an estimated cost of Rs. 39.83 crores. The revised estimated cost has been indicated as Rs. 127 crores. The irrigation component is estimated to cost about Rs. 92 crores. The ultimate potential of the project is 5.76 lakh hectares. The installed generating capacity on completion of the project would be 180 MW. The expenditure incurred on the project to end of 1970-71 is anticipated to be 83.84 crores, of which Rs. 64.5 crores pertain to irrigation and 19.34 crores, to power. For 1971-72 an outlay of Rs. 19 crores has been provided, of which Rs. 12 crores are for irrigation and Rs. 7 crores for power. The potential and utilisation of 89,000 hectares has already been achieved. Further benefits would accrue when the Dam is completed in 1973-74.

12. *Kangsabati Project (West Bengal)*

The estimated cost of the project is reported to be Rs. 45.93 crores. The expenditure incurred to end of 1970-71 was Rs. 33.38 crores. The ultimate irrigation potential of the project is 3,84,000 hectares. The anticipated potential and utilisation under the project to end of 1970-71 is 142,000 hectares and 119,000 hectares respectively. The outlay provided for the project for Annual Plan 1970-71 is Rs. 2.53 crores. The potential and utilisation anticipated to end of 1971-72 is 200,000 hectares and 130,000 hectares respectively.

CHAPTER 9

POWER

Completion of generation schemes under implementation and expansion of transmission and distribution facilities with a view to ensuring better utilisation of generating capacity and supporting larger rural electrification programme, have been aimed at in the formulation of the Power Plan. The programme of construction of inter-State links for facilitating exchange of power between adjoining States has also received increased emphasis.

9.2. A provision of Rs. 528.97 crores is made for the power programme during 1971-72 as against an expenditure of Rs. 514.58 crores during the year 1970-71, the break of which is as follows:

TABLE 9.1: *Outlay for Power Programmes*

		(Rs. crores)	
sl. no.		Plan expenditure 1970-71	Plan outlay 1971-72
(0)	(1)	(2)	(3)
1	centre	80.41	96.01
2	centrally sponsored	5.00	7.00
3	states	411.02	413.66
4	union territories	18.15	12.30
	<i>total</i>	514.58	528.97

9.3. The programme-wise distribution of Rs. 528.97 crores during 1971-72 is as under:

TABLE 9.2 : *Distribution of Outlay by Categories of Power Programme*

(Rs. crores)

	centre	centrally	states	union	total
		sponsored		territories	
1 <i>generation</i>					
(i) continuing	44.14	—	200.31	2.45	246.90
(ii) new	8.05	—	22.61	0.01	30.67
2 transmission and distribution	2.46	7.00	136.86	8.06	154.38
3 rural electrification	39.00	—	45.71	1.28	85.99
4 investigation, survey and misc.	2.36	—	8.17	0.50	11.03
<i>total</i>	96.01	7.00	413.66	12.30	528.97

9.4. Annexure 9.1 gives the state-wise figures of approved outlay for 1970-71 and that for 1971-72.

9.5. During 1971-72, additional generating capacity aggregating to 1.18 million KW is targetted to be commissioned as against 0.98 million KW of capacity commissioned in 1970-71. Scheme-wise break up of capacity commissioned in 1970-71 and that expected to be commissioned in 1971-72 are in Annexures 9.2 and 9.3 respectively. The cumulative capacity on 31.3.1971 was 16.49 KW, which by end of 1971-72 is expected to increase to 17.67 million KW.

9.6. Some of the Major generating units that are expected to be commissioned in 1971-72 are:

Ramagundam Ext. (62.5 MW); Dhurvaran Extension (140 MW) Gujarat; Kutiadi (75 MW) Kerala; Sharavathy—Stage II (89.1 MW) Mysore; Ennore (110 MW) Tamil Nadu; Jawahar Sagar (66 MW) Rajasthan; Harduaganj State IV (55 MW), Obra Thermal Extension (100 MW) Uttar Pradesh, Pathratu (100 MW) Bihar.

9.7. A list of principal generation schemes under implementation and new schemes with their respective approved financial provisions is as Annexure 9.4.

9.8. The construction of transmission and distribution lines has also been given priority in the Plan. An outlay of Rs. 154.38 crores is provided for this programme during 1971-72 as against Rs. 127 crores provided in 1970-71 Plan. Within this over all provision, Rs. 20.67 crores is earmarked for certain 220/132 KV lines and associated sub-stations, which on completion will facilitate effective utilisation of the power exchanged with neighbouring states and also dispersal of power generated to load centres. Some of the 220 KV/132 KV line which will be under construction during 1971-72 are at Annexure 9.5.

9.9. Keeping in view the importance and also the urgency of expeditious completion of the inter-State lines, a provision of Rs. 7 crores has been made during 1971-72 for the purpose under the centrally sponsored programme as against a provision of Rs. 5 crores provided in 1970-71. A list of inter-State links covered under the provision of Rs. 7 crores is at Annexures 9.6 and 9.7.

9.10. Rural electrification programme in the States has received increasing importance over the years. The programme is being partly financed from funds available within the State Plan and partly from funds made available to the States by Rural Electrification Corporation and other financial institutions like AFC/ARC, Banks, etc.

9.11. For the year 1971-72, a provision of Rs. 45.71 crores is made within the States Plan, and Rs. 1.28 crores within the Union Territories Plan for this programme. The State-wise break up of the Plan outlay of Rs. 45.71 crores is at Annexure 9.8. In addition, the Rural Electrification Corporation will finance this programme in the State to the extent of Rs. 39 crores during the year. Agricultural Refinance Corporations, Agriculture Finance Corporation and Banks etc. are also expected to supplement the outlays on the programme.

9.12. It is anticipated that about 3,29,559 additional irrigation pump sets may be energised in 1971-72 bringing the total number of pumps in operation in the country to 19,59,000, as against 10,88,662 at the commencement of the Fourth Plan. State-wise break up of the pumps to be energised during 1971-72 is at Annexure 9.9.

9.13. Under Rural Electrification programme States and Union Territories are also electrifying villages. By end of 1970-71, the total number of electrified villages in the country was just over 1 lakh. During 1971-72, it is expected that additional 11,000 number of villages may get electrified during the year. By end 1971-72, nearly 20.5 per cent of the villages would get electrified in the country as against 12.6 per cent electrified at the commencement of the Fourth Five Year Plan.

ANNEXURE 9.1

Expenditure and Outlay on Power Programme by States and Union Territories—1970-71 and 1971-72

(Rs. lakhs)

sl. no.	state/union territory	1970-71 expenditure	1971-72 Plan outlay
(0)	(1)	(2)	(3)
A. states			
1	Andhra Pradesh	3653	3400
2	Assam	701	756
3	Bihar	2678	2450
4	Gujarat	2320	2370
5	Haryana	2077	1847
6	Himachal Pradesh	1	381
7	Jammu and Kashmir	901	750
8	Kerala	1849	1725
9	Madhya Pradesh	1850	1910
10	Maharashtra	4576	4680
11	Meghalaya	37	38
12	Mysore	1884	1695
13	Nagaland	53	61
14	Orissa	1660	1708
15	Punjab	2781	3594
16	Rajasthan	1762	2000
17	Tamil Nadu	2984	2421
18	Uttar Pradesh	7573	797
19	West Bengal	1843	1600
	<i>total states</i>	41102	41360
B. union territories			
1	A and N Islands	8.25	10.4
2	Chandigarh	40.00	35.0
3	Dadra and Nagar Haveli	6.00	5.0

ANNEXURE 9.1—(Contd.)

(0)	(1)	(2)	(3)
4	Delhi	742.37	725.00
5	Goa, Daman and Diu	98.62	112.00
6	Himachal Pradesh	454.56	—
7	L.M.A. Islands	7.20	6.40
8	Manipur	53.75	66.72
9	N.E.F.A.	20.81	29.17
10	Pondicherry	20.32	15.71
11	Tripura	362.75	225.00
	<i>total union territory</i>	1814.63	1230.48
	<i>C. central plan</i>		
1	Ministry of I and P	1610.40	2048.31
2	DVC	1040.00	1253.00
3	Neyveli	93.00	19.00
4	Atomic P.S.	2689.00	2381.03
5	Rural Electrification Corp.	2609.00	3900.00 ^a
	<i>total central plan</i>	8041.40	9601.34
D	centrally sponsored programme (inter-State links)	500.00	700.00
	<i>grand total (A+B+C+D)</i>	51458	52897.82

¹ Included in Union Territory List.^a This includes Rs. 1100 lakhs provided in the Budget of Min. of I&P.

ANNEXURE 9.2

*Additional Generating Capacity Targetted and Commissioned in
1970-71*

(in megawatts)

sl. no.	utilities	capacity targetted	set no.	capacity commissioned	set no.	
(0)	(1)	(2)	(3)	(4)	(5)	
1,	Andhra Pradesh	Ramagundem Thermal (1 x 62.5 MW)	62.5	1	Nil	—
2	Assam	Umiam H.E.S.—Stage II (2 x 9), Garo Hills (2 x 2.5)	18	1.2	18	1 2
3	Bihar	Barauni Thermal (3 x 15+2 x 50)	5	1.2	—	—
		Kosi HES (4 x 5)	50	5	50	5
		Pathratu (4 x 50+2x 100)	10	2.3	5	2
4	Gujarat	Gas Turbines (2 x 27)	—	—	100	5
5	Jammu and Kashmir	Kalakot Thermal (3 x 7.5)	54	1.2	54	1.2
6	Kerala	Kuttiadi HES (3 x 25)	15	2.3	Nil	—
7	Maharashtra	Parli Thermal (2 x 30)	75	1,2,3	Nil	—
		Nasik Thermal (2 x 140)	30	1	Nil	—
8	Mysore	Sharavathy HES-Stage II (6 x 89.1)	280	1,2	280	1,2
9,	Punjab	UBDC Hydel (3 x 15)	89.1	6	Nil	—
10	Tamil Nadu	Parambikulam HES (30+70+60+25)	30	1,2	Nil	—
		Ennore (2 x 55+2 x 110)	70	—	70	—
		Kodayar (1 x 60+1 x 40)	+25	—	+25	—
		Obra HES (3 x 33)	165	2,3	55	2
11	Uttar Pradesh	Harduaganj Ext. (2 x 55)	100	1,2	60	1
		Obra T ² (5 x 50)	33	1	99	1,2,3
		Jaldhaka HES (3 x 9)	55	1	55	1
12	West Bengal	Little Ranjit (2 x 1)	50	5	Nil	—
			9	3	Nil	—
			2	1,2	1	1

ANNEXURE 9.2—(Contd.)

(0)	(1)	(2)	(3)	(4)	(5)	
13	Himachal Pradesh	Uhl (Bassi) (3 x 15)	30	1,2	45	1,2,3
		Nogli HES (4 x 5)	1	3,4	—	—
14	Delhi	Indraprastha (V Unit) (1 x 55)	55	1	55	1
		<i>total (utilities)</i>	1313.6		972	
<i>II. self generating industrial establishments</i>						
		Singreni Collieries (3 x 6)	6	3	6	3
		<i>total all-India</i>	1316.6		978	

ANNEXURE 9.3

Additional Generating Capacity Targetted for 1971-72

(in megawatts)

sl. no.	utilities	schemes	capacity targetted	set no. coming in operation
(0)	(1)	(2)	(3)	(4) ↓
<i>Southern Region</i>				
1	Andhra Pradesh	Ramagundam Thermal (1 x 62.5)	62.5	1
2	Kerala	Kuttiadi (3 x 25)	75.0	1,2,3
3	Mysore	Sharavathy Stage II (6 x 89.1)	89.1	6
4	Tamil Nadu	Ennore (2 x 55 + 2 x 110 MW)	110	3
		Kodyar (1 x 60 + 1 x 40)	40	2
<i>Northern Region</i>				
5	Punjab	UBDC Hydel (3 x 15)	30	1,2
6	Himachal Pradesh	Nogli (4 x 5)	1	3,4
7	Jammu and Kashmir	Chenani HES (5 x 4.6)	13.8	1,2,3
		Kalakote Thermal	15.0	2,3
8	Rajasthan	Jawaharsagar (3 x 33)	33	1
9	Uttar Pradesh	Obra Thermal (5 x 50)	50	5
		Harduaganj (iv) (2 x 55)	55	2
		Obra 'T' Extension (3 x 100)	100	1
<i>Eastern Region</i>				
10	Bihar	Pathratu (4 x 50 + 2 x 100)	100	6
		Kosi Hydel (4 x 5)	5	3
11	West Bengal	Jaldhaka (3 x 9)	9	3
		Little Ranjit (2 x 1)	1	2
<i>Western Region</i>				
12	Gujarat	Dhuvaran Extension (2½ x 140)	140	1
13	Maharashtra	Parli 'T' (2 x 30)	60	1,2
14	Madhya Pradesh	Jawaharsagar (3½ x 33)	33	2

ANNEXURE 9.3—(Contd.)

(1)	(2)	(3)	(4)
<i>North Eastern Region</i>			
15	Assam	Gauhati 'T' (1 x 30)	30
		Garohills (2 x 2.5)	5
16	<i>total (utilities)</i>		1057.4
	<i>non-utilities</i>		
17	Bokaro Steel Plant (2 x 55+1 x 12)		122
18	<i>grand total</i>		1179.4
			Say 1.18 million KW

ANNEXURE 9.4

*List of Principal Generating Scheme Under Construction During
1971-72 and Financial Provisions*

			(Rs. lakhs)
sl. no.	states	schemes	outlay (1971-72)
(0)	(1)	(2)	(3)
1	Andhra Pradesh		
		1 Balimela Dam (Joint) Project Andhra Pradesh Share	200
		2 Srisaïlam H.E. Project	350
		3 Ramagundam Thermal Scheme	134
		4 Kothagudem Thermal Scheme—Stage III	1282
		5 Lower Sileru Hydro Electric Project	350
2	Assam		
		1 Gauhati Thermal	50
		2 Garo Hill (Tara)	10
		3 Namrup Extension	125
3	Bihar		
		1 Pathratu Thermal Power Station	236.00
		2 Kosi Hydrel Power Station	25.00
		3 Subernarekha Hydrel Power Station	200.00
		4 Pathratu Thermal Power Station (Extension)	800.00
4	Gujarat		
		1 Dhuvaran Extension Stage II	815
		2 Ukai Hvdro Project (Power)	500
		3 Ukai Thermal Station	200
5	Haryana		
		1 Beas Unit I (Power)	541.44
		2 Beas Unit II (Power)	70.22
		3 Bhakra Right Bank	115.00
		4 55 MW Faridabad Thermal	280.00

ANNEXURE 9.4—(Contd.)

(0)	(1)	(2)	(3)
6	Himachal Pradesh		
		1 Giri Hydel Project (Stage I)	215.03
7	Jammu and Kashmir		
		1 Chenani HES	46.84
		2 Sumbal (U. Sindh HES)	200.00
		3 Lower Jhelum HES	260.00
8	Kerala		
		1 Kuttiadi H.E. Scheme	60.00
		2 Idikki H.E. Scheme	1000.00
9	Madhya Pradesh		
		1 Jawhar Sagar HES	150
		2 Korba Thermal Extension Schemes	400
10	Maharashtra		
		1 Koyna HES Stage III	500
		2 Vaitarana HES Stage I	120
		3 Bhatgar and Vir	50
		4 Koradi Thermal I and II Sets	800
		5 Parli Thermal Station	196
		6 Koradi Thermal Sets III and IV	202
11	Mysore		
		1 Sharavathi Stage II	180
		2 Sharavathi Stage III	205
		3 Kalinadi H.E. Scheme (Stage I)	148
12	Orissa		
		1 Balimela Dam Portion	360
		2 Balimela Hydro Electric	620
13	Punjab		
		1 Beas--Unit I (Power)	812.16
		2 Beas Unit II	105.33
		3 Bhakra Rt. Bank	88.00
		4 U.B.D.C.	225.00
		5 Gurbanak Thermal Plant	650.00

ANNEXURE 9.4—(Contd.)

(0)	(1)	(2)	(3)
14	Rajasthan		
		1 Beas Unit I	338.40
		2 Beas—Unit II	247.40
		3 Bhakra Rt. Bank	19.70
		4 Jawaharsagar HES	150.00
15	Tamil Nadu		
		1 Kodayar HES	83.72
		2 Ennore Thermal	310.82
		3 Pandiar Punnapuzha	
		4 Kundah Stage IV	250.00
		5 Ennore Extension	
		6 Naduvattam Diversion Scheme	49.86
		(Figures for Tamil Nadu are Provisional)	
16	Uttar Pradesh		
		1 Ramganga HES	900
		2 Yamuna HES Stage II	1330
		3 Obra Thermal Scheme	22
		4 Harduaganj Stage IV	120
		5 Obra Thermal Ext. Stage I	900
		6 Yamuna HES Stage IV Part I	150
		7 Maneri Bhali—Part	225
		8 Panki Thermal Ext.	186
		9 Harduaganj Stage V	100
17	West Bengal		
		1 Santaldih Thermal Project	877
		2 Jaldhaka Hydrel Project Stage- 1	21
		3 Packaged Thermal Plant	21
18	Union Territories		
		1 Delhi V Unit (55 MW)	80
		2 Tripura Gumti HES	132
		3 Manipur Lamakhong HES	2
19	Central Plan		
		1 Badarpur Thermal Station	1050
		2 Baira Siul HE Scheme	365

ANNEXURE 9.4—(Contd.)

	(2)	(3)
3	Loktak HE Scheme	285
4	Salal—HE Scheme	150
5	Rajasthan Atomic P.S. Unit I	486.10
6	Rajasthan Atomic P.S. Unit II	944.76
7	Kalpakkam Atomic P.S. Unit I	842.67
8	Kalpakkam Atomic P.S. Unit II	118.00
9	Rural Electrification Corporation	3900
10	DVC Chandrapura 4th and 5th Unit	1253

ANNEXURE 9.5

*List of Important Transmission Lines to be Constructed
During the Year 1971-72*

sl. no.	region/name of the States	name of the line 220/230 KV	132/110 KV
(0)	(1)	(2)	(3)
<i>Southern Region</i>			
1	Andhra Pradesh	(i) Lower Sileru—Rajamundry. S/c line—107 Km. (ii) Kothagudum—Hyderabad S/o line—243 Km.	(i) Dharamavaram—Chittor S/c line—65 Km. (ii) Chittor—Nellore S/c line—228 km. (iii) Nagarjunsagar—Nalgonda S/o line—39 km (iv) Srisailam—Cumbum S/c line—44.7 Km.
2	Tamil Nadu	(i) Thiruvalem—Chingleput S/c line—94 Kms.	(i) Thiruvalem—Mosur S/c line—64 Km.
3	Kerala	(i) Sabrigiri—Kayathar S/c line—110 km. (ii) Iddikki—Kalamassery D/c line—64 Km.	
4	Mysore	(i) A.B. Site—Shimoga D/c line—109 Km. (ii) Shimoga—Mysore S/c on Dc tower—210 Km. (iii) Shimoga—Bangalore D/c line—272 Km. (iv) Mysore—Bangalore S/c line—157 Km.	(i) Hubli—Dandeli S/c line—64 Km. (ii) Hubli—Gada S/c line—54 Km.

ANNEXURE 9.5—(Contd.)

(0)	(1)	(2)	(3)
	<i>Northern Region</i>		
5	Uttar Pradesh	(i) Muradnagar—Hardu- ganj D/c line—111 Km. (ii) Muradnagar—Chibro S/c line—150 Km. (iii) Muradnagar to Shamli S/c line—150 Km. (iv) Chibro—Muradnagar S/c line—230 Km. (v) Chibro—Rishikesh S/c line—80 Km. (vi) Harduganj—Murada- bad S/c line—124 Km. (vii) Rishikesh—Manerbhali S/c line—144 Km. (viii) Sultanpur—Gorakhpur S/c line—135 Km.	(i) Ramganga—Nehtaur D/c line—40 Km. (ii) Basti—Gonda S/c line —65.5 Km. (iii) Kasia—Deoria S/c line—40 Km. (iv) Sirathu—Karvi S/c line—64.75 Km. (v) Gonda—Balaraich S/c line—64 Km.
	Haryana	(i) Abdullapur—Pipli S/c line. (ii) Pipli—Panipat S/c line.	(i) Rupar—Pinjore S/c line—56 Km. (ii) Pipali—Pehowa S/c line (iii) Hissar—Itarsi S/c line.
	Punjab	(i) Ludhiana—Bhatinda line—136 Km. (ii) Jullundur—Amritsar S/c line—83 Km. (iii) Dehar—Ganguwal S/c line—51 Km. (iv) Pong—Jullunder D/c line—90 Km. (v) Ganguwal—Abdullapur S/c line—150 Km.	(i) Ludhiana—Jagraon S/c line—32 Km. (ii) Jagraon—Moga S/c line—38 Km. (iii) Moga—Muktsar S/c line—80 Km. (iv) Malout—Abohar S/c line—35 Km. (v) Bhatinda—Maur S/c line—41 Km. (vi) Samrala—Gobindgarh D/c line—27 Km. (vii) Gobindgarh—Patiala S/c line—40 Km.

ANNEXURE 9.5—(Contd.)

(0)	(1)	(2)	(3)
8	Rajasthan	(i) RAPP—Kota—Kaipur S/c line—240 Km.	(i) RPs—Kota/Jawahar-nagar D/c line—60 Km. (ii) Debari—Shirohi S/c line. (iii) Ratanagar—Bikaner S/c line—144 Km. (iv) Hanumangarh—Suratgarh Rajisar S/c line—90 Km. (v) Debari—Zawat—Mun S/c line—36 Km.
9	Jammu and Kashmir	(i) Jammu—Pathankot S/c line—110 Km.	(i) Chenani—Srinagar D/c line—162 Km. (ii) Sumbal—Srinagar S/c line—60 Km.
10	Delhi	(i) 220 KV Ring Main around Delhi—104 Km.	
<i>Western Region</i>			
11	Gujarat	(i) Ukai—Jambua D/c line—130 Km.	(i) Morvi—Bhuj S/c line (ii) Dhanduka—Bhavanagar S/c line—72 Km (iii) Jambua—Nandesb-wari D/c line—50 Km (iv) Jambua—Broach S/c line—64 Km. (v) Navsari—Bhastan S/c line—24 Km. (vi) Jambua—Tilakwada S/c line—50 Km. (vii) Navasari—Bhastan S/c line—24 Km. (viii) Ramasan—Talod S/c line—90 Km.

ANNEXURE 9.5 (Contd.)

(0)	(1)	(2)	(3)
			(ix) Jamnagar—Bhatia S/c line—30 Km.
			(x) Bhatia—Mithapur S/c line—70 Km.
12	Madhya Pradesh	(i) Korba—Amarkantak S/c and D/c Tower—490 Km.	(i) Gwalior—Piobhae S/c on D/c tower 125 Km
		(ii) Satpura—Koradi S/c on D/c tower 90 Km.	
13	Maharashtra	(i) Pophli—Karad S/c line—55 Km.	(i) Parli—Nandod S/c line—96 Km.
			(ii) Amaravati—Warud S/c line—104 Km.
			(iii) Lonand—Walchandnagar S/c line—72 Km.
			(iv) Phursungi—Bhatgar S/c line—37 Km.
<i>Eastern Region</i>			
14	Bihar	(i) Gaya—Dehri D/c line—81 Km.	(i) Muzafferpur—Mothiyari S/c line—92 Km.
		(ii) Dehri—Mughalsara S/c line—91 Km.	(ii) Muzafferpur—Sitamarhi S/c line—51 Km.
			(iii) Waria—Chandrapura D/c line—132 Km.
			(iv) Hathidah—Sultanganj S/c line—101 Km.
			(v) Adityanur—Rajkharsawan S/c line—33 Km.
			(vi) Balmikinar—Motihari S/c line—147 Km.
			(vii) Dehri—Banjari D/c line—35 Km.
			(viii) Dehri—Dumraon D/c line—88 Km.
			(ix) Dehri—Karamnasa S/c line—96 Km.

ANNEXURE 9.5 (Contd.)

(0)	(1)	(2)	(3)
			(x) Chapra—Siwan S/c line—65 Km.
			(xi) Purnea—Saharsa S/c line—96 Km.
			(xii) Arrah—Dumraon S/c line—60 Km.
			(xiii) Samastipur—Pandal S/c line.
15	Orissa	(i) Talchar—Theruvati D/c line—131 Km. (ii) Balimela—Theruwali D/c line—222 Km.	(i) Jharsuguda—Brijanagar S/c line—80 Km. (ii) Choudwar—Kendrapara S/c line. (iii) Kundrapara—Paradeep S/c line—104 Km. (iv) Choudwar—Chainpal S/c line—80 Km. (v) Khurda—Ganjaur S/c line.
16	West Bengal	(i) Santhaldih—Durgapur S/c line—100 Km. (ii) Santhaldih—Howrah D/c line—215 Km.	(i) Durgapur—Gokarana D/c line—110 Km. (ii) Santhaldih—Purulia D/c line—35 Km. (iii) Alipurdaur—Assam VDR S/c line—38 Km. (iv) Alipurdaur—Sankesh River S/c line—38 Km. (v) Dalkholla—Siliguri S/c line—128 Km.
<i>North Eastern Region</i>			
17	Assam	(i) Gauhati—Nowgong S/c line—112 Km.	(i) Shillong—Cherrapunee S/c line—40 Km. (ii) Badarpur—Imphal S/c line—160 Km.
18	Tripura		(i) Churaibari—Agartala S/c line—148 Km.
19	Manipur		(i) Loktak—Imphal S/c line—45 Km.

ANNEXURE 9.6

**List of Inter-State Regional Lines (Centrally Sponsored Schemes)—
Provision during 1971-72**

(Rs. Lakhs)

Sl. no.	name of the link	state-wise allocation during 1971-72	
(0)	(1)	(2)	(3)
<i>Inter State Link</i>			
1	Giri—Yamuna	Himachal Pradesh	9.00
		Uttar Pradesh	4.00
2	Pathankot—Chehani	Punjab	5.00
		Jammu & Kashmir	20.00
3	Delhi (Badarpur)— Jaipur (Rajasthan)	Rajasthan	130.00
		Haryana	40.00
		Delhi	20.00
<i>Western Region</i>			
4	Satpura—Ambazari	Maharashtra	11.00
		Madhya Pradesh	24.00
5	Chandni—Bhusawal	Maharashtra	9.00
		Madhya Pradesh	9.00
<i>Southern Region</i>			
6	Pamba—Kayattar	Tamil Nadu	15.00
		Kerala	20.00
7	Ennore—Nellore	Tamil Nadu	10.00
		Andhra Pradesh	20.00
<i>Eastern Region</i>			
8	Chandrapura—Santalidih	DVC	5.00
9	Chandil—Joda	Bihar	40.00
		Orissa	15.00
10	Durgapur (DVC)— Durgapur (West Bengal)	D.V.C.	5.00
		West Bengal	10.00

ANNEXURE 9.6—(Contd.)

(0)	(1)	(2)	(3)
11	Chandrapura—Durgapur (DVC)	D.V.C.	40.00
12	Purnea—Silliguri	Bihar	10.00
		West Bengal	30.00
13	Badarpur—Jirighat	Assam	7.00
		Manipur	7.00
14	Loktak—Dimapur	Nagaland	6.00
		Manipur	9.00
15	Dimapur- Mariand	Assam	4.00
		Nagaland	1.00
<i>Inter Regional Links</i>			
16	Mughalsarai—Dehri	Bihar	52.00
		Uttar Pradesh	8.00
17	Alipurduar—Bongaigaon	Assam	15.00
		West Bengal	5.00
18	Upper—Sileru—Balimela	Orissa	25.00
		Andhra Pradesh	10.00

ANNEXURE 9.7

*Abstract of State-wise/Union Territory-wise Allocation in respect of
inter-state Transmission Lines—Centrally Sponsored Schemes
during 1971-72*

		(Rs lakhs)
1.	state/union territory	outlay
10.		
0)	(1)	(2)
1	Andhra Pradesh	30.00
2	Assam	26.00
3	Bihar	102.00
4	Haryana	40.00
5	Jammu and Kashmir	20.00
6	Kerala	20.00
7	Madhya Pradesh	33.00
8	Maharashtra	20.00
9	Nagaland	7.00
10	Orissa	40.00
11	Punjab	5.00
12	Rajasthan	180.00
13	Tamil Nadu	25.00
14	Uttar Pradesh	12.00
15	West Bengal	45.00
16	Himachal Pradesh	9.00
17	Delhi	20.00
18	Manipur	16.00
19	Damodar Valley Corporation	50.00
20	<i>total</i>	700.00

ANNEXURE 98

Plan Outlay on Rural Electrification in 1971-72

(Rs lakhs)

sl. no	states	outlay
(0)	(1)	(2)
1	Andhra Pradesh	100
2	Assam	197
3	Bihar	100
4	Gujarat	140
5	Haryana	303
6	Himachal Pradesh	38
7	Jammu and Kashmir	20
8	Kerala	120
9	Madhya Pradesh	789
10	Maharashtra	1
11	Meghalaya	38.65
12	Mysore	168
13	Nagaland	2
14	Orissa	100
15	Punjab	15
16	Rajasthan	255
17	Tamil Nadu	775
18	Uttar Pradesh	1300
19	West Bengal	110
	<i>total states</i>	4576.65
	<i>total—union territories</i>	128.67
	<i>Rural Electrification Corporation</i>	3900
	<i>total</i>	8599.32

¹Maharashtra did not provide any plan outlay for rural electrification within the State plan and indicated that they expect loans from financial institutions for rural electrification to the extent of Rs 1600 lakhs

ANNEXURE 9.9

Rural Electrification—Pump Sets Energised as on 31-3-1971 Targets for 1971-72

sl no	state/union territories	energised pumps as on 31.3.71	additional pumps to be energised in 1971-72	cumulative total as on 31.3.72
(0)	(1)	(2)	(3)	(4)
1	Andhra Pradesh	186951	25000	211951
2	Assam	67	342	409
3	Bihar	65102	18750	83852
4	Gujarat	69879	20000	89879
5	Haryana	86426	10000	96426
6	Himachal Pradesh	486	20	506
7	Jammu and Kashmir	245	40	285
8	Kerala	23163	4000	27163
9	Madhya Pradesh	58093	20000	78093
10	Maharashtra	211679	55000	266679
11	Mysore	131246	18836	150082
12	Nagaland	Nil	Nil	
13	Orissa	620	500	1120
14	Punjab	90877	25000	115877
15	Rajasthan	35095	20000	55095
16	Tamil Nadu	530002	60000	590002
17	Uttar Pradesh	128159	50000	178159
18	West Bengal	1369	191	1560
	<i>total —states</i>	1619459	327679	1947138
	<i>union territories</i>	10040	1880	11420
	<i>total all-India</i>	1629499	329559	1959058
			Say:	1959000

Note: Of 3,29,559 pumps to be energised during 1971-72 1,00,000 pumps are expected to be energised from Plan finances of the States; the balance from loans from Rural Electrification Corporation and other financial institutions.

CHAPTER 10

VILLAGE AND SMALL INDUSTRIES

According to the available information, the output as well as the exports of a number of small industries registered further increases in 1970-71 over the levels reached in the preceding year. About 2.09 lakh small scale units had been registered with the Small Industries Directorates on a voluntary basis upto March, 1971 as about 1.91 lakhs upto March, 1970. The estimate of output in the small scale industrial sector in 1970-71 is not yet available. There was some improvement in the working of the programme for industrial estates. As regards other small industries also, there was an increase in the production and exports of some industries during 1970-71 as compared to 1969-70, although the achievements fell short of the targets in respect of most industries as indicated below:

TABLE 10.1 : *Targets and Achievements under Village and Small Industries*

	Fourth Plan targets	1969-70 achievements	1970-71	
			targets	estimated achievements
(1)	(2)	(3)	(4)	(5)
<i>production</i>				
handloom, powerloom and khadi cloth (in m. meters)	4250	3600	3900	3760
raw silk (m. Kgs.)	3.00	2.30	2.50	2.85
<i>exports</i>				
cotton handloom fabrics and manufactures (Rs. crores)	15.00	11.32	15.00	14.41
handicrafts (Rs. crores)	100.00	83.29	100.00	80.30
coir yarn and manufactures (Rs. crores)	17.00	13.22	14.50	14.61
silk fabrics and waste (Rs. crores)	10.00	14.80	20.00	14.31

Note : Figures of achievements relate mostly to calendar years.

10.2. The nationalisation of 14 major Indian banks in July, 1969 gave an added impetus to bank's lending to small industries. The total credit extended by the scheduled commercial banks to small industries including industrial estates rose from Rs. 393.9 crores in March 1970 to Rs. 493.6 crores in March 1971. The allocation of foreign exchange for small scale industries to import raw materials was also increased from Rs. 65 crores in 1969-70 to Rs. 83 crores in 1970-71. During 1970-71, 73 more items were reserved for exclusive development in the small scale industrial sector, bringing the total number of such items to 128. Training courses in industrial entrepreneurship were arranged for the technically qualified persons by some of the Small Industries Services Institutes and other institutes, such as, SIET (Hydrabad), IIT (Delhi), PTC, Okhla (Delhi), etc. With a view to evolve appropriate technologies in respect of certain selected industries, a cell on appropriate technology has been set up for identifying technical problems and arranging research and investigations on them through concerned agencies and institutions. The progress of the Centrally-sponsored scheme for the Rural Industries Project was also reviewed

10.3. The programme for the development of village and small industries in 1971-72 has been formulated in the light of the progress achieved during the preceding two years and the objectives envisaged under the Fourth Plan, with particular reference to the need for augmentation and diversification of employment opportunities especially for the educated unemployed. As against the outlay of Rs. 43.44 crores for 1970-71, a total outlay of Rs. 46.30 crores has been provided in the public sector for the development of these industries in 1971-72. The break-up of the outlay for 1971-72 as between the Centre, States and the Union Territories, is indicated in table no. 10.2

TABLE 10.2: *Plan Outlay for 1971-72 and 1970-71*

(1)	1970-71		(Rs. crores)
	(outlay)	(expenditure)	1971-72 (outlay)
	(2)	(3)	(4)
centre	22.51	22.52	22.70
centrally sponsored	1.24	1.10	1.02
states	17.87	19.61	20.51
union territories	1.82	1.91	1.98
total	43.44	45.14	46.30

10.4. Industry-wise distribution of the Plan outlay for 1971-72 is shown in the following table:

TABLE 10.3: *Industry-wise Distribution of Outlay on Village and Small Industries for 1971-72*

industry	(Rs. lakhs)				
	centre	centrally sponsored	states	union territories	total
(1)	(2)	(3)	(4)	(5)	(6)
handloom and powerloom industries	8.25	—	402.98	19.66	589.17
small scale industries	277.41	—	834.10	128.06	1239.57
industrial estates	—	—	260.44	34.53	294.97
sericulture	11.26	—	179.99	3.41	194.66
handicrafts	25.35	—	117.66	6.73	149.74
coir industry	0.60	—	67.10	1.25	68.95
khandi and village industries	1955.75	—	33.00	1.00	1989.75
rural industries projects	—	87.25	—	—	87.25
collection of statistics	—	15.00	—	—	15.00
total	2278.62	102.25	2050.51¹	197.68	4629.06

¹Excludes Rs. 11.50 lakhs for Uttarakhand.

10.5. The pace of the developmental expenditure in respect of some of the schemes implemented by the Centre and also some programmes implemented by certain States has been rather slow during the first two years of the Fourth Plan period. It is proposed to take suitable steps to accelerate the pace of expenditure so that the provisions made for the development of different small industries in the Fourth Plan are utilised fully.

10.6. A committee has recently reviewed the present procedures for allocation of scarce raw materials to small scale units and suggested suitable measures for a more equitable distribution of such raw materials to them. The committee's recommendations are now under consideration. Besides an extensive programme for training of technically qualified persons, it is proposed to formulate certain suitable schemes for providing financial assistance to the educated unemployed to enable them to set up small scale industries.

10.7. A scheme has recently been formulated to assist the handloom industry in obtaining their requirements of yarn. It is proposed to review the programme for the installation of powerlooms so as to accelerate the progress of the programme. The recommendations of the Khadi & Village Industries Commission (Asoka Mehta Committee) would be reviewed.

10.8. Efforts would be intensified to increase the production of raw silk so as to meet the growing demand for silk in foreign markets. Steps would also be taken to implement the decisions on the recommendations of the Study Group on the Coir Industry, which was set up sometime back to make a comprehensive review of the progress of the industry since the beginning of the Third Plan period with particular reference to export performance. Some special schemes are being formulated for further expansion of the exports of handicrafts.

10.9. Steps have been initiated to extend the coverage of the existing Rural Industries Project to the entire districts, excluding towns with population of more than 15,000. Five new Rural Industries Projects would be set up, including one in Haryana and four in areas covered by the Rural Electric Cooperative Projects.

10.10. In the light of the programmes formulated for the development of different village and small industries, production and export of selected items during 1971-72 are likely to advance to the levels indicated below.

TABLE 10.4: *Targets for Village and Small Industries*

production	1971-72 targets
handloom, powerlooms and khadi cloth (M. metres)	3,900
raw silk (M. lgs.)	3.00
<i>exports</i>	
cotton handloom fabrics and manufactures (Rs. crores)	16.00
handicrafts (Rs. crores)	85.00
coir yarn and manufacture (Rs. crores)	14.75
silk fabrics and wastes (Rs. crores)	15.00

Promotion of Industries in Selected Backward Areas

10.11. With a view to removing regional imbalances, about 200 industrially backward districts have already been selected to qualify for concessional finance for industries from the All-India term-lending institutions. From these selected districts, about 35 districts areas have also been selected to qualify for a scheme for an outright grant or subsidy by the Centre amounting to one-tenth of the fixed capital investment of industrial units having a fixed capital investment of less than Rs. 50 lakhs. Recently a Central scheme of transport subsidy for industries in the State of Jammu and Kashmir and the North-Eastern Region, has also been announced. These schemes of concessions and subsidies are expected to provide an impetus for promotion of small industries in selected backward districts areas.

CHAPTER 11

INDUSTRY AND MINERALS

The industrial production rose by about 7 percent during 1969-70. The increase in 1970-71 was, however, only of the order of 4 percent. While several factors have been responsible for the deceleration in the rate of industrial growth during the year an important reason was the shortage of raw materials such as steel, non-ferrous metals, cotton, jute, etc. The shortage of steel and non-ferrous metals affected not only a large number of industries engaged in the fabrication of machinery such as chemical equipment, dairy equipment, etc., but also was one of the reasons responsible for causing considerable slippages in the construction schedules of a large number of projects which would otherwise have contributed to production. The production of cotton and jute textiles which together have a weight of more than 25 percent in the index of industrial production was stagnant during the last 3 years. The production of cotton yarn during 1969-70 and 1970-71 was even less than in 1968-69. There were wide fluctuations in the production of jute and there has been no increase in the production of jute textiles during the last 4 years. All this affected the growth of industrial production substantially.

11.2. Another factor that has come in the way of rapid expansion of industrial growth is the lack of adequate capacities in a large number of industries such as paper, newsprint, automobile tyres and tubes, bicycle tyres and tubes, agricultural tractors, cement, printing machinery, dry batteries, storage batteries, electric lamps, etc. It has been observed that additional production in these industries can be achieved only through significant additions to capacity. In some of these commodities considerable shortages are being experienced and substantial imports are being resorted to.

11.3. Another factor which has contributed to the slack in production is the demand constraints being experienced by some of the industries

such as machine tools, castings and forgings, structurals, railway wagons, textile machinery etc. There are number of reasons for the lower rate of production in these industries. The primary reason is, however, the inadequate investments in the user industries.

11.4. The Annual Plan for 1971-72 has been formulated keeping the above situation in view. As it is not possible to obtain additional production from new projects in the near future, emphasis has been placed on maximum utilisation of the capacities already created and the expeditious completion of the projects under construction. This is particularly true of industries like steel and fertilisers in which there is a wide gap between the existing capacity and production and at the same time which are not suffering from demand constraint. A provision of about Rs. 14 crores has been made in the Annual Plan for carrying out technological improvements and providing balancing equipment and finishing facilities in the HSL plants. Similarly, efforts are being made to achieve greater production from the existing fertiliser plants by provisions of balancing equipment and making technological improvements wherever necessary as well as by removing other bottlenecks. For projects under construction adequate provision has been made in the Plan so as to ensure their completion speedily. The projects falling in this category are Bokaro Steel Project, Koyna and Korba Aluminium Projects, Khetri Copper Project, iron ore mines, Haldia Refinery, Cochin Shipyards, etc.

11.5. Another important feature of the Annual Plan for this year is that while adequate provision has been made for the projects under construction, as perspective view of the requirements beyond the horizon of the Fourth Plan has been taken and provision for taking advance action for new projects has been made. The idea is that preliminary action on the projects having a long gestation period which would materialise in the Fifth Plan should be taken right now. In fact, it is only if advance action is taken on these projects at this time that it would be possible for these projects to contribute to industrial production in the Fifth Plan period. With this end in view, provision has been made for carrying out feasibility studies for new projects in the field of steel, non-ferrous metals, fertilisers, etc. Investment decisions on some of the new projects have also been taken and

necessary provisions made for this purpose in this year's Plan. The expansion of Bhilai Steel Plant from 2.5 million tonnes to 4.0 million tonnes has been approved. The expansion of Bokaro has also been approved in principle and simultaneous action is being taken to expand its capacity beyond 1.7 million tonnes so as to have an intermediate stage of 2.5 million tonnes by the end of the current Plan period. In the case of fertilisers, a new unit at Tuticorin based on naphtha has been approved. This project would be in the joint sector, the Government of Tamil Nadu participating in the equity capital of the project along with a private party. The expansion of the Vizag and Kotah plants in the private sector has also been approved.

11.6. In order to encourage dispersal of industries and ensure balanced regional development of the country, emphasis has been placed on the location of industries in backward Districts which have been identified. It has been decided that financial and credit institutions would provide certain general concessions for financing industries in these Districts. It has also been decided to provide subsidy to industrial entrepreneur setting up projects in selected backward Districts. To begin with, the subsidy would be available for two Districts in each of the nine relatively backward States and one District in each of the other States and Union Territories. A provision of Rs. 5.00 lakhs has been made for this purpose in the Annual Plan.

Plan Outlay

11.7. The total outlay provided in 1971-72 for industrial and mineral programmes in the public sector is Rs. 609.32 crores. This is somewhat less than the outlay provided in the Annual Plan for the last year. As in the past, the major part of the outlay is in the Central sector. Table 11.1 gives the break up of the outlay between the Centre, States and Union Territories for 1970-71 and 1971-72.

TABLE 11.1: *Plan Expenditure and Outlay Industry and Minerals*

	(Rs crores)		
	1970-71		1971-72
	(outlay)	expenditure	outlay
(i) centre	586.68	452.09	574.26
(ii) states	34.90	41.73	34.88
(iii) union territories	0.75	0.63	0.18
<i>total</i>	622.33	494.45	609.32

11.8. It would be seen from the above table that while the outlay for the States is almost at the same level as in the previous year, the reduction is, mainly, in the Central outlay. A statement showing the project-wise allocation of the Central outlay is given at list VI in the Appendix. A statement showing the expenditure in 1969-70 and 1971-72 is enclosed as Annexure 11.1.

The following is the break up of the outlay by major sectors:

TABLE 11.2: *Outlay by Major Industrial Sectors*

sl. no.	industry	outlay (Rs. crores)	percentage to the total
(0)	(1)	(2)	(3)
1	steel	210.93	36.7
2	petroleum	69.50	12.1
3	minor development	44.05	7.7
4	fertilisers	53.06	9.3
5	non-ferrous metals	35.81	6.2
6	chemicals	22.76	4.0
7	atomic energy	115.62	2.7
8	others	122.53	21.3
	<i>total</i>	674.26	100.0

11.9. The bulk of the outlay in the Central Plan has been provided for steel, fertilisers, petroleum, mineral development and non-ferrous

metals. Steel alone accounts for more than one third of the total outlay. Among other schemes for which substantial provision has been made are: Heavy Engineering Corporation, Bharat Heavy Electricals, Hindustan Machine Tools, Pumps and Compressors Project, Hindustan Paper Corporation, National Textile Corporation, Hindustan Shipyard and the Cochin Shipyard. An outlay of Rs. 65.00 crores has been provided for financing programmings of industrial financial institutions, namely, IDBI, ICICI and IFC without making any budgetary draft on resources. This amount would be obtained, mainly, through borrowings from the market and from the National Industrial Credit Fund (LTO) of the Reserve Bank of India and also includes the contribution of the Reserve Bank of India to the share capital of these institutions.

11.10. An outlay of Rs. 34.88 crores has been provided for industrial and mineral development programme of States and Union Territories. The important projects for which provision has been made in the State Plans are the Durgapur Chemicals in West Bengal, Continuous Casting Plant in Tamil Nadu, Daitari iron ore project, Kalinga Iron Works and Ferro-Chrome Project in Orissa, Sugar Factory in Nagaland, Dalla Cement Factory in U.P. and heavy electrical equipment factory in Bihar.

11.11. Two statements showing the targets of capacity and production for 1971-72 for the "Core" industries and anticipated levels of capacity and production for 'other selected industries' alongwith the achievements recorded during the previous two years are given at Annexure 11.2 and 11.3 respectively.

Iron and Steel

11.12. A provision of Rs. 210.93 crores has been made for steel projects in the Annual Plan for 1971-72. Out of the above amount, Rs. 172.00 crores are for Bokaro alone and the rest for other projects. The provision for schemes being implemented by Hindustan Steel is Rs. 33.00 crores. These schemes are mentioned below along with the provision made for each:

sl. no.	scheme	outlay (Rs. crores)
(0)	(1)	(2)
1	Rourkela Steel Plant first stage	2.79
2	Durgapur Steel Plant first stage	0.98
3	Bhilai Steel Plant second stage	5.03
4	A.S.P. Durgapur	0.24
5	Townships	3.00
6	Central Engineering Design Bureau	1.00
7	Dalli Mines for Bhilai	2.50
8	Expansion of Bhilai third stage	3.00
9	Technological improvements in HSL Plants	13.97
10	C.R.G.O. sheets	0.10
11	Refractory plant	0.40
12	Seamless Tubes Plant	0.09
	<i>total</i>	33.10

11.13. In the case of Rourkela, the provision made in 1971-72 is to cover the balance payments required for conversion of dolomite kiln into lime burning kiln and the construction of new lime kiln of 160,000 tonnes capacity, the work of which is expected to be fully completed during the year. In Durgapur, orders have been placed for 4 additional soaking pits and the VIC cranes. The re-building of coke oven battery No. 1, which is in progress, is expected to be completed during the year. The sixth blast furnace at Bhilai which is a part of the expansion scheme has been commissioned recently. The provision made in the Plan in the current year is for payment for equipment, pipes and refractories, freight insurance, customs and certain civil works and engineering fees. The provision required for alloy steel plant Durgapur is mainly for vacuum degassing units and other small items.

1.14. The expansion of Bhilai Steel Plant to 4.0 million tonnes has recently been approved and preparation of the detailed project report has been taken up. The mechanisation of Dalli Mines has been taken up to meet the increased requirement of iron ore for the Bhilai Steel Plant. A second sintering plant is also being set up at Bhilai to utilise the surplus

finer which would be available from the mechanised mines. The installation of a refractories plant at Bhilai with an annual capacity of 1.0 lakh tonne has also been approved to meet the growing demand of refractories of the public sector steel plants. The C.E.D.B. has been entrusted with the preparation of the D.P.R. for this project. The expansion of the Bhilai Steel Plant to 4.0 million tonnes is expected to be completed by 1974-75.

11.15. The work on the construction of the Bokaro Steel Plant is in full swing and a provision of Rs. 172.00 crores has been made for the project in the Annual Plan. Simultaneously, the work is also in progress on the expansion of Bokaro from 1.7 to 4.0 million tonnes so as to achieve a capacity of 2.5 million tonnes by the end of the current Plan period. According to the revised schedule, the erection of the first blast furnace complex is expected to be completed during the current year and the entire first stage by March, 1973.

11.16. The sites for the location of the three new steel plants in Andhra Pradesh, Mysore and Tamil Nadu have been decided. In the Annual Plan a provision of Rs. 138.50 lakhs has been made for each of the two steel plants at Hospet and Visakhapatnam and Rs. 73.00 lakhs for the plant at Salem. In addition, a provision of Rs. 1.00 crore has been made for loans to the State Governments for undertaking water supply schemes for these projects. The C.E.D.B. have been entrusted with the work of preparation of techno-economic feasibility report for the Hospet Project while for the projects at Salem and Visakhapatnam, M/s. M.L. Dastur and Company will prepare such reports. These reports are expected to be received during the current year. It is envisaged that the plants at Hospet and Visakhapatnam will have a capacity of 2.00 million tonnes of mild steel each and the Salem Plant will have a capacity of 250,000 tonnes of special steel. The product mix of these plants is being considered and a decision on this is expected to be taken shortly.

11.17. Although full efforts are being made to get maximum production from the existing steel plants but the recent accident in the Rourkela Steel Plant has caused some setback and it is expected that the pro-

duction of steel ingots in the year should be of the order of atleast 7.0 million tonnes as against about 6.0 million tonnes in the last year.

Non-Ferrous Metals

11.18. A high priority has been accorded to the production programme of non-ferrous metals. A provision of Rs 35.81 crores has been made for non-ferrous metal projects in the Annual Plan 1971-72. This includes development of mines and setting up of smelters for aluminium, copper and zinc. In addition, the exploration for non-ferrous metals has been intensified in a number of areas for locating new deposits. Provision for air-borne mineral survey with sophisticated equipment has also been made under the Geological Survey of India. This survey is expected to bring to light new areas which have to be further explored by intense ground survey to locate economically workable non-ferrous mineral deposits.

Aluminium

11.19. During 1970-71, a total of 161,000 tonnes of aluminium was produced, all by the private sector units as compared to 135,100 tonnes during 1969-70. The total smelter capacity, by the end of 1970, stood at about 167,000 tonnes. There are proposals, in the private sector, to increase plant capacities during 1971-72 and the aluminium production may go up further.

11.20. Bharat Aluminium Company in the public sector is going ahead with the schemes of putting up integrated aluminium smelters at Korba (M.P.) and at Ratnagiri (Maharashtra). The alumina plant at Korba having a capacity of 200,000 tonnes per annum is expected to be commissioned by the middle of 1972. The D.P.Rs. for both Korba and Koyna aluminium smelters are under examination of the Government and are shortly expected to be approved for implementation. The first pot-line is expected to be commissioned at Korba by the middle of 1974. A provision of Rs. 13.47 crores has been made in the Annual Plan 1971-72 for Bharat Aluminium Company.

Copper

11.21. The total production of copper during 1970 was 9331 tonnes, as compared to 9751 tonnes during 1969. The existing capacity is 9600 tonnes only which is in the private sector under Indian Copper Corporation Ltd. in Bihar. The private sector unit has been licenced to set up a flash smelter increasing the capacity to 1,65,000 tonnes per annum and the work is in progress. The smelter is expected to be commissioned during the second half of 1971-72.

11.22. In the public sector, Hindustan Copper Ltd. is setting up a flash smelter with 31,000 tonnes per annum capacity at Khetri in Rajasthan. The Khetri Copper Project under H.C.L. is designed for the following programmes :

- (i) Production of 9600 tonnes of copper ore per day (8000 tonnes from Khetri Mines and 1600-2000 tonnes from Kolihan mines).
- (ii) Production of 31,000 tonnes of electrolytic copper metal per annum.
- (iii) Production of about 2.0 lakh tonnes per annum of triple super phosphate.

11.23. It is envisaged that the Khetri Mines will gradually build up to a production of 3000 tonnes of ore per day by 1972, increasing to 7600 tonnes per day by 1976-77. At Kolihan Mines, production will start in October, 1971 and the rated capacity of 1600 tonnes will follow from July, 1972, increasing to 2000 tonnes per day from 1975. The concentrator is expected to go into full production by the end of July, 1972. The smelter will be commissioned by the end of 1973. The refinery and the acid-cum-fertiliser plant will also be commissioned by the end of 1973.

11.24. Hindustan Copper Ltd. has also a proposal to develop Rakha Copper Mines in Bihar to produce 1000 tonnes of ore per day yielding 3500 tonnes copper metal per annum.

11.25. In the Annual Plan 1971-72, provision has also been made for carrying out exploratory-cum-developmental mining of the Nallakonda copper deposits and the Bandalamottu lead deposits, both in Andhra Pradesh.

11.26. For the projects under H.C.L. an outlay of Rs. 17.84 crores have been provided in the Annual Plan 1971-72. This also includes the provision for undertaking feasibility studies for exploiting smaller copper deposits at Daribo, Chandmari and Akwali in Rajasthan, and for Sukinda nickel deposit.

Zinc

11.27. During 1970, production of zinc was 23,402 tonnes both from the private sector and public sector units compared to 24,514 tonnes during 1969. Both the plants are running at almost half of their rated capacity owing to a number of difficulties and efforts are being made to increase their production. In the public sector, the mines are producing at a rate of 900 tonnes per day instead of 2000 tonnes per day required to meet the total requirement of the smelter which has a capacity of 18,000 tonnes per annum. Mine development schemes are being expedited so that the production rate can be improved.

11.28. During the Annual Plan 1971-72, a provision of Rs. 420.00 lakhs has been made towards Hindustan Zinc Ltd. for increasing the production from the existing smelter at Debri and also for initiating action for doubling of its capacity to 36,000 tonnes per annum by the end of the Fourth Plan period. There is also a proposal to develop a new mine for which exploratory work is already in progress in Rajasthan to meet the additional requirement of 2000 tonnes of ore per day for the increased capacity of the smelter.

11.29. A new project of setting up a zinc smelter at Visakhapatnam in the public sector with a capacity of 30,000 tonnes per annum with Polish collaboration based on imported zinc concentrates has been included in the Plan. This project, however, may not be able to contribute any production during the Fourth Plan but efforts are being made to

arrange for continuous supply of zinc concentrates from some foreign sources on a long term basis so that production rate is maintained as per schedule, when commissioned.

Engineering Industries

11.30 The engineering industries which were till recently suffering from slak in demand because of the conditions prevailing in the economy have improved their performance. The demand is no longer a constraint in most of the engineering industries but shortage of steel is now coming in the way of the maximum utilisation of capacity and expansion. Steps are, however, being taken to improve the supply of steel by having more imports.

11.31. The provision for engineering industries made in the Annual Plan is mainly for completion of the existing projects and their diversification. Provision has also been made for a number of new schemes taken up during the Fourth Plan. These are : printing machines, gas cylinders and agricultural tractors. The provision made for B.H.E.L. project at Hardwar is for providing additional facilities for production of 200 MW boilers and other items like welded wall and direct firing system together with some forging facilities. The first stage of the stamping shop of B.H.E.L. , Hardwar is expected to be completed during the year. The production plan for 1971-72 in the Hardwar Unit includes assemblies for main turbine and generater set of 100 MW capacity. In the case of Hyderabad Unit : the present orders of turbo sets will keep the production going till 1973 and facilities for manufacture of centrifugal compressors are also proposed to be provided. In the case of Heavy Electricals (India) Ltd., Bhopal, while no provision has been made in the Plan, the expenditure on capital equipment is estimated at Rs. 3.31 crores which would be met by making certain adjustments. The Company proposes to undertake the manufacture of new items such as automatic regulating equipment and expansion in respect of lamination for electrical moters and insulating materials.

11.32. It is expected that the terms of collaboration for the gas

cylinders project would be finalised during the year. A consolidated provision of Rs. 2.40 crores has been made for the gas cylinders and pumps and compressors project in the Annual Plan. According to the revised project report of Instrumentation Ltd., Kotah, the manufacture of some of the instruments which were earlier planned to be taken up at Plaghat will now be at Kotah factory.

11.33. So far as H.E.C. is concerned, a provision of Rs. 6.57 crores has been made in the Plan. The work relating to the 6000 tonnes Press in the foundry forge plant at Ranchi is in progress and it is expected to be commissioned during the year. The construction of the other two projects at Ranchi, namely, the heavy machine building plant and the heavy machine tools plant is almost complete. The production plan for 1971-72 has been prepared with a view to bring about sizeable increase in production. All semi-finished and unfinished items are being identified and listed for expeditions completion. Cost accounting system is being introduced in the plants to ensure that each order is properly costed. Positive steps to improve industrial relations have also been taken up. The M.A.M.C. has taken up a diversification programme so as to utilise their capacity. The Bharat Heavy Plants and Vessels Company's Plant at Visakhapatnam has recently been commissioned. The Company is, at present, implementing two schemes for the manufacture of new items of equipment such as air and gas separation plants and multilayer high pressure vessels.

11.34. A provision of Rs. 4.5 crores has been made for the Hindustan Machine Tools, mainly, for the new projects for the manufacture of presses, printing machinery and tractors.

11.35. A provision of Rs. 53.06 crores has been made in the Annual Plan for the implementation of fertiliser programme in the public sector. At present 6 fertiliser projects are under construction in the public sector. Madras fertiliser project was expected to go into production during 1970-71, but has been delayed due to labour troubles. Durgapur and Cochin projects were expected to start production, in April, 1971. This expectation has been belied and these projects are now likely to be commissioned

in October, 1971. The expansion of FACT Unit by 22,000 T(N) has been completed, but the actual commercial production may start in September, 1971 as the foreign designers/suppliers have yet to give the guarantee tests. The delays in all these projects have been mainly due to the difficulty in obtaining special and structural steels, delay in the supply of indigenous equipment and labour unrest. Two more fertiliser projects under construction viz. Barauni and Namrup II, have also suffered from these very causes and have been delayed. Now they are expected to go in for commercial production by the middle of 1972-73.

11.36. The capacity for production of nitrogenous fertilisers did not change during 1970-71 as was earlier expected. This capacity—1.344 million tonnes (N), will increase in 1971-72 by the addition of 3 new units and the expansion of FACT unit, to 1.86 million tonnes (N). There would not be any addition to capacity by the private sector.

11.37. Madras fertiliser unit will add 85,000 tonnes (P_2O_5) and FACT expansion will add another 10,000 tonnes (P_2O_5) to the existing capacity of 421,000 tonnes (P_2O_5) for phosphatic fertilisers, reaching an installed capacity level of 516,000 tonnes (P_2O_5) in 1971-72.

11.38. The production of fertilisers during 1970-71 was 0.83 million tonnes (N) and 0.220 million tonnes (P_2O_5). The likely achievement in 1971-72 is likely to be 1.06 million tonnes (N) and 0.295 tonnes (P_2O_5).

11.39. The work on the two coal-based projects at Ramagundam and Talcher is progressing satisfactorily. The progress of Trombay expansion scheme has not been fully satisfactory. The project at Kandla which is in the co-operative sector is progressing. During the year small expansions in the private sector units at Vizag and Kotah have been approved. A new unit at Tuticorin based on naphtha has been approved in the private sector, the Government of Tamil Nadu will also participate in the equity capital of this project. The construction work on Gas fertiliser project is in progress.

Chemicals

11.40. The major central public sector programme claiming significant outlays in the Annual Plan for 1971-72 is the Gujarat petro-chemicals complex and the Hindustan Organic Chemicals.

11.41. The Gujarat petro-chemicals complex basically consists of the Aromatics Project and the Olefins Complex with its downstream units. In 1971-72 the outlay provided for the Aromatics Projects is Rs. 10.00 crores whereas that for the Olefins Complex and the Barauni Petro-chemicals Complex together is Rs. 5.96 crores. The Aromatics Project would be nearing completion toward the end of 1971-72.

11.42. The work on the Gujarat Olefins Complex this year would be mainly on the establishment of the optimum naphtha cracker, whereas the work on the Barauni and Assam petro-chemicals would mainly relate to the development of feasibility studies.

11.43. An outlay of Rs. 2.75 crores has been provided for Hindustan Organic Chemicals. The main facilities which are expected to be brought into commission during the year are the hydrogen, aniline, benzene hexachloride, formaldehyde and the nitro-products plants.

Mineral Oil

11.44. Exploratory activities for locating new oil deposits will be strengthened during the 1971-72, both on land as well as in the off-shore region of the country. Off-shore drilling in the Cambay area will be initiated and deep drilling in Tripura and other areas will be expedited.

11.45. The Oil and Natural Gas Commission will not only be engaged in the exploration for oil in the country, but will also make efforts to increase the crude oil production from its fields in Gujarat and Assam. During 1970, ONGC produced 3.60 million tonnes of crude oil, the bulk of which is from the Gujarat fields. The total crude oil production in the country during 1970 was 6.81 million tonnes against 6.72 million tonnes during 1969.

11.46. In the Annual Plan 1971-72, an outlay of Rs. 3701.10 lakhs (including Rs. 1968.00 lakhs from internal resources) has been provided for the activities of the ONGC. n

11.47. During the year, the refining capacity of petroleum products reached 20.00 million tonnes and the actual production during 1970 was 18.46 million tonnes in terms of crude throughput. The public sector contributed 11.0 million tonnes and the private sector 7.5 million tonnes during 1970. Since the indigenous production of crude oil fell short of the total requirements, about 11.6 million tonnes of crude oil had to be imported during 1970. Efforts are being made to increase production from the Indian oil fields. But, until and unless a rich oil field is located, the country will have to depend on import of crude oil to meet the total requirement of the refineries. During the Annual Plan 1971-72, an outlay of Rs. 3274.80 lakhs has been provided for the refining, marketing and other projects connected with the utilisation of petroleum products in the country like production of lubricants and initial action for setting up of a new refinery at Bangaingaon in Assam. The new refinery included in the Plan is expected to have a capacity of 1.0 million tonnes.

11.48. The Annual Plan 1971-72 also provides for creation of facilities at Haldia for import of crude oil and to supply it to Barauni refinery so that the full capacity at Barauni (3.0 million tonnes) can be utilised. Provision for taking initial action for expansion of Cochin Refinery from its existing capacity of 2.5 million tonnes has also been made in the Annual Plan 1971-72. With the envisaged programme in mineral oil, it is expected that the total requirement of refined petroleum products in the country will be met from indigenous production, some specialised items will, however, have to be imported. With the increase in the price of crude oil by the exporting countries, specially in the Middle East, necessary action has been initiated to reduce the consumption of petroleum products and to produce some substitutes so that foreign exchange requirement for the import of crude oil and petroleum products is reduced.

Coal

11.49. The total coal production in the country during 1970 was 71.93 million tonnes as against 72.73 million tonnes during 1969. The lignite production during 1970 was 3.91 million tonnes as against 4.16 million tonnes during 1969. The coal industry was confronted with a number of problems, during the last year, specially in regard to transportation owing to a number of strikes and thefts etc. on the Eastern Railway specially in the Bihar-Bengal sector, as a result of which pit head stocks mounted at the collieries and despatches were low resulting in the lowering of production. Efforts are being made to overcome the difficulties and increase production as well as despatches so that the demands of the different sectors can be met as well as overall production in the country can be raised.

11.50. The total production of coking coal was of the order of 18 00 million tonnes during the last year. Owing to short fall in the production of steel, there was difficulty in disposing off the coking coal produced and it had to be diverted to other industries. With the picking up of the steel production in the coming years, it is expected that the coming coal requirements will also go up and the coal industry will again stabilise itself.

11.51. The National Coal Development Corporation in the public sector produced 13.97 million tonnes of coal during 1970-71. N.C.D.C. produced 1.404 million tonnes of washed coal from Kargali Washery.

11.52. Owing to lack of demand of washed coal from the steel plants, other washeries which were commissioned by the N.C.D.C. like Sewang, Gidi, etc., worked partially. Efforts are being made to find alternative use by way of export etc. for the washed coal from these washeries.

11.53. Singaranni Colliery in the public sector produced 3.986 million tonnes of coal during 1970-71. An outlay of Rs. 1539.16 lakhs has been provided in the Annual Plan 1971-72 for N.C.D.C. which includes also the requirements of the new products like Sudandih and Monidih, the two new coking coal mines which are under development in Madhya

Pradesh, Maharashtra and Singrauli area in M.P. to meet, specific requirement of power projects.

11.54. The Neyveli Lignite Corporation produced 3.91 million tonnes of lignite which was utilised for the production of fertiliser, power and carbonised briquettes at Neyveli. Owing to difficulties in the mining sector, the production was almost at the same level as in the earlier year. The power generation capacity reached 600 MW and production during 1970-71 was 1801 K+W hours. The urea production was 69,256 tonnes and loco production was 73,376 tonnes during 1970-71. There was difficulty with the fertiliser plant and certain steps have been initiated to remedy the defects so that a higher production can be achieved. The sale of loco improved and it is expected that the production will go up further during the current year. An outlay of Rs. 285.50 lakhs has been provided for Neyveli Lignite Corporation for its mining schemes.

Iron Ore

11.55. The production of iron ore in the country during 1970 was 28.50 million tonnes compared to 28.30 million tonnes during 1969. The iron ore mining in the country is, mainly, in the hands of the private sector. In the public sector, iron ore mining is carried out to meet the requirement of the Hindustan Steel Ltd. and for export by N.M.D.C. and Orissa Mining Corporation. During 1970-71, N.M.D.C. produced 1.64 million tonnes of iron ore from the Kiriburu mines, and 3.27 million tonnes from Bailadila, 14 mines in Madhya Pradesh, N.M.D.C. is engaged in the development of a new mine with a capacity of about 4.0 million tonnes at Bailadila-5 besides the other two mines, one at Kiriburu (expansion) to meet the requirements of the Bokaro Steel Plant and another at Donimalai. The scheme at Donimalai was originally export oriented but with the decision to set up a steel plant at Bellary-Hospet, the ore from Donimalai might be diverted to meet the requirements of this Steel Plant.

11.56. During the Annual Plan 1971-72, an outlay of Rs. 1769.00 lakhs has been provided for the projects under N.M.D.C. which includes development of the iron ore mines mentioned above and also further deve-

lopment at Kudremukh where there is a proposal to set up a mine concentrator/pelletisation plant to produce either slurry or pellets for export purposes. The D.P.R. has been received and is under active consideration of the Government.

Mineral Exploration

11.57. During the year 1971-72, mineral exploration in the country will be continued by G.S.I. and also by the Directorates of Geology and Mining in different States. To intensify the exploratory activities and to locate new mineral deposits in the country as early as possible, it was felt that G.S.I. should be re-organised. A casting unit has been proposed to carry out exploration on business lines, apart from scientific examination. Action towards this has already been initiated so that the cost of exploration is kept in check and the exploiting agencies may not have to bear the burden of high exploratory costs. G.S.I. in collaboration with the French agency (BRGM) will initiate Air-Borne Mineral Survey in the States of Mysore, Rajasthan and Gujarat during the year 1971-72. The Department of Air-Borne Mineral Survey which carried out the earlier aerial survey in collaboration with the USAID (Messrs. Aero Surveys Corporation/Messrs. Ralph Parsons) was merged with the Geological Survey of India. A provision of Rs. 642.00 lakhs has been made in the Annual Plan 1971-72 towards the activities of the Geological Survey of India and the Indian Bureau of Mines.

Cement

11.58. The installed capacity of cement is expected to increase by about 1.5 million tonnes and production by about a million tonnes during the year as a result of completion of certain schemes both in the public as well as private sectors. The first cement plant at Mandhar (M.P.) in the public sector built by the Cement Corporation of India had gone into production in July, 1970 and the second at Kurkunta (Mysore) will go into production this year. Each of these plants has a capacity of 200,000 tonnes per annum. The Corporation has a number of other projects in hand. These are proposed to be set up at Bokajan (Assam), Paonta (Himachal Pradesh), Mandhar (expansion and slag cement) and Dehra-

Dun. Preliminary work on Bokajan has already started and orders for plant and machinery for this project have already been placed. The plan contains a provision of Rs. 1.00 crore for the Cement Corporation.

11.59. The capacity for paper and paper board did not register any increase and remained at 768,000 tonnes during 1970-71. There was, however, a slight increase in production which increased from 724,000 tonnes in 1969-70 to 758,000 tonnes in 1970-71. The paper industry has been brought back under the purview of licensing and it has become incumbent on the existing manufacturers to obtain C.O.B. licences. On the basis of applications received, the capacity of some of the units is being reassessed. As a result of this, it is estimated that the total installed capacity of the industry would be of the order of 868,000 tonnes in 1971-72.

11.60. During 1970, there were several complaints about shortage of writing and printing papers required for educational purposes. An ad hoc Committee was set up specifically to look into these complaints and a number of steps were taken. As a consequence of these measures, supply position of these varieties of paper has considerably improved. The possibilities of stepping up production in the existing mills have also been examined by a Crash-Programme Committee. This Committee has evolved a programme for increasing the capacity of paper and paper board by additional 130,000 tonnes per annum by carrying out modifications in plant and machinery of the 22 existing paper mills. It is expected that these schemes will be implemented by the end of 1972 and the impact of extra production arising out of this will be felt in 1973.

11.61. Preliminary work on the establishment of paper/pulp capacity in the public sector in Nagaland and Assam has been started by the Hindustan Paper Corporation. During 1971-72, it is expected that considerable progress would be made on the projects proposed to be set up in Assam and Nagaland.

11.62. Full production from the Nepa Hills which has an installed capacity of 75,000 tonnes per annum was not achieved and production in 1970-71 remained around 39,000 tonnes. The production is, however, expected to go up in 1971-72 by importing more pulp. The work on the installation of pulping and recovery units is in progress and is expected to be completed in 1972-73 when it would be possible to achieve full production from the project.

11.63. Some progress has been made on the establishment of Kerala Newsprint project in the public sector and it is expected that it would be speeded up during 1971-72. Another newsprint project has been approved in the private sector. It would be set up in Himachal Pradesh.

Ship Building

11.64. The Annual Plan contains a provision of Rs. 821.00 lakhs for 1971-72 against the anticipated expenditure of Rs. 347.11 lakhs in the previous year. The construction of the dry dock which will be able to accommodate ships up to the size of 55,000 DWT is nearing completion. The dock is likely to be commissioned during this year. The completion of this dock will increase the viability of the Hindustan Shipyards through ship repair earnings. The construction of the wet basin was sanctioned in January, 1971 and is likely to cost Rs. 3.00 crores. Soil investigation and other preliminary works are in progress. The wet basin will enable the shipyard to undertake above-water repairs of ships and also provide increased fitting-out facilities for ships after full construction. The work on the construction of the second shipyard at Cochin is in progress and a provision of Rs. 4.5 crores has been made in the Plan for this project.

Automobile Tyres and Tubes

11.65. In 1969, the Fourth Plan target of automobile tyres was revised and it was changed from 5.5 million to 8.0 million so that a production of 7.0 million tyres in 1973-74 could be ensured. In 1968-69, the installed capacity was 3.34 million, and the actual production was 3.75 million. By 1970-71, the installed capacity reached 4.88 million

and the production has gone up to 4.15 million. The installed capacity and production during the current year is expected to go upto 5.2 and 4.6 million respectively.

Leather and Leather Footwear

11.66. The industry has made good progress during the first two years of the Fourth Plan. In 1970-71, the production of leather footwear reached 15.44 million pairs and expected to go upto 16.0 million pairs in 1971-72. The question of increasing the export of leather and leather goods has been under consideration of the Leather Development Council and steps are being taken for modernisation and mechanisation of the industry. The Development Council has also decided to set up a Committee to look into the problem of modernisation of the leather industry. An export target of Rs. 110.00 crores has been fixed for 1971-72 against Rs. 98.00 crores for 1970-71.

Watches

11.67. The H.M.T. Watch Factory at Bangalore is currently producing about 3,50,000 watches per annum. In view of the increasing demand for watches, steps are being taken to increase their manufacture in factory in Bangalore and for the setting up a new project in Srinagar (J&K State) were included in the Fourth Plan. Detailed Project Reports prepared by the HMT for both these projects have been accepted by the Government of India and are under implementation.

11.68. As regards the Srinagar Factory, land has been acquired and civil construction work has started. Local office of the project has been established. Orders for machinery have been placed. It is expected that this unit will go into production in 1972-73.

11.69. The expansion of HMT unit at Bangalore envisages manufacture of 200,000 additional watches with date and automatic movements. It is hoped that the production of these automatic watches will also start in 1972-73.

Electronics

11.70. Electronic components are the crux of the electronics industry. The manufacture of components is essential for building up a self-supporting electronics industry. With a view to develop an integrated and self-reliant electronics industry in the country as rapidly as possible a separate Department of Electronics was constituted in 1970 and the Electronics Commission has been set up early in 1971. As a result of the various steps taken to promote the electronic components industry, the import content of various items of equipment has been gradually going down. During 1970-71 the production of sophisticated components made perceptible progress. Production of other items like microwave components has also started in small quantities. Additional capacities are likely to be established in a number of items. The statement below indicate in quantitative terms the production capacity to be achieved during 1971-72.

Important Electronic Components	(Qty. in Millions) production capacity to be achieved during 1971-72
valves	5.50
transistors and diodes	50.00
carbon resistors	280.00
paper and mica capacitors	32.00
electrolytic capacitors	63.00
stryraflex capacitors	39.00
polyster capacitors	39.00
ceramic capacitors	105.00
trimmers	33.00
loudspeakers	6.00
gang condensers	8.00
potentiometers	10.00
band switches	6.00
ferrites	8.00

I.E.T.	20.00
telescopic aerials	5.00
valve holders	5.00
picture tubes	0.03
integrated circuits	0.05
connectors	1.70
relays	0.80

Sugar

11.71. The production of sugar during 1970-71 is expected to be 3.85 million tonnes compared to 4.26 million tonnes in 1969-70. The year 1970-71 started with a carry over stock of 2.1 million tonnes and, therefore, the total availability during 1970-71 was about 6.0 million tonnes.

11.72. Sugar consumption during the year picked up and is expected to be about 4.0 million tonnes. On the export front too, the industry is expected to fair better than last year. During 1970, the exports totalled 0.32 million tonnes and in 1971 it may be about 0.37 million tonnes. In case some exporting countries declare shortfalls, India may get further allocations and may be in a position to export more. In view of the larger internal consumption, increased exports and slight decline in production, the carry over stock of 1971-72 may be marginally less.

11.73. In view of the satisfactory stock position and to bring about normalcy in the distribution of sugar the control and restrictions on the prices and movement of sugar were removed towards the middle of 1971. Control on releases of sugar from factories, however, is still operative.

11.74. Information about the sugar crop for the year 1971-72 has not yet become available but according to preliminary estimates the output may be about 4.25 million tonnes.

Approximate Value of production Rs. 47.00 crores.

ANNEXURE 11.1

Plan Outlay and Expenditure on Central Industrial and Mineral Projects during 1969-70, 1970-71 and 1971-72

(Rs lakhs)

Sl. no.	scheme project	fourth plan outlay 1969-74	1969-70		1970-71		1971-72 outlay
			outlay	expenditure	outlay	expenditure revised estimate	
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
I Ministry of Steel and Heavy Engineering							
<i>Iron and Steel</i>							
1	Hindustan Steel Ltd. (continuing schemes)						
(i)	Rourkela Steel Plant (1st Stage)				392.00	263.00	279.00
(ii)	Durgapur Steel Plant (1st Stage)				156.00	79.00	98.00
(iii)	Bhilai Steel Plant (2nd Stage)	5100.00	3500.00	2210.00	522.00	791.00	503.00
(iv)	A.S.P. Durgapur Townships				186.00	53.00	24.00
(v)	Central Engineering and Design Bureau of H.S.L.				75.00	151.00	300.00
(vi)	Dalli Mines for Bhilai	1892.00	—	—	—	—	100.00
					50.00	100.00	250.00
2	Hindustan Steel Ltd. (new schemes)						
(i)	expansion of Bhilai Steel Plant	1600.00	—	—	50.00	90.00	300.00

(ii) Plate mill	7500.00	—	—	—	—	—	—
(iii) Technological improvements balancing equipment and finishing facilities for HSL plants	4500.00	—	—	1593.00	666.00	1397.00	—
(iv) C.R.G.O. Sheets	2000.00	—	—	—	10.00	10.00	—
(v) Refractory Plant	—	—	—	—	10.00	40.00	—
(vi) expansion of Alloy Steel Plant Durgapur	—	—	—	—	10.00	—	—
H.S.L.	24592.00	3500.00	2210.00	3024.00	2217.00	3301.00	—
3 Steel Ltd. (continuing 1.7 million tonnes)	55800.00	17000.00	14997.00	17500.00	14500.00	16006.25	—
4 Bokaro Steel Ltd. (5th convertor and continuing action on expansion to 4 million tonnes)	12200.00	—	—	250.00	150.00	1000.00	—
5 Teaughat Dam	850.00	—	—	200.00	600.00	200.00	—
6 Mysore Iron and Steel Works (continuing schemes)	590.00	250.00	590.00	—	300.00	—	—
7 Mysore Iron and Steel Works (Expansion)	300.00	—	—	—	—	100.00	—
8 Additional capacity for steel for Fifth Plan (advance action)	11000.00	—	—	—	—	450.00	—
9 Hindustan Steel Works Construction Ltd.	—	—	—	—	—	27.00	—
10 Seamless Tubes Plant (HSL)	950.00 ¹	—	—	15.00	10.00	9.00	—
total : iron and steel	106282.00	20750.00	17797.00	20909.00	17777.00	21093.25	—

ANNEXURE 11.1—(Contd.)
(Rs. lakhs)

(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Heavy Engineering Units						
11	Heavy Engineering Units	3618.00	923.13	485.00	945.68	448.00	636.75
12	HEC-Continuous casting Plant	200.00	—	—	—	—	—
13	M.A.M.C.	249.00	103.00	17.00	85.45	44.00	—
14	Bharat Heavy Plate and Vessels Ltd.	1308.00	611.70	399.00	368.76	368.76	250.00
15	Triveni Structural Ltd.	85.00	28.40	100.00	42.10	124.92	—
16	Tungabhadra Steel Products	100.00	—	—	—	—	—
17	Heavy Engineering Units (new projects)	200.00	—	—	—	—	—
18	Consortium for Industrial Projects	25.00	—	—	—	—	—
	<i>total—Heavy Engineering Units</i>	5785.00	1666.23	1001.00	1442.29	985.68	906.75
	<i>total—Departments of Steel</i>	112067.00	22416.23	18798.00	22431.29	18762.68	22000.00
	II Departments of Industrial Development						
19	Heavy Electricals Ltd.	1100.00	250.00	218.00	282.00	221.00	—
20	B.H.E.L.—Tiruchi (including expansion and diversification)	555.00	—	—	—	—	—
21	B.H.E.L.—Hardwar (including Stamping shop)	2420.00	—	—	—	—	—
22	B.H.E.L.—Ramchandrapuram (Steam turbines and expansion)	60,000	1399.38	850.28	725.00	600.00	1033.00
23	B.H.E.L.—ASEA Switchgear Project	51.00	—	—	—	—	—
24	Machine Tools Corporation Ajmer	621.00	266.00	127.01	244.00	125.01	90.00
25	Hindustan Cables Ltd. (including Township)	645.00	—	—	—	—	—
26	Second Cable Factory	550.00	259.00	175.56	180.00	140.00	172.00

27	Instrumentation Ltd.	310.00	54.00	34.88	103.55	18.24	59.44
28	H.M.T.—Presses	300.00	212.36	7.29	245.00	49.54	500.00
29	H.M.T.—Printing machines	300.00					
30	H.M.T.—Watch factory	500.00					
31	H.M.T.—Tractors	500.00					
32	National Instruments Ltd. (including ophthalmic glass project)	202.00	70.00	27.16	48.00	8.86	50.00
33	Expansion or NEPA Mills	666.00	184.00	164.86	267.65	110.75	80.00
34	Hindustan Photo Films	535.00	55.00	7.42	60.00	15.82	136.70
35	Salt Works	10.00	0.98	—	0.75	—	—
36	ISI	71.00	12.00	5.00	8.50	17.92	22.00
37	N.P.C.	25.00	3.05	1.84	3.10	3.00	5.00
38	Travancore Titanium Products (Central share)	190.00	30.00	10.00	60.00	60.00	95.00
39	Pumps and Compressors Project	500.00	20.00	59.40	125.00	30.00	240.00
40	Gas Cylinders Project	400.00	22.00	—	65.0		
41	Cement Corporation	2300.00	295.00	295.00	266.00	160.00	100.00
42	Hindustan Paper Corporation Ltd.	6000.00	10.00	—	75.0	4.39	300.00
43	Tannery and Footwear Corporation	215.00	30.00	1.19	11.00	8.33	22.67
44	All India Institute of Weights and Measures	10.00	0.50	0.81	2.43	2.43	2.80
45	R & D Organisation for electrical Industrial	162.00	8.53	5.33	11.10	10.19	16.52
46	subsidy for development of backward areas	500.00	—	—	—	—	20.00
47	Central agency for inspection of boilers	24.00	3.00	—	1.00	—	—
48	scooter project	600.00	—	—	—	—	—

ANNEXURE 11.1—Contd.

(Rs. lakhs)

(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
49	Consortium for power projects	25.00	—	—	—	—	—
50	Feasibility studies for advance action for Fifth Plan	50.00	0.500	0.77	0.30	0.70	2.30
51	Central Machine Tool Institute	200.00	22.50	30.26	28.25	32.39	44.00
52	pilot plant studies on processes developed in national laboratories	200.00	—	—	—	—	—
	<i>total : Department of Industrial Development</i>	2133.17 00	3330.08	2022.06	2812.63	1618.57	2991.19
III. Department of Mines and Metals							
53	Korba and Koyna Aluminium Projects	12500.00	875.00	511.09	1240.00	740.79	1347.00
54	Khetri Copper project	7128.00	—	—	—	—	—
55	Hindustan Copper (Rakha Agni-gundala and Sukinda Nickel)	2500.00	1700.00	836.63	2056.67	1300.00	1784.00
56	Geological Survey of India and IBM	4000.00	190.10	90.48	310.00	114.61	642.01
57	airborne mineral surveys	—	155.00	116.17	88.00	137.72	—
58	N.M.D.C.—Bailadilla-14	494.00	—	—	—	—	—
59	N.M.D.C.—Bailadilla 5, Kiriburu expansion & Dornimalai	5800.00	1210.00	687.00	1490.00	1194.00	1769.00
60	N.M.D.C.—Kudremukh	1500.00	—	—	—	—	—
61	Coal Board—Third Plan ropeways scheme	31.00	110.00	135.00	110.00	64.00	100.00

	1000.00					
62	Coal Board—sand transportation scheme	1000.00				
63	N.C.D.C. (continuing schemes)	3797.00				
64	N.C.D.C. (coking coal mines, Mordih non-coking coal mine washeries etc.)	5442.00	1741.00	1248.06	1277.00	1508.00 1539.16
65	N.C.D.C.—other programmes	500.00				
66	Newell Lignite Corporation	450.00	241.00	13.00	346.00	142.16 285.50
67	R.P.C.—Mining project	308.00				
68	P.P.C.—Intensive exploration	20.00				
69	P.P.C.—Saladipura Pyrites, Udaipur, phosphates and Maldeota Phosphate Projects	1000.00	168.00	102.50	119.34	85.18 69.85
70	P.P.C.—expansion of pyrites at Amjore and beneficiation schemes	500.00				
71	Feasibility studies for pollerisation of iron ore mines	50.00				
72	Feasibility studies for Hindustan Zinc	30.00				
73	Other feasibility studies	50.00	41.50	35.30	41.75	38.50 30.50
74	Modernisation of Tindoo smelter	75.00				
75	Manganese ore India—beneficiation plant	60.00				
76	Iron ore crushing and screening plant	940.00				
77	Gujarat Aluminium project (Central share)	100.00				
78	Hindustan Zinc Ltd. (continuing scheme)	742.00	262.00	139.17	296.87	227.05 420.08
79	Hindustan Zinc Ltd. (expansion and development of mining)	1152.00			100.00	

ANNEXURE 11.1—(Contd.)
(Rs. lakhs)

(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
80	doubling the capacity of zinc smelter	500.00	—	—	—	—	—
81	Development of rock phosphate in Malon area	50.00	—	—	—	—	—
82	Vizag smelter	—	—	—	—	—	—
	<i>total—Department of Mines and Metals</i>	51002.00	6713.60	3908.40	7475.63	5552.01	7987.10
IV. Department of Chemicals							
83	Fertiliser Corporation of India						
	(i) Namrup fertiliser project	16.00	—	12.00	—	—	—
	(ii) Namrup expansion	3797.00	—	1506.00	—	976.00	—
	(iii) Durgapur fertiliser project	2418.00	—	916.00	—	633.00	—
	(iv) Sindri rationalisation scheme	2381.00	—	66.00	—	401.00	—
	(v) Barauni fertiliser project	3870.00	5000.00	1603.00	6131.15	1088.00	—
	(vi) Gorakhpur fertiliser project	273.00	—	162.00	—	30.00	—
	(vii) Trombay expansion including Misc. schemes	3864.00	—	63.00	—	203.00	—
	(viii) Sindri Naphtha gasification	53.00	—	11.00	—	2.00	—
	(ix) Sindri P.P.G. Sulphuric acid and Ammonium Nitrate Plant	42.00	—	81.00	—	75.00	—
	(x) new projects—Talchar	—	—	—	—	—	—
	(xi) new projects—Ramagudam	26200.00	—	39.00	—	170.00	—
	(xii) new projects—others (Haldia, Cochin II, Sindri, Nangal expansion)	—	50.00	38.00	—	170.00	—

	42914.00	5050.00	4497.00	6131.15	3788.00	3961.00
<i>sub-total</i>						
84 Cochin fertiliser project	2136.00	368.00	672.00	277.00	626.00	290.02
85 Fourth Stage expansion of FACT	267.00	111.00	53.00		58.00	
86 Madras Fertiliser project	4009.00	1508.00	1425.00	1978.00	950.00	1055.00
87 Kanpur Fertiliser project (Central Share)	47.00	47.50	47.50			
88 Indian Drugs and Pharmaceuticals	188.00	388.00	156.00	190.00	170.00	240.00
89 Indian Drugs and Pharmaceuticals antibiotics plant	100.00					
90 Indian Drugs and Pharmaceuticals Ltd. diversification	100.00					
91 Hindustan Insecticides (continuing scheme)	23.00	5.00	24.00	2.31	8.00	5.45
92 Hindustan Insecticides (new schemes)	242.00					
93 Hindustan Antibiotics Ltd.	291.00	72.49	3.00	47.00	50.00	
94 Hindustan Organic Chemicals	916.00	600.00	350.00	300.00	375.00	275.00
95 Central Institute of Plastic Engrs.	95.00	31.84	31.84	18.25	24.18	10.00
96 Gujarat Aromatic's Project	1800.00	700.00	426.00		698.00	
97 Gujarat and Barauni Petro-Chemical Complexes	4550.00			1088.71		
98 Additions of balancing equipment to Methanol Plant	300.00		12.0		14.00	
99 Methylamines plant	100.00				13.00	1696.00
100 Assam Petro-Chemical Complex	1000.00				40.00	
<i>total-Department of Chemicals</i>	58938.00	8881.83	7697.34	10032.42	6816.18	7532.47
<i>Y. Department of Petroleum</i>	18100.00	5800.00	4086.00	4154.21	4954.00	3701.10
101 O.N.G.C.						

ANNEXURE 11.1—(Contd.)
(Rs. lakhs)

(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
102	Oil India Ltd.	600.00	—	—	—	—	—
103	Indian Oil Corporation marketing	3028.00	—	576.26	—	700.00	1097.80
104	Gaohati, Barauni and Koyali Refineries	2080.00 5500.00	2030.00	311.00 263.00	2100.00	136.00 650.00	195.00 1527.00
105	Haldia Refinery	400.00	—	29.00	—	53.00	330.00
106	Cochin Refinery (expansion)	461.00	307.00	326.54	72.69	—	30.00
107	Madras Refinery	61.00	75.00	—	75.00	60.00	—
108	Govt. Esso Lube oil Project	50.00	—	—	—	—	20.00
109	I.O.C.—Feasibility studies	40.00	—	30.00	—	1.73	50.00
110	Lubrisol Bonegam Refinery <i>total—Department of Petroleum</i>	30320.00	8232.00	5621.80	6401.90	6554.73	6950.90
<i>VI. Ministry of Foreign Trade</i>							
111	Plantations	2241.00	190.48	209.11	284.98	309.24	270.47
112	National Textile Corporation	1750.00	400.00	77.50	231.00	246.25	332.07
113	N.I.D.C.	104.00	30.00	30.00	30.00	—	15.00
	<i>total—Ministry of Foreign Trade</i>	4095.00	620.48	316.61	545.98	555.49	617.54
<i>VII. Ministry of Finance</i>							
114	Security Paper Mill	85.00	31.82	24.37	23.63	23.51	22.70
115	New Alkoid factory	103.00	35.00	—	19.00	19.00	84.00
116	Kolar Gold Mines	311.00	69.07	62.56	74.23	54.28	60.00
117	Hutti Gold Mines	73.00	50.00	—	—	—	—
118	printing Press for bank note paper Dewar	850.00	10.86	21.54	29.25	15.23	250.01
119	printing press for stationery, Nasik	150.00	—	—	—	—	—
120	Staff quarters for security press	—	10.86	6.00	14.40	4.02	18.56

121	staff quarters for Bombay and Cal- cutta Mints	230.00	24.48	4.36	30.26	5.79	8.77
122	staff quarters for currency note press		—	6.00	9.46	4.02	19.36
123	loan assistance to financial institu- tions		1700.00				
124	support by R.B.I. to industrial financial institutions and market borrowing by the insti- tutions	25000.00		1281.00	6500.00	3855.00	6500.00
	<i>total—Ministry of Finance</i>	26802.00	2932.09	1405.83	6700.29	3980.85	6963.70
	<i>VIII. Ministry of Transport</i>						
	<i>Shipping</i>						
125	Hindustan Shipyards— Dry dock	250.00	200.00	94.61	110.00	120.56	48.00
126	Hindustan Shipyard West basin	300.00	—	—	—	—	—
127	Hindustan Shipyard Integrated	750.00	150.00	39.98	150.00	100.00	155.00
128	Hindustan Shipyard (subsidy)	600.00	200.00	86.69	120.00	71.11	170.00
129	second Shipyard Cochin	2200.00	100.00	54.61	300.44	55.44	450.00
	<i>total—Ministry of Transport and Shipping</i>	4100.00	650.00	275.89	680.00	347.11	821.00
	<i>IX. Department of Atomic Energy</i>						
	<i>Atomic Energy Programmes</i>	6425.00	1050.85	741.11	1587.81	1021.60	1561.84
	<i>summary Ministry/Department wise</i>						
1.	Ministry of Steel & Heavy Engg.	112067.00	22416.23	18798.00	22431.29	18762.68	22000.00
2.	Department of Industrial Develop-						

ANNEXURE 11.1—(Contd.)
(Rs. lakhs)

(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	meni	21337.00	3330.08	2022.06	2812.63	1618.57	2991.19
3	Department of Mines and Metals	51002.00	6713.60	3908.40	7475.63	5552.01	7987.10
4	Department of Chemicals	58938.00	8881.83	7697.34	10032.42	6816.18	7532.47
5	Department of Petroleum	30320.00	8232.00	5621.80	6401.90	6554.73	6950.90
6	Ministry of Foreign Trade	4095.00	620.48	316.61	545.98	555.49	617.54
7	Ministry of Finance	26803.00	2932.09	1405.83	6700.29	3980.85	6963.70
8	Ministry of Transport and Shipping	4100.00	650.00	275.89	680.00	347.11	821.00
9	Department of Atomic Energy	6425.00	1050.85	741.11	1587.81	1021.60	1561.84
	<i>total</i>	315086.00	54827.16	40787.04	58667.95	45209.22	57425.74

ANNEXURE 11.2

Capacity and Production Estimates for 1969-70 and 1970-71 and Targets for 1971-72 for 'Core Industries'

sl. no.	industry	unit	1969-70 (actuals)		1970-71 (target)		1970-71 (estd.)		1971-72 (target)	
			capa- city	produc- tion	capa- city	produc- tion	capa- city	produc- tion	capa- city	produc- tion
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>iron and steel</i>										
1	steel ingots	million tonnes	9.0	6.43	9.0	7.6	9.0	6.11	9.0	7.0
2	finished steel	"	6.9	4.94	7.0	5.7	6.9	4.7	7.0	6.0
3	pig iron for sale	"	1.54	1.54	1.3	1.1	1.3	1.27	1.87	1.4
4	alloy and special steel	'000 tonnes	222.0	140.4	222.0	170.0	222.0	200.0	238.0	238.0
<i>non-ferrous metals</i>										
5	aluminium	'000 tonnes	163.8	135.1	168.8	170.0	167.0	161.06	180.00	170.00
6	copper	"	9.8	9.8	9.6	9.6	9.6	9.33	16.50	10.00
7	zinc	"	38.0	23.7	38.0	28.0	38.0	23.40	38.00	25.00
<i>industrial machinery</i>										
8	chemical machinery	Rs. million	133.5	133.0	260.0	150.0	183.4	170.0	311.0	220.0
9	printing machinery	"	4.8	2.4	4.8	3.7	8.6	3.0	14.6	6.6
10	rubber machinery	"	2.8	2.2	2.8	2.7	5.8	11.5	17.3	9.7

27	acrylonitrile	"																			
28	synthetic rubber electronics	"	30.0	28.0	30.0	N.A.	28.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	32.0
29	resistances (fixed and variable)	millions. nos.	103	90	N.A.	N.A.	N.A.	N.A.	N.A.	100	N.A.	N.A.	100	N.A.	N.A.	100	—	—	—	—	290
30	condensers or capacitors (fixed and variable)	"	90	66	"	"	"	"	"	89.7	"	"	"	"	"	89.7	—	—	—	—	323
31	semi-conductors (including thick film, thin film and integrated circuits)	"	52.6	23	"	"	"	"	"	77.9	"	"	"	"	"	77.9	—	—	—	—	50.0
32	transmitting and receiving tubes including cathode ray tubes	"	5.0	5.0	"	"	"	"	"	5.0	"	"	"	"	"	5.0	6.0	6.0	6.0	6.0	5.53
33	connectors, switches and relays	"	N.A.	0.1	"	"	"	"	"	2.0	"	"	"	"	"	2.0	N.A.	N.A.	N.A.	N.A.	3.0
34	sophisticated micro-wave components and antennas	Rs. million	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
35	ferrites and magnets	tonnes	—	400	"	"	"	"	"	400	"	"	"	"	"	400	—	—	—	—	500
36	thermistors and varistors	millions nos.	1	120	"	"	"	"	"	—	"	"	"	"	"	—	2	2	2	2	1.5
37	testing and control equip- ment components	Rs. million	N.A.	—	"	"	"	"	"	200	"	"	"	"	"	200	N.A.	N.A.	N.A.	N.A.	260
38	wireless and micro-wave equipment (BEL and IIT)	"	320	290	—	—	—	—	—	320	—	—	—	—	—	320	420	420	420	420	385

ANNEXURE 11.3

Capacity and Production estimates for 1969-70 and 1970-71 and anticipated capacity and production for 1970-71 for selected industries

Sl. no.	Industry	Unit	1969-70 (actuals)		1970-71 (anticipated)		1970-71 (revised estimate)		1971-72 (anticipated)	
			capacity	production	capacity	production	capacity	production	capacity	production
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>Industries machinery</i>										
1	metallurgical and other heavy equipment	'000 tonnes	85	18	85	22	85	20.0	85	25
2	coal and other mining machinery	"	50	15	50	18	50	15.5	50	20
3	cotton textile machinery	Rs. million	450	204	450	250	475	315.0	500	300
4	cement machinery	"	230	98	230	130	230	120.0	230	150
5	sugar machinery	"	210	124	210	150	210	140.0	40	170
6	heavy fabricate machinery for fertilisers and chemicals	'000 tonnes	16	—	33	6.0	33	1.0	33	2

7	steel castings	'000 tonnes	126.3	46	126.3	50	129	47.7	135	75
8	steel forgings	"	147.0	60	173	75	120	66.0	12.0	80
9	cranes (excluding mobile cranes)	"	30	6	30	7	37	3.3	37	10
10	ball and roller bearings	million nos	15	14	16	16	16	17.7	16	18
11	heavy pumps and compressors	'000 tonnes	—	—	—	—	—	—	—	—
12	dumpers and scrapers	nos	150	107	250	150	250	250	350	325
13	crawler tractors and wheeled loaders	nos	850	384	1200	600	1200	500	1200	810
14	seamless pipes	'000 tonnes	39.6	24	39.6	27	396	26.0	39.6	28
15	gas cylinders	"	—	—	—	—	—	—	—	—
16	power driven pumps (organised sector)	'000 nos.	375	333	400	400	400.0	242.0	400.0	400
17	diesel engines (stationary)	"	150	133.4	150	150	150.0	67.4	150.0	100
18	commercial vehicles	"	58	35.5	58	48	62.5	47.5	62.05	57
19	motor cycles, scooters, mopeds and 3 wheelers	"	160	91	160	140	160.0	125.0	160.0	150
20	bicycles (organised sector)	"	2175	1914	2500	2250	2105.0	2068.0	2200.0	2300
21	sewing machines (organised sector)	"	493	327	493	420	493.0	249.0	493.0	460
22	electric fans (organised sector)	"	1810	1552	1820	1680.0	1816	1677.0	1900.0	2000
23	dry batteries	million nos	469	468.8	557	470.0	469.0	506.0	500	510
24	storage batteries (organised sector)	'000 nos	1068	927	1282	1290	1068	1142	1200	1230
25	radio receivers (organised sector)	'000 nos.	2330	1749	2800	2100	2330	1793	2500	2200

ANNEXURE 11.2—(Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
<i>heavy electrical equipment</i>										
26	turbines—hydro	mill. kw	0.80	—	1.0	0.50	1.0	0.21	0.1	0.31
27	turbines—thermal	-do-	1.50	0.32	1.5	0.70	1.5	0.63	1.5	0.86
28	power boilers	-do-	1.50	0.60	2.0	0.85	2.0	0.45	2.0	1.0
<i>electric transformers</i>										
29	above 33 kv	mill.kva	6.0	2.5	6.0	5.0	6.0	3.0	6.0	4.0
30	33 kv and below	-do-	5.5	3.8	5.5	5.0	6.5	6.5	7.5	7.0
<i>electric motors</i>										
31	above 200 hp	mill. hp	1.10	0.20	1.10	0.50	1.1	0.3	1.1	0.4
32	200 h.p. and below	"	2.98	2.42	2.98	2.40	3.5	3.0	4.0	3.5
33	A.C.S.R. conductors	'000 tonnes	100	61	100	90.0	97.8	70.0	97.8	90
34	wire core cables	'000 metres	4500	4000	5500	5000	7500	7000	8500	8000
<i>heavy chemicals</i>										
35	caustic soda	'000 tonnes	367.1	361	400	350	367.1	357.4	384.0	370
36	soda ash	"	434.8	422	435	425	470.8	446	470.8	460
37	sulphuric acid	"	1921.2	1129.0	2000.0	1300.0	1930.2	1199.2	1930.2	1250
38	paper and paper board	"	768.0	724.0	813.0	750.0	768.0	758.0	868.0	785
39	cement	mill. tonnes	15.96	13.81	17.5	14.5	17.36	14.36	19.0	15.5
40	automobile tyres	mill. nos.	4.88	3.99	4.5	4.5	4.88	4.15	5.2	4.6
41	bicycle tyres	"	21.31	21.31	21.29	22.0	21.29	20.00	N.A.	30.0
42	oxygen gas	mill. c. metres	79	37.5	—	36.0	79.0	39.5	79	40
43	dye stuffs	'000 tonnes	16.8	11.67	16.3	11.0	17.7	13.4	18.0	14.0
44	drugs & pharmaceuticals	R.S. million	—	25.00	N.A.	2750	N.A.	2750	N.A.	2750

46	refractories	'000 tonnes	1300.0	649.0	—	750.0	1137	745	1137	750
47	soap	"	212.6	235.0	—	245.0	212.6	232.4	212.6	245
48	leather footwear	million pairs	N.A.	16.46	N.A.	20.5	N.A.	15.44	N.A.	16.00
49	paints and varnishes	'000 tonnes	77.5	62.1	—	—	77.5	65.2	78.72	70
<i>petro-chemicals and plastics</i>										
50	P.V.C.	'000 tonnes	44.0	34.4	44.0	58.0	42.5	38.6	42.5	40.0
51	polyethylene	"	39.1	36.0	39.1	38.0	39.1	41.6	39.1	39.1
52	polystyrene	"	17.5	8.7	17.5	12.0	17.5	8.7	17.5	12.0
53	polypropylene	"	—	—	—	—	—	—	—	—
<i>cotton textiles</i>										
54	cotton yarn	million Kg.	17.6 ¹	961.0	18.0 ¹	1000.0	17.8	970	180	1000
55	cotton cloth (mill sector)	mill. metres	203.0	4192.0	208.0*	4350.0	209.0	4200	209	4300
56	rayon filament (including tyre cord)	'000 tonnes	56.5	55.6	—	—	56.5	54.0	56.5	56.0
57	rayon staple fibre	"	26.01*	52.0	68.0	62.0	26.01*	63.0	26.9*	65.0
<i>synthetic fibres</i>										
58	nylon filament	'000 tonnes	7.6	7.9	9.8	9.0	9.3	9.8	12.0	12.5
59	nylon tyre cord and other industrial yarn	"								
60	polyester filament and staple fibre	"	5.0	5.9	4.5	6.0	6.5	5.9	7.0	7.0
61	acrylic fibre	"	—	—	—	—	—	—	—	—
62	man-made fabrics	mill. metres	—	892	—	1050	—	890	—	900
63	jute manufactures	'000 tonnes	1500	944	1500	1250.0	15	1050	1500	1100
64	woollen cloth	mill. metres	43.6	12.2	43.6	13.0	43.6	13.3	43.6	13.5
65	sugar	'000 tonnes	3556	4261.0	3750.0	4200.0	3700	3850	4100	4350
66	vanaspathi	'000 tonnes	820.0	477.0	950.0	525	950	—	—	—

* million spindles

* '000 looms

* licensed capacity.

CHAPTER 12

TRANSPORT AND COMMUNICATIONS

An outlay of Rs. 632.15 crores has been provided for Transport and Communications programme in 1971-72 against an expenditure of Rs. 525 crores in 1970-71. The break-up of Plan outlay and expenditure between the Centre, States and Union Territories for 1971-72 and 1970-71 is shown as under :

TABLE 12.1 : *Plan Outlay*

(Rs. crores)

	Fourth Plan Provision	1970-71	1971-72
		estimated Expenditure	outlay
centre	2622.00	399.55	494.1
centrally sponsored	42.00	3.45	7.2
states	475.47	102.10	116.6
union territories	90.72	19.81	14.1
total	3230.19	524.91	632.0

12.2. The following table indicates the provision for 1971-72 b-72 b major programmes :

TABLE 12.2 : *Plan Outlay on Transport and Communications—1971-72*

(Rs. crores)

	Fourth Plan provision	1970-71	1971-72
		estimated expenditure	outlay
(1)	(2)	(3)	(4)
railways	1050.00	152.77	180.0
roads	865.63	133.10	156.0
road transport	89.04	19.15	22.0
ports	194.94	43.50	58.0

(1)	(2)	(3)	(4)
shipping	140.83	38.11	39.48
inland water transport	12.84	3.68	2.80
light houses	7.00	1.01	1.29
civil air transport	203.23	35.64	47.55
farakka barrage	70.00	11.34	10.00
tourism	36.68	7.28	9.62
communications	520.00	76.31	98.11
broadcasting	40.00	3.02	6.39
<i>total</i>	3230.19	524.91	632.15

A statement showing the details of the provision for various programmes at centre and the States and Union Territories is given at Annexure 12.1.

Railways

12.3. The growth of freight traffic in the first two years of the Fourth Plan has been much below expectation. In 1969-70, the freight traffic amounted to 207.9 million tonnes against the initial estimate of 214 million tonnes. For 1970-71, the original estimate was 217 million

TABLE 12.3 : *Freight Traffic on the Railways*

		(Million tonnes)		
sl. no.		1969-70 (actuals)	1970-71 (approx-actuals)	1971-72 (anticipated)
(0)	(1)	(2)	(3)	(4)
1	coal	71.0	64.3	68.0
2	finished and raw materials of steel	23.6	22.8	23.4
3	iron ore for export	8.8	9.8	12.0
4	cement	10.7	11.1	12.0
5	railway material	16.1	14.4	14.4
6	other general goods	77.7	76.6	78.2
	<i>total</i>	207.9	199.0	208.0

tonnes. However, the actual traffic during the year amounted to about 199 million tonnes which is lower than the traffic of 204 million tonnes reached in 1968-69, the year preceding the commencement of the Fourth Plan. According to the estimates framed at the time of the presentation of the Railway Budget, it is expected that the freight traffic would pick up in 1971-72 and the overall traffic during the year would amount to 208 million tonnes. The table 12.3 shows the commodity-wise break-up of the anticipated freight traffic for 1971-72 and the actuals for earlier two years.

12.4. The passenger traffic on the railways has registered steady increase during the first two years of the Fourth Plan. In 1969-70, the traffic increased by 5.7 per cent in terms of passengers originating and by 6 per cent in terms of passenger kilometres. In 1970-71, the increase in originating passenger traffic and passenger kilometres was of the order of about 6 per cent compared to the preceding years. In 1971-72, provision has been made for further increase of 3 per cent in the passenger traffic.

12.5. As in the earlier years, the investment programme for the railways in 1971-72 has been formulated to meet the maximum requirements from the operational point of view and also keeping in view the long term objective of Plan development. The following table shows the expenditure on different railway programme in 1969-70 and 1970-71 and the outlays for 1971-72.

TABLE 12.4 : *Outlay for Railway Development Programme*

		(Rs. crores)		
sl. no.		1969-70 actuals	1970-71 revised estimate	1971-72 budget estimate
(0)	(1)	(2)	(3)	(4)
1	rolling stock	99.22	105.31	112.33
2	workshop and sheds	2.75	3.79	4.94
3	machinery and plant	2.95	3.43	5.81
4	track renewals (net)	21.18	26.04	37.65
5	bridge works	4.23	3.88	5.33

TABLE 12.4 (Contd.)

(0)	(1)	(2)	(3)	(4)
6	line capacity works	33.89	36.28	42.36
7	signalling and safety works	8.12	9.07	16.48
8	electrification	11.84	12.48	15.54
9	other electrical works ¹	1.22	3.65	4.25
10	staff quarters	6.08	3.74	5.61
11	staff Welfare	2.34	3.09	2.83
12	user's amenities	4.47	4.21	4.01
13	new lines	10.69	13.11	15.97
14	other specified works	1.78	2.67	2.33
15	investment in road services	1.91	3.05	2.96
16	suspense account and (—) credit etc.	(—)20.27	2.78	0.42
17	metropolitan transport	0.07	0.39	1.18
		192.47	240.97	280.00
18	deduct expenditure of depreciation account	73.78	88.20	100.00
		118.69	152.77	180.00

¹Including provision for taking over of open line wires from Posts and Telegraphs Department.

12.6. The programme for acquisition of rolling stock i.e. locomotives, wagons and coaches including replacement requirements is shown below :

TABLE 12.5 : Acquisition of Rolling Stock

Sl. No.	total on line at the end of 1968-69	acquisition in 1969-70	acquisition in 1970-71	programme of acquisition for 1971-72
(0)	(1)	(2)	(3)	(4)
1	<i>locomotives</i>			
	(a) steam	10046	74	38
	(b) diesel	996	115	116
	(c) electric	513	31	50
2	<i>wagons in terms of 4-wheelers</i>	484902	14918	11128
3	<i>coaching stock (including EMU)</i>	34291	1496	1293

12.7. As in the earlier years, a major part of the outlay proposed for the works programme is proposed to be utilised on the works already in progress. However, certain major new schemes relating to doubling of track, electrification and new lines will also be taken up during the year. The more important schemes relating to doubling of track proposed in 1971-72 Plan are (1) patch doubling of 64.91 kilometres on Bina-Katni section (2) Patch doubling of 93.34 kilometres on Jolarpettai-shoranur section, (3) doubling of 31 kilometres between Nekonda and Mahabubabad on Kazipet-Dornakal section, (4) doubling of 75.43 kilometres on Mathura-Bayana section, (5) Patch doubling of 8.5 kilometres between kota and Gurla, (6) provisions of third line between Ballabgarh and Palwal which would be an extension of Tuglakabad-Ballabgarh third line sanctioned in 1968-69. Other important schemes for which provision has been made include (i) remodelling of yards at Balharshah (ii) mechanization and remodelling of down yard at Moghalsarai, (iii) route relay inter-looking at Asansol, (iv) extension of diesel loco shed at New Katni, (v) heavy electric repair shop for diesel locomotives at Goldon Rock on the Southern Railway, (vi) diesel loco shed at Kazipet and (vii) extension of the existing loco shed at Ratlam. The programme also provides for construction of new rail link between Dabla and Singhana to serve the Khetri Copper Project and the Singhana Fertiliser Plant. Further, electrification of Tundla-Delhi section will be taken up which will mark the completion of Howrah-Delhi electrification trunk route. The studies in respect of metropolitan transport schemes in Calcutta and Bombay which were taken up in the earlier years will be proceeded with. The techno-economic feasibility study for mass rapid transit system in Calcutta is likely to be completed by October, 1971. Provision has also been made for studies for rapid transit system in Madras and Delhi.

12.8. The provision made in the Annual Plan 1971-72 for Central Roads programme is Rs. 54.34 crores. This includes Rs. 40.54 crores for the development of national highways (including national highway portion of the Lateral Road) Rs. 2.00 crores for the Lateral Road

(State Roads portion), Rs. 8 crores for special roads and Rs. 3.80 crores for Centrally sponsored programme of roads of Inter-State and Economic importance.

12.9. The provision of Rs. 54.34 crores for Central road programme in 1971-72 represents an increase of about 22 per cent over the provision of Rs. 44.44 crores in 1970-71. The machinery for execution of national highways in the States, is being strengthened to take up a larger programme. In addition some liberalisation in the existing powers delegated to the States in respect of works estimates has also been made.

12.10. In the Central sector the main programme during 1971-72 as in the preceding year is the development of existing national highways. The programme provides for initiating work on construction of 216 kms of missing links, 5 major bridges, 38 minor bridges including 14 bridges for widening and strengthening, widening of 1920 kms of roads to 2 lanes, construction of 25 bypasses around congested towns, replacement of level crossings by over/under bridges etc. Besides, further progress will be made on the schemes already under execution.

12.11. In addition to the programme for the development of existing national highways, the Annual Plan 1971-72 provides for completion of lateral road from Bareilly in U.P. to Amingaon in Assam which at present is in an advanced stage of completion. Further, the Ministry of Shipping and Transport have recently finalised the programme for development of new roads of inter-State and economic importance and the programme for 1971-72 provides for a commencement of work on these roads. The programme for 1971-72 also takes into account the development of new national highways for which a provision of Rs. 15 crores has been included in the Fourth Plan. Recently the Government of India has declared 1218 kms of roads as new national highways. Some more roads are under consideration of Government for being taken up as national highways, a decision on which is expected to be taken shortly.

Road Transport

12.12. The existing fleet of State Road Transport Undertakings constitutes about 40 per cent of the total number of passenger buses in the country. A provision of Rs. 21.55 crores has been made in the States Plans in 1971-72 for the State Transport Undertakings against Rs. 15.72 crores in 1970-71. In the Central Sector, a provision of Rs. 30 lakhs has been made for the Central Roads Transport Corporation and Rs. 15 lakhs for assistance to the Central Road Transport Research Institute, Poona.

Major Ports

12.13. The Fourth Plan envisaged an increase in traffic at the major ports from 55 million tonnes in 1968-69 to about 77 million tonnes in 1973-74. The traffic in 1969-70 was about 55 million tonnes and in 1970-71 it increased to about 56 million tonnes. During 1970-71, the traffic in iron ore increased by about 3 million tonnes. However, the traffic in other commodities, namely, petroleum products, coal, fertilisers including raw materials of fertilisers, foodgrains and other dry cargo declined by about 2 million tonnes. The traffic in 1971-72 is estimated to go up to about 58 million tonnes.

12.14. In the Annual Plan 1971-72, a provision of Rs. 51.18 crores has been made for the development of major ports. In addition, the Port Trusts are expected to find about Rs. 24.86 crores from their internal resources. The port-wise break-up of the Annual Plan provision is given at Annexure 12.2.

12.15. The major part of the programme included in the Annual Plan 1971-72 relates to continuation of works already in progress. The oil jotty at Haldia Dock Project has been commissioned. The construction of six berths at Haldia is in progress and the project is likely to be completed in 1973-74. At Bombay, the dock expansion and Ballard Pier extension schemes which together will add eight berths are expected to be completed by March 1972. At Madras Port, the oil Dock Project is in an advanced stage of completion and it is expected to be completed

in 1972. The Outer Harbour Project at Visakhapatnam and the Mormugao development project are expected to make further progress during the year. The Mangalore and the Tuticorin Harbour Projects are also expected to make considerable progress during the year. The important new schemes proposed to be taken up in 1971-72 are Nheva Sheva project at Bombay, Oil Dock Project at Cochin and general cargo berth at Paradeep. In the Fourth Plan, provision has been made for setting up a Central Dredging Organisation. Orders for purchase of two dredgers have already been placed; one from abroad and the other from the Garden Reach Workshop Limited. One of the Dredgers has already been delivered and the other is expected to be delivered by April 1972.

Minor Ports

12.16. For the development of minor ports in the Central Plan, a provision of Rs. 4.19 crores has been made which includes Rs. 14 lakhs for making part payment for purchase of survey launches for the Minor Ports Dredging Survey Organisation, Rs. 110 lakhs for development of Ports in Andaman & Nichobar Islands and Laccadive, Amindivi and Minicoy Islands, Rs. 295 lakhs for loans to the State Governments for the development of selected minor ports at Kakindada, Cuddalore, Mirya Bay, Porbander, Beypore, Karwar and Gopalpore. In the Plan of States and Union Territories, a provision of Rs. 2.97 crores has been made for the development of minor ports. The programme provides for development of various minor ports in Gujarat, Kerala, Maharashtra, Mysore and Andaman and Nichobar Islands.

Shipping

12.17. In the Fourth Plan, the Shipping tonnage was expected to increase from about 2.14 million grt to about 3.5 million grt with another 0.5 million grt on order. At the end of 1970-71, the total operative tonnage was 2.44 million grt, consisting of 2.21 million grt of overseas tonnage and 0.23 million grt of coastal tonnage. Further, shipping tonnage of 1.0 million grt was on order or under construction. Of the total tonnage, Shipping Corporation of India owned 0.86 million grt or about 35 per cent of the Indian Shipping tonnage. Presently, Indian shipping

caters for about 22 per cent of the overseas trade. During 1971-72, it is proposed to place orders for acquisition of about 0.4 million grt. The operational tonnage at the end of 1971-72 is expected to be about 2.51 million grt.

12.18. In the Annual Plan 1971-72, a provision of Rs. 39.31 crores has been made which includes Rs. 35 crores for loan to the Shipping Development Fund, Rs. 84 lakhs for training ship 'Dufferin', Rs. 3.30 crores for subsidy to Shipping Development Fund, Rs. 6 lakhs for Welfare of Seamen and Rs. 10 lakhs towards loan for mechanisation of sailing vessels. In addition Rs. 17 lakhs is provided for development of shipping in Andaman & Nicobar Islands in the State sector.

Inland Water Transport

12.19. In the Central sector, a provision of Rs. 2.11 crores has been made for the development of inland water transport in 1971-72. This includes Rs. 1.61 crores for the Central Inland Water Transport Corporation, Rs. 3 lakhs for development of Pandu and Jogigopa Ports etc. and Rs. 47 lakhs for loan assistance to the State Governments for various Centrally sponsored schemes of inland water transport such as improvement of Champakara Canal in Kerala, construction of lock in Mahandu in Orissa etc. In the Plans of States and Union territories, a provision of Rs. 69 lakhs has been made which includes developments of water transport in Assam, Bihar and Goa.

Tourism

12.20. As against 245,000 tourists who visited India in 1969 the number of foreign tourists increased to 281,000 in 1970. A provision of Rs. 9.63 crores has been made for tourism programme in 1971-72 which includes Rs. 3 crores for India Tourism Development Corporation, Rs. 3.79 crores for the programme of the Central Department of Tourism and Rs. 2.84 crores for programmes of States and Union Territories. The programme of the Tourism Development Corporation mainly includes construction of hotels, motels, renovation and expansion of travellers lodges restaurants and establishment and expansion of

transport units at Delhi, Calcutta, Bombay, Lucknow, Varanasi etc. The programmes of the Central Department of Tourism provides for giving loans to the extent of Rs. 2 crores to hotels in the private sector, Rs. 10 lakhs for loans to transport operators for purchase of tourist vehicle and the remaining amount of Rs. 1.69 crores is for development of places of tourist interest. The more important schemes included in the Annual Plan 1971-72 are development of Gulmarg for winter sports in Jammu & Kashmir, Kovalam in Kerala as a tourist resort and development of Nagarjunasagar area. Provision has also been made for development of game sanctuaries, youth hostels and mounting of Son et Lumiere shows.

Communications

12.21. The total outlay on schemes relating to Posts and Telegraphs Department for 1971-72 is Rs. 94 crores. The Department's contribution from its internal resources is expected to be about Rs. 55.40 crores and the balance amount of Rs. 38.60 crores is to be provided by the Government. The Plan provides for opening of 4000 new post offices in 1971-72. Schemes regarding ungrading of post offices, modernisation of postal services, mobile post offices etc. have also been included in the Plan. The target set for providing additional telephone connections in 1970-71 viz. 110,000 is estimated to have been fully achieved and even exceeded. In 1971-72, 130,000 additional telephone connections are proposed to be provided. About 400 long distance public call offices and 500 telegraph offices are also proposed to be opened during the year.

12.22. The target for the production of telephones at Indian Telephone Industries Limited, Bangalore, in 1971-72 is 274,000 as against the actual production of 2,73,120 in 1970-71 and 2,44,743 in 1969-70. There was a general shortfall in production in 1970-71, mainly due to the shortage of imported raw materials and components, foreign exchange difficulties etc. The Indian Telephone Industries Limited propose to finance the expansion of the Bangalore factory entirely from their internal resources. The construction of buildings and the provision of

essential services at the new Transmission Factory, Naini has been completed and production initially by assembling components received from Bangalore factory, is likely to begin by about September 1971. Preliminary work has also commenced for the setting of a New Telephone Instruments Factory which will also be located at Naini for the manufacture of telephone instruments and allied items. A provision of Rs. 100 lakhs for the New Transmission Factory and Rs. 75 lakhs for the New Telephone Instruments Factory has been made in 1971-72.

12.23. The Hindustan Teleprinters Limited, Madras had a target of production of 5500 units of teleprinters. Production during the year 1970-71 amounted to 4911 units of fully assembled machines. The company has taken up the manufacture of teleprinters motors. Proposals for diversifying production so as to take up the manufacture of electric typewriters and electronic calculators, etc. are also under consideration. The company has been able to secure good export orders and is expected to meet its plan expenditure from its internal resources.

12.24. Under Overseas Communications Service, the Arvi Earth Station was commissioned for commercial operation in February, 1971. The 1971-72 Plan provides for the Second Earth Station to be located near Dehradun.

Civil Air Transport

12.25. A provision of Rs. 12.10 crores, including revenue expense provision of Rs. 10 lakhs has been made for the programmes of the Civil Aviation Department in the budget for 1971-72. This includes a sum of Rs. 9.03 crores for the development of international and domestic airports. The works at aerodromes include strengthening, construction and development of taxi-ways, main-runways, aprons at International airports and Domestic aerodromes and additions, alteration and construction of terminal Buildings and residential quarters. The 1971-72 Plan also provides for the development of aeronautical communication services and air-routes and aerodrome equipment.

12.26. A provision of Rs. 16.15 crores has been made for Indian

Airlines in the budget for 1971-72. Of this, a substantial amount will be for meeting payment requirements for aircraft already purchased/ordered or proposed to be ordered including the seven Boeing 737s and 10 additional HS-748s. Other schemes of Indian Airlines for which provision has been made in 1971-72 Plan include workshop expansion, purchase of simulators and flight data recorders, construction of staff quarters and provision of passenger facilities. The capacity of the Indian Airlines, which declined from 223 million tonne kilometres in 1969-70 to 208 million tonne kilometres in 1970-71 mainly on account of loss of three planes—two in accidents and one in hijacking, is expected to increase to 344 million tonne kilometres in 1971-72.

12.27. For Air India, the plan provision of Rs. 15.90 crores has been made in the budget for 1971-72. A substantial part of this provision is for the repayment of loans taken for the purchase of Boeing 707 and 747 aircraft. Two Boeing 747 aircraft (Jumbo jets) have already been acquired by Air India and the remaining two will be received in 1972. Other important projects provided for in the Plan include construction of hangers and workshop facilities for 747 operations and hotel projects at Juhu and Santa Cruz. The capacity of Air India is expected to increase from 518.6 million tonne kilometres (revised estimate) in 1970-71 to 682.9 million tonne kilometres in 1971-72.

Meteorology

12.28. A provision of Rs. 2.36 crores has been made for the programmes of the India Meteorological Department in the budget for 1971-72. Schemes include development of meteorological telecommunications, expansion of Northern Hemisphere Analysis Centre, development of cyclone warning and research organisation, development of hydro-meteorology and drought studies.

Broadcasting

12.29. A provision of Rs. 6.39 crores has been made in 1971-72 for development of broadcasting and television. A large part of the provision is for the continuing schemes. The more important conti-

ning schemes are shifting of Monitoring Service from Simla to Delhi, high power stations at Aligarh, Jodhpur, Simla, Gorakhpur, Najibabad, Nagpur, Alleppey, and Imphal and medium power stations at Agartala, Port Blair, Rewa, Jalgaon, Silchar and Darbhanga. Provisions has also been made for television centres at Lucknow/Kanpur, Srinagar, Bombay-Poona, Calcutta and Madras and starting of a TV Training Wing at the Film and TV Training Institute at Poona. While the station at Simla with high power transmitter went on the air just before the beginning of the year, those at Jodhpur, Alleppey and Leh have also since commissioned during the current year. External Services of All India Radio have further been strengthened with the commissioning of the two high power transmitters at Aligarh and the super power transmitter at Rajkot. At the end of 1970-71 commercial broadcasting services were being operated from 18 centres in the country. In 1971-72, 3 additional centres are expected to be covered. Besides, Yuv Vani service will be introduced from the Srinagar station. An important development which is expected to give fillip to A.I.R.'s development programmes further is the setting up of its own Civil Construction Wing which has already been approved by the Government. This will go a long way in accelerating the construction activity of the A.I.R.

ANNEXURE 12.1

Outlay on Transport and Communications During 1970-71 and 1971-72

Sl. No.	schemes	fourth plan provision	1970-71		1971-72 outlay
			outlay	estimated expenditure	
(0)	(1)	(2)	(3)	(4)	(5)
railway	centre	1050.00	180.00	152.77	180.00
roads	centre	393.00	41.60	35.74	50.54
	centrally sponsored	25.00	2.84	2.06	3.80
	states	376.61	64.95	79.77	92.86
	union territories	71.02	13.41	15.53	9.37
	<i>total</i>	865.63	122.80	133.10	156.57
road transport	centre	3.00	0.47	0.55	0.45
	states	72.68	13.16	15.95	18.15
	union territories	13.36	2.56	2.65	3.40
	<i>total</i>	89.04	16.19	19.15	23.50
major ports	centre	160.00	40.20	37.24	51.18
minor ports	centre	7.00	1.80	1.88	1.24
	centrally sponsored	13.00	1.60	0.89	2.95
	states	12.12	1.93	2.70	2.24
	union territories	2.82	0.58	0.79	0.73
	<i>total</i>	34.94	5.91	6.26	7.16
shipping	centre	140.00	23.62	38.00	39.31
	union territories	0.83	0.17	0.11	0.17
	<i>total</i>	140.83	23.79	38.11	39.48
inland water transport	centre	5.00	1.91	2.37	1.64
	centrally sponsored	4.00	0.52	0.50	0.47
	states	2.87	0.26	0.45	0.44
	union territories	0.97	0.30	0.36	0.25
	<i>total</i>	12.84	2.99	3.68	2.80

ANNEXURE I—Contd.

(0)	(1)	(2)	(3)	(4)	(5)
lighthouses	centre	7.00	1.01	1.01	1.29
civil air	centre	202.00	46.48	35.30	47.20
transport	states	0.80	0.13	0.26	0.25
	union territories	0.43	0.09	0.08	0.10
	<i>total</i>	203.23	46.70	35.64	47.55
frakka barrage	centre	70.00	19.00	13.34	10.00
total transport	centre	2037.00	356.09	316.20	382.85
	centrally sponsored	42.00	4.96	3.45	7.22
	states	465.08	80.43	99.13	113.94
	union territories	89.43	17.11	19.52	14.02
	<i>total</i>	2633.51	458.59	438.30	518.03
tourism	centre	25.00	5.37	4.02	6.79
	states	10.39	1.99	2.97	2.68
	union territories	1.29	0.23	0.29	0.15
	<i>total</i>	36.68	7.59	7.28	9.62
communica- cations	centre	520.00	86.00	76.31	98.11
broadcasting	centre	40.00	3.82	3.02	6.39
grand total	centre	2622.00	451.28	399.55	494.14
	centrally sponsored	42.00	4.96	3.45	7.22
	states	475.47	82.42	102.10	116.62
	union territories	90.72	17.34	19.81	14.17
	<i>total</i>	3230.19	556.00	524.91	632.15

ANNEXURE 12.2

Annual Plan 1971-72—Major Ports

(Rs. crores)

Sl. No.	ports/programmes	Plan provision	ports own resources	total
(0)	(1)	(2)	(3)	(4)
1	Calcutta	—	1.50	1.50
2	Haldia	14.25	—	14.25
3	Bombay	—	9.00	9.00
4	Madras	5.00	2.00	7.00
5	Cochin	3.50	1.50	5.00
6	Visakhapatnam existing harbour	—	3.86	3.86
7	Visakhapatnam Outer Harbour	5.00	2.00	7.00
8	Kandla	1.00	0.50	1.50
9	Mormugao	2.50	4.00	6.50
10	Paradip	3.50	0.50	4.00
11	Mangalore Harbour Project	5.50	—	5.50
12	Tuticorin Harbour Project	5.50	—	5.50
13	Central Dredging Organisation	3.22	—	3.22
14	Bhagirathi-Hooghly River Training Works	2.21	—	2.21
	<i>total</i>	51.18	24.86	76.04

CHAPTER 13

EDUCATION

While the Plan outlays on education in 1970-71 was 123.13 crores, the anticipated expenditure is estimated at Rs. 125.20 crores. The Plan outlay for 1971-72 is Rs. 157.74 crores. The break up of expenditure and outlay by Centre, Centrally sponsored, States and Union Territories and for general and technical education is given as under :

TABLE 13.1: *Plan Outlay on Education*

(Rs. crores)

sector	general education		technical education		total plan outlay
	1970-71 anticipated expenditure	1971-72 plan outlay	1970-71 anticipated expenditure	1971-72 plan outlay	1971-72
(1)	(2)	(3)	(4)	(5)	(6)
centre	33.59	36.49	8.65	9.33	45.82
centrally sponsored	2.83	2.31	2.18	4.26	6.57
states	61.94	87.26	7.66	8.74	96.00
union territories	7.38	8.47	0.97	0.88	9.35
total	105.74	134.53	19.46	23.21	157.74

13.2. The targets of additional enrolments at various stages at the end of the Fourth Plan, the estimated achievements in 1969-70 and 1970-71 and the targets for 1971-72 are shown in Table 13.2.

It is estimated that by the end of 1971-72, the percentages of pupils attending the primary, middle and secondary classes to the total population in the age-groups 6-11, 11-14 and 14-17 will be 81.3, 35.5 and 22.4

respectively against the targets for 1973-74, viz. 85.7, 40.2 and 24.7 respectively.

TABLE 13.2: *Additional Enrolment*

		(in millions)			
sl. no.	stage of education	1969-74 target	1969-70 achieve- ment	1970-71 likely achievement	1971-72 target
(0)	(1)	(2)	(3)	(4)	(5)
1	classes I-V	13.80	2.22	2.77	2.64
2	classes VI-VIII	5.46	0.79	0.84	0.97
3	classes IX-XI	3.27	0.45	0.68	0.69
4	university education (arts, science and commerce)	1.08	0.17	0.22	0.17

Elementary Education

13.3. The States of Maharashtra and U.P. have kept the targets for enrolment in the primary classes during 1971-72 at a lower level in relation to the estimated achievements in the previous two years. This has resulted in the lowering of the overall national target of enrolment at this stage as compared to the estimated achievement in 1970-71. The number of beneficiaries under the school feeding programme for 1971-72 will be practically the same as in 1970-71. While the State of Kerala, Maharashtra, M.P. Rajasthan and U.P. propose to increase the coverage in 1971-72, Mysore will curtail the programme in areas which were affected by scarcity conditions in the previous year. Bihar has, however, decided to discontinue the entire programme owing to administrative difficulties. In Andhra Pradesh, two Central Kitchens

will be set up for cooking school meals. Some of the other high lights of the development programmes in the States are: the appointment of

graduate headmasters in senior primary schools in Mysore and Andhra Pradesh; the strengthening of the inspectorate in Kerala to reduce wastage and stagnation and the appointment of subject teachers in the higher primary schools in Maharashtra.

13.4 In the Central sector, the main development programmes during 1971-72 are: the construction of buildings for the text book printing presses at Mysore and Bhubaneswar; the implementation of the Intensive Educational District Development projects in 4 districts and pilot projects in 16 districts in the country; and the preparatory work relating to the introduction of educational television.

Secondary Education

13.5. Adequate provision has been made to cope with the additional enrolment at this stage. Improvement of science teaching will continue to receive emphasis. The Government of Maharashtra have completed the surveys of manpower requirements in the Osmanabad district and in the Haveli Tehsil of Poona district to serve as a basis for organising projects for occupational education in these areas. Work on similar lines is being undertaken in the four districts selected for intensive educational development by the Central Government. Mention may also be made of the proposal of the Maharashtra Government to start 5 more technical high schools/centres and to introduce technical streams in 5 more non-Government secondary schools.

Teacher Education

13.6. Provision has been made for some expansion in the teacher training facilities in the States and Union Territories in the Eastern region. The National Council of Educational Research and Training and the State Institutes of Education will continue their programmes for the in-service training of teachers. The University Grants Commission will initiate a programme of strengthening University departments of education and selected secondary training colleges.

Higher Education

13.7. The University Grants Commission will continue to provide assistance for the expansion of library and laboratory facilities and residential accommodation for teachers. Grants will be given to Universities for the development of their faculties, especially of science. The University Grants Commission will provide grants up to Rs. 5 lakhs to Universities for the introduction of correspondence courses. The U.G.C. will also assist the Universities for the establishment of centres for post-graduate studies. Special assistance will be provided to selected colleges for the development of Humanities, Social Science and Science Departments. Summer Schools will be organised as in the past. Programmes of students' amenities and student welfare—students' hostels, non-student centres, text book centres in residential areas, health centres etc.—will be expanded. The programmes of research scholarships, both junior and senior, will be continued. Action will be taken on some of the recommendations of the Expert Committee on rural higher education, especially in regard to their administrative and academic reorganisation.

Social Education

13.8. The programme of farmers' education and functional literacy which is being implemented jointly by the Ministries of Education and Social Welfare, Food and Agriculture and Information and Broadcasting, will be extended to 20 other districts. Pilot literacy projects will be implemented with the active participation of the State Governments in selected areas. Voluntary organisations will continue to be assisted in their efforts to spread programmes of adult education.

Languages

13.9. The Ministry of Education and Social Welfare will continue to provide assistance for the appointment of Hindi teachers and the development of Hindi teacher-training colleges and Hindi teacher training sections in training institutions of non-Hindi speaking States. The number of scholarships to students from non-Hindi speaking areas to

study Hindi at the post-Matric level will be increased from 1500 in 1970-71 to 1750 in 1971-72. The Central Institute of Indian Languages, set up at Mysore in 1969, will establish an Institutional Psycho-Linguistic Unit and the Folklore Research Unit, carry out a project in Study Skills for College Entrants, and organise translation courses, seminars, workshops, etc. The number of trainees of the Regional Language Centres will be increased. As regards production of literature in regional languages for students at the University level, all State Governments have now set up their Book Production Boards and the actual production of books will be stepped up during the current year.

Cultural Programmes

13.10. Accelerated assistance will be given for the development of the three National Academies and a number of other cultural institutions in the country. Provision has also been made for providing financial assistance to Performing Groups and to writers in indigent circumstances. The major activities under the scheme of Gazetteers will be the publication of Volume III of the Gazetteers of India. "Economic Structure and Activities", and the translation of Volume I of the Gazetteer of India, "Country and People", into Hindi. The work in regard to the compilation of the Gazetteer of Bhutan and Volume II of "Who's Who of Indian Martyrs", will continue. Central assistance will continue to be given to the State Governments for the revision of District Gazetteers. A scheme for the Reorganisation of Archeological Survey of India has been included in the Plan in order to enable the Survey to fulfil its role of conservation, preservation and excavation of monuments.

Scholarships

13.11. The schemes for the award of scholarships administered by the Central Government, namely the National Scholarships, the National Loan Scholarships, merit scholarships for children of school teachers and merit scholarships in residential schools will be continued during the year. In addition, two new schemes (a) national scholarships at the secondary stage for talented children from rural areas, and (b) cultural talent scholarships for school-going children between the ages of 10-14

will be started by the Ministry of Education and Social Welfare during the year.

Technical Education

13.12. Emphasis in technical education will continue to be laid on qualitative development. The facilities for post-graduate education and research in the Indian Institutes of Technology will be increased. Further assistance will be provided to technical institutions so as to enable them to complete most of their construction programmes, procure equipment and appoint the necessary staff.

13.13. The Material Science Centre at Kharagpur, the Advanced Centre for Research in Aeronautical Engineering at Bombay and the post-graduate education and research programmes in the university department, in the I.I.Ts., Regional Engineering Colleges and other institutions will be further strengthened. A number of courses like landscape architecture, building sciences, applied science courses in physics, chemistry and mathematics and agricultural engineering will be started. The intake capacity of the Institutes of Management will be increased.

13.14. Part-time degree and diploma courses, specialised courses to be conducted in cooperation with industry and refresher courses for personnel from industry as well as quality improvement programmes will be further extended. The programme of apprenticeship training will be expanded.

Other Programmes

13.15. The schemes for the welfare of non-student youth will be initiated during 1971-72. The scheme of national integration camps will continue to be operated by the N.C.E.R.T. and the Kendriya Vidyalaya Sangathan. The programmes of National Sports Organisation and National Service Scheme will be extended in the Universities/Colleges. The National Institute of Sports and the State Sports Councils will intensify their efforts for promotion of games and sports and for the coaching of national teams for international meets and competitions. The Sports Talent Search Scholarship Scheme, initiated in 1970-71, will be further expanded.

CHAPTER 14

SCIENTIFIC RESEARCH AND NATRUAL RESOURCES I SCIENTIFIC RESEARCH

The Plan and Non-Plan outlays for 1971-72 and estimated expenditure for 1970-71 for the Department of Atomic Energy (Research & Development), Council of Scientific and Industrial Research (CSIR) and Scientific Surveys and Development Division under the Department of Science and Technology and Ministry of Education and Social Welfare are given in the table below.

TABLE 14.1: *Outlay and Expenditure on Scientific Research*

(Rs. lakhs)

	Plan	1970-71 expenditure		Plan	1971-72 outlay	Total
		non-plan	total		non-plan	
Department of Atomic Energy (R&D)	976.32	1918.30	2894.62	1620.04	2358.18	3978.22
Council of Scientific and Industrial Research	749.92	1593.25	2343.17	854.49	1662.49	2517.20
Scientific Surveys and Development Division (Department of Science and Technology and Ministry of Education and Social Welfare)	197.54	644.23	841.77	248.35	681.42	929.77
<i>total</i>	1923.78	4155.78	6079.56	2722.88	4702.31	7425.19

Department of Atomic Energy (Research and Development)

14.2. The main features of the important projects/programmes of the

Department of Atomic Energy (Research and Development) are briefly described in the following paragraphs:

14.3. *Variable Energy Cyclotron*: This project which is being established at Calcutta will serve as a National Centre for high quality research work in physics and for controlled direct radiations of biological and agricultural products. The fabrication of main magnet frame is nearing completion at Ranchi. Magnet coil fabrication is on hand at Bhopal. Main and trimvalley coil power supply has been fabricated at the Bhabha Atomic Research Centre. Major Vacuum System Assembly, Ion source and its drives are ready. Accelerator and service wing of the buildings have been completed. The project is expected to be completed by 1973-74.

14.4. *Reactor Research Centre Kalpakkam*: This centre will be the central research and development establishment for carrying out work in thorium technology and associated problems. It will have a Fast Breeder Test Reactor as its main experimental facility and other auxiliary facilities such as a Fuel Reprocessing Developmental Laboratory, Waste Treatment Facility, Engineering Laboratories, post irradiation facilities, a central workshop, a Radio-Chemistry Laboratory and services like housing. Two engineering halls are ready for occupation and work on desing office, additional laboratory buildings, workshop etc., is in progress.

14.5. *High Intensity Radiation Utilisation Project*: This project envisages construction of megacurie Cobalt-60 handling and storage facilities alongwith associated laboratories for the development of applications of large radiation sources in industry, agriculture and medicine. When completed, it will provide facilities for establishing design parameters for large irradiators and will enable developmental work, fabrication and construction of prototype irradiation facilities. Civil works of the project have been partially completed. Electrical and mechanical works are in progress.

14.6. *Irradiation Facilities*: Work on the establishment of a facility at Kota to produce encased Cobalt-60 sources for use in the various irradiation facilities has commenced. A Radiation Processing Demons-

tration Facility is being set up at Trombay with the assistance of the UNDP (Spl. fund). The detailed project report is under preparation.

14.7. *Space Research:* In the space research field, the main objective is to develop indigenous competence for designing and building sophisticated hardware involved in space technology including rockets and Satellites for scientific research and practical applications, the use of these systems for providing point-to-point communications and a national TV hook-up through a direct broadcast synchronous satellite, and the applications of satellites for meteorology and for remote sensing of earth resources.

14.8. The Space Science and Technology Centre will continue its developmental work on indigenous rockets and connected propellants. A precision Instrumentation Laboratory and a test facilities for guidance are being set up at the Centre.

14.9. Work on the establishment of a launching station capable of launching multistage rockets and satellites has been taken up at Sriharikota in the east coast. Civil works relating to essential buildings and other services like block house, helipad, rocket assembly are in progress. The first phase of the station, which will enable launching of sounding rockets will be completed during 1971. The second phase of the programme for adding ground-support facilities for range operations to carry out flight tests, tracking and testing is expected to be completed by 1972. The third phase of the programme enabling the station to launch satellites is expected to be completed by 1974.

14.10. It is also proposed to set up at Sriharikota a Solid Propellant Plant to produce large propellant grains up to 10 tonnes in single charges and a Static Test and Evaluation Complex for carry out test and evaluation of such grains. Action to commence construction of these projects has been initiated and procurement action for long delivery equipment has begun.

14.11. A joint experiment for broadcast of Instrumental Television Programme on a national scale using ATSF Satellite is being undertaken

in co-operation with the National Aeronautics and Space Administration of USA. Under the agreement between the Department of Atomic Energy and NASA for this purpose the Department has to provide service for the management of hardware, research and development facilities, workshop and administration and also to construct the necessary civil works.

14.12. The Experimental Satellite Communications Earth Station at Ahmedabad is being expanded to include new facilities to enable it to participate in the Satellite Instructional TV Experiment. The UNDP has approved a request for assistance estimated to cost US \$ 1.069 million for this purpose. The Civil works relating to the expansion of the Station will commence during 1971-72.

14.13. *Pilot Studies relating to Desalination, water utilisation and underground water:* In connection with the feasibility studies undertaken by the Working Group on Agro-Industrial Complex, it is proposed to set up Pilot-Scale Plants to conduct more detailed studies.

14.14. *Research and Development Programmes:* Among the important research and development programmes to be undertaken during 1971-72 at the Bhabha Atomic Research Centre, mention may be made of:

- (a) Study on the chemistry of a reactor to produce U-233, and development of design for a larger plant for separation of U-233.
- (b) Development work connected with technology for enrichment of uranium.
- (c) Development of various types of lasers.
- (d) Development of improved fuel design for Candu type 200 and 500 MWe power reactors.
- (e) Research and development work for boiling light water reactors.
- (f) Developmental and field work in connection with food irradiation, research pertaining to preservation of sea foods, potatoes, onions and grains.

(g) Experimental studies on the multistage flash distillation (MSF) and the long tube vertical evaporators (LTVE) as a part of research and development work in the field of desalination. (SF)

14.15. *Aided Research Institutes:* The Tata Institute of Fundamental Research will continue its various research projects in the field of microwave engineering, solid state electronics, radio carbon dating, radio astronomy and computer development. The Physical Research Laboratory, Ahmedabad will continue development studies in cosmic rays, solar-terrestrial relationship, aeronomy, geomagnetism, theoretical physics concerning problems of nuclear structure, plasma physics and space physics. The Saha Institute for Nuclear Physics, Calcutta will collaborate closely with the Department of Atomic Energy in building up of cyclotron for the variable energy cyclotron project. The Tata Memorial Centre will undertake studies for the assessment of the results of various therapeutic procedures for treatment of cancer. A programme for the expansion of the Centre to coordinate research work with other bodies and institutions and to train doctors and students from other hospitals and institutions is also being initiated.

Council of Scientific and Industrial Research (CSIR)

14.16. In order to bring the benefits of economic development to the masses, CSIR strategy in the remaining period of the Fourth Five Year Plan will be to intensify its efforts on programmes which relate to inputs for agricultural development, farm mechanisation, post-agricultural operations, storage, transportation and the processing of agricultural and marine products, utilisation of by-products, rural housing, health and communication. The CSIR constituted a Planning Committee which included among other members, the Member (Industry) as the Chairman and Member (P) of the Planning Commission, to screen new projects, review the annual plans, identify the scientific and technological problems involved in the industrial projects covered by the plan and determine interse priorities in terms of financial, human and other resources. The Committee could not meet so far as the Chairman had resigned. CSIR is reconstituting the Committee.

14.17. Research and development and pilot plant work being carried out/or proposed to be taken up in some of the important areas is described in the following paragraphs.

14.18. *Fertilisers and Pesticides:* Work is being carried out on production of fertilisers from various unexploited sources including coal, phosphate deposits and potassium salts from marine resources. Chemosterilants for insect control are being developed. Work on design and development of insecticide sprayer for tea gardens has been taken up.

14.19. *Agricultural Equipment and Techniques:* Agricultural equipment for planting, harvesting and mechanical handling crops are being developed. Design and development work on power tiller and green crop dryer and development of refrigerated transport of perishable goods has been taken up. Research work is being carried out on sea water agriculture and cultivation of marine algae.

14.20. *Utilisation of Agricultural and Animal Wastes:* Development programmes on processing of rice bran for production of edible quality oil has been taken up. Research and development work on utilisation of slaughter house and tannery by-products is being carried out.

14.21. *Food Processing:* More attention is being given to developing technology for preserving, processing and better utilisation of food. Some of the new development programmes on hand are (i) improvement of rice milling techniques for better yields and quality (ii) high protein foods from oil seeds and cakes (iii) process development and design equipment for cashew industry (iv) processing and preserving of meats, fish and poultry products. Programme for development and application of improved techniques for cereal and food storage in villages has been taken up.

14.22. *Public Health Engineering Rural Sanitation and Drinking Water :* With a view to improving environment quality and public health and utilise waste water pilot plant work is being carried out on low cost waste treatment by waste stabilization pond and utilisation of effluent for (a) fish culture and (b) production of algae. Studies

are being carried out on (i) the effect of raw sewage and differently diluted sewage on soil productivity and crop production (ii) the nature and mechanism of sewage sickness in the soils and (iii) direct sludge slurry irrigation. A systematic survey and analysis of the refuse from 9 major cities of the country is being carried out. The survey will enable more rational design of composting and incineration plant. Studies are being made on economic treatment and disposal of industrial waste effluent from various industries. Desalination techniques are being developed with a view to produce potable water in saline areas. Studies on control of air and water pollution and industrial toxicology are being carried out.

14.23. *Exploration and Exploitation of Mineral Resources* : Instruments and techniques for geophysical and aerial mineral surveys are being developed. Studies are being carried out on evaluation and beneficiation of ceramic raw materials. Some of the important projects proposed to be taken up during the year are (i) hydrometallurgical unit for nickel and other non-ferrous metals (ii) setting up facilities for large scale creep testing for research and development (iii) formed coke pilot plant (iv) pilot plant for oils and chemicals from coals (v) semicommercial-production of magnesium and (vi) development of ceramic fibres, new optical glasses and low loss ceramics for electronics.

14.24. *Development of Processes, Products, Special Materials and Equipment required by Industries* : Some of the important programmes being carried out are development of semi-conductor grade silicon, phosphors, professional ferrites, multi-channel transistorised TV receivers, systems, integrated circuits, bulk organic chemicals, organic intermediates, silicone intermediates, solvent extraction and thermal conversion process for petroleum industry, additives for fuel and lubricants and catalysts. Work on design of nuclear pressure vessels, microwave towers and automatic tower testing station has been taken up. Pilot plants work on o-aminophenol and semi-carbazide from urea and development work on arc welding, aluminium electrode, friction welding machine are also on hand.

Products of export value such as treated chrome, manganese and iron ores and pellets, glass, mica and ceramic articles, refractories, leather goods, spice extractive and packaging materials are under development.

14.25. *Regional Development* : There are four regional laboratories which are concentrating on problems of regional development especially with a view to utilisation of local raw materials such as coal, petroleum and mineral products, forest and animal products, economic and medicinal plant products and fruits and vegetables. A suggestion for setting up a new Regional Research Laboratory to cater to the needs of UP, Bihar, MP and Rajasthan was considered by an ad-hoc Committee under the chairmanship of the Vice-President CSIR who have stressed the need for developmental/promotional centres in the states since at present there is no focal point of economic growth in the remote areas, hilly tracts and under-developed regions.

14.26. *Research Schemes, Scholarships and Fellowships* : Under the Council's scheme of grants-in-aid to various universities and research institutions other than CSIR, seven hundred and seventy eight research schemes are in progress. The research fellowships under the research schemes as well as ad-hoc research fellowships totalled to 2992. Fifteen emeritus scientists and 80 retired scientists are pursuing research under this schemes.

14.27. *Aided Cooperative Industrial Research Associations* : Nine research associations, four in textile and one each in plywood, tea, wool, ceramics and jute industry are functioning. Ahmedabad Textile Industrial Research Association has developed indigenous substitutes which can replace sodium hydrosulphite to the extent of 40 per cent in textiles vat dyeing. Bombay Textile Research Association developed a process for complete substitution of Rongalite a reducing agent which is presently imported. Indian Jute Industries Research Association, Calcutta worked out a suitable pre-treatment process with non-ionic wetting agents to accelerate the softening of jute fabrics. The process is being scaled up in an industrial unit.

Scientific Surveys and Development Division under the Department of Science and Technology and Ministry of Education and Social Welfare

Survey of India

14.28. *Centre for Survey Training and Map Production, Hyderabad:* At present 180 officers are undergoing training at the Centre which is being equipped to carry out research and development in photogrammetry, cartography and map production. The Centre has also been entrusted with consultancy services and the responsibility for special large scale surveys connected with development and forestry. The buildings for locating works concerning reproduction and production of maps and administrative blocks of the Centre have been completed. The stores and lectures blocks are likely to be completed shortly.

14.29. *Indian Photo Interpretation Institute, Dehra Dun:* At present 53 trainees from various States are undergoing training in the Institute in the application of techniques of aerial photo interpretation in the fields of geology, forestry, soil survey and soil conservation. The permanent buildings of the Institute are under construction and are expected to be ready during the current financial year (1971-72).

Surveys for Irrigation and Hydel Schemes (Raising of one Circle Office, 8 Field Parties and 3 Drawing Offices)²

14.30. Project surveys and mapping of Haryana, Delhi, Jammu & Kashmir, Rajasthan, Madhya Pradesh, Gujarat, U.P., Maharashtra, Tripura, Bhutan (about 44 projects) and forest surveys in Haryana, U.P., and Jammu & Kashmir already taken up will be continued. The field parties have also been engaged for survey activities and for fair drawing at recess headquarters. The three drawing offices have been engaged in compilation, fair drawing and scrutiny of departmental and development project maps drawn in the field by survey parties.

14.31. The new Plan schemes proposed to be taken up during the year 1971-72 are—(i) *Map Reproduction and Cartography* : (a) Augmentation of map printing potential in the Survey of India and (b) Purchase of equipment and materials for modernising cartographic procedures; (ii) Surveys for irrigation and power projects and mineral exploration; (iii) Strengthening of Surveyor General's Office; and (iv) Raising of two new Geodetic Units.

Botanical Survey of India

14.32. It is proposed to strengthen the research potential and the administrative staff at the Headquarters office, Central National Herbarium; Botanic Garden, Shibpur, Central Botanical Laboratory, Industrial Section, Indian Museum and the Regional Circles of the Botanical Survey. A new Arid Zone Circle for doing research in arid zone flora will be set up at Jodhpur during 1971-72. The Andaman and Nicobar Circle is also being set up during 1971-72. It is also proposed to take up the establishment of the Botanic Garden in Delhi during 1971-72. Ten research scholarships have been sanctioned for the year 1971-72. Fifteen additional research scholarships are also proposed to be instituted during the year.

Zological Survey of India

14.33. It is proposed to establish a new Marine Biological Research Station at Madras during 1971-72. The existing Marine Survey Division at Calcutta will also be shifted to Madras to form part of the new station. It is also proposed to strengthen the research and administrative staff at the Headquarters office and the Regional stations during this year. The four Regional Stations at Madras, Shillong, Poona and Dehra Dun will be developed and placed under the charge of a Deputy Director. Provision has been made for the purchase of land for the construction of buildings for the Headquarters Office at Calcutta and for the Regional Station at Dehra Dun. The Construction of the building of the Regional station at Shillong is also to be taken up during the year.

Anthropological Survey of India

14.34. Besides continuing the research schemes, the following new projects are proposed to be initiated during 1971-72 :

- (1) Establishment of a 'Museum of Man' and four Zonal Anthropological Museums in various parts of the country ;
- (2) Establishment of a Clearing House Unit for collecting research information on the trends of development in anthropology and allied disciplines in the country ;
- (3) Institution of a Fellowship Programme for the grant of a number of Senior and Junior Fellowships to qualified researchers in anthropology ;
- (4) A Visiting Fellowship Programme under which qualified teachers from Universities will be invited to the survey for a period not exceeding two years ;
- (5) Institution of a Collaborative Research Programme in which University Departments shall be given grants-in-aid to carry out research on topics approved by the Survey;
- (6) A programme for the construction of buildings for two Regional Stations and for acquiring land for another Regional Station at a cost of Rs. 10.00 lakhs.

National Atlas Organisation

14.35. Two Field Research Units, one for North India and another for South India have been raised. The North India Unit carried out extensive geo-economic and geomorphological survey of the Ganda-Khadar in the Meerut and Muzaffarnagar districts of Uttar Pradesh, and the South Indian Unit started work on the Gunga-Bhadra dam area. Both the field parties will take up few more field visits for making detailed studies in the current year. Preparation of the "Tourist Atlas of India" will be expedited. The information collected will be incorporated in the standing plates of the

Transport and Tourism series and the work of preparing originals will be started.

National Research Development Corporation

14.36. Besides continuing the work on the existing five developmental projects, (namely, Phthalic Anhydride, Lightning Arresters ; Built-in-Lubrication; Abs and San Plastics; and Fat Liquors & Syntans), two new projects viz., Aleuritic Acid from Sugar and Citric Acid have been sanctioned and the work has already started. The Corporation has at present the following projects under consideration for implementation : manufacture of rennet from fistulated calves, recovery of potassium chloride from distillery waste, manufacture of sponge iron, manufacture of titanium dioxide, manufacture of potassium dichromate, preparation of a feasibility report for verticle shaft kiln, preparation of feasibility report for the manufacture of battery grade manganese dioxide, high pressure metal technology, ethyl cellulose, high yield pulping project, and electronic hygrometer.

14.37. *Aided Scientific Societies and Institutions* : With a view to encouraging scientific research the Ministry is giving grants to scientific research institutes, associations and academies for their maintenance and further development. Some of the important institutes supported under the scheme are the Indian National Science Academy, the Indian Association for Cultivation of Science, Bose Institute, Maharashtra Association for Cultivation of Science, Birbal Sahni Institute of Palaeobotany, Institute of Himalayan Geology and the Indian Science Congress Association. Assistance to these institutions will continue to be given during 1971-72.

II. NATURAL RESOURCES

Forest Resources

14.38. The scheme of Pre-Investment Survey of Forest Resources is to be continued in the Fourth Plan to cover a total area of about 85,000 sq. kilometers of forests at an estimated cost of Rs. 152 lakhs. Field

work has already been completed in parts of Jammu and Kashmir, Andhra Pradesh and Maharashtra. The programme will be extended during 1971-72 to cover further forest areas. It is also intended to conduct a rapid survey in the forest areas of the Eastern Zone comprising of Assam, Meghalaya, Nagaland, Manipur, Tripura and NEFA.

14.39. Special efforts will be continued to assess the forest resources in different natural regions based on the available information in the Working Plans and other sources. The current programmes of forest development are to be intensively studied and critically evaluated to find out in which directions these may be orientated, particularly to provide additional raw materials for the forest industries and additional gainful employment.

Mineral Resources

Minerals Survey and Investigations

14.40. The Geological Survey of India, including the Air-borne Minerals Survey and Exploration Unit, the Indian Bureau of Mines, the Department of Atomic Energy, Oil and Natural Gas Commission and the State Directorates of Geology and Mining would continue work on mineral exploration and investigation as in the previous year.

Geological Survey of India

14.41. The Geological Survey of India will carry out its usual work of mapping, mineral investigation, groundwater investigation, geo-technical investigation and research. In the mineral investigation field, the work was again organised in seven groups, as Ferrous, Non-Ferrous Strategic, Precious, Fertilizer, Non-metallic and Coal, with higher priority for non-Ferrous and Phosphorites; also search for potash evaporates was given special attention. Geo-physical and geo-chemical investigations and drilling were to assist geological mapping, wherever necessary. Marine geological studies for search of off-shore minerals were given more attention. Geo-seismological studies assisted by photo-geological interpretation, geo-physical survey and structural

mapping would also be undertaken. Airborne mineral survey unit would attend to about 2,200 anomalies for reconnaissance and 300 anomalies for detailed ground studies, for which about 7,800 metres of drilling is estimated to be required. In addition, regional geo-chemical reconnaissance is also planned.

Indian Bureau of Mines

14.42. The Indian Bureau of Mines will undertake 21 detailed studies of important mines and 60 regional studies of regional areas.

Oil and Natural Gas Commission

14.43. Oil and Natural Gas Commission plans to bring about 1.79 lakhs of metres during the ensuing year.

State Directorates of Geology and Mining

14.44. All the State Directorates will continue their investigations in different areas, the more important of which are the investigation of phosphates in Rajasthan and bauxite and lignite in Gujarat.

Groundwater Investigations

14.45. The Geological Survey of India and the Exploratory Tubewell Organisation will conduct groundwater investigations. The major work of G.S.I. will be mostly river-basin oriented. In addition, they will undertake 159 investigations, where necessary, assisted by drillings. More hydrograph stations, specially in the areas suffering from chronic water shortage would be established. The Exploratory Tubewell Organisation expect to conduct about 350 investigations, out of which about 170 will be of the nature of exploratory hole. In addition, they have got some special programmes and comprehensive water resources studies in Narvada basin. Some of these studies would be undertaken with USAID and UNDP assistance.

CHAPTER 15

ENERGY DEVELOPMENT

Investigations and Studies

Energy production and supply are being concurrently dealt with by the Centre, states and private sectors. Development programmes are undertaken by a multitude of organisations both in the public and private sectors. The outlay provided for different projects in the public sector may be referred to in the Chapters on Power and Industry and Minerals under electricity, coal, oil, nuclear energy etc. Investigations and studies proposed to be carried out during the year for planning sub-sectors of energy are detailed out below:

Energy Producing Sectors

Power

15.2. Power Economy Committee set up under the aegis of the Ministry of Irrigation and Power completed its report in March, 1971. The recommendations of the Committee are being examined with a view to their implementation. One of the recommendations of the Power Economy Committee is to reorganise the Central Electricity Authority to make it more effective in the use of its statutory powers. Actions are being initiated in this direction.

15.3. A Decade Plan (1971-81) for Power Development has been prepared. Details of projects and their phasing are being worked out to initiate advance action for the Fifth Plan. Particularly, action to ensure adequate field investigations and timely delivery of plant and equipment is already in hand.

15.4. The Seventh Annual Power Survey at present under-way to reassess and update the demand for electricity over the next five years is

different regions as well as in the country as a whole is expected to be completed during the year.

15.5. The manufacturing programme of heavy electrical equipment to sustain the required power development during the Fifth Plan period will also be examined with a view to achieve proper phasing and coordination.

15.6. A study undertaken last year on the relative economics of transportation of coal vis-a-vis transmission of power to the consuming centres away from the coal fields is expected to be completed during the year.

Petroleum

15.7. Under the Ministry of Petroleum and Chemicals a special cell is to be set up for the purpose of analysing the past consumption trends and for projecting the anticipated requirements of the petroleum products covering the decade till 1980-81. Short-term forecasts will be made by the cell for supply arrangements; medium range forecasts will be for planning imports, exports and trade; and long-term forecasts will be for planning refineries' capacity, their locations and product pattern.

Coal

15.8. A techno-economic study on the feasibility of hydrogenation of coal to obtain crude petroleum and its products undertaken last year by the Central Fuel Research Institute is expected to be completed during the year. Re-grading of coal on the basis of its calorific value is being considered by the Fuel Efficiency Committee set up by the Ministry of Steel & Mines. Studies in this connection are expected to be completed during the year.

Atomic Energy

15.9. A Committee on the selection of future sites for the nuclear power generation set up by the Department of Atomic Energy is expected to complete its report during the year. Also further studies will be carried

out on the development of Agro-industrial complexes based on generation of atomic energy.

Non-Commercial Energy

15.10. 19th and 22nd round National Sample Survey Data are being processed and estimates of all-India and Statewise consumption of non-commercial fuels such as firewood, agricultural wastes and dung will be made based on these computer studies.

Energy Consuming Sectors

Agriculture

15.11. For estimating energy requirements in the agricultural sector a scheme for controlled experimentation under different agro-climatological conditions in different parts of the country has been included in the Fourth Five Year Plan at an estimated expenditure of Rs. 14.05 lakhs. The objective is to find out different levels of energy requirements for a few of the important cropping rotations which are possible under Indian conditions. The results of the study will help determining the desirable rate of mechanisation of Indian agriculture and the corresponding demand for different categories of arm machinery and forms of energy, such as diesel, oil, electricity etc. and the employment opportunities that will be created in the form of rural industries for the maintenance and repair of these equipment. A provision of Rs. 1.02 lakhs has been made for the scheme in the Annual Plan for 1971-72.

Transport

15.12. A study on the comparative economics of railway traction using coal, diesel oil and electricity which is already on hand in collaboration with the Railway Board is expected to be completed this year. On the basis of the results of this study a critical examination of the future dieselisation and electrification programmes of the railways will be made.

Industry

15.13. A study will be undertaken on the energy requirements in different energy intensive industries with a view to develop norms for the consumption of energy in its various forms such as power, coal, petroleum etc.

Domestic and Rural

15.14. To gradually eradicate the evil of heavy consumption of fire-wood and dung as domestic fuel, a proposal for the setting up of distribution facilities for soft coke, coal etc. in different regions was initiated last year through the Zonal Councils. The proposal will be pursued further during the year with a view to formulating a concrete programme.

CHAPTER 16
HEALTH AND FAMILY PLANNING

L HEALTH

A provision of Rs. 74.14 crores has been made for Health programmes for 1971-72 as against the anticipated expenditure of Rs. 66.78 crores during 1970-71. The distribution of outlays as between Centre, States and Union Territories are given below :

TABLE 16.1. Outlay on Health Programmes by Centre, States and Union Territories

Sl. no.		1970-71 anticipated expenditure	1971-72 Plan Outlays
(0)	(1)	(2)	(3)
1	centre	7.82	8.56
2	centrally sponsored	27.28	27.03
3	states	27.91	35.16
4	union territories	3.77	3.39
		66.78	74.14

16.2. *The programme-wise distribution of the outlay is as follows :*

TABLE 16.2 : Distribution of Outlay on Health by Different Programmes
(Rs. crores)

sl.no.	programme	1971-72 Plan outlay
(0)	(1)	(2)
1	medical education and research	16.28
2	training programmes	1.73
3	control of communicable diseases	23.80
4	hospitals and dispensaries	17.63
5	primary health centres	7.82
6	indigenous systems of medicine	3.00
7	other programmes	3.88
	<i>total</i>	74.14

Control of Communicable Diseases

16.3. An outlay of Rs. 15.45 crores has been allocated for the national malaria eradication programme as against the budgeted estimate of Rs. 14.69 crores for 1970-71. As per the phasing of the programme, 100.029 units would be in the attack phase, 67.425 units in the consolidation phase and the remaining 225.796 units in the maintenance phase. Thus, excluding 15 million people residing in high altitude areas having no malaria transmission problem, 24 per cent of the population would be in attack phase areas, 17 per cent in consolidation phase areas and 59 per cent in the maintenance phase areas. Besides, the anti-larval operations in certain urban areas being carried out by the local bodies would be intensified and a plan provision of Rs. 0.25 crore has been made for this purpose.

16.4. Emphasis would continue to be placed on primary vaccination of the new borns, clearance of the backlog in primary vaccination and revaccination of the selected groups of population under the national small-pox eradication programme. An outlay of Rs. 2.94 crores has been made for grants-in-aid to the States/UTs towards the additional staff appointed since 1-4-1969 and also for the cost of the small-pox vaccine which would be supplied free to the States and Union Territories. In addition, four freeze dried vaccine manufacturing institutes in the country would be further developed to increase their production capacity. The WHO and UNICEF have agreed to supply machinery and equipment for this purpose.

16.5. Under the national TB control programme, 34 TB clinics and 910 TB isolation beds would be established during the year. Besides anti-TB drugs would be supplied free to the voluntary agencies engaged in the control of the disease and for the expansion of the State TB clinics. 40 new BCG teams will be set up during the year bringing the total number of such teams to 287. The BCG Vaccine Laboratory, Guindy, supplies vaccine and tuberculin dilutions required for TB control programme. During 1971-72 the production of freeze dried vaccine is expected to go upto 50 million doses sparing some surplus for the neighbouring countries.

16.6. Filaria control units numbering 34 will be set up in 1971-72. Free supply of material and equipment will continue to be provided to the existing 69 Filaria control units functioning in urban areas and covering a population of 7 million. Rajasthan is proposed to be surveyed by the Central Survey Team to find out the population exposed to risk of filariasis. The filariasis training centres at Calicut, Rajmundry and Varanasi will continue their normal training programme.

16.7. Under the leprosy control programme, 23 leprosy control units and 115 Survey Education and Treatment (SET centres) are to be established during 1971-72. Training will continue to be imparted to the medical officers and non-medical personnel at the Central Leprosy Teaching and Research Institute, Chingleput, Tamil Nadu.

16.8. Under the trachoma control programme, antibiotic ophthalmic ointment will be procured by the Centre and supplied free in the rural areas through the primary health centres. The programme has so far covered 497 C.D. blocks in the country.

16.9. For control of VD, 15 VD clinics will be set up which will bring the total number of VD clinics to 294 by 1971-72.

16.10. Cholera is endemic in 54 districts situated in the States of Andhra Pradesh, Bihar, Maharashtra, Orissa, Mysore, Tamil Nadu and West Bengal. As per the scheme formulated by the Ministry of Health and Family Planning, special cholera workers will be appointed in selected endemic blocks of the affected districts for which grants will be given to the State Governments. A plan provision of Rs. 0.15 crore has been made for the year under the Centrally sponsored sector.

Medical Education, Training and Research

16.11. There are 95 medical colleges in the country with an annual admission capacity of about 12,000. During 1971-72 no new medical college has been proposed to be established by the State Governments/ Union Territories. However, it is proposed to conduct feasibility survey for starting a medical college in the north-eastern region. Some spade

work for starting a medical college at Jammu is being done by the Jammu and Kashmir Government. Funds have been provided in the State Plans for improvement of the existing medical colleges. Funds for further development of the existing post-graduate Training and Research Institutes at Chandigarh, Pondicherry, Delhi and Calcutta have been provided. To meet the growing demand for teachers and specialists in medical colleges and hospitals 10 departments would be upgraded during the year 1971-72. A Plan provision of Rs. 2.20 crores has been made for the Indian Council of Medical Research.

16.12. The schemes pertaining to training of nurses and other para-medical personnel have been included in the State Sector for which the States are providing funds in their plans. The training of physio-therapists, occupational therapists and prosthetic technicians is a centrally sponsored scheme under which the States would depute their nominees for training and the trainees would be given stipends by the Central Government.

Hospital Beds

16.13. During 1971-72, 3625 additional beds are likely to be established of which about 1500 would be located in rural areas. The Central Government Health Scheme is proposed to be extended to Kanpur, Meerut, and Calcutta during the year. Assistance will continue to be given to the Cancer Institute, Madras and Chittaranjan National Cancer Research Centre, Calcutta towards the research in cancer.

16.14. To control goitre, which is endemic in the sub-Himalayan belt, iodised salt would continue to be supplied from the iodisation plants installed at Sambhar lake (Rajasthan), Kharaghoda (Gujarat) and Calcutta.

Primary Health Centres

16.15. At the commencement of the Fourth Five Year Plan 4919 primary health centres were functioning in the country and a target of establishing 508 primary health centres covering 340 blocks which did not have a primary health centre has been set up for the Fourth Five Year

Plan so that there is at least one primary health centre in each block. By December, 1970, 308 primary health centres were yet to be established. During 1971-72, it is proposed to establish 39 primary health centres.

Indigenous Systems of Medicine

16.16. The research schemes under Indigenous Systems of Medicine and Homoeopathy are being implemented under the Central Council for Research in ISM and Homoeopathy which started functioning from October, 1969. During 1971-72, 8 departments would be upgraded for which a provision of Rs. 18 lakhs has been made under the Centrally sponsored sector. A Statutory Council for the regulation of practice and training in those systems is likely to be constituted under the Act passed by the Parliament.

Other Programme

16.17. For ensuring a uniform and effective enforcement of the Drugs and Cosmetic Act and allied legislation in the country, 4 zonal offices have already been established at Bombay, Calcutta, Madras and Ghaziabad, and these offices will be further strengthened with staff. The Central Indian Pharmacopoeia Laboratory, Ghaziabad will provide testing facilities to various State Governments in respect of the pharmacopoeial items. It is proposed to create a microbiological unit at the Central Food Laboratory Calcutta which is an appellate laboratory dealing with very large number of samples. Its existing research and standardisation units will be strengthened. An outlay of Rs. 3.66 crores has been provided for the above programmes.

16.18. Targets for some of the important health programmes for 1971-72 along with the position at the end of 1970-71 are given in Table 16.3.

TABLE 16.3 : *Selected Achievements and Targets*

S. No.	item	Estimated position by 1970-71	Targets for 1971-72 (additions)
(0)	(1)	(2)	(3)
1	beds	2,66,200	3625
2	primary health centres	5,092	39
3	medical colleges	95	—
4	annual admissions	11,800	—
5	dental colleges	15	—
6	admissions (dental colleges)	680	—
7	national malaria eradication programme (phasing)		
	attack phase	105.259	100.029
	consolidation phase	68.225	67.425
	maintenance phase	219.766	225.796
		393.250	393.250
8	T.B. clinics	521	40

II. FAMILY PLANNING

16.19. In the Fourth Five Year Plan, Family Planning programme has been given a very high national priority. The objective set out for the programme is the reduction of the birth rate from 39 per thousand in 1968-69 to 32 per thousand by 1973-74. By 1980, the birth rate is expected to fall to 25 per thousand as per the targets laid down. A provision of Rs. 60.60 crores has been made for the programme during the year as against an outlay of Rs. 52.00 crores and an expenditure of Rs. 47.24 crores during 1970-71. Of the proposed outlay, Rs. 54.82 crores will be allocated to the States and Union Territories and the remaining Rs. 5.78 crores have been set apart for Central expenditure on the programme.

TABLE 16.4 : *Outlay on Family Planning Programme*

(Rs. lakhs)

Sl. no.	programme	centrally sponsored			total
		states	union territories	centre	
(0)	(1)	(2)	(3)	(4)	(5)
1	service	4916.10	48.14	176.48	5140.72
2	training	175.20	2.25	46.11	223.56
3	mass education	185.75	3.60	158.35	346.70
4	research	15.81	0.15	143.78	159.74
5	organisation	71.40	6.82	53.52	131.74
6	maternal and child health	58.00	—	—	58.00
	<i>total</i>	5421.26	60.96	578.24	6060.46

Services

16.20. In addition to the continuation of 1812 urban family welfare planning centres, 5162 rural family welfare planning centres and 30795 sub-centres (16,557 from family planning budget), 200 rural family welfare planning centres and 1,000 sub-centres will be established during 1971-72. It is proposed to provide each rural health centre with at least one vehicle either from UNICEF or family planning budget. Till 31.3.71, 2317 vehicles from UNICEF and 1000 vehicles from the family planning budget have been supplied to the primary health centres. For 1971-72, provision has been made for the supply of 1,900 additional vehicles for PHCs including 400 vehicles ordered during 1970-71.

16.21. Priority will be given to the construction of buildings for rural centres and sub-centres and provision for the construction of an additional 800 rural family welfare planning centres and 3165 sub-centres has been made.

16.22. The second doctor for family planning has not yet been posted

in about 2950 RFWPCs. About 900 centres have no extension educator. There is a considerable shortage of staff at supervisory levels. Against a requirement of 5162 LHV's, only 1606 are in position from the family planning budget for the existing centres. Out of a total requirement of 60,000 ANMs, there are only 30,000 available till 31.3.71. 305 ANM schools with a total annual intake of 7100 students will continue to function. Out of the proposed 25 new ANM Schools to be opened during the Fourth Plan, 14 have already been opened and the remaining are expected to start functioning during 1971-72. In certain States there is a surplus of ANMs whereas in the States of Bihar, Orissa and Uttar Pradesh, there is a shortage. Out of a required 20648 family planning health assistants, only 13489 are in position. During the year 1971-72, endeavour would be to overcome the shortage of staff so that the family planning centres and sub-centres function effectively.

16.23. Against an expectation of 2.6 million sterilisation and 0.9 million IUCD insertions as mentioned in the Annual Plan document of 1970-71, the achievement was 50.3 per cent and 52.1 per cent respectively. During the year 1971-72, the expectation in performance is about 2.1 million sterilisation and 0.83 million IUCD insertions. Increased demand for female sterilisation has been observed and Tubectomy operations constitute nearly 34 per cent of the total sterilisations carried out during 1970-71. During 1971-72, this trend is also expected to continue and the necessary infrastructure for this purpose would be provided. In addition to the 59 posts-partum Centres sanctioned during 1969-70, another 63 centres have been sanctioned during 1971-72. 3510 sterilisation beds have been provided in the various States at the beginning of the current year and it has also been proposed to establish a number of additional sterilisation beds in the districts and taluka hospitals from the family planning budget. The post-partum programme will intensify family planning activity among the women who come to the hospitals or the maternity homes for child birth abortion.

16.24. Out of the 456 Oral Contraceptive Pilot Projects approved so far, 317 projects have been commissioned. 267 projects were reporting. The 50 projects which were not reporting have been closed. Instructions

have also been issued that no further pill project will be opened till the study currently under progress is finalised and the results are known. As it is necessary to know the use effectiveness for a period of three years continuous use, it was further decided to continue only these centres which have been in existence for more than 18 months to enable useful study to be carried out with a limited stock. The distribution of Condom (Nirodh) has also shown remarkable progress. In the year 1970-71, a total of 142.02 million pieces were distributed out of which 52.69 million pieces were distributed through the commercial channels. During the year 1971-72, the target in respect of conventional contraceptives is 3.83 million users.

16.25. Out of the 17 intensive districts sanctioned, 16 were functioning during 1970-71. However, it was reported that 37.5 per cent of the technical posts under the normal pattern and 55.0 per cent under the intensive district pattern were vacant. Similarly, at the rural level, 49.3 per cent of the posts required for primary health centres and sub-centres were vacant and 66.4 per cent of the posts required for family planning centres in urban in areas were also vacant. The construction programme in the intensive districts had also progressed at a very slow pace. During 1971-72, the deficiencies in respect of staff of as well as construction of annexes to primary health centres and sub-centres are expected to be partly made up. Preliminary work in the 17 districts to be selected for the second phase under the Intensive District Scheme will also be taken up during the year.

Training

16.26. The 5 Central Institutes and the 44 Regional Family Planning Training Centres which are already in existence will continue to function. During 1970-71, there was considerable under-utilisation of the training facilities. 5 family planning training centres are without rural or urban field practice areas. During 1971-72, these deficiencies are expected to be corrected. Seven buildings for Regional Family Planning Training Centres are under construction and will be completed during the year, bringing the total of Regional Family Planning Training Centres with their own buildings to 19.

Mass Education

16.27. A programme for the inclusion of population dynamics in the curricula of middle and higher secondary classes has been drawn up. To begin with, it is proposed to undertake orientation of teachers in Teachers Training Institutes, as also the publication of the required test book material. Attempts will be made through new methodologies and approaches during the current year to further bridge the gap between the awareness of family planning and its acceptance.

16.28. It is also proposed to utilise, in a better manner the audio-visual vans, wall paintings and boardings. The use of traditional media such as dramas, kathas and jatras to propagate the message of family planning will also be stepped up. The importance of involving local leadership in the programme has been recognised.

Research and Evaluation

16.29. The Indian Council of Medical Research will continue to sponsor with financial support from Government research projects in fields like reproductive biology and fertility control. The Council would also undertake an evaluation of the various types of contraceptives with a view to testing their effectiveness, acceptability and after effects. Under the overall guidance and supervision of the National Institute of Family Planning, the various Demographic and Communication Action Research Institutes will continue their research work.

16.30. Concurrent evaluation of the programme will also be undertaken by the Evaluation and Intelligence wing of the Department of the Family Planning and the Demographic and Evaluation Cells of the State Family Planning Bureaux. The strengthening of the existing demographic and evaluation cells and the establishment of these cells in the States of Madhya Pradesh, Mysore, Kerala Jammu and Kashmir will also be undertaken during 1971-72. It is also proposed to extend target couple registers during the current year in all the PHCs and urban centres. Efforts will be made to keep these registers upto-date.

Maternal and Child Health

16.31. Outlays have been provided for Maternal and Child Health Programmes. A provision of Rs. 10 lakhs provided during the current year seeks to protect about 13 lakhs children with triple immunisation and nearly 2 lakhs pregnant mothers against tetanus. The scheme of control of blindness among children caused by Vitamin A deficiency has an outlay of Rs. 8 lakhs to cover 24 lakhs children. There is a provision of Rs. 40 lakhs for the scheme of prophylaxis against nutritional anaemia among mothers and children. This would benefit nearly 36 lakhs women and children.

16.32. The States procure the vaccines out of the funds allocated to them for implementation of the schemes. Iron and folic acid tablets and Vitamin A solution are procured Centrally by the Department of Family Planning and distributed to the States.

CHAPTER 17

HOUSING, URBAN DEVELOPMENT AND WATER SUPPLY

I. HOUSING AND URBAN DEVELOPMENT

A provision of Rs. 54.26 crores has been made for housing and urban development programmes during 1971-72. Distribution of Plan expenditure and outlay between Centre, States and Union Territories is given below:

TABLE 17.1: *Plan Expenditure and Outlay on Housing and Urban Development*

(Rs. crores)—

	1970-71 (expenditure)			1971-72 (outlay)		
	housing	urban	total	housing	urban	total
	development	development		development	development	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
centre	8.55	0.15	8.70	8.61	0.16	8.77
states	26.36	9.82	36.18	25.74	14.90	40.64
union territories	1.94	2.04	3.98	2.94	1.91	4.85
<i>total</i>	36.85	12.01	48.86	37.29	16.97	54.26

The provision under housing is inclusive of a sum of Rs. 12 crores of L.I.C. Loans to States.

17.2. The State-wise allocations under housing and urban Development are given in Annexure 17.1. In the case of a few States, because of the inter-linked scope of housing and urban development schemes, outlays on urban development schemes have been included under housing.

States and Union Territories

17.3. The scheme wise break up of the outlay on housing has not been indicated by all the States. However, subject to Plan provision made by States, special attention during the year is proposed to be given to schemes of slum clearance and improvement in metropolitan areas like Madras, Calcutta and Bombay. The Tamil Nadu Government has

recently constituted a Slum Clearance Board for tackling the problem in a large-scale in Madras city. Similarly, the Calcutta Metropolitan Development Authority has undertaken a massive bustee improvement scheme in the Calcutta Metropolitan Area. The Maharashtra Government has also undertaken a similar programme in the Bombay Metropolitan Area. In Delhi, the problem is tackled in two ways, namely, the rehabilitation of pavement dwellers under the scheme for the removal of Jhuggis and Jhonpris and resettling them on caping sites of 25 square yards and through a programme for the clearance and improvement of congested katras. These programmes will be strengthened.

17.4. The State Governments would also be paying larger attention during the year to the problem of providing house-sites for landless agricultural labour in rural areas and protection of tenancy rights on existing homesteads. The Ministry of Works and Housing is formulating a new scheme for the purpose. Provision has also been made for other schemes like low income group and middle income group housing and industrial housing schemes.

Central Sector

17.5. List XII on the Appendix indicates the provision for the various schemes in the Central sector for 1971-72. Out of a total provision of Rs. 8.61 crores for housing schemes in the Central sector, Rs. 2 crores have been provided for contribution towards share capital for the Housing and Urban Development Finance Corporation as in the previous year. The Corporation is arranging for more funds from L.I.C., Unit trusts, etc. to finance housing and urban development programmes promising a quick turnover. A provision of Rs. 5.7 crores has been made for office and residential accommodation for Central Government employees to be mostly utilised for continuing works. A provision of Rs. 17 lakhs has been made for the dock labour housing scheme and Rs. 50 lakhs for plantation labour housing schemes. The latter will be taken-up mostly in Assam and West Bengal. Provision has also been made for the continuing schemes of the National Buildings Organisation for experimental construction to evolve cheaper methods and materials and also for collection of housing statistics.

A provision of Rs. 15 lakhs constituting the balance of the amount provided under the Fourth Five Year Plan as loan to the Madras Government for the cellular concrete plant at Ennore has been made.

Urban Development

States Sector

17.6. The provisions under urban development in the Plans of States and Union Territories are for the continuing programmes of preparation of Master Plans, financial assistance to local bodies for implementation of urban development schemes, etc. One of the important programmes undertaken in the States relate to the twin city project of the Maharashtra Government under which a new Metro Centre adjacent to Bombay city is being created to relieve the congestion on the existing city. For this a provision of Rs. 1.6 crore for land acquisition and development has been made by the Maharashtra Government in its State Plan. For the Calcutta Metropolitan area, a provision of Rs. 8.90 crores has been made in the West Bengal Plan for the execution of schemes on water supply and drainage, transport, bustee improvement and clearance etc. Programmes for C.M.D. are also being supplemented to a great extent through Non-plan provision.

17.7. Besides the above schemes, special provision have been made in the respective State Plans for the State Capital works for the following cities:

	(Rs. lakhs) <i>provision in the annual Plan</i>
Gandhinagar (Ahmedabad)	500.00
Bhubaneswar (mostly for residential accommodation to Govt. employees)	57.00
Bhopal	115.00
Chandigarh	120.00

Central Sector

17.8. In the Central sector out of the total provision of Rs. 15.76 lakhs, Rs. 10 lakhs have been provided for the preparation of inter-state

regional Plans and the National Capital Regional Plan by the Town and Country Planning Organisation. The balance of Rs. 5.76 lakhs is for training and research in local self-government by way of grants to the five training centres situated at Delhi, Bombay, Lucknow, Hyderabad and Calcutta.

II. WATER SUPPLY AND SANITATION

17.9. The Annual Plan for 1971-72 provides a total outlay of Rs. 83.80 crores for water supply and sanitation. Sectorwise distribution is given below with relevant expenditure figures for 1970-71.

TABLE 17.2: *Expenditure and Outlay on Water Supply and Sanitation Schemes*

	(Rs. lakhs)	
	1970-71 expenditure	1971-72 outlay
(1)	(2)	(3)
A. state sector	7141.52	8232.25
1. states	6421.23	7351.00
2. union territories	720.29	881.00
B. central sector	52.15	147.45
3. centrally sponsored scheme	40.00	119.00 ¹
4. central schemes	12.15	28.45
<i>total</i>	7193.67	8379.70

¹ Work programme of the order of Rs. 85.00 lakhs has been approved by the Planning Commission and the balance yet to be approved

A. State Sector

17.10. Out of the total provision of Rs. 82.32 crores for the State and Union Territories, urban water supply and sanitation accounts for Rs. 53.12 crores and rural water supply for Rs. 29.20 crores. The break up for States and Union Territories is given in the Annexure 17.2.

17.11. In the urban sector, the physical programme as proposed by some States and Union Territories is to increase the water supply by 26.5 mgd. in corporation towns and to provide protected water supply to 111 additional towns and sewerage to 20 more towns. On the rural side, proposals are expected to cover 6,630 more villages by piped water supply and 12,834 more villages by simple measures like construction or renovation of wells.

Urban Water Supply and Sanitation

17.12. Some of the major schemes included are the following:

1. Hyderabad Water Supply Scheme—(Manjira Project—Phase II)—Andhra Pradesh.
2. Ranchi Water Supply Scheme—(Getalsud Project)—Bihar.
3. Ahmedabad Water Supply Scheme—(Dharoi Dam Project)—Gujarat.
4. Water Supply and Sewerage to Cochin Development Area—Kerala.
5. Augmentation of Bombay Water Supply—(Bhatsai Project)—Maharashtra.
6. Greater Shillong Water Supply Scheme—Meghalaya.
7. Bangalore Integrated Water Supply and Sanitation Scheme—Mysore.
8. Cuttack Sewerage Scheme—Orissa.
9. Augmentation of Madras City Water Supply—(Veeranam Project)—Tamil Nadu.
10. Improvement of Water Supply at Port Blair—(Dhanikhari Reservoir)—Andaman and Nicobar Islands.
11. Augmentation of Delhi Water Supply—(related to Ramganga Project, U.P.)—Delhi.
12. Opa Water Supply Scheme—Goa.

17.13. Water Supply, sewerage and drainage in Calcutta Metropolitan Development Area is an integral part of the Schemes for the development of Calcutta Metropolitan District under urban development sector.

17.14. Besides accelerating the work of continuing schemes towards

their early completion, several new water supply schemes are also proposed to be taken up.

17.15. To supplement resources for urban water supply and sanitation schemes, the States propose to take loans from the Life Insurance Corporation of India. Of these loans Rs. 14.62 crores are included in the approved plan resources. Evidently, more loans will be attempted to be taken by the States outside the Plan.

17.16. The programme for conversion of dry latrines into sanitary ones had not made sufficient progress in the various States during the past two years of the Fourth Five Year Plan. This is proposed to be substantially accelerated especially in areas where sewerage is not likely to be provided in the foreseeable future.

Rural Water Supply and Sanitation

17.17. The progress of expenditure in respect of rural water supply and sanitation schemes by States and Union Territories for the first three years of the Fourth Five Year Plan is given below:

TABLE 17.3: *Expenditure on Rural Water Supply and Sanitation*

(1)	(Rs. lakhs)		
	1969-70 (expenditure)	1970-71 (anticipated expenditure)	1971-72 (outlay)
	(2)	(3)	(4)
1 States	1872.65	2528.77	2815.84
2 union territories	71.34	99.92	69.00
<i>total</i>	1943.99	2628.69	2874.84

The provision for rural water supply will also cover the "well construction programme" which in some States is executed through the Community Development Department. The programme is also supplemented to some extent by provisions made for this purpose under Welfare of Backward Classes. The work for rural water supply is mainly proposed to be carried out in permanently disadvantaged and backward areas.

B. Central Sector

17.18. In the Central sector, a total provision of Rs. 147.45 lakhs has been made for 1971-72 against an actual expenditure of Rs. 38.84 lakhs in 1969-70 and anticipated expenditure of Rs. 52.15 lakhs in 1970-71.

Centrally Sponsored Scheme

17.19. There is only one Centrally sponsored scheme, namely, the establishment of Special Investigation Divisions in the State Public Health Engineering Departments for investigations, assessment of problems of rural water supply schemes and identification of the scarcity-hit and difficult areas. It is proposed to intensify this work during the 1971-72 and the remaining years of the plan to obtain a more reliable picture regarding the availability, exploration and exploitation of underground water sources which is one of the major difficulties in tackling the problem of rural water supply. A provision of Rs. 119 lakhs has been made for 1971-72 as against the actual expenditure of Rs. 36.14 lakhs for 1969-70 and anticipated expenditure of Rs. 40.00 lakhs in 1970-71.

Central Schemes

17.20. A provision of Rs. 25 lakhs has been made for handling, assembling, testing and local transporting of high-speed drilling rigs being received as UNICEF assistance for use in the various States to exploit ground water sources in hard rock areas.

17.21. A sum of Rs. 2.45 lakhs has been provided for training in Public Health Engineering. The Post-Graduate training is assisted in the institutions at Calcutta, Bombay and Roorkee and undergraduate training is organised from time to time in different States. Under-graduate courses include training of water works supervisors, well drillers, water and sewage analysts and sewage and industrial plant supervisors. These are directly run by the Central Public Health Engineering Organization of the Ministry of Health, Government of India.

17.22. Necessary legislation for the establishment of prevention of water pollution boards at the Central and State levels is before the Parliament. For the year 1971-72, a provision of Rs. 1 lakh has been made for a Central Board proposed to be created after necessary enactment.

17.23. The details of physical programme for 1971-72 are given in Annexure 17.3.

ANNEXURE 17.1

Outlays for 1971-72—Housing and Urban Development in the States and Union Territories

(Rs. lakhs)

sl. no.		housing		urban development	
		1970-71 anticipated expenditure	1971-72 outlay	1970-71 anticipated expenditure	1971-72 outlay
(0)	(1)	(2)	(3)	(4)	(5)
1	Andhra Pradesh	44	169	28	40
2	Assam	15	27	32	43
3	Bihar	124	130	15	20
4	Gujarat	100	180	8	10
5	Haryana	51	50	—	—
6	Himachal Pradesh	3	40	3	43
7	Jammu and Kashmir	60	50	17	15
8	Kerala	134	110	29	29
9	Madhya Pradesh	134	250	14	10
10	Maharashtra	590	320	43	240
11	Mysore	176	180	1	
12	Nagaland	10	20	12	28
13	Orissa	133	150	24	23
14	Punjab	85	74	10	14
15	Rajasthan	123	117	1	5
16	Tamil Nadu	371	325	39	40
17	Uttar Pradesh	270	260	1	30
18	West Bengal	214	120	701	8904
19	Meghalaya	2	2	10	10
	<i>total : (states)</i>	2636	2574	982	1490

ANNEXURE 17.1 (contd.)

(0)	(1)	(2)	(3)	(4)	(5)
	<i>union territories</i>				
1	Andaman & Nicobar	2.40	3.83	—	—
2	Chandigarh	4.00	2.50	1	1
3	Dadra and Nagar Haveli	1.35	1.90	—	—
4	Delhi	140.09	250.34	181.00	172.00
5	Goa, Daman and Diu	11.30	15.00	3.55	0.06
6	Himachal Pradesh	10.00	¹	13.46	²
7	Laccadive Islands	0.05	0.10	—	—
8	Manipur	3.50	4.25	2.21	3.22
9	NEFA	—	—	—	—
10	Pondicherry	19.04	12.90	1	7.46
11	Tripura	2.50	3.00	3.61	8.00
12	<i>total : (union territories)</i>	194.23	293.82	203.83	190.74
	<i>grand total</i>	2830.23	2867.82	1185.83	1680.74

¹ Included under Housing.

² Included under States.

³ Included under Union Territories.

⁴ Includes Rs. 878 lakhs for C.M.D.P.

ANNEXURE 17.2

Annual Plan 1971-72—Water Supply and Sanitation

(Rs. lakhs)

sl. no.	state/union territory	anticipated expenditure 1970-71		outlay 1971-72	
		TWS	RWS	TWS	RWS
(0)	(1)	(2)	(3)	(4)	(5)
A. state sector					
1	Andhra Pradesh	204.75	159.75	385.00	123.00
2	Assam	81.85	19.09	123.00	40.30
3	Bihar	351.99	116.99	335.00	90.00
4	Gujarat	285.00	145.00	365.00	255.00
5	Haryana	240.00	155.00	290.00	161.60
6	Himachal Pradesh*	—	—	74.00	54.00
7	Jammu and Kashmir	152.00	96.01	195.00	110.00
8	Kerala	415.00	40.00	557.00	59.00
9	Madhya Pradesh	350.90	160.80	400.00	200.00
10	Maharashtra	1836.70	636.70	1700.00	500.00
11	Meghalaya	41.00	37.00	42.00	22.00
12	Mysore	475.00	300.00	550.00	230.00
13	Nagaland	58.00	17.79	72.00	30.00
14	Orissa	94.00	27.00	135.00	25.00
15	Punjab	145.00	105.00	220.00	110.00
16	Rajasthan	430.00	200.00	583.00	355.00
17	Tamil Nadu	663.14	117.64	750.00	169.94
18	Uttar Pradesh	460.00	152.00	465.00 ^a	235.00
19	West Bengal	136.00	43.00	110.00	46.00
	<i>total—states</i>	6421.23	2528.77	7351.00	2815.84
20	Andaman Nicobar Island	82.34	6.00	93.76	3.60
21	Chandigarh	1.67	1.67	0.50	0.50
22	Dadra and Nagar Haveli	2.00	—	2.00	2.00
23	Delhi	415.00	10.00	603.00	75.00
24	Goa	105.41	2.90	130.00	5.40
25	Himachal Pradesh ¹	64.50	64.50	—	—
26	Laccadive Islands	—	—	—	—

ANNEXURE 17.2 (contd.)

(0)	(1)	(2)	(3)	(4)	(5)
27	Manipur	10.98	4.25	12.50	6.00
28	NEFA	11.49	5.87	6.00	3.00
29	Pondicherry	21.48	2.23	26.29	6.00
30	Tripura	5.42	2.50	7.20	2.50
	<i>total-union territories</i>	720.29	99.92	881.25	104.00
	<i>grand total</i>	7141.52	2628.69	8232.25	2919.84
B.	<i>central sector</i>	52.15		147.45	
	1. centrally sponsored	40.00		119.00 ¹	
	2. central schemes	12.15		28.45	
	<i>grand total</i>	7193.67		8379.70	

¹ Approved by Planning Commission Rs. 85 lakhs only (subject to work programme).

² Figures for Himachal Pradesh included under union territories for 1969-70 and for 1970-71 but under states for 1971-72.

³ This does not include Rs. 55.00 lakhs provided for Uttarkhand water supply schemes. Figures for 1969-70 and for 1970-71 include expenditure on Uttrakhand water supply schemes.

ANNEXURE 17.3

Annual Plan—1971-72 Physical Programme

sl. no.	state/union territory	corporation MGD	urban water supply (tons (No.))	sewerage towns (no.)	pipd water supply villages served(no.)	wells villages served (no.)
(0)	(1)	(2)	(3)	(4)	(5)	(6)
1	Andhra Pradesh	—	7	—	38	1500
2	Assam	—	—	—	14	—
3	Bihar	—	—	—	109	1530
4	Gujarat	—	10	—	200	—
5	Haryana	—	3	6	133	—
6	Himachal Pradesh	—	—	—	150	—
7	Jammu & Kashmir	4.00	3	—	146	—
8	Kerala	—	1	—	70	—
9	Madhya Pradesh	—	—	1	2541	400
10	Maharashtra	—	—	—	1902	—
11	Meghalaya	—	1	1	23	—
12	Mysore	—	20	4	126	1448
13	Nagaland	—	3	—	13	3
14	Orissa	—	4	—	20	—
15	Punjab	—	4	4	298	—
16	Rajasthan	—	25	—	35	1500
17	Tamil Nadu	—	12	—	—	—
18	Uttar Pradesh	10.00	4	3	483	358
19	West Bengal	—	13	—	183	6000
	<i>total (states)</i>	14.00	110	19	6484	12739
1	Andaman and Nicobar	—	1	—	2	20
2	Chandigarh	—	—	—	1	—
3	Dadra and Nagar Haveli	—	—	—	1	—
4	Delhi	12.50	1	•	22	—

ANNEXURE 17.3 (contd.)

(0)	(1)	(2)	(3)	(4)	(5)	(6)
5	Goa	—	—	—	—	15
6	Laccadive Islands	—	—	—	—	—
7	Manipur	—	—	—	5	60
8	NEFA	—	—	—	115	—
9	Pondicherry	—	—	1	—	—
10	Tripura	—	—	*	—	—
	<i>total (union territories)</i>	12.50	1	1	146	95
	<i>grand total</i>	26.50	111	20	6630	12834

Notes 1 30 Urban villages proposed to be covered—denotes Nil

* 6 Schemes proposed to be taken up—denotes Not reported.

* 1400 squatting plates to be supplied.

CHAPTER 18
SOCIAL WELFARE

The Annual Plan 1971-72 provides for an outlay of Rs. 17.25 crores for social welfare programmes as against an expenditure of Rs. 3.90 crores in 1969-70 and Rs. 5.62 crores in 1970-71. The break-up of the expenditure and outlays in the Centre, States and Union Territories is given below. The big increase in outlay in 1971-72 is due to the inclusion of the special nutrition programme in the Plan with an outlay of about Rs. 10 crores.

TABLE 18.1: *Outlay on Social Welfare*

		(Rs. crores)	
sl. no.		1970-71 anticipated expenditure	1971-72 Plan outlay
(0)	(1)	(2)	(3)
1	centre	3.22	14.68
2	centrally sponsored	0.44	0.33
3	states	1.74	1.99
4	union territories	0.22	0.25
	<i>total</i>	5.62	17.25

The financial breakup in the Central and State sectors is given in Annexures 18.1—18.3.

18.2. The programme of Family and Child Welfare Projects providing integrated services to children in the villages, specially those in the pre-school stage, and basic training to women and young girls in home-craft, mother-craft, health, education and child care, will be continued. Each project consists of one main Centre and five Sub-Centres. The plan outlay of Rs. 140 lakhs provides for the continuation of the existing 226

Family and Child Welfare Projects and conversion of 50 Welfare Extension Projects into Family and Child Welfare Projects. The conversion would, however, be carried out with the approval of the State Governments so that the financial liability can devolve smoothly on the States at the end of the five year period. The programme of in-service training of staff employed in family and child welfare projects will be continued. It is proposed to initiate during the year a long-term evaluation of these projects. Emphasis will be laid on the improvement of services in bringing out effective supervision at different levels and training of personnel.

18.3. Nutrition of the pre-school age children has been recognised as a basic requirement for their normal growth and development and accordingly a provision of Rs. 6 crores was made in the Fourth Five Year Plan. The programme was begun in 1970-71 and provided nutritional facilities to 20,000 children. In 1971-72, it is proposed to provide services to an additional 2.73 lakh children.

18.4. The special nutrition programme to cover children in tribal areas and urban slums in the age group 0-6 years and expectant and nursing mothers has been introduced in the year 1970-71 in the non-plan budget. In 1971-72 the programme has been shown in the plan with a budget provision of Rs. 10 crores to cover 10 lakhs children in urban areas and another 10 lakhs in tribal areas. The programme will be administered through 5,000 centres in urban areas and 10,000 centres in rural areas.

18.5. The Central Social Welfare Board provides financial and technical assistance to about 3000 voluntary welfare agencies for undertaking various social welfare programmes and as well to strengthen their organizational and technical competence. The grant in aid programme of the Board will be continued. The important welfare programmes of the Central Social Welfare Board to be continued during 1971-72 include condensed courses of education for adult women, Holiday Homes for Children, Urban Welfare Extension Projects and socio-economic programmes.

18.6. It is proposed to provide services for 2,500 destitute children on cottage system either directly or through voluntary effort during 1971-72.

Provision has also been made to strengthen the existing organisations working for the welfare of destitute children and to promote institutional and non-institutional services for them. It is also proposed to provide financial assistance to voluntary organisations for setting up homes for the destitute women between the ages of 18-45 and their dependent children and destitute women who are 45 years old and above.

18.7. The programmes for the welfare of the physically handicapped include the expansion and development of the existing National Centre for the Blind to provide comprehensive services. A Library for the Blind will start functioning during 1971-72. A small research wing will be set up at the National Centre for the Blind to devise aptitude tests to be administered to the blind trainees to guide their vocational choices. A pilot school will be organised for children with emotional disturbances, delinquency and psychopathic personality. The programme of scholarships to blind, deaf and orthopaedically handicapped students for general education, for technical and professional training will be continued. During 1971-72, about 2,000 awards are proposed to be offered.

18.8. The State Governments will be persuaded for speedier implementation of schemes pertaining to social defence. These schemes cover juvenile delinquency, eradication of beggary, social and moral hygiene programmes, welfare services in prisons, after-care and probation services. The Central Bureau of Correctional Services, in addition to providing technical assistance on matters relating to Social Defence both to government and voluntary organisations, proposed to undertake a seminar and offer courses to judiciary and honorary magistrates and to conduct four regional and state level courses for Correctional Officers. Research projects will be undertaken on juvenile delinquency, implementation of S.I.T. Acts, beggar problem in large cities and evaluation of probation system in collaboration with academic bodies.

18.9. The All-India Prohibition Council will be assisted in their programmes relating to educational work on prohibition.

18.10. The Central Institute of Research and Training in Public Cooperation will continue to undertake research and organise orientation

courses for personnel drawn from governmental and voluntary organisations.

18.11. The programme of rehabilitation of displaced families from East Pakistan is being continued. A provision of Rs. 20 lakhs has been made to provide loans to families to enable them to buy a plot of land, construct a small house or set-up business. It is estimated that this provision will be able to rehabilitate 1000 families.

18.12. The programme of pre-vocational training for those children who cannot continue their school education due to economic or social reasons will be continued in the existing 84 centres. Seminars and refresher courses will be organised for the staff of the Pre-vocational Training Centres.

ANNEXURE 18.1

Progress of Expenditure on Social Welfare Programmes in the Fourth-Plan-Central sector

(Rs. lakhs)

sl. no.		fourth plan outlay	anticipated expenditure 1970-71	plan outlay 1971-72
(0)	(1)	(2)	(3)	(4)
I. Centre				
1	family and child welfare	700.00	139.04	140.00
2	nutritional feeding in balwadis	600.00	10.00	102.00
3	special nutrition programme for children	—	—	998.38
4	assistance to voluntary organisations for welfare of destitute children and destitute women	300.00	—	25.00
5	Grant-in-aid to voluntary organisations by the Central Social Welfare Board	600.00	133.07	127.00
6	welfare of the physically handicapped	250.00	15.68	29.02
7	research, training and administration	105.00	8.00	14.50
8	central bureau of correctional services	20.00	1.00	2.00
9	strengthening of all India voluntary organisations	33.00	3.51	4.96
10	educational work for prohibition	10.00	1.00	1.00
11	rehabilitation of rehabilitable persons from permanent liability homes and infirmaries	125.00	11.00	20.00
12	regional pre-vocational training centres	—	—	3.95
		2743.00	322.30	1467.81
II. Centrally Sponsored				
1	Pre-vocational training centres	200.00 ¹	44.47	33.37
	<i>total</i>	2943.00	366.77	1501.18

¹ Includes outlay for item No. 12.

ANNEXURE 18.2

Outlay and Expenditure on Social Welfare by States

(Rs. lakhs)

sl. no.	state	fourth plan outlay	1970-71		1971-72
			plan outlay	anti-cipated expenditure	plan outlay
(0)	(1)	(2)	(3)	(4)	(5)
1	Andhra Pradesh	70	2	4	6
2	Assam	59	12	9	12
3	Bihar	21	1	1	2
4	Gujarat	72	8	8	10
5	Haryana	41	5	7	14
6	Jammu & Kahsmir	25	5	5	6
7	Kerala	52	3	3	4
8	Mahdya Pradesh	75	8	15	20
9	Maharashtra	150	15	15	19
10	Mysore	100	10	11	17
11	Nagaland	20	3	3	3
12	Orissa	20	4	4	3
13	Punjab	40	6	7	9
14	Rajasthan	30	5	8	9
15	Tamil Nadu	82	16	27	28
16	Uttar Pradesh	100	10	12	22
17	West Bengal	88	21	32	13
18	Meghalaya	12	—	3	3
19	Himachal Pradesh	—	—	—	3
	<i>total</i>	1057	134	174	199

ANNEXURE 18.3

Outlay and Expenditure on Social Welfare by Union Territories

(Rs. lakhs)

sl. no.	union territory	fourth plan outlay	1970-71		1971-72
			plan outlay	anticipat- ed ex- penditure	Plan outlay
(0)	(1)	(2)	(3)	(4)	(5)
1	Andaman & Nicobar Islands	—	—	0.36	0.20
2	Dadra & Nagar Haveli	1.00	0.10	0.08	0.15
3	Delhi	70.00	14.95	14.95	18.00
4	Goa, Daman & Diu	10.00	1.55	1.55	1.10
5	Himachal Pradesh	35.00	2.00	2.00	—
6	Manipur	6.00	1.00	0.43	1.30
7	Pondicherry	10.00	1.17	0.70	2.00
8	Tripura	9.00	1.40	1.29	1.79
	<i>total</i>	141.00	22.17	21.36	24.54

CHAPTER 19

WELFARE OF BACKWARD CLASSES

An outlay of Rs. 30.22 crores has been provided for welfare of backward classes during 1971-72 as against an expenditure of Rs. 26.53 crores in 1970-71. The following table gives the distribution of outlay and expenditure between Centre, States and Union Territories:

TABLE 18.1: *Outlay and Expenditure on Welfare of Backward Classes*

(Rs. crores)

	fourth plan outlay	1970-71 expenditure	1971-72 outlay
centrally sponsored	60.00	11.26	12.58
states	76.18	13.90	16.79
union territories	4.95	0.87	0.85
<i>total</i>	141.13	26.03	30.22

19.2. In the Centrally sponsored sector, the most important programmes are those of tribal development blocks and award of post-matric scholarships. The tribal development block programme was initiated in the Second Plan for intensive development of areas predominantly inhabited by tribes. At present there are 504 tribal development blocks. In 1971-72, it is proposed to continue the programmes in these tribal development blocks; no new blocks will be opened as it is intended to give priority to consolidation of development effort in the existing blocks. Fourteen blocks in stage I will be allotted Rs. 2 lakhs per block, 406 blocks in stage II, Rs. 1 lakh per block and 64 blocks in stage III, Rs. 2 lakhs per block. The remaining 20 blocks are in Manipur each of which is allotted uniformly at the rate of Rs. 1.20 lakhs per annum. Out of the total allocation of Rs. 609.25 lakhs for 1971-72 for this programme, an allocation of Rs. 42.25 lakhs is for pockets of tribal concentration and sub-blocks.

19.3. For the educational development of Scheduled Caste and Scheduled Tribe students, the scheme of post-matric scholarships will be continued. During 1971-72, the Plan outlay for the scheme is Rs. 3.42 crores. This is in addition to what is available for the scheme as committed expenditure, viz., Rs. 7.48 crores. It is anticipated that about 2 lakhs students will be awarded post-matric scholarships during the year. In order to encourage the meritorious students, it has now been decided to increase the maintenance rates in the scholarships for students getting more than 60 per cent marks, to one and a half times the rates for other students.

19.4. The scheme of girls' hostels will be continued; grants-in-aid will be given to educational institutions providing pre-matric as well as post-matric education, for establishment of new hostels as well as for expansion of the existing seating capacity.

19.5. The pre-examination coaching programme for Scheduled Caste and Scheduled Tribe candidates for various categories of posts in the Central and State civil services and other subordinate service examinations will be continued at the Centres started in different States. The centres preparing candidates for I.A.S., I.P.S. and other Central services will be continued at Allahabad and Madras. Coaching-cum-Guidance centres started at Delhi, Kanpur, Jabalpur and Madras and the Employment Exchanges set up for confidence building, career guidance and pre-employment coaching will continue their activities.

19.6. The tribal research institutes set up in 11 States for conducting research on various problems of tribal development and training of personnel posted in tribal areas will be continued. An outlay of Rs. 12.70 lakhs has been provided for the purpose. The Study Team on Tribal Research Institutions set up by the Planning Commission is, at present, examining the research and training activities of these institutes.

19.7. An outlay of Rs. 61.30 lakhs has been provided for improvement in working and living conditions of scavengers. Under the scheme, grant-in-aid is given to municipalities for purchase of wheel-barrow, gum-boots, scrapers, etc. to eliminate manual disposal of night soil. To im-

prove the living conditions of the scavengers, sweepers and others engaged in un-clean occupations, assistance for houses/house-sites in urban and semi urban areas is given to members of these communities.

19.8. The programme of assistance to voluntary organisations will be continued. Grants-in-aid will be given to 26 voluntary organisations of all-India character for taking up welfare activities among the Scheduled Castes and Scheduled Tribes.

19.9. In the States, schemes for educational development at the pre-matric stage such as award of stipends/scholarships, freeships, boarding grants, hostel facilities, mid-day meals, uniforms, etc. will be continued. Programmes for assisting Scheduled Caste and Scheduled Tribe persons for getting training in new vocations or for obtaining grant-in-aid for improving their present occupations/vocations in agriculture, animal husbandry and small industry will be continued.

ANNEXURE 19.1

Outlay on Welfare of Backward Classes

(Rs. lakhs)

sl. no	states/ union territory	outlay 1971-72
0	1	2
1	Andhra Pradesh	132
2	Assam	105
3	Bihar	115
4	Gujarat	150
5	Haryana	40
6	Himachal Pradesh	16
7	Jammu & Kashmir	12.89
8	Kerala	28.00
9	Madhya Pradesh	28.00
10	Maharashtra	121.00
11	Meghalaya	—
12	Mysore	100.00
13	Nagaland	—
14	Orissa	87.00
15	Punjab	40.00
16	Rajasthan	73.00
17	Tamil Nadu	120.00
18	Uttar Pradesh	201.00
19	West Bengal	58.00
	<i>total—states</i>	1679.00
	<i>union territories</i>	
1	Andaman & Nicobar	13.2
2	Chandigarh	—
3	Dadra & Nagar Haveli	—
4	Delhi	21.25
5	Goa, Daman & Diu	4.01
6	Laccadive & Minicoy	0.25
7	Manipur	16.60
8	Pondicherry	5.08
9	Tripura	37.00
	<i>total : union territories</i>	85.42

CHAPTER 20

LABOUR AND EMPLOYMENT

An outlay of Rs. 7.00 crores has been provided for craftsmen training and labour welfare schemes during 1971-72 as against the likely expenditure of Rs. 5.61 crores during the year 1970-71. The break-up of this outlay between Centre, States and Union Territories is as under :

TABLE 20.1 : *Outlay and Expenditure on Craftsmen Training and Labour Welfare*

	(Rs. crores)	
	1970-71 likely expenditure	1971-72 Plan outlay
centre	1.11	1.90
states	4.06	4.64 ¹
union territories	0.44	0.46 ¹
<i>Total</i>	5.61	7.00

¹ Statewise/Union Territory wise break-up is given in Annexure 20.1.

20.2. The Fourth Plan envisages only a marginal expansion of the seating capacity of the Industrial Training Institutes. The additional requirements of craftsmen in new trades; such as tool and die making, electronics and chemicals, etc. are sought to be met through a programme of diversification of trades by reducing the seating capacity in trades which have ceased to be popular and utilising the capacities thus available for the development of new skills. Accordingly, the outlays provided in the Annual Plan are mostly for providing trained staff and needed equipment in the industrial training institutes, diversification of trades, construction of essential buildings and hostel for trainees.

20.3. In-plant training in some designated trades is provided under the Apprentices Act, 1961. Emphasis will be laid on engaging more

and more apprentices in places which have already been located and undertaking surveys for the location of new seats. Basic training centres are proposed to be set up for apprenticeship training in trades, such as printing, hotel and catering, chemical and textile, etc. for which training facilities are not available in the Industrial Training Institutes. Construction of hostels for apprentices is also proposed to be undertaken at some important industrial centres. A proposal to amend the Apprentices Act, 1961 to cover the engineering Degree and Diploma holders, is under active consideration.

20.4. The Central Staff Training and Research Institute, Calcutta has commenced its training activities and has undertaken various research projects. The construction programme of buildings for the Foreman Training Institute, Bangalore and the Advanced Training Institute, Madras are in an advanced stage of completion and the training programme at these Institutes are expected to commence during the year. The training programmes at the Central Training Institutes administered by the D.G. E & T are being reoriented to facilitate the consolidation and diversification of the training programmes in the Industrial Training Institutes. Schemes are proposed to be taken up for intensive training in various trades like fitter, welder, electroplating, wiremen, etc. for promotion of self-employment in rural and urban areas.

20.5. The main programmes proposed to be taken up under the Employment Service are the strengthening of the employment exchange machinery in certain areas, extension of the service to rural areas and schemes for vocational guidance and career counselling. Surveys to ascertain the employment pattern of graduates and the proportion of employed persons on the live registers of employment exchanges will also be undertaken during the year. Area skill surveys are also proposed to be started on a pilot basis in selected centres.

20.6. An important programme included is the setting up of a National Institute of Labour. The Institute will undertake broad-based training and orientation programmes for personnel concerned with labour matters in the Central and State Administrations, public and private

sector managements and trade unions. It will also undertake and co-ordinate research and consultancy functions, and bring out publications, of common interest to all, including labour. During the year it is also proposed to expand the activities of the Central and Regional Labour Institutes on a modest basis with a view to making employers and workers more safety conscious and to impart latest know-how about health hazards and safety measures. On similar lines, fact finding surveys are proposed to be conducted in mines as well. The Workers' education programme would be expanded further, to new Regional Centres under the programme are to be added. The major part of the field work on the Working Class Family Income and Expenditure Survey in 60 Centres, launched with a view to bringing the weighting diagram of the Consumer Price Index up-to-date, is expected to be completed by the end of the year.

20.7. The Plan programmes of the States and Union Territories under labour contemplate provision of additional welfare facilities, better utilisation of the existing labour welfare arrangements, strengthening of the base of labour information and intelligence and taking other suitable steps for ensuring better implementation of labour laws.

Employment

20.8. While the overall objectives of the Fourth Five Year Plan as reflected in physical targets and financial outlays have been kept in view, it has been stressed on the Central Ministries and State Governments that the generation of employment opportunities should constitute an important element in the strategy of the Annual Plan for 1971-72. Efforts have been made to orient the existing as well as new programmes to increase their labour content. In order to secure a wider spatial distribution of employment opportunities, emphasis has also been given on accelerating the process of dispersal of development to encompass increasingly the more backward regions and weaker sections of the population.

20.9. Within the above overall strategy, in planning the investment appropriate step up in the outlay has been proposed in sectors which create large scale employment opportunities, such as agriculture, industry, power,

irrigation, roads and communications, village and small industries, elementary education etc. The Central Government have laid stress on the taking up of pilot projects for small farmers, marginal farmers and landless labour, dry farming areas drought prone areas, etc. as supplemental to agricultural development. This will also go a long way in meeting the employment needs of the weaker sections.

20.10. In order to give a further fillup to employment, a crash scheme for rural employment has been introduced for 1971-72 for which a sum of Rs. 50 crores has been provided in the current year's Central Budget. This scheme envisages employment of 1000 persons on an average in every district continuously over a working period of 10 months in a year. So far proposals for 323 districts have been formulated involving an expenditure of Rs. 39 crores. Proposals of 281 districts involving an expenditure of Rs. 30 crores have already been approved and necessary sanctions issued for implementation.

20.11. For tackling unemployment among the educated persons, a special provision of Rs. 25 crores has also been made in the Central Budget for 1971-72. Through this fund, it is proposed to assist the educated men and women so that they might set themselves up in gainful creative activities which would at the same time accelerate economic progress of the country. The details of the projects are being worked out by the Planning Commission in consultation with the Central Ministries.

ANNEXURE 20.1

Outlay on Craftsmen Training and Labour Welfare in the Annual Plan 1971-72 by States and Union Territories

		(Rs. lakhs)
sl. no.		outlay
<i>States</i>		
1	Andhra Pradesh	11.00
2	Assam	17.00
3	Bihar	44.00
4	Gujarat	28.00
5	Haryana	20.00
6	Himachal Pradesh	7.00
7	Jammu & Kashmir	10.00
8	Kerala	20.00
9	Madhya Pradesh	31.00
10	Maharashtra	45.00
11	Mysore	34.00
12	Orissa	17.00
13	Punjab	27.00
14	Rajasthan	10.00
15	Tamil Nadu	27.00
16	Uttar Pradesh	80.00
17	West Bengal	36.00
	<i>total—states</i>	464.00
<i>union territories</i>		
1	Andaman & Nicobar Islands	0.28
2	Chandigarh	1.37
3	Delhi	32.32
4	Goa, Daman & Diu	3.18
5	Manipur	0.47
6	NEFA	2.62
7	Pondicherry	4.10
8	Tripura	1.50
	<i>total—union territories</i>	45.84
	<i>grand total</i>	509.84
	Or say	Rs. 510 lakhs

CHAPTER 21

OTHER PROGRAMMES

I. REHABILITATION

An outlay of Rs. 12.73 crores has been included in the Annual Plan for 1971-72 for carrying out development programmes pertaining to the rehabilitation of displaced persons from East Pakistan and repatriates from Burma and Ceylon and for undertaking development programmes in the Dandarkanya development area and in the Andaman and Nicobar Islands.

21.2. By the end of 1970-71, 41,620 families of new migrants from East Pakistan were settled—35,035 on agricultural and 6,585 on non-agricultural programmes under the various rehabilitation projects in different States including the Dandakanya project and the Andaman and Nicobar Islands.

21.3. A provision of Rs. 4.25 crores has been made in the Annual Plan 1971-72 for continuing various programmes in Dandakaranya project area. It is proposed to resettle in the Project area 150 families of local landless tribals, besides 1,250 refugee families in agriculture and 200 refugee families in non-agricultural occupations. Another 1,500 agricultural families from East Pakistan are proposed to be settled in agricultural occupations in different States. Besides, 900 non-agricultural families of the same category are also proposed to be resettled in different States in small trades business or similar occupations, for which a sum of Rs. 45.30 lakhs has been provided. In addition to this, a token provision of Rs. 25 lakhs has been made for setting up of various small scale industries such as manufacturing of card board and straw board, powerlooms, brick and tile making, porcelain crockery, etc. to help resettle the displaced persons from East Pakistan. A provision of Rs. 1.57 crores has been made for giving assistance to earlier migrants from East Pakistan in West Bengal and persons migrating to India from the Indian enclaves which had earlier

been proposed to be transferred to Pakistan. It is also proposed to give rehabilitation assistance to 3,300 families of the Burma repatriates in the form of business loans and agricultural land. It is proposed to provide rehabilitation assistance to about 4,000 families of repatriates from Ceylon.

21.4. A sum of Rs. 65 lakhs has been provided for the Rehabilitation Industries Corporation to maintain its various activities and the level of employment already attained.

21.5. Work in respect of the special development programmes already in progress in Andaman and Nicobar Islands would continue. It is proposed to induct 100 families to Katchal Island. Besides, a fresh batch of ex-servicemen families would be resettled in the Island of Great Nicobar. Plantation of rubber on an additional area of 800 acres in Katchal Island, construction of residential houses, office buildings and roads in Little Andaman and Great Nicobar Islands will also be undertaken.

II. STATISTICS

21.6. An outlay of Rs. 264 lakhs has been provided in the Annual Plan for 1971-72 for various schemes under 'Statistics' as against Rs. 203 lakhs in 1970-71. This includes Rs. 191 lakhs for the schemes under the purview of the Department of Statistics, Rs. 70 lakhs for the schemes operated under the aegis of the Office of the Registrar General of India and Rs. 3 lakhs for the schemes of the Department of Supplies (Director General of Supplies and Disposals).

21.7. The distribution of the outlay for the schemes under the purview of the Department of Statistics by Centre, States and Union Territories is given as under :

TABLE 21.1. *Outlay on Statistics—Department of Statistics* (Rs. lakhs)

sl. no.	centre/states	1970-71 outlay expenditure	1971-72 outlay
1	centre	72.87	108.00
2	states	54.00	73.00
3	union territories	8.93	9.99
	<i>total</i>	135.80	190.99

¹ Latest estimate Rs. 48.05 Lakhs.

21.8. The schemes under the purview of the Department of Statistics fall in two categories—(1) schemes originating from the Department of Statistics and also operated by them (2) schemes of other Departments but operated by the Department of Statistics. As regards schemes operated by the Department of Statistics, the Annual Plan 1971-72 includes the following new schemes :

- (1) cell for coordination of work relating to survey of industries in the unorganised sector ;
- (2) expansion of industrial statistics (Index Scheme);
- (3) methodological and applied statistics, relating to the conduct of sample surveys ;
- (4) enhancement of sample size under NSS in selected areas ;
- (5) strengthening of NSS Organisation;
- (6) improvement and research in demographic studies ; and
- (7) construction of a hostel for ISS probationers.

Schemes already in progress will be continued for which substantial provision has also been made.

21.9. In addition to the schemes of the Department of Statistics, following schemes of other Departments which are being operated by the Department of Statistics will be continued to be implemented during 1971-72 : (1) Annual Survey of Small Scale Industries (operated on behalf of the Ministry of Industrial Development), (2) Working Class Family Income and Expenditure Survey (on behalf of the Ministry of Labour and Employment), (3) Collection of inputs on housing construction by employers for their workers (on behalf of the National Building Organisation), and (4) the pilot survey for estimation of fish catch from inland water sources (on behalf of the Department of Agriculture).

21.10. Out of the total provision of Rs. 83 lakhs for States and Union Territories during 1971-72, about Rs. 43 lakhs are proposed to be

spent on core schemes and the balance on various other statistical schemes. The implementation of all the statistical schemes is expected to be speeded up during the year 1971-72. Almost all the States and Union Territories have been requested to take up the pilot survey of Distributive Trade during 1971-72.

21.11. A provision of Rs. 70 lakhs has been made for the schemes of the Office of the Registrar General in the current year's Annual Plan as against an expenditure of Rs. 62 lakhs during 1970-71. The provision for the current year will cater to the following schemes :

	(Rs. lakhs)
(1) sample registration for selected areas	7.97
(2) strengthening of vital Statistical Organisation at Headquarters	1.63
(3) strengthening of District Registration Office	5.00
(4) strengthening of Statistical Units in Municipalities for improving vital statistics	3.40
(5) computer system for processing census data	19.31
(6) registration, Promotion, methodological research and population studies	32.09
(7) expenditure on printing and publications	0.60
<i>total</i>	70.00

21.12. A provision of Rs. 3.06 lakhs has also been made for Plan Schemes collection computerisation and analysis of purchase statistics, operated by the Directorate General of Supplies and Disposals.

III. INFORMATION SERVICES AND PLAN PUBLICITY

21.13. During 1970-71, the media units of the Ministry of Information and Broadcasting and the Publicity Department of State Governments continued to give publicity support to development Plans. Due to paucity of funds there was no significant extension of other activities.

21.14. All India Radio's Farm and Home units serve the areas where important schemes like Farmers' Training and Functional Literacy, High-

yielding Varieties, the Small Farmers' Development Agency and the Marginal Farmers and Agricultural Labour Agency are functioning. The programme to set up 11 new units did not make progress during 1970-71.

21.15. Under the Directorate of Field Publicity eleven new field publicity units were added, bringing the total to 177. These units reach out to the people through mobile units and mobilise public opinion in support to national campaigns. All the field units, including the 30 provided by the Department of Family Planning, conducted motivational publicity for family planning.

21.16. In addition to strengthening PIB's office at Jammu and setting up of Sindhi and Urdu units at Bombay, new offices started functioning at Imphal, Agartala and Panaji to service the small newspapers published from these places.

21.17. During 1971-72 emphasis is being laid on extending publicity activities to rural areas, particularly to areas where special programmes calculated to help the small farmers, marginal farmers and agricultural labour are being taken up.

21.18. During the year 1971-72, eleven more Farm and Home units are proposed to be established by All India Radio at Dibrugarh, Baroda, Jammu, Calicut, Parbhani, Gulbarga, Jeypore, Imphal, Kurseong, Cuddapah and Ranchi stations taking the total number of such units to thirty-eight. In addition to giving coverage for agricultural activities a composite programme of short duration covering several aspects of home and family life has been started on an experimental basis. The aim is to give some general education to the farmer. New language editions of *Yojana*, the fortnightly journal published on behalf of the Planning Commission, are expected to be brought out during 1971-72.

21.19. The Press Information Bureau proposes to set up four new offices at Indore, Vijayawada, Chandigarh, Rajkot or Shillong. Schemes for strengthening of the language units and improving the delivery system are being implemented. The Directorate of Advertising and Visual Pub-

licity and the Publications Division propose to bring out literature for special categories of people like students.

21.20. The outlay for schemes relating to information services and Plan publicity in the Annual Plan 1971-72 is Rs. 3.60 crores. This includes Rs. 1.88 crores at the Centre, Rs. 1.33 crores in States and Rs. 0.39 crores for Union Territories.

A P P E N D I X

List	Description
I	Centrally Sponsored Schemes by Heads and Sub-Heads of Development for 1971-72.
II	Agriculture and Allied Programmes for 1971-72—Centre.
III	Irrigation and Flood Control Schemes for 1971-72—Centre.
IV	Power Programmes for 1971-72—Centre.
V	Village and Small Industries schemes for 1971-72—Centre.
VI	Industrial and Mineral Projects for 1971-72—Centre.
VII	Transport and Communications Schemes for 1971-72—Centre.
VIII	Education Programmes for 1971-72—Centre.
IX	Scientific Research Programmes for 1971-72—Centre.
X	Health Programmes for 1971-72—Centre.
XI	Family Planning Schemes for 1971-72—Centre.
XII	Housing, Urban Development and Water Supply Programmes for 1971-72—Centre.
XIII	Social Welfare Programmes for 1971-72—Centre.
XIV	Labour Welfare and Craftsmen Training Schemes for 1971-72—Centre.

APPENDIX

LIST I

Centrally Sponsored Schemes by various Heads and Sub-Heads of Development for 1971-72

(Rs. lakhs)

sl. no.	heads of development/scheme	outlay 1971-72
(0)	(1)	(2)
<i>Agriculture and Allied Programmes</i>		
agricultural production		
1	maximised production of cotton <i>development of commercial crops for export promotion</i>	201.00
2	maximised production of groundnut etc.	120.00
3	maximised production of castor	4.00
4	special package programme on jute	40.00
5	subsidised distribution of improved and certified seeds of jute and mesta	16.00
6	aerial spraying on jute	10.00
7	special package programme on mesta	8.00
8	quality improvement programme of jute and mesta	6.00
9	development of V.E.C. tobacco	29.20
10	plot project for the development of sugarbeet	1.00
11	extension work and package programme on lac	1.50
12	package programme for development of coconut including production and distribution of improved seedlings	7.00
13	package programme for cashewnut	20.00
14	package programme for arecanut	0.93
15	package programme for development of spices including establishment of centre nursery for Pepper & Ginger	4.00
16	development of fruit production for export (including Banana and Fruit development Corporation)	14.00
17	development of walnut for export purposes	0.50
18	development of onions for export purposes	0.50
	total : commercial crops	483.63

LIST I (Contd.)

(Rs. lakhs)

(0)	(1)	(2)
19	integrated dry land agricultural development	216.00
20	farmers' education and training	95.00
21	agricultural statistics—timely reporting of estimates of area and production of principal crops	22.00
22	pilot project of multiple cropping	31.00
23	eradication of pestes and diseases on crops in endemic areas	100.00
	<i>total : agriculture production</i>	947.63
	<i>soil conservation</i>	
24	pilot projects for reclamation of ravine lands	50.00
25	soil survey in IADP and problem areas	7.50
26	soil and water conservation in the water-sheds of rivery valley projects	420.00
	<i>total : soil conservation</i>	477.50
	<i>animal husbandry</i>	
27	coordinated cattle breeding project	10.00
28	rinderpest eradication	40.00
29	sheep breeding farms	20.00
	<i>total : animal husbandry</i>	70.00
	<i>fisheries</i>	
30	provision of landing and berthing facilities at minor ports	90.00
	<i>forestry</i>	
31	forest resources survey	20.00
	<i>flood processing and subsidiary foods</i>	
32	schemes relating to subsidiary food and applied nutrition	23.30
	<i>cooperation</i>	
33	agriculture credit stabilisation fund	200.00
34	margin money requirements of cooperation for fertilizer distribution	300.00
	<i>total : cooperation</i>	500.00
	<i>community development</i>	
35	applied nutrition programme	225.00
36	pilot research projects-in growth centres	20.00
	<i>total : community development</i>	245.00
	<i>total : agriculture and allied programmes</i>	2373.43
	<i>Power</i>	
37	inter-state lines	700.00
	<i>Village and Small Industries</i>	
38	intensive development of rural industries (rural industries projects)	87.25

LIST I (Contd)

(Rs. lakhs)

(0)	(1)	(2)
39	collection of statistics relating to small scale units in the unorganised total : village and small industries	15.00 102.25
<i>Transport and Communications</i>		
<i>roads</i>		
40	roads of inter-state or economic importance minor ports	380.00
41	minor ports development scheme inland water transport	295.00
42	development scheme of inland water transport	47.00
	total : transport and communications	722.00
<i>Education</i>		
<i>general education</i>		
43	appointment of hindi teachers in non-hindi states	100.00
44	financial assistance for establishment of hindi teachers training colleges in non-hindi speaking states	12.00
45	production of literature at university level	105.00
46	development of sanskrit	14.00
	total : general education	231.00
<i>technical education</i>		
47	development of regional engineering colleges	341.04
48	development and consolidation of post-graduate courses and research in engineering and technology	85.00
	total : technical education	426.04
	grant total : education	657.04
<i>Health</i>		
<i>medical education & training</i>		
49	upgrading of certain departments in medical institutions in India	83.00
50	physio-therapist, occupational therapist and prosthetic technicians (stipends)	3.78
<i>control of communicable diseases</i>		
51	malaria eradication programme (cost of material and equipment— Rs. 726.66 lakhs & subsidy to states—Rs. 793.00 lakhs)	1519.66
52	urban malaria	25.00
53	national smallpox eradication programme including cost of smallpox vaccine	294.53
54	development of freeze dried vaccine manufacturing institue (Lor:n)	20.00
55	national filaria control programme	55.00
56	control of venereal diseases	12.28

LIST I (Contd)

(Rs. lakhs)

(0)	(1)	(2)
57	cholera control programme	35.00
58	leprosy control programme	59.75
59	national TB control programme including TB drugs	236.93
60	control of trachoma	14.70
<i>primary health centres</i>		
61	strengthening of primary health centres with basic health services	250.00
<i>indigenous systems of medicine</i>		
62	upgrading of teaching institutions and research other programmes	18.00
63	establishment of psychiatric clinics in districts and teaching hospitals	5.60
64	national TB programme for Delhi, including material and equipment under USAID programme, anti-TB drugs for TB clinics in Delhi, Chandigarh, Laccadive, Minicoy, A & M Islands and Tribal areas	13.13
65	malaria eradication programme in Delhi, Chandigarh, Tribal areas, A & N Islands	25.79
66	schemes in union territories	23.66
67	national smallpox eradication programme for Delhi and other union territories	3.41
68	loans to union territories	1.07
69	national and equipment under USAID programme	1.87
	<i>total : health</i>	2702.26
<i>Family Planning</i>		
<i>services & supplies</i>		
70	rural main centres and sub-centres	1450.00
71	vehicles for rural centres	277.00
72	supply of surgical equipment to FWP centres	35.00
73	urban FWP centres	257.52
74	district FP bureaux	486.56
75	construction of buildings	1213.92
76	sterilization beds and units	145.00
77	composition for IUCD and sterilization	590.00
78	conventional contraceptives	158.00
79	post partum programme	99.10
80	intensive district & selected area programme	60.00
81	supply of surgical equipment to hospitals	7.00
82	sterilization theatres	6.50
83	city FP bureaux	7.50

LIST I (Contd)

(Rs. lakhs)

(0)	(1)	(2)
	<i>Training</i>	
84	State health transport organisations	100.00
85	disadvantaged area scheme	23.00
86	regional training centres	70.00
87	training of ANMs	80.00
88	training of LHVs	13.00
89	training of Dais	9.20
90	training of IMA personnel throughout state IMA branches	3.00
	<i>mass education</i>	
91	MEM activities in states	184.75
	<i>research</i>	
92	demographic and communication action research	3.81
	<i>organisation</i>	
93	state FP bureaux	71.40
94	experimental projects	12.00
	<i>F.M.C.M.</i>	
95	immunisation programme	10.00
96	prophylaxis against nutritional anaemia among mothers and children	40.00
97	prophylaxis against control of blindness among children due to vitamin A deficiency	8.00
98	grants-in-aid to union territories with legislatures	22.73
99	grants-in-aid to union territories without legislatures	38.22
	total : family planning	5482.22
	<i>Water Supply</i>	
100	special investigation divisions	119.00
	<i>Welfare of Backward Classes</i>	
101	post-matric scholarships	342.01
102	girls' hostels	39.67
103	coaching and allied schemes	21.03
104	tribal development blocks	609.25
105	cooperation	45.301
106	research, training and special projects	12.70
107	improvement in working and living conditions of those engaged in unclean occupations	61.30

includes Rs. 20 lakhs as loan.

LIST I (Contd)

(Rs. lakhs)

(0)	(1)	(2)
108	denotified tribes and nomadic tribes	92.25
109	aid to voluntary organisations	35.00
	<i>total : welfare of backward classes</i>	1258.5
	<i>social welfare</i>	
110	pre-vocational training centres	33.37

LIST II

Agriculture and Allied Programmes for 1971-72—Centre

(Rs. lakhs)

sl. no.	head of development/scheme	outlay 1971-72 _j
<i>I agriculture research and education (ICAR schemes)</i>		
<i>research</i>		
<i>coordinated projects pilot research schemes</i>		
<i>food crops</i>		
1	rice	30.00
2	wheat	12.00
3	barley	6.47
4	maize	14.00
5	sorghum	10.00
6	millets	10.00
7	pulses	10.00
	<i>total: food crops</i>	<i>92.47</i>
<i>commercial crops</i>		
8	sugarcane	—
9	sugarbeet	5.00
10	cotton	24.00
11	jute	10.36
12	oil seeds	30.00
13	soyabeans	3.60
14	tobacco	5.00
15	spices & cashewnuts	7.00
16	coconut & arecanut	15.00
	<i>total: commercial crops</i>	<i>99.96</i>
<i>horticulture</i>		
17	fruits (including mango malformation & research on citrus dieback)	12.00
18	tuber crops	1.95
19	potato	2.50
20	vegetables	8.00
21	certification, inspection & registration of virus free citrus trees	1.90
22	establishment of regional research stations for medicinal and aromatic plants	1.50

LIST II (Contd.)

(Rs. lakhs)

(0)	(1)	(2)
23	horticulture	1.00
	<i>total</i> : horticulture	28.85
	<i>Others</i>	
24	forage crops	4.00
25	technological research on vegetable oils & oilseeds	—
26	research project on sugar cane	7.00
27	centres of advance studies	5.00
28	summer institute	1.00
29	coordinated scheme on energy requirements in agriculture	1.02
30	strengthening of computers centre at I.A.R.S.	1.00
31	zonal research centre for improved agricultural implements and machinery	2.00
	<i>total</i> : others	21.02
	<i>research in soils, agronomy and agricultural engineering—</i>	
	<i>soil and water management</i>	
32	coordinated agronomic experiments	40.00
33	co-relation of soil tests with crops responses	6.00
34	micronutrients of soils	5.50
35	soil structure	5.00
36	microbiological decomposition of organic matter	3.24
37	irrigation research in river valley projects	4.30
38	research on new cropping patterns water use in selected command areas	7.50
39	strengthening of research on soil salinity, irrigation drainage and water management	17.00
40	ground water management	3.00
41	strengthening of research under rainfed conditions	—
42	national demonstration on major food crops	49.75
43	long term fertiliser experiments	1.00
44	soil conservation research demonstration and training centres	5.00
	<i>total</i> : research in soils, agronomy and agricultural engineering	147.29
45	animal sciences research—teterinary and animal husbandry	150.00
	<i>agricultural research institutes</i>	
46	Indian Agricultural Reseach Institute	100.00
47	Central Rice Research Institute	10.13
48	Central Potato Research Institute	12.10

LIST II (Contd.)

(Rs. lakhs)

(0)	(1)	(2)
49	Central Jute Agricultural Research Institute	4.50
50	Central Tobacco Research Institute	3.15
51	Central Tuber Crops Research Institute	4.20
52	Indian Grassland & Fodder Reserach Institute	14.00
53	Institute of Horticulture Research	10.41
54	Jute Technological Research Laboratory	7.00
55	Indian Lac Research Institute	2.13
56	coordinated projects on dry land agril. & others	34.00
57	dry land agricurltural and other schemes	10.00
58	cotton technological research laboratory	4.33
59	Central Arid Zone Research Institute and Soil Conservation Centres	18.90
60	Soil Salinity Research Institute	15.77
61	Institute of Sugarcane Research	6.34
62	Sugarcane breeding Institute	3.08
63	Animal and Plant virus Research Institute	1.00
	<i>total : agricultural research institute</i>	261.04
	<i>animal sciences institutes</i>	
64	Indian Veterinary Research Institute	60.00
65	National Dairy Research Institute	38.72
66	Central Sheep & Wool Research Institute	10.00
	<i>Fisheries Research Institute</i>	
67	Central Inland Fisheries Institute	7.00
68	Central Marine Fisheries Research Institute	20.00
69	Central Institute of Fisheries Technology	20.00
	<i>total : fisheries research institute</i>	47.00
	<i>agricultural research statistics and agricultural economics</i>	
70	national index of field experiments	2.71
71	pilot studies for evolving sampling techniques for estimation of cost of production of poultry and eggs	0.95
72	pilot studies on the impact of milk supply on rural economy	2.58
73	pilot sample surveys for developing techniques for estimation of producton of fruits and vegetables	3.10
74	pilot sample surveys for developing techniques for estimation of production and extent of cultivation of cashewnut	0.74
75	pilot sample survey for block level estimates of agricultural production	—

LIST II (Contd.)

		(Rs. lakhs)
(0)	(1)	(2)
76	pilot investigation for developing and integrated technique for estimation of output of major livestock products and attendant animal husbandry practices	4.55
77	pilot sample surveys for estimation of availability of cost of production of milk and its index	1.00
78	sample survey for assessment of high yielding varieties programme	10.00
79	completion of building and furnishing the computer laboratory and library and provisions of equipment at IARS	6.89
80	pilot studies on pre-harvest forecasting of crops	2.86
81	pilot studies for estimation of birth and death rates in bovines for preparation of life tables	0.99
82	strengthening of research and training facilities at the IARS	4.50
	<i>total : agri. research statistics</i>	40.96
<i>agricultural education</i>		
83	establishment and development of agril. universities	450.00
84	improvement of facilities in	
	(a) post-graduate colleges of agril. sciences	30.00
	(b) under-graduate colleges of agril. sciences	
	(c) post-graduate colleges of veterinary sciences	
	(d) under-graduate colleges of veterinary dairy	
85	improvement of facilities in agril. colleges of central universities (Banaras Hindu University and Vishwabharati)	5.00
86	award of under-graduate scholarships—	
	(a) merit scholarships for study in agriculture veterinary/agril. engineering	20.65
	(b) agril. science talent research scheme	
87	award of fellowships for post-graduate students—	
	(a) fellowships for M.Sc./Ph.D	40.79
	(b) graduate assistantships	
	<i>total : agril. education</i>	546.44
	<i>total : I agril. research and education</i>	1543.75
<i>II. agricultural production</i>		
<i>Improved seeds</i>		
88	national seeds corporation	30.00
89	central state farms corporation	23.00
	<i>total—improved seeds</i>	53.00

LIST II (Contd.)

(Rs. lakhs)

(0)	(1)	(2)
	<i>agricultural implements and machinery</i>	
90	tractor training centres and workshops	15.91
91	centre support for agro-industries corporation	206.00
	<i>total: agril. implements and machinery fertilizers</i>	221.91
92	central fertilizer control laboratory	3.65
93	directorate of fertilizer promotion	12.50
	<i>total: fertilizers</i>	16.15
	<i>plant protection</i>	
94	strengthening of dte. of plant protection, quarantine and storage	0.24
95	estt. of central plant protection training institute-cum-field testing station	3.47
96	study of pest infestation in storage conditions and remedial measures to prevent storage losses	0.55
97	expansion of plant quarantine facilities	1.33
98	expansion of field station for investigation on locusts	0.34
99	strengthening of agril. aviation service	34.36
100	pilot project for establishment of parasites—control of insects and pests	3.00
101	pilot project for use of herbicides on various crops	1.00
	<i>total: plant protection</i>	44.29
	<i>agricultural statistics</i>	
102	agricultural census	75.00
103	agro-economic research centres	7.40
104	farm management studies	7.49
105	coordinated scheme for studying the cost of cultivation of the principal crops in India	20.00
106	cattle insurance	0.50
107	eleventh quinquennial livestock census	2.00
	<i>total: agril. statistics</i>	112.39
	<i>special development programmes</i>	
108	agricultural development projects of mandi type	10.00
109	pilot project for desert development	50.00
	<i>total : special development programmes</i>	60.00
	<i>agricultural extension and training</i>	
110	improving the professional competence of state level officers working in agri./A.H. departments	0.45

LIST II (Contd.)

		(Rs. lakhs)
(0)	(1)	(2)
111	concentrated subject matter refresher course for instructresses/mukhayasevikas	0.25
112	estt. of extension department in home science colleges	4.50
113	procurement of publicity-cum-exhibition van	0.15
114	setting up of an information-cum-seminar division	0.50
115	fertilizer demonstration scheme	0.61
116	all india crop competition	0.20
117	farmers training and education (staff at H.Q's fellowships and handling of equipment charges etc.)	3.64
118	upgrading of workshop wing at E.E.I. Nilokheri	0.80
119	training-cum-production scheme for farm mechanics at EEI, Nilokheri	0.80
120	strengthening of three existing EELs located at Nilokheri (Haryana), Anand (Gujarat), Rajendra Nagar (Andhra Pradesh)	1.91
121	exchange of farmers within the country	0.48
122	organization of national and regional workshops for rural youth leaders and supervisors	0.51
123	international youth farmers exchange programme with countries other than U.S.A.	2.10
124	evaluation of extension trg. and farmers trg. and education programme	0.42
125	estt. of test kitchens at the hqrs. of the regional home economists	0.72
126	production of agricultural research and instructional films	12.00
	<i>total: agricultural extension and training</i>	29.24
	<i>other schemes of agricultural programme</i>	
127	mobile soil testing laboratories	9.00
128	I.A.D.P. programme	11.27
129	national Commission on agriculture	18.75
	<i>total II: agricultural production</i>	576.00
130	III. development of small farmers and agricultural labour	900.00
	<i>IV. minor irrigation</i>	
131	ground water exploration project	241.00
	<i>V. soil conservation</i>	
132	all India soil and land use survey	1.44
	<i>VI. area development</i>	
133	command area development	300.00
134	pilot projects for soil and water management	20.00
	<i>total VI : area development</i>	320.00

LIST II (Contd.)

(Rs. lakhs)

(0)	(1)	(2)
	<i>VII. animal husbandry</i>	
135	establishment of cattle farms	40.00
136	expansion of jersey farm	0.48
137	extension of herd registration scheme	1.36
138	distribution of calves from milk colonies and khattals	1.37
139	estt. of regional forage demonstration station	5.29
140	estt. of large scale sheep farm	26.87
141	coordn. poultry breeding programme at regional farms	2.19
142	animal welfare board	1.00
143	ICD projects in DMS milk shed areas	65.00
144	frozen semen bank	2.33
145	animal quarantine service	1.00
146	slaughter houses	5.00
147	inservice poultry training institute, Bangalore	4.34
148	all-india regional livestock poultry show	2.50
149	sire evaluation cell	0.52
150	all india milk field competition	0.15
151	control of wild and stray cattle	0.40
	<i>total VII: animal husbandry</i>	150.20
	<i>VIII. dairying and milk supply</i>	
152	delhi milk scheme	115.00
153	Indian Dairying Corporation	1983.00
	<i>total VIII: dairying and milk supply</i>	2098.00
	<i>IX. fisheries</i>	
154	Indo-Norwegian Project	58.46
155	transportation	2.38
156	pelagic fisheries	5.75
157	extension	0.86
158	scheme for development of fisheries in Sunderbans	5.00
159	deep sea fishing station	50.75
160	subsidy for fishing trawlers	10.00
161	laning and berthing facilities for fishing crafts at major ports	50.00
162	inland fisheries resources	0.50
163	central institute of fisheries education	14.54
164	Central institute of Fisheries Operation	33.39
165	pre-investment survey of fishing harbours	5.08
	<i>total IX: fisheries</i>	236.71

LIST II (Contd)

(Rs. lakhs)

(0)	(1)	(2)
<i>X. forestry</i>		
166	loan to states for construction of log looms in food corporation of India	4.60
167	Forest Research Institute	24.00
168	pre-investment survey of forest resources	37.61
169	logging training project	4.27
170	Delhi Zoological Park	2.25
171	capital outlay on public works	6.30
	<i>total X: forestry</i>	79.03
<i>XI. warehousing, storage and marketing</i>		
<i>storage and warehousing</i>		
172	construction of storage godowns by	
	(i) F.C.I.	1030.00
	(ii) department of food	17.16
	(iii) Central warehousing Corporation	125.00
	(iv) State warehousing Corporation (contribution by CWC)	75.00
173	storage training and demonstration scheme	
	(i) Indian Grain Storage Institute Hapur	7.28
	(ii) intensification of save grain campaign	5.82
174	provision of village grain storage bins to farmers	20.00
175	construction of storage godowns for fertilisers	30.00
	<i>total: storage and warehousing</i>	1310.24
<i>agricultural marketing</i>		
176	training in agricultural marketing	1.56
177	setting up of one lint growing centre at Surat	0.87
178	setting up of a livestock marketing cell at the branch head office of Directorate of Marketing and Inspection	0.49
179	compulsory grading of agricultural commodities for exports	2.33
	<i>total: agricultural marketing</i>	5.25
	<i>total XI: warehousing, storage and marketing</i>	1315.49
<i>XII. food processing and subsidiary foods</i>		
180	production of groundnut flour and soyabean products	20.00
181	pilot plant for protein isolate toned milk	10.00
182	fortification of salt	4.00
183	mobile food and nutrition extension units	12.50

LIST II (Contd.)

(Rs. lakhs.)

(0)	(1)	(2)
184	Institute of Catering Technology and Applied Nutrition	18.20
185	research schemes	0.50
186	production of Balahar at low cost protein food	122.00
187	fruit products and cold storage	2.00
188	fortification of wheat products	24.60
189	audio-visual aids and publicity	
190	extension work through voluntary agency	2.92
191	production of weaning food	10.00
192	community canning and fruit preservation centres	11.40
193	nutrition education through commercial channels of modern bakeries	5.00
194	maize, pulses and millet processing	1.25
195	food technology training centre	1.00
196	studies in acceptability of nutritious food	1.00
197	upgrading of laboratories and directional expenditure	6.44
198	modern bakeries	15.00
199	modernization of rice milling programme	15.01
200	development of NSI Kanpur	23.78
	<i>total XII—food processing and subsidiary foods</i>	<i>306.60</i>
201	XIII central support to financial institutions—ARC	5594.00
202	XIV buffer stocks	6900.00
	<i>XV—cooperation</i>	
203	cooperative training and education	58.92
204	assistance to NCDC for refinance of block capital cost of processing units	200.00
205	rehabilitation of Super Bazar	11.00
206	development of NCCF	10.25
207	indian farmers' fertilizer cooperatives	1075.00
208	investment in the debenture of land mortgage banks	1850.00
	<i>total XV—cooperation</i>	<i>3205.17</i>
	<i>XVI—community development and panchayati raj composite nutrition programme for women and pre-school children</i>	
209	demonstration feeding and encouragement of econ. activities by mahila mandals	50.00
210	training of associated women workers	4.00
211	incentive awards to youth mandals	21.00

LIST II (Contd.)

		(Rs. lakhs)
(0)	(1)	(2)
212	sammellans	3.00
213	training of youth workers in rural areas	2.00
214	orientation of school teachers in C.D.	1.00
215	research through university and other institutions	5.00
216	prize competition scheme	0.95
217	literature for non-officials associated with panchayatira	0.50
218	basic and cultural literature for neo-literates	1.50
219	photographic competition	0.75
220	production of films on CD and panchayatiraj	3.00
	<i>total XVI—community development and panchayatiraj</i>	92.70

LIST III

Irrigation and Flood Control Schemes for 1971-72—Centre

		(Rs. lakhs)
sl. no.	head of development/scheme	1971-72 outlay
(0)	(1)	(2)
<i>Irrigation</i>		
<i>I. Continuing Scheme</i>		
1	Hydrological Observation in Krishna-Godavari Basin	37.74
2	diversion of Godavari waters into Krishna	0.22
3	Central Water and Power Research Station, Poona	38.45
4	Ganga basin water studies	33.00
5	Central Water and Power Commission	17.74
6	research scheme applied to river valley projects	30.00
7	technical training centres	11.36
8	engineering laboratory	20.52
	<i>total—continuing schemes</i>	189.03
<i>II. New Schemes</i>		
9	national network for collection of basic hydrological data	48.22
10	Expansion of CW&PC—setting up of regional committee for coordination and creation of additional directorate	12.00
11	expansion of CW&PRS (Poona)	11.02
12	Irrigation Commission	7.00
13	<i>Ganga Basin</i>	
	(i) schemes for regional organisation for river basin studies	23.20
	(ii) schemes of preparation of river basin plan of Mahanadi Basin	13.82
14	writing of the History of major irrigation projects	0.80
	<i>total—new schemes</i>	119.70
	<i>grand total—irrigation</i>	305.09
<i>Flood Control</i>		
<i>I. continuing schemes</i>		
15	flood forecasting and warning centre unit	1.15
<i>II. new schemes</i>		
16	flood forecasting and warning centre	43.85
17	procurement of dredgers	153.66
18	extension of CW&PC—strengthening of flood control organisation	3.64
	<i>total—flood control</i>	202.30
	<i>grand total—irrigation and flood control</i>	507.39

APPENDIX

LIST IV

Power Programmes for 1971-72—Centre

		(Rs. lakhs)
sl. no.	head of development/scheme	1971-72 outlay
(0)	(1)	(2)
<i>Ministry of Irrigation and Power</i>		
1	power research institute and switchgear testing and development station	48.68
2	thermal power station—personnel training institute	6.35
3	central electricity authority	8.50
4	load despatch training institute	0.50
5	fundamental and basic research on power	20.00
6	hydro and thermal designs division, CWPC	4.05
7	survey and investigations	98.23
8	Badarpur Thermal Power Station	1050.00
9	load despatching stations	20.00
10	Salal Hydro-Electric Project	150.00
11	Loktak Hydro-electric project	285.00
12	Siul-Bhaira Hydro-electric Project	365.00
13	rural electrification corporation	3900.00
	<i>total—Ministry of Irrigation and Power</i>	5948.31
14	Damodar Valley Corporation	1253.00
<i>Department of Mines and Metals</i>		
15	Neyveli Thermal Station Expansion	19.00
<i>Department of Atomic Energy</i>		
16	Tarapur Atomic power Station	2.50
17	Rajasthan Atomic power Station—I Unit	468.10
18	Rajasthan Atomic power Station—II Unit	944.76
19	Madras Atomic Power Station—I Unit	842.67
20	Madras Atomic Power Station—II Unit	118.00
21	preliminary expenditure on new atomic power station	5.00
	<i>total—Department of Atomic Energy</i>	2381.03
	<i>total—power</i>	9601.34

APPENDIX

LIST V

Village and Small Industries Schemes for 1971-72—Centre

(Rs. lakhs)

sl. no.	head of development/scheme	outlay 1971-72
(0)	(1)	(2)
<i>Khadi and Village Industries</i>		
1	traditional and ambar khadi	999.00
2	development of village industries	575.00
3	khadi and village industries (subsidy in lieu of concession in the rate of interest on loans) ¹	381.75
	<i>total</i>	1955.75
<i>Handloom Industry</i>		
4	development schemes for handloom industry	8.25
<i>Handicrafts</i>		
5	design centres	0.20
6	research centres	0.75
7	training and extension	6.73
8	marketing	0.82
9	exhibition	5.50
10	publicity and propaganda	
11	museums	4.90
12	other (including loans to other parties)	6.45
	<i>total</i>	25.35
<i>Silk Industry</i>		
13	development schemes for silk industry	11.26
<i>Coir Board</i>		
14	plan schemes of coir board	0.60
<i>Small Scale Industries</i>		
15	development commissioner's establishment	26.10
16	small industries services institutes	32.50
17	national small industries corporation	100.00
18	UNDP projects	32.86
19	training of engineers	15.00
20	testing centres	19.00
21	appropriate technology cell	4.00
22	others	47.95
	<i>total</i>	277.41
	<i>grand total</i>	2278.62

¹This relates to scheme Nos. 1 and 2, its break-up between the programmes for the development of khadi and village industries being not available, the item has been shown separately.

LIST VI

Industrial and Mineral Projects for 1971-72—Centre

(Rs. lakhs)

sl. no.	name of the project	outlay 1971-72
(0)	(1)	(2)
<i>Ministry of Steel and Mines (Department of Steel)</i>		
<i>Iron and Steel</i>		
1	Hindustan Steel Ltd. (incl. Rs. 9.0 lakhs for seamless tubes plant)	3310.00 (2401.00)
2	Bokaro Steel Ltd.	17906.25
3	▼ Tenughat Dam	200.00
4	Mysore Iron and Steel Works	100.00
5	Hospet Steel Plant	138.50
6	Vishakhapatnam Steel Plant	138.50
7	Salem Steel Plant	73.00
8	Loans to State Grants for water supply schemes for new steel plants	100.00
9	Hindustan Steel Works Construction	27.00
	<i>total : iron and steel</i>	21093.25 (2401.00)
<i>Heavy Engineering Projects</i>		
10	Heavy Engineering Corporation	656.75
11	Bharat Heavy Plate and Vessels Ltd.	250.00
	<i>total : engineering projects</i>	906.75
	<i>total : Deptt of Steel (Steel and Heavy Engineering)</i>	22000.00 (2401.00)
<i>Department of Mines</i>		
12	Korba and Koyna Aluminium Projects	1347.00
13	Hindustan Copper Ltd.	1784.00
14	Geological Survey of India (includes air-borne mineral survey)	611.91
15	Indian Bureau of Mines	30.10
16	National Mineral Development Corporation	1769.00
17	Coal Board—ropeways scheme	100.00
18	National Coal Development Corporation	1539.16
19	Neyveli Lignite Corporation	285.50
20	Pyrites, Phosphates and Chemicals Ltd.	69.85
21	Hindustan Zinc Ltd.	420.08 (32.00)

LIST VI (Contd.)

(Rs. lakhs)

(0)	(1)	(2)
22	feasibility studies	30.50
	total : Deptt. of Mines	7987.10
	total : Ministry of Steel and Mines	(32.00)
		29987.10
		(2433.00)
	<i>Ministry of Industrial Development</i>	
23	Bharat Heavy Electricals Ltd.	1033.00
24	Machine Tool Corporation	90.00
25	Hindustan Cables	172.00
		(65.10)
26	Instrumentation Ltd.	59.00
		(59.00)
27	Hindustan Machine Tools Ltd.	500.00
28	National Instruments Ltd. (includes ophthalmic glass project)	50.00
29	expansion of NEPA mills	80.00
30	Hindustan Photo-films	136.70
		(101.73)
31	Indian Standard Institute	22.00
		(8.80)
32	National Productivity Council	5.00
33	Travancore Titanium Products (central share)	95.00
34	Pumps and Compressors project] 240.00
35	Gas Cylinders project	
36	Cement Corporation	100.00
37	Hindustan Paper Corporation	300.00
38	Tannery and Footwear Corporation	22.67
39	All India Institute of Weights and Measures	2.80
40	R and D Organisation for Electrical Industries	16.52
41	subsidy for development of backward areas	20.00
42	feasibility studies for advance action for Fifth Plan	2.50
43	Central Machine Tool Design Institute	44.00
	total : Ministry of Industrial Development	2991.19
		(234.51)

LIST VI (Contd.)

(Rs. lakhs)

(0)	(1)	(2)
<i>Ministry of Petroleum and Chemicals Department of Chemicals</i>		
44	Fertiliser Corporation of India	
	(i) Namrup Fertiliser Project	}
	(ii) Namrup Expansion	
	(iii) Durgapur Fertiliser project	
	(iv) Sindri Rationalisation Scheme	
	(v) Barauni Fertiliser Project	
	(vi) Gorakhpur Fertiliser Project	
	(vii) Trombay Expansion incl. Misc. Schemes	
	(viii) Sindri Naphtha Gasification	
	(ix) Sindri PPG Sulphuric acid and Aluminium Nitrate Plant	
	(x) new projects—Talcher, Rangundam, Haldia, Cochin II, Korba, Sindri and Nangal Expansion	
45	Cochin fertiliser projects] 290.02
46	Fourth stage expansion of FACT	
47	Madras Fertiliser projects	1055.00 (191.00)
48	Indian Drugs and Pharmaceuticals	240.00
49	Hindustan Insecticides Ltd.	5.45 (5.45)
50	Hindustan Organic Chemicals	275.00
51	Central Institute of Plastic Engg.	10.00
52	Indian Petro-Chemicals Corporation Ltd.	1696.00
	<i>total—Deptt. of Chemicals and foreign loan</i>	7532.47 (196.45)
53	Oil and Natural Gas Commission	3701.10 (1968.00)
54	Indian Oil Corporation	
	(i) marketing	1097.80 (1097.80)
	(ii) Gauhati, Barauni and Koyali Refineries	195.00 (195.00)
	(iii) Haldia Refinery	1527.00 (1527.00)
	(iv) Bongaigaon Refinery (Assam)	50.00 (50.00)
	(v) feasibility studies	20.00 (20.00)
	<i>sub-total : I.O.C.</i>	2889.00 (2889.80)

LIST VI (Contd.)

(0)	(1)	(Rs. lakhs)
(0)	(1)	(2)
55	Cochin Refineries (expansion)	330.00 (130.00)
56	Madras Refineries Ltd.	30.00 (30.00)
	<i>total—Deptt. of Petroleum</i>	6950.90 (5017.80)
	<i>Ministry of Foreign Trade</i>	
57	Plantations	270.47 (69.30)
58	National Textile Corporation	332.07
59	National Industrial Development Corporation	15.00
	<i>total—Ministry of Foreign Trade</i>	617.54 (69.30)
	<i>Ministry of Finance</i>	
60	Security Paper Mill	22.70
61	New Alkaloid Factory	84.00
62	Kolar Gold Mines	60.00
63	printing Press for bank note paper, Dewar	250.01
64	Staff quarters for security press staff	18.86
65	Staff quarters for Bombay and Calcutta mints	8.77
66	Currency Note Press	19.36
67	support by R.B.I. to industrial financial institutions and market bor- rowings by their institutions	6500.00 (6500.00)
	<i>total—Ministry of Finance</i>	6963.70 (6500.00)
	<i>Ministry of Transport and Shipping</i>	
68	Hindustan Shipyard—dry dock	46.00
69	Hindustan Shipyard—integrated development programme	155.00
70	Hindustan Shipyard—subsidy	170.00
71	Second Shipyard, Cochin	450.00
	<i>total—Ministry of Transport and Shipping</i>	821.00
	<i>Department of Atomic Energy</i>	
72	Atomic Energy programmes	1516.84
73	loans to India Rare Earths Ltd.	45.00
	<i>total—Deptt. of Atomic Energy</i>	1561.84
	<i>grand total</i>	57425.74 (14451.06)

Note :- Figures in brackets (Rs. 14451.06) indicate the internal resources of respective undertakings and other resources.

LIST VII

APPENDIX

Transport and Communications Schemes for 1971-72—Centre

(Rs. lakhs)

sl. no.	head of development/schemes	outlay 1971-72
(0)	(1)	(2)
<i>Railways</i>		
1	rolling stock	6619.00
2	machinery and plant	376.00
3	track renewals	3.00
4	bridge works	280.00
5	traffic facilities	4322.00
6	signalling and interlocking works etc.	1220.00
7	workshops (including production units namely, DLW, CLW and ICF but excluding those provided in part of electrification projects)	535.00
8	electrification	1691.00
9	other electrical works	167.00
10	staff quarters	586.00
11	amenities for staff	313.00
12	passenger and other railway users' amenities	408.00
13	new lines	1732.00
14	metropolitan transport projects	128.00
15	restoration of dismantled lines	1.00
16	other specified works	240.00
17	taking over of open line wires from P & T department	100.00
18	investment in government commercial undertakings—road services	296.00
19	(a) stores suspense (net)	160.00
	(b) manufacture suspense (net)	108.00
	(c) misc. advances (net)	116.00
20	credits and recoveries	22.00
21	probable savings	1059.00
	<i>total</i>	18000.00
<i>Roads</i>		
22	national highways	4054.00
23	lateral road	200.00
24	border roads	750.00
25	special roads	50.00
	<i>total</i>	5054.00

LIST VII (Contd.)

(Rs. lakhs)

(0)	(1)	(2)
<i>Road Transport</i>		
26	Central Road Transport Corporation Ltd.	30.00
27	Central Road Transport Training and Research Institute	15.00
	<i>total</i>	45.00
<i>Major Ports</i>		
28	Haldia	1425.00
29	Madras	500.00
30	Cochin	350.00
31	Visakhapatnam Outer Harbour	500.00
32	Kandla	100.00
33	Mormugao	250.00
34	Paradeep	350.00
35	Mangalore	550.00
36	Tuticorin	550.00
37	Bhagirathi Hooghly River Training Works	221.00
38	Central Dredging Organisation	322.44
	<i>total</i>	5118.44
<i>Minor Ports</i>		
39	Minor Ports Dredging and Survey Organisation	14.00
40	Andaman and Nicobar Islands	110.00
41	Lacative Minicoy and Amindivi Islands	
	<i>total</i>	124.00
<i>Shipping</i>		
42	Shipping Development Fund Committee Loans	3500.00
43	Shipping Development Fund subsidy	326.89
44	Shipping Development Fund Committee (Administrative expenses)	1.42
45	sailing vessels industry	10.00
46	subsidy in lieu of concessions in the rate of interest on loans	1.55
47	welfare of seamen	6.30
48	purchase of training ship	84.38
	<i>total</i>	3930.54
<i>Inland Water Transport</i>		
49	regional organisation	1.00
50	Central Inland Water Transport Corporation	161.35
51	terminal facilities at Pandu	0.65
52	construction of Jogigopa port	1.20
	<i>total</i>	164.20

LIST VII (Contd.)

(Rs. lakhs)

(0)	(1)	(2)
	<i>Lighthouses</i>	
	<i>Air Transport</i>	
54	works at aerodromes	910.00
55	aeronautical communication service	74.00
56	air routes and aerodrome equipment	126.00
57	training and education	2.00
58	research and developments	4.00
59	subsidy to HAL for aircraft sold or to be sold to IAC	69.00
	<i>total</i>	1285.00
60	<i>Indian Meteorological Department</i>	257.30
	<i>Indian Airlines</i>	
61	purchase of aircraft	976.00
62	other schemes	639.00
	<i>total</i>	1615.00
63	<i>Air India</i>	1590.00
	<i>total civil air transport</i>	4720.00
	<i>Farakka Barrage</i>	
64	construction and other works	100.00
	<i>Tourism</i>	
65	development of tourist centres	140.80
66	development of tourist organisation	28.60
67	Indian Tourism/development Corporation	300.00
68	hotel development loan fund	200.00
69	transport loan fund	10.00
	<i>total</i>	679.40
	<i>Posts and Telegraphs</i>	
70	programmes of posts and telegraphs department	9400.00
	<i>Other Communications</i>	
71	Indian Telephone Industries Ltd.	175.00
72	Hindustan Teleprinters Ltd.	1
73	overseas communication service	220.00
74	wireless planning and coordination	16.00
	<i>total</i>	411.00
	<i>total : communications</i>	9811.00
75	<i>Broadcasting</i>	639.00
	<i>grand total</i>	49414.58

1 To be met from the internal resources of the Company.

LIST VIII

Education Programmes for 1971-72—Centre

sl. no.	head of development/scheme	outlay 1971-72
(0)	(1)	(2)
<i>General Education</i>		
<i>School Education</i>		
1	Printing Presses (german Gift)	139.24
2	assistance to voluntary organisations	5.00
3	national integration	
	(a) deshgetanjali	2.00
	(b) nehru bal pustakalaya	15.00
4	extension service centres (Grant-in-aid)	18.00
5	education television	1.00
	<i>total</i>	181.24
<i>Social Education</i>		
6	assistance to voluntary organisations	25.00
7	production of literature for neo-literates	3.50
8	farmers' education and functional literacy	40.00
9	workers social education institutions	1.02
10	directorate of adult education and polyvalent centres (transferred from NCERT)	2.00
11	national board of adult education	0.15
	<i>total</i>	72.27
<i>Higher Education</i>		
12	Institute of German Studies	1.00
13	Institute of French Studies	1.00
14	University for Hill areas	1.00
15	Institute of Advanced Study, Simla	4.42
16	loans for construction of hostels to affiliated colleges	5.00
17	grants to voluntary organisations for construction of hostels in big cities	3.00
18	assistance to institutes of higher learning	3.00
19	Deshbandu College, Delhi	1.00
20	grant to inter-university board	0.25
21	development grants to deemed univeristies	0.06
22	exchange of delegation abroad	0.50

LIST VIII (Contd.)

(Rs. lakhs)

(0)	(1)	(2)
23	Shastri Indo-Canadian Institute	10.00
24	rural institute	4.00
25	grant to Delhi College	0.50
26	publication of selections from educational records	1.00
27	University Grants Commission	2260.00
	<i>total</i>	2302.73
	<i>Development of Hindi</i>	
28	kendriya hindi shiksha mandal	8.00
29	award of scholarships to students from non-Hindi states for study of Hindi	14.80
30	financial assistance to voluntary organisations	14.00
31	preparation of Hindi encyclopaedia	0.50
32	award of prizes of Hindi writers of non Hindi states	0.50
33	scheme of correspondence courses in Hindi	3.00
34	financial assistance for Hindi medium sections/colleges in non-Hindi medium areas	5.00
35	propagation of Hindi abroad	4.00
36	schemes of central Hindi Directorate	8.50
	<i>total</i>	58.30
	<i>Development of modern Indian Languages</i>	
37	assistance for the development of modern Indian languages including grants-in-aid to cultural-cum-language organisations	7.00
38	Commission for Scientific and Technical Terminology (CSTT) and its Scheme	2.12
39	Production of literature at university level	65.00
40	Central Institute of English, Hyderabad	7.00
41	bhartiya bhasha sansthan and assistance to Hindi states for appointment of teachers of other Modern Indian Languages	23.92
	<i>total</i>	105.04
	<i>Development of Sanskrit</i>	
41	A grants to voluntary organisations including development of Gurukulas & Duccan College, Poona	16.80
42	Kendriya Sanskrit Vidyapeetha, Tirupauti.	3.00
43	Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeetha, Delhi	6.79
44	award of scholarships	5.40
45	production of Sanskrit literature	4.70
46	other central schemes for promotion of Sanskrit	0.60

LIST VIII (Contd.)

(Rs. lakhs)

(0)	(1)	(2)
47	integration of traditional system of Sanskrit with modern system of education	} 8.00
48	sanskrit bhavan including central sanskrit library	
49	other central sanskrit institutions of higher learning	
50	Rashtriya Sanskrit Sansthan (Central Sanskrit Institute)	
	<i>total</i>	45.29
<i>Book Promotion</i>		
51	cheap publication of text books	
	(a) honorarium to evaluators	1.25
	(b) Indo-Soviet Board	0.30
	(c) assistance to publications of Indian authors	10.00
52	National Book Development Board	2.90
53	National Book Trust	
	(a) activities	8.70
	(b) adan-pradan publications	12.00
54	book exports promotion and activities including international book fair	2.75
55	national educational resources centre	} 1.00
	(a) analysis of book imports	
	(b) text book library and information centre.	
	<i>total</i>	38.90
<i>Educational Planning and Coordination</i>		
56	implementation of the recommendations of the Education Commission	0.10
57	strengthening of statistical unit	1.65
58	Indian Council of Social Science Research	41.00
59	grant to Auroville Project	3.00
60	National Staff College for Educational Administrators	2.75
61	pilot project under the Ministry of Education	50.00
62	publication of the abridged versions of the report of the Education Commission in regional languages	0.10
63	maintenance and development grants to voluntary organisations doing research work in Social Sciences	8.00
64	(a) International Education Year	} 0.01
	(b) out of school science education international conference	
65	(c) Central Asian Studie	0.80
	(d) award of fellowships	0.75
66	people of India in dolls	1.00

LIST VIII (Contd.)

(Rs. lakhs)

(0)	(1)	(2)
67	Hindi publications of the Ministry of Education	0.24
68	Asian Institute of Education Planning & Administration	1.60
	<i>total</i>	111.00
	<i>Cultural Affairs</i>	
69	building grants for cultural organisations	9.00
70	propagation of culture among college and school students	5.00
71	Sahitya Akademi	2.50
72	Sangeet Natak Akademi	4.00
73	Lalit Kala Akademi	4.00
74	external culture and I.C.C.R.	7.50
75	review committee of the three akademies and I.C.C.R.	1.00
76	assistance to performing groups	6.50
77	financial assistance to writers in indigent circumstances	0.75
	<i>total</i>	40.25
	<i>Gazetteers</i>	
78	revision of Indian gazetteers and compilation of Bhutan gazetteers	4.00
79	Who's Who Indian martyrs	
80	cultural heritage	1.75
81	revision of district gazetteers	11.60
	<i>total</i>	17.35
	<i>Archaeology</i>	
82	development of archaeology	20.32
	<i>National Archives of India</i>	
83	development of national archives of India	17.84
	<i>Libraries</i>	
84	National Library, Calcutta	8.00
85	central reference library—book exchange unit	0.40
86	Delhi Public Library	7.61
87	Central Public Library	2.00
88	T.M.S.S.M. Library, Tanjore	2.00
89	Raza Library, Rampur	0.50
90	grants to public library	3.00
	<i>total</i>	23.51
	<i>Museums and Art Galleries</i>	
91	National Museum—schemes for the development of	16.00
92	Nehru Memorial Museum and Library	37.85
93	National Gallery	3.00
94	development of Salar Jung Museum, Hyderabad	3.50

LIST VIII (Contd.)

(Rs. lakhs)

(0)	(1)	(2)
95	Indian Museum, Calcutta	4.12
96	victorial memorial hall	1.86
97	grants to private museums	5.90
	<i>total</i>	72.23
	<i>Cultural Institutions</i>	
98	Namgyal Institute of Tibetology, Gantok	0.80
99	Dairatulah-Matrifilezamia, Hyderabad	0.50
100	Institute of Higher Studies, Varanasi	3.00
101	Nav-Nalanda Mahavihara	2.00
102	School of Buddhist Philosophy, Leh	3.94
	<i>total</i>	10.24
	<i>Games, Sports, Physical Education and Youth Services</i>	
103	grant to national sports organisations	4.00
104	National Institute of Sports and National Coaching Scheme	13.00
105	grants to mountaineering foundations	1.00
106	national sports centre and sports house	6.00
107	grants to states sports councils including strengthening of physical education training institutions	10.00
108	sports talent scholarships schemes	4.80
109	Laxhmitbai College of Physical Education	4.50
110	national physical efficiency drive	2.00
111	promotion of training and research in yoga	1.20
112	recreation, circus, literature on physical education and seminars on physical education	0.60
113	campus work projects	1.00
114	planning forums	1.50
115	scouting and guiding	1.00
116	national service crops national sports organisations	114.00
117	assistance to voluntary organisations	2.00
118	exchange of students in camps, studies etc.	10.00
119	youth welfare boards and committees	1.00
120	youth services including youth centres	61.00
	<i>total</i>	239.10
	<i>N.C.E.R.T.</i>	
121	grant in aid to NCERT	126.00
	<i>Scholarships</i>	
122	national scholarships scheme	58.51

LIST VIII (Contd.)

(Rs. lakhs)

(0)	(1)	(2)
123	national loan scholarships scheme	67.30
124	merit scholarships for children of school teachers	6.45
125	merit scholarships in residential schools	2.02
126	national scholarships at the secondary stage for talented children from rural area	15.00
127	scheme of award of scholarships for study abroad	11.00
128	cultural talent scholarships	3.80
129	external scholarships	1.92
	<i>total</i>	167.00
	<i>total-general education</i>	3648.61
	<i>Technical Education</i>	
130	I.I.T., Kharagpur	48.64
131	I.I.T., Bombay	77.00
132	I.I.T., Kanpur	48.52
133	I.I.T., Madras	71.00
134	I.I.T., Delhi	63.61
135	School of Planning and Architecture, New Delhi	2.35
136	N.I.T.E.S., Bombay	17.00
137	I.I. of Industrial Designs, Bombay	5.62
138	I.I.M., Ahmedabad	15.00
139	I.I.M., Calcutta	14.61
140	National Institute of Foundary and Forge, Ranchi	52.54
141	Indian School of Mines, Dhanbad	5.00
142	establishment of regional institutes for training of teachers for poly-technics	64.19
143	quality improvement programmes	65.57
144	revision of salary of technical teachers	10.00
145	practical training stipends schemes, programmes of apprenticeship training	170.00
146	defence training scheme (part-time course)	0.70
147	State Government institutions (part-time diploma)	2.00
148	Non-Government institutions (part-time degree course)	1.30
149	State Government institutions (part-time degree course)	2.00
150	Non-Government scientific and technical institutions for development and improvement etc. including M.I.T. Madras (Central grants to private institutions)	70.00
151	commerce education, art education and management studies at other centres	2.00

LIST VIII (Contd.)

(Rs. lakhs)

(0)	(1)	(2)
152	subsidy towards the interest charges on loans to the non-government engineering and technological institutions	0.01
	construction of hostels and staff quarters at engineering and technical institutions	
153	state government institutions	60.00
154	Non-government institutions	40.00
155	practical training hostels	1.50
156	establishment of 4 technical schools and 4 department of advanced studies	1.05
157	board of apprenticeship training	4.24
158	national council for science	12.50
159	additional management institute	5.00
	<i>total--technical education</i>	932.95
	<i>grand total-education</i>	4581.56

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APPENDIX

LIST IX

Scientific Research Programmes for 1971-72—Centre

(Rs. lakhs)

sl. no.	head of development /scheme	outlay 1971-72
(0)	(1)	(2)
<i>Department of Atomic Energy (Research and Development)</i>		
1	Bhubha Atomic Research Centre	330.92
2	Variable Energy Cyclotron project	178.82
3	Reactor Research Centre	211.58
4	space research programmes	565.66
5	grants in aid and donation to scientific societies and institutions	122.84
6	land and building and township	152.13
7	atomic minerals	35.56
8	pilot studies relating to desalination and underground water	5.00
9	other schemes	17.53
	<i>total—Department of Atomic Energy (R and D)</i>	1620.04
<i>Council of Scientific and Industrial Research</i>		
10	research and development projects and pilot plants in National Laboratories	623.35
11	research schemes scholarship and fellowships	34.10
12	industrial research associations	69.54
13	residential buildings	120.00
14	other schemes	7.50
	<i>total—Council of Scientific and Industrial Research</i>	854.49
<i>Scientific Surveys and Development Division under the Department of Science Technology and Ministry of Education and Social Welfare</i>		
15	Survey of India	117.00
16	Botanical Survey of India	7.66
17	Zoological Survey of India	6.86
18	Anthropological Survey of India	6.30
19	National Atlas Organisation	5.34
20	Scientific Societies and Institutions and grants for Scientific Research	57.69
21	National Research Development Corporation	11.90
22	capital outlay on public works	35.60
	<i>total—Scientific Surveys and Development Division under the Department of Science Technology and Ministry of Education and Social Welfare</i>	248.35
	<i>grand total</i>	2722.88

APPENDIX

LIST X

Health Programmes for 1971-72—Centre

		(Rs. lakhs)
sl. no.	head of development/scheme	outlay 1971-72
(0)	(1)	(2)
<i>Medical Education Training</i>		
1	National Medical Library	9.10
2	Lady Hardinge Medical College & Hospital, New Delhi	12.00
3	Kasturba Health Society, Sewagram for starting a medical college at Sewagram	10.00
4	All India Institutes of Medical Sciences, New Delhi	69.65
5	Vallabh Bhai Patel Chest Institute, Delhi	10.00
6	All India Mental Health Institute, Bangalore	4.00
7	stipends to post-graduate students in medicine and surgery	25.00
8	post-graduate Institute of medical education and research Chandigarh	42.50
9	Jawaharlal Nehru Institute for post-graduate medical education and research, Pondicherry	35.00
10	National Institute of Health Administration and Education, Delhi	13.44
11	training centre for integrated course of nursing and public health and scholarship for nursing, education, master of nursing, post-graduate B.Sc. nursing and diploma	18.40
12	assistance to private medical colleges	1.00
13	training and research in medical statistics	0.75
14	training programme at model vital and health statistics unit, Nagpur	0.43
15	child welfare training centre	0.05
16	mobile training-cum-service units	12.00
17	training of Physio-therapists etc. at the physio-occupational therapy Institute, New Delhi	0.71
18	college of nursing	17.50
	<i>total</i>	281.32
<i>Medical Research</i>		
19	medical research (ICMR)	220.00
<i>Medical Care</i>		
20	extension of CGHS Scheme to Bombay	13.00
21	extension of CGHS Scheme to other cities	2.00

LIST X (Contd.)

(Rs. lakhs)

(0)	(1)	(2)
22	extension of CGHS to Delhi Police Personnel	15.00
23	extension of CGHS scheme to Uttar Pradesh	20.00
24	extension of CGHS Scheme to West Bengal	12.00
25	Mental Hospital (HMD) Ranchi	2.54
26	All India Institute of Hearing & Speech, Mysore	8.19
27	Chittaranjan National Cancer Institute	2.00
28	Cancer Research Centre, Calcutta	4.70
29	MP Shah Cancer Research Centre, Ahmedabad	1.00
30	All India Institute of Physical Medicine and Rehabilitation Bombay	15.81
31	grant-in-aid to voluntary organisations	50.00
32	Rehabilitation Centre, Safdarjang Hospital, New Delhi	5.32
33	supply of Anti-TB drug to voluntary TB Institutions	15.00
34	Safdarjang Hospital, expansion of	12.10
35	Willingdon Hospital, expansion of	4.30
	<i>total</i>	182.96
	<i>Control of Communicable Diseases</i>	
36	national malaria eradication programme	1.00
37	national filaria control programme	0.06
38	national smallpox vaccine unit, NICD	1.52
39	cholera control programme (for educational material)	0.50
40	regional & central cholera control unit	0.32
41	national TB Institute, Bangalore	0.10
	<i>total</i>	3.50
	<i>Other Programmes</i>	
42	goitre control scheme	4.52
43	pilot project in feasibility of vitamins and mineral fortification of sample food	0.44
	<i>total</i>	4.96
	<i>Central Institutes</i>	
44	All India Institute of Hygiene and Public Health, Calcutta	1.69
45	National Institute of Communicable Diseases, Delhi	5.00
46	Establishment of Neuro-Virulence Testing Unit, NICD	1.52
47	Establishment of Virology Division, NICD	1.00
48	Central Research Institute, Kasauli	2.25
49	Central Leprosy Training & Research Institute Chingleput	1.00
50	Expansion of BOG Vaccine Laboratory, Guindy	5.10
51	Central Drug Laboratory, Calcutta	3.89

LIST X (Contd.)

		(Rs lakhs)
(0)	(1)	(2)
52	Drug Technical Advisory Board	12.30
53	Prevention of Food Adulteration	1.75
54	Central Food Laboratory Calcutta	0.72
55	Central Health Education, Bureau	0.68
	<i>total</i>	36.80
	<i>Indigenous Systems of Medicine</i>	
56	development of ayurvedic unani homoeopathic and nature cure system	100.00
57	pharmacopœcial committee on ISM including homoeopathy	0.33
58	central Indian Pharmacopia Laboratory, Ghaziabad	0.50
	<i>total</i>	100.83
	<i>Miscellaneous</i>	
59	construction of buildings in Delhi and other places, etc.	25.38
60	construction of staff and office accomodation port health organisation, Kandla	0.40
	<i>total</i>	25.78
	<i>grant total</i>	856.15

APPENDIX

LIST XI

Family Planning Schemes for 1971-72—Centre

(Rs. lakhs)

sl. no.	head of development/scheme	outlay 1971-72
(0)	(1)	(2)
1	urban & F.W.P. centre	3.00
2	post partum programme	2.40
3	central health transport organisation	7.23
4	Ministry of Railways, Defence and D.G.P & T	55.70
5	commercial distribution of conventional contraceptives	96.15
6	central F.P. Corps	2.00
7	Hindustan Latex Ltd.	10.00
8	training of A.N.Ms.	28.00
9	training of I.M.A. personel through central I.M.A.	0.50
10	stipend to medical students	4.00
11	F.P. training centre, Bombay	3.17
12	central F.P. field unit	9.79
13	mass education media division, deptt. of F.P.	81.00
14	Ministry of Information & Broadcasting	77.35
15	demographic & communication research	30.00
16	National Institute of F.P., New Delhi	37.29
17	International Institute of Population Studies, Bombay	13.86
18	medical & biological research	55.00
19	research in Indian system of medicine	3.63
20	technical wing of deptt. of F.P.	22.74
21	regional offices	15.18
22	other offices	13.40
23	awards	2.00
24	discretionary grant	0.85
25	experimental project	4.00
	<i>total</i>	578.24

LIST XII

Housing, Urban Development and Water Supply Programme for 1971-72—
Centre

		(Rs. lakhs)
sl. no.	head of development/scheme	outlay 1971-72
(0)	(1)	(2)
<i>Housing Schemes</i>		
1	office and residential accommodation	570.00
2	experimental housing	3.00
3	housing statistics	4.00
4	integrated subsidised scheme—employees' scheme	1.51
5	plantation labour housing	50.00
6	housing and urban development corporation—share capital	200.00
7	cellular concrete factory at Ennore	15.00
8	dock labour housing	17.00
	<i>total</i>	860.51
<i>Urban Development</i>		
9	town planning and inter-state regional plans	10.00
10	local self government schemes	5.76
	<i>total</i>	15.76
<i>Water Supply</i>		
11	training in public health engineering	2.45
12	central water pollution prevention board	1.00
13	UNICEF assistance of ground water development— rupee counter-part (handling charges etc.)	25.00
	<i>total</i>	28.45

APPENDIX

LIST XIII

Social Welfare Programmes for 1971-72—Centre

(Rs. lakhs)

sl. no.	head of development/schemes	outlay 1971-72
(0)	(1)	(2)
1	family and child welfare	140.00
2	nutritional feeding in balwadis	102.00
3	special nutrition programme for children	998.38
4	assistance to voluntary organisations for welfare of destitute children and destitute women	25.00
5	grant-in-aid to voluntary organisations by the Central Social Welfare Board	127.00
6	welfare of the physically handicapped	29.02
7	research, training and administration	14.50
8	Central Bureau of Correctional Services	2.00
9	strengthening of all-India voluntary organisation	4.96
10	educational work for prohibition	1.00
11	rehabilitation of rehabilitable persons from permanent liability home and infirmaries	20.00
12	regional pre-vocational training centres	3.95
	<i>total</i>	1467.81

APPENDIX

LIST XIV

Labour Welfare and Craftsman Training Schemes for 1971-72—Centre
(Rs. lakhs)

(0)	(1)	(2)
<i>Labour Ministry</i>		
1	central and regional labour institutes	5.34
2	National Safety Council	1.00
3	mines safety programmes	1.00
4	programmes for Chief Labour Commissioner's office	3.00
5	workers' education	15.00
6	Labour Bureau Schemes	33.21
7	National Institute for Labour	7.50
	<i>total</i>	66.05
<i>Directorate General of Employment and Training</i>		
8	Central Staff Training and Research Institute, Calcutta	11.08
9	Foreman Training Institute, Bangalore	13.10
10	Advanced Training Institute, Madras	6.98
11	central training institute for inspectors	2.81
12	mine mechanisation training institutes	0.25
13	all India skills competitions	0.66
14	progressive trade tests	2.09
15	national apprenticeship scheme	24.81
16	basic training facilities in non-ITI trades in the existing CTIs including Hostel a commodation for apprentices	6.00
17	all India trade test for apprentices	1.00
18	local cost of foreign experts	7.51
19	supervisory training scheme	0.50
20	central institute for research and training in employment service	0.49
21	vocational rehabilitation centres	7.72
22	occupational information employment counselling and studies	18.28
23	setting up of the National Focal Point in DGET including cash contribution to UNDP under Asian Manpower plan	1.63
	<i>total</i>	104.91
24	construction of buildings, etc.	19.02
	<i>grand total</i>	189.98

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