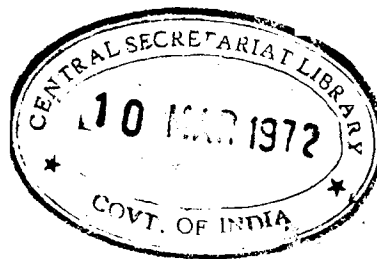


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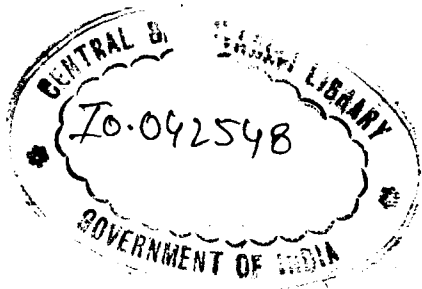
FOURTH FIVE YEAR PLAN

(1969—74)

[The draft incorporates the proposals for the Annual Plan
1969-70]

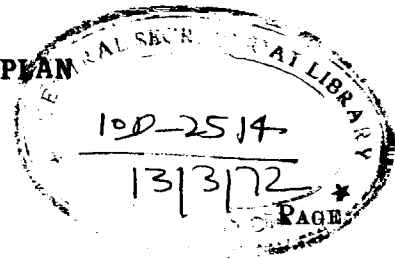
PLANNING DEPARTMENT
GOVERNMENT OF BIHAR

September, 1968



DRAFT FOURTH FIVE YEAR PLAN
(1969—74).

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INTRODUCTORY NOTE.

The draft outline gives the substance of the proposals of the State Government of Bihar for the Fourth Five Year Plan (1969—74). With minor modifications the draft is according to the format suggested in Planning Commission letter no. PC(P)1/4(1)66., dated the 27th July, 1968. The proposals contained in this first draft will be discussed in the Working Groups consisting of officers from the Planning Commission, representatives of the Central Ministries and of the State Government in October, 1968. The final draft will emerge after the discussions with Planning Commission have been completed.

The work of preparation of the draft Plan was taken in hand early this year after certain guidelines were provided by the Planning Commission. More than two dozen Working Groups consisting of senior Administrators, technical heads of departments, economists and selected non-officials worked on the requirements of the different sectors of the Plan. The proposals contained in the draft outline are based mainly on the recommendations of these Working Groups. Some important recommendations of the Working Groups were also placed before the State Planning Committee.

While the draft Plan was under preparation the National Development Council Committee of Chief Ministers considered the principles to be adopted for distribution of Central assistance to the States during Fourth Plan and also the pattern of Central assistance. Till the time the draft was sent to the Press the final decision of the National Development Council on the subject was not available but we have proceeded on the assumption that Central assistance would be available in the shape of block loans and block grants in place of the earlier schematic pattern. We have also assumed that the list of Centrally sponsored schemes will now be much smaller but would be financed fully by the Central Government.

The earlier draft Fourth Plan of the State prepared in October, 1966 envisaged an outlay of Rs. 5,45 crores. The present draft is of Rs. 4,93.75 crores. Considering the increased cost of the plan due to inflation, the increased expenditure on non-productive items due to increase of cost of living allowance, etc., the size of the plan should have been considerably larger than Rs. 5,45 crores for ensuring the realisation of the development potentials of the State. In view of the severe financial constraints, however, the proposed outlay has been kept at a figure which is almost the minimum. No firm figures have yet been indicated about the quantum of Central assistance that will be available during the Fourth Plan period. A minimum amount of Rs. 300 crores has been assumed as a working basis but this also would leave a large gap which will remain to be bridged. Apart from the efforts to be made by the State Government to raise resources, Central assistance on a generous scale would be necessary and this should include a rescheduling of the repayment of Central loans.

Due to the emphasis given on the fullest utilisation of the available material and human resources planning at the district level will have an important place in the Fourth Plan. The 17 districts of the State situated in the three broad natural divisions, i.e., North Bihar, South Bihar (Gangetic plains) and Chotanagpur plateau have their peculiarities which have to be taken into account in devising development schemes locally for those areas. The concerned District Officers will collect and analyse data regarding physical characteristics, natural resources, development of infra-structure and consider the various possibilities of economic development to ensure the maximum utilisation of the existing infra-structure. Planning at the local level will be a continuing process and adjustments will be made from year to year keeping certain priorities and targets in view. This approach will be different from the earlier practice of drawing up a list of schemes based on the demands of the local people. Some exercises in planning on these new lines have already been made with the help of district maps at the district level and further exercises will be made from time to time during the Fourth Plan period.

CHAPTER I.

Physico-geographical conditions of the State.

The State of Bihar has three principal natural divisions—North Bihar, South Bihar and the Plateau region of Chotanagpur and Santhal Parganas. North Bihar, separated from the rest of the State by the Ganga, comprises of the four districts of Tirhut Division and Purnea, Saharsa and parts of Monghyr and Bhagalpur districts of the Bhagalpur Division. South Bihar broadly consists of the plains south of the river Ganga and comprises of the three districts of Patna Division and parts of Monghyr and Bhagalpur districts of the Bhagalpur Division. The plateau of Chotanagpur and Santhal Parganas extends to almost half of the area of the State and comprises of the five districts of the Chotanagpur Division and the district of Santhal Parganas of the Bhagalpur Division.

As per 1961 census, the State of Bihar is the second largest State in India by size of population. It has a population of 46.4 millions comprising of about 23.3 million males and 23.1 million females. It extends over an area of 1,74,038 square kilometers. With only 5.31 per cent of the Union's land area, Bihar contains 10.58 per cent of its entire population. There are 67,665 inhabited and 10,428 uninhabited villages in Bihar. The number of towns in the State is 153. Seven of them have a population above one lakh. The average density of population is 267 persons to a square kilometer against 144 for India as a whole. The population, however, is not distributed evenly. The average density in the North Bihar plains is 408 and in the South Bihar plains 324 as against only 146 in the Chotanagpur plateau. A compact block extending over the portions of the districts of Saran, Muzaffarpur, Darbhanga, Champaran, Monghyr (North) Patna and Shahabad occupying less than 1/8th of the land area contains more than one fourth of the total population of the State, and comprises one of the largest and most densely populated tracts in the country. In Tirhut Division, in an area roughly comparable in size to that of Kerala, the average density (1 201 persons to the square mile) is even higher than that of Kerala (1,127).

Since 1961 the total population of the State is estimated to have increased from 46.5 millions to about 55.93 millions at the commencement of the Fourth Plan (1969) and is expected to rise to 63.11 millions by the end of the Fourth Plan (1974) and to 70.32 millions by the end of the Fifth Plan (1979). The average growth rate (19.77 per cent) of the population of Bihar in the last decade (1951—61) though lower than the all India average of 21.5 per cent, was phenomenal and higher than the rate recorded on any of the previous census.

During 1951—61 the rural population of Bihar increased from 36.16 millions to 42.54 millions indicating an increase of 17.5 per cent as against an all-India average of 20.6 per cent. During 1951—61 the urban population of Bihar increased from 2.59 millions to 3.91 millions indicating an increase of 15.9 per cent as against the all-India average of 26.4 per cent. According to the 1961 census, the ratio of rural and urban population was 91.59 : 8.41 as against the corresponding all-India figures of 82:18.

Sandy alluvial soil is the main characteristic of the plains north of the Ganga. It is spread over the entire North Bihar Plain except the mid-western portion which contains calcareous soil. Sandy alluvial soil is rich in lime and often contains a high proportion of clay making it sticky and non-porous. It is suited to the cultivation of paddy. Calcareous soil containing a very high content of calcium carbonate showing highly alkaline reaction is found in a patch in the mid-western portion of the North Bihar Plain. Alluvial soil of a heavy texture with a heavier sub-soil, is the main characteristic of the South Bihar Plain. Red soil covers almost the entire Chotanagpur plateau, except Singhbhum district. It is highly ferruginous and its composition and texture differ from place to place depending on the parent rock, topography, leaching and temperature. Mixed red and black soil occur in Singhbhum and parts of south-eastern Ranchi.

The normal rainfall exceeds 2,000 mm. in the north-eastern portion of Purnea district and the Himalayan foot hills in the north-west of Champaran, and is between 1,600 and 2,000 mm. in contiguous areas. The only other areas with over 1,600 mm. of annual rainfall are the Netarhat Plateau and a small zone near Khunti. The rainfall is 1,200—1,600 mm. in the northern, eastern and southern parts of the State. It falls below 1,200 mm. in Saran, south Muzaffarpur, Patna, Gaya, Shahabad and Monghyr districts. The State average is 1,272 mm.

About 18 per cent of the total geographical area of the State is covered by forests. The area not available for cultivation other than forests accounts for 13.8 per cent of the total area while the net area sown is of the order of 49.3 per cent. Culturable waste land covers 17.3 per cent of the total geographical area of the State. For the State as a whole, the average size of the agricultural holding per capita in its rural areas in 1965 was 0.46 acre. In Saran, Muzaffarpur and Darbhanga districts, the size of the agricultural holding per capita in the rural areas is of the order of 0.35 acre. These are among the most densely populated districts in the State. In Ranchi district which is comparatively sparsely populated, the average size of the agricultural holding per capita is almost double the State average. The net area of cultivation per capita is only 0.42 acre for the State as a whole. The average size of holding in the State is about 2.94 acres and well over 80 per cent of the holdings are below 5 acres. Cultivation is mainly dependent on rainfall. As rainfall is often inadequate and erratic, droughts occur not infrequently over large parts of the State. The North Bihar plains are also liable to suffer from heavy floods. For these and other reasons, agricultural yields have been generally low and uncertain.

According to the 1961 census, out of a total population of 46.4 millions in the State, 19.23 millions or 41.4 per cent are workers. Among workers, males comprise 27.9 per cent and females 13.5 per cent so that 2 out of every 3 workers are males. About 77 per cent of all workers are employed in agriculture as against 69.5 per cent for India as a whole. 42.1 per cent of the rural population are workers and the remaining non-workers. The participation rate for the rural population is thus higher than that for the total population (41.4 per cent). Only 33.3 per cent of the urban population are workers. Although the plateau region of Bihar contains large reserves of coal and other raw materials of industry and few large manufacturing concerns have been established, only 2.2 per cent of workers in Bihar are employed in manufacturing industry as against the average of 4.2 per cent for India. The percentages of workers employed in household industry, trade and commerce, construction, transport and communication, and other services are also significantly lower than the average for all-India.

As the level of urbanisation is very low in Bihar the industrial structure of its rural population follows closely the pattern indicated by the total population. The economy of the State is predominantly rural and agricultural. In Ranchi, Palamau, Santhal Parganas, Hazaribagh, Champaran, Saharsa, Saran and Gaya, participation of the rural population in primary sector is very high. Participation in the secondary sector is comparatively high in the districts of Darbhanga, Bhagalpur and Monghyr. The industrial structure of the urban population, however, is quite different from that of the rural population. There is an appreciable concentration of workers in the primary sector in the districts of Dhanbad and Hazaribagh, mainly due to mining activities in these districts. In Saharsa over 1/3 of the working population is engaged in the primary sector, mainly in agriculture and dairying. More than 1/2 of the urban workers in Singhbhum are engaged in the secondary sector. Agricultural labourers, who are essentially landless people engaged on land, comprise a large section of the agricultural working population in all districts in the plains region of the State. In Darbhanga, Champaran and Patna no fewer than 4 out of every 10 agricultural workers are agricultural labourers. Even in other plains districts with the sole exception of Saran, the

proportion of agricultural labourers is nowhere less than one-third. Only 9.12 per cent of the working population of Bihar is engaged in the secondary sector, i.e. mining, quarrying, household industry and manufacturing other than household industries. Employment in the secondary sector is lowest in Ranchi, Champaran, Saharsa and Palamau districts.

Bihar is the richest State in India in regard to mineral resources. The main deposits occur in Chotanagpur Plateau. With a little over 48 per cent of the country's total production Bihar is the largest producer of coal in the country. In regard to iron-ore it ranks next only to Orissa in production. Copper is produced only in Bihar. The richest mica tracts in India are located in Bihar. Ruby mica production in Bihar occupies a unique position in the world. Other minerals with a fairly appreciable quantum of production in the State are bauxite, manganese, kyanite, clay, asbestos, pyrites, sulphur and apatite.

The Scheduled Castes comprise 14.07 per cent of the State's population, as against 14.71 per cent for the country as a whole. The Scheduled Tribes comprise 9.05 per cent of the State's population, as against 6.81 per cent for the country as a whole. The Scheduled Tribes in Bihar are mainly concentrated in the six districts of Chotanagpur Plateau. More than two-fifths (61.61 per cent) of Ranchi's population and almost half (47.31 per cent) of Singhbhum's population are tribal. The proportions are lower in the Santhal Parganas (38.24 per cent) and Palamau (19.24 per cent), and only about 11 per cent in Hazaribagh and Dhanbad. There is also a very sizable population of other socially and economically backward communities who need special assistance in various ways.

Out of 39.3 million persons aged five years or more in the State, 8.5 million persons or 21.75 per cent are literate. The corresponding rate of literacy was 13.45 per cent in 1951. Though there has been substantial increase in the literacy rate in the last decade, the rate in Bihar is still among the lowest in India, and considerably lower than the all-India average of 28.29 per cent.

The per capita income in Bihar (Rs. 292) is not only lower than the national average (Rs. 423) but the lowest among all the States in India. As the per capita income is very low, there is some difficulty in generating substantial savings, or building up sizable reserves for capital for investment in development programmes or raising additional resources through taxation.

Due partly to the low per capita income of the people, and partly to certain historical reasons bearing on the land tenure, the revenue receipts of the State Government are much lower than in other States of comparable size ; and the per capita revenue, as also the per capita expenditure, both development and non-development, are about the lowest among all States in India. In particular, the low per capita expenditure on education over many decades has resulted in a large backlog of illiteracy and educational backwardness.

CHAPTER II

Review of the important programmes.

1. The efforts made during the first three Plans for building up suitable infra-structure for the development of the economy in its various sectors, for remedying some of the basic ills, and for increasing the supply of goods and services for meeting the urgent needs of a fast growing population have met with a considerable measure of success. The annual net State output has increased in this period from about Rs. 590 crores to over Rs. 1,000 crores.

2. *Outlays in first three Plans.*—The outlays made in the First, Second and Third Plans and the Annual Plans are shown below :—

		Agricul- ture and C. D.	Irriga- tion and flood control.	Power, and Mining.	Industry and Communi- cation.	Trans- port and Communi- cation.	Social services.	Miscella- neous.	Total.
First Plan	..	16.04	12.94	9.46	1.04	10.78	21.19	1.82	73.27
Second Plan	..	54.20	26.98	31.14	8.47	15.20	41.28	0.71	177.98
Third Plan	..	68.62	75.95	84.73	9.69	17.09	57.98	0.70	314.79
Annual Plans—									
1966-67	..	20.47	22.30	23.29	2.09	3.31	8.38	0.12	79.96
1967-68	..	20.22	18.92	17.15	2.39	2.44	7.71	0.08	68.91
1968-69	..	18.88	18.76	15.75	2.35	4.56	9.42	0.04	69.76

AGRICULTURE.

The average annual production of foodgrains in Bihar at the commencement of the First Plan was around 51 lakh tonnes. The average for the quinquennia ending 1955-56, 1960-61 and 1965-66, that is for the First, Second and Third Plan periods work out to 52.06, 59.58 and 72.50 lakh tonnes respectively. We may thus fairly claim that the annual production of foodgrains has increased over the first three Plans by about 21 lakh tonnes or say about 40 per cent approximately. The actual production in the last year of the Second Plan (1960-61) was 73 lakh tonnes. The production increased to 74.12 lakh tonnes in 1964-65, but declined to 69.17 lakh tonnes in 1965-66 due to unfavourable weather conditions over large parts of the State, apart from non-fulfilment of irrigation target and rise in the cost of fertilisers with inadequate supply.

During the Annual Plans 1966-67 and 1967-68, the target was to achieve an additional production of 6.05 lakh tonnes and 10.16 lakh tonnes respectively over a base of 73 lakh tonnes for 1966-67. The potential created, however, was only 5.91 lakh tonnes upto 1967-68 because Bihar had to face unprecedented drought and famine over a large part of the State. Flood also took its toll in 1967-68. A large number of short-term measures capable of yielding quick results including the high yielding varieties programme, short-duration cropping, multiple-cropping and promotion of subsidiary foodgrains were undertaken to combat the crisis. It is expected that by the end of 1968-69 an additional potential of 10.72 lakh tonnes would be created.

A good part of the provision under agriculture during the first three Plans has been utilised for building up the basic infra-structure consisting of agricultural research, agricultural education and agricultural extension services, and a

viable base has now been created for promoting more intensive development of agriculture in future years. These and other measures taken under Agricultural Production Programmes during the first three Plans have set in motion a process of modernisation of agriculture in the state through the application of scientific knowledge and techniques which may produce far-reaching results in the course of a decade or so.

CREDIT.

The total amount of short and medium term agricultural Credit provided through co-operatives increased from Rs. 2.46 crores in 1961-62 to Rs. 10.40 crores in 1965-66.

IRRIGATION AND FLOOD CONTROL.

Considerable emphasis was given in the first three Plans on development of irrigational facilities and flood control. Among the major projects, the main portion of the Kosi Project had been completed by the end of the Third Plan period. While flood control was established early, the utilisation of irrigation water started on a small scale only in the last year of the Third Plan due to various reasons, e.g., want of watercourses, and delay in the erection of the hydel power unit. Steps have been taken for remedying these shortcomings, and a well co-ordinated programme was taken in hand towards the end of the Third Plan period for promoting intensive agricultural development of the areas irrigated by the Kosi. Among other major projects, which had been more or less completed by the end of the Third Plan period, mention may be made of the remodelling of the Sone canals and the construction of the Barrage over the river Sone near Dehri. The gross area irrigated from new major and medium projects at the end of the Third Plan was 6.15 lakh acres. It is expected that with the progress made during the first three Plans in the execution of various major and medium projects, acceleration of certain projects, more especially the Gandak, it would be possible to provide effective irrigation to an additional 35 lakh acres by the end of the Fourth Plan (1973-74). Under minor irrigation there is need for distinguishing between (a) ground water schemes e.g., wells, tube-wells, provision of rahat, pumps etc., (b) small reservoir and weir schemes ; and (c) renovation of old irrigation channels, tanks and embankments.

It was estimated that the stabilised area under the Minor Irrigation Schemes was 7.75 lakh acres in 1955-56 and 17.50 lakh acres in 1960-61. Taking the first three Plans together, the irrigation potential created is approximately 6 lakh acres under (a) and about 19 lakh acres under (b).

During the First, Second and Third Five Year Plan periods respectively 2,348, 1,273 and 1,027 diesel pumps were given to cultivators on a subsidy basis. During 1966-67, 1967-68 respectively about 7,800 and 8,000 additional diesel sets were distributed to cultivators. The anticipated achievement during 1968-69 is also likely to be about 8,000. Up to the end of the Third Plan period, there were about 10,556 electric pumping connections only. During 1966-67 as many as 14,012 additional electric connections were provided for pumping sets, whereas during 1967-68 the number of additional connections went upto 15,807. In the year 1968-69 it is expected that another 15,000 to 17,000 connections will be given.

POWER.

At the commencement of the First Plan power generation in Bihar was largely confined to self-generating units in a few mineral and industrial centres, and electricity supply was available in only 10 towns and villages out of a total of

about 68,000. The progress made during the three Plans will be evident from the following figures :—

	1950.	1955.	1960.	1965.
1. Total installed generating capacity (MW).	244	449	604	859
2. Per capita energy consumption (MWH).	15.3	29.1	41.1	60.0
3. Number of places electrified ..	10	364	2,475	4,070

The increase in 1965 over 1950 in installed capacity works out to 252 per cent ; in per capita consumption to 292 per cent, and in the number of places electrified to 4,070. The growth of installed capacity is, however, substantially lower than in the country as a whole, for, while in 1950 Bihar has 10.6 per cent of the generating capacity of India, the corresponding figure in 1965 is only 8.45 per cent. The average per capita consumption in Bihar is only slightly below the average for all-India (61) but the bulk of the energy is consumed in the mineral and industrial belt, and the supply available in the rest of the State is very limited. The existing transmission facilities are inadequate over most parts of the State, more particularly in the North Bihar plains where the density of population is very high. In all, only about 6 per cent of the towns and villages in the State have been electrified so far, and in rural electrification and development of ground water resources with the help of electrical pumps, the State is well below the average for the nation as a whole.

One unit of 50 MW at Patratu was commissioned during 1966-67. Work was also in progress on the first unit of 50 MW at Barauni and the second unit of 50 MW at Patratu. The erection work on the Kosi Hydrel Station was also taken up towards the end of the year. During 1967-68 the second unit of 50 MW at Patratu was commissioned. The work on another unit of 50 MW at Barauni was in an advanced stage. The erection of the two 50 MW sets at Barauni was also in progress. However, the erection of the Kosi Hydrel Station received a set-back due to serious waterlogging in the Turbine pit, non-receipt of materials and equipments and delay in the second stage connecting work. During 1966-67, 14,012 pumping connections were given. This was raised to 15,807 during 1967-68. Transmission, Sub-Transmission and Distribution Lines were also attended to, particularly keeping in view the requirements of the rural areas for energisation of pumping sets. At the end of 1966-67 the aggregate load on the Board's system was about 255 MW out of which the Board met about 82 MW from its own generation and the balance by purchases from other sources. The demand rose to 300 MW during 1967-68 and the Board met 117 MW from its own generation, the balance being purchased from other sources.

ROADS AND ROAD TRANSPORT.—Considerable progress has been made with the construction of National and State Highways and major district roads. The mileage under roads in these categories has increased from 3,025 miles at the commencement of the First Plan to 9,109 miles at the end of the Third Plan. The mileage of major district roads has also increased from only about 102 miles in 1951 to 5,130 miles in 1965-66. The total length of first class metalled roads has also increased from about 2,000 miles in the pre-Plan period to 7,173 miles at the end of the Third Plan. The progress has been particularly marked in North Bihar

where the length of metalled roads has increased from 440 miles in 1951 to 3,162 miles. Good progress has been made also with the widening of trunk roads, and the length of the double lane roads has increased from 57 miles only in 1950 to 525 miles. Although the development of the road system is still very inadequate for meeting fully the present and future needs, and vast areas in the interior are still without proper road facilities, it can be fairly claimed that during the first three Plans a broad net-work of all-weather highways has been built over most parts of the State, including North Bihar.

MINERALS

The southern part of the State contains most of India's reserves of coal (more especially, metallurgical coal), besides large reserves of other industrial raw materials such as iron-ore, limestone, mica, bauxite, copper, china-clay etc. At constant prices, the net output of mineral production in Bihar rose from Rs. 23.05 crores in 1950-51 to Rs. 25.40 crores in 1955-56, Rs. 32.12 crores in 1960-61, and Rs. 39.29 crores in 1965-66. The percentage increase in the net output in 1965-66 over 1950-51 works out to 70.46 per cent. The rate of growth of mineral production in Bihar has, however, been lower than in India. The index of mineral production in the State, taking 1955-56 as base (100) was only 151 in 1965-66 as against 184 for all-India.

INDUSTRIES

Although Bihar has a very rich industrial potential, and it is the second most populous State in the country, the average number of daily workers employed in factories in 1954 was only about 2.3 lakhs; and 8 States rank higher than Bihar in industrial development on this criterion: Maharashtra (9.6 lakhs), West Bengal (8.9 lakhs), U. P. (4.0 lakhs), Madhya Pradesh (3.6 lakhs), Gujerat (3.9 lakhs), Madras (3.6 lakhs), Andhra Pradesh (2.6 lakhs) and Mysore (2.4 lakhs). A few large-scale industries based on the mineral resources of the State had been established well before the First Plan period, but their presence did not attract many ancillary or subsidiary industries in the State. The State has set up two factories, viz., Super-phosphate Factory of Sindri and High Tension Insulator Factory at Ranchi with a total outlay of about Rs. 1.85 crores. During the Third Five Year Plan production in the Superphosphate Factory was raised from 12,000 tonnes to 22,000 tonnes. The High Tension Insulator Factory was commissioned into production and preliminary arrangements were advanced for setting up an Electric Equipment Factory in collaboration with the General Electric Company. In the Co-operative Sector a Spinning Mill with 12,000 spindles was set up at Mokameh. The Oil Refinery set up by the Government of India at Barauni went on steam some years ago. Work has also started on the establishment of a fertilizer factory and a Petro-Chemical Complex around Barauni. The Central Government also took up the establishment of a heavy industries complex, consisting of a Machine Building Plant, a Foundry Forge and a Machine Tools Plant at Ranchi in the Second Plan period. These have now gone into production. The decision to locate a large steel plant based on the coking coal resources around Bokaro was taken in the Second Plan period, but its construction could be taken up only towards the fag end of the Third Plan. There has been some expansion of industries in the private sector during the last three Plans, but the rate of expansion has been relatively slow.

While the pace of growth of industries during the first three plans has been rather slow and halting some progress has been made in the planning and development of resource-based large-scale industries chiefly in the public sector which are expected to provide considerable scope for development of modern small-scale and medium ancillary and subsidiary industries in the State

during the Fourth and the Fifth Plan periods. There was also an increase in the net value of the output of factory establishments during the three plans as shown below :—

—		1950-51.	1955-56.	1958—61.	1965-66.
Net value in crores of rupees	..	32.4	43.91	58.48	78.07
Percentage increase	.. ..	..	35.5	33.2	33.50

As might be expected, however, from what has been said earlier in this paragraph, the rate of increase has been significantly lower than in India as a whole and the index of industrial production in Bihar with 1956 as the base year works out to 151.3 as against 184.4 for all-India.

EDUCATION

The enrolment in Primary Classes (I to V) has increased from 14.65 lakhs in 1950-51 to 39.59 lakhs in 1965-66 that is by 280 per cent. However, the enrolment in primary schools as a percentage of the total population in the State of boys and girls in the 6—11 age-group is still well below the all-India average.

The Bihar and all-India percentages of the children in the 6—11 age-group who were enrolled in the primary classes during the years 1950-51, 1955-56, 1960-61 and 1965-66 are as follows :—

—				1950-51.	1955-56.	1960-61.	1965-66.
Bihar	.. ..	..	..	27.9	35.7	50.7	54.3
India	.. ..	..	..	42.6	52.9	62.2	78.5

In 1966-67 Bihar's percentage went up to 55.2, the all-India average for 1966-67 being 79.9 per cent. In 1967-68 Bihar's percentage grew further to 56.3 per cent.

At the middle school level, the enrolment increased from 2.23 lakhs in 1950-51 to 7.13 lakhs in 1965-66. Here again the percentage of enrolment to the total population of boys and girls in the 11—14 age-group is significantly below the all-India average. The percentages of enrolment to the total population in Bihar and the whole of India in 1950-51, 1955-56, 1960-61 and 1965-66 are as follows :—

—				1950-51.	1955-56.	1960-61.	1965-66.
Bihar	.. ..	..	..	7.8	10.3	17.1	18.6
India	.. ..	..	..	12.7	16.5	22.5	32.2

In 1966-67 Bihar's percentage rose to 19.1 as against the all-India percentage of 33.9. In 1967-68 Bihar's percentage increased further to 19.4.

At the secondary stage the enrolment increased from 1.5 lakhs in 1950-51 to 4.54 lakhs in 1965-66. The percentage of enrolment to the total population of boys and girls in the 14—17 age-group in 1965-66 was 13.5 as against 17.8 per cent for the whole of India in 1965-66. The percentage of Bihar in 1966-67 dropped to 13.2 as against the all-India average of 19 per cent in the same period. During 1967-68 Bihar's percentage rose again to 13.4.

At the University stage the enrolment increased from 23,000 in 1950-51 to 1.04 lakhs in 1965-66, 1.09 lakhs in 1966-67 and 1.14 lakhs in 1967-68. The total enrolment for all the States in India in 1965-66 was 11 lakhs. The percentage of students learning science at the University stage rose from 16.4 per cent in 1950-51 to 31.5 per cent in 1965-66 and 34 per cent in 1967-68. The all-India average in 1965-66 was 42.5 per cent.

There has been very significant progress during the first three plans in the field of technical education in the State. The enrolment increased from barely 132 in 1950-51 to 1,376 in 1965-66. Similarly, at the diploma level the intake has increased from 100 in 1950-51 to 2,129 in 1965-66.

HEALTH

The number of hospital beds has increased from 4,286 in 1950-51 to 12,755 at the end of the Third Plan. The ratio of beds to population is, however, only 1 : 3,900 as against the all-India average of 1 : 2,060. The number of doctors has increased from 4,813 in 1950-51 to 7,992 in 1965-66. The doctor-population ratio at the end of the Third Plan was 1 : 6,458 as against the average of 1:5,800 for all-India.

WELFARE OF BACKWARD CLASSES

As mentioned earlier, Scheduled Castes, Scheduled Tribes and other backward classes constitute a very sizable proportion of the total population in the State. A large number of freeships, stipends and other concessions have been given for children belonging to these classes, and their total enrolment in educational institutions has increased from 10.17 lakhs in 1950-51 to 29.27 lakhs in 1963-64.

CHAPTER III.

OVERALL APPROACH TO THE FOURTH FIVE YEAR PLAN.

Broadly the approach of the State Fourth Five Year Plan accepts the principle enunciated in the Planning Commission's document on the subject, that there should be growth with stability and self-reliance. In order to achieve self-reliance as speedily as possible, the State's economy would have to be strengthened on the agricultural and industrial fronts. Since the economy of the State is predominantly agricultural and rural, the agricultural production programme will have to be given top priority. Other factors of the strategy would include boosting up of activities in the co-operative, irrigation and power sectors, for matching the requirements of the effort on the agricultural front. In the social services sectors, special attention will be given to the problems of the Adibasis in Chotangpur and Santhal Parganas areas. The general level of education and health existing in the State, which is much below that of the all-India average, would also be improved.

AGRICULTURE.

Although there was a substantial increase in foodgrains production during the first three Plans, the rate of population growth also became accelerated as a result of which Bihar continued to be deficit in foodgrains. For an estimated population of 63.11 million by the end of the Fourth Plan, the estimated requirement of foodgrains by the end of the plan period will be 113.11 lakh tonnes, assuming 18.3 Oz. of foodgrains per diem per capita and 86 per cent adult equivalent of unit population. With a base of 78 lakh tonnes during 1968-69, an additional production potential of 37.71 lakh tonnes is proposed to be created through different inputs by the end of 1973-74. This will mean an average annual increase of 9.67 per cent which is much higher than the national average. As irrigation, multiple cropping, and high yielding varieties programme together account for about 90 per cent of the target, the main accent would be on these inputs. Moreover, it is only when the present per acre out-put valued hardly at about Rs. 206 at constant prices (1949) has substantially increased that savings and capital formation on any significant scale can be expected. The State Fourth Plan, therefore, aims at giving top priority to agricultural production programmes.

MINOR IRRIGATION.

In order to bring a matching acreage of cultivable land under irrigation for agricultural production programmes, minor irrigation, irrigation including River Valley Projects have been given top priority in the State Fourth Plan. Much headway in this direction is yet to be made as at present only 13 per cent of the total cultivated lands have assured irrigation facilities. Minor Irrigation Programmes will receive special attention as they are generally of a quick yielding nature. The main emphasis in the Fourth Plan, however, will be on ground water schemes : wells, open borings, tube-wells and installation of electrical and diesel pump facilities which will be very helpful even in drought conditions. It is proposed to bring under irrigation through these schemes about 28.26 lakh acres which would yield about 7 lakh tonnes of foodgrains.

IRRIGATION.

The medium irrigation schemes already in hand will be completed as early as possible for meeting the requirements of water for the agricultural production drive. Special attention will be given to the Chandan Reservoir Project, Uderasthan

Irrigation Scheme and the Musakhand Dam Scheme. A few reservoir schemes in the Chotanagpur and Santhal Parganas belt will also have to be taken up in order to benefit the Adivasis living in that area.

The major irrigation schemes will have to be completed as early as possible because they will go a long way in bridging the irrigation gap. In particular the execution of the Gandak Project would be accelerated so as to provide irrigation to 3.62 lakh acres by the Kharif season of 1970, and over 15.31 lakh acres in the Kharif of 1971.

Kosi Project and Sone High Level Canals also will receive special attention with a view to completing them as early as possible.

POWER.

The power Plan of Bihar is directed to meet a load demand of 827 MW by 1973-74. This would mean an installed capacity of 1125 MW. With a sanctioned installed capacity of 905 MW., there will be a shortage of about 220 MW in the Boards' System. It is necessary, therefore, that the sanctioned schemes are completed as early as possible in order to keep the shortage to about 220 MW only. Transmission lines required for the proper utilisation of the generated capacity as well as for meeting a growing demand would also call for a substantial investment. Sub-transmission and distribution systems require immediate augmentation and reorganisation to keep pace with the increased load as well as to improve the existing unsatisfactory conditions. The requirement of electrical pumping sets, so necessary for agricultural production programmes, would also necessitate large scale extension of sub-transmission and distribution lines and substations. Keeping in view the benefits accruing from rural electrification programmes, in particular from the energisation of irrigation pumping sets, investments on rural electrification would have to be of a very high order. Although Bihar has made a big head-way in rural electrification during the recent years, its achievement looks very poor when compared to other States namely Andhra Pradesh, Maharashtra and Madras. In Andhra Pradesh 4,595 out of 27,084 villages were electrified along with 89,659 agricultural pump connections up to the end of March, 1968. In Maharashtra 6,855 out of 35,851 villages were electrified along with 90,002 agricultural pump connections. In Madras 8,018 out of 14,124 villages were electrified and connections were given to 3,44,151 agricultural pumps up to the end of March, 1968. In comparison, in Bihar, only 6,375 villages have been provided with electricity and 40,375 agricultural pumping sets have been energised up to the end of March, 1968. Thus over 90 per cent villages still remain without electricity. The State Fourth Plan, therefore, envisages energisation of 1,25,000 pumping sets during the Plan period. The accent in the power sector is on rural electrification apart from completing the schemes already in hand.

INDUSTRIES.

It will be the endeavour of the State Government to remove the weak spots existing in the present industrial structure. The major weak spots are (a) lack of spread effect of the basic metal industries, and (b) disparities in industrial growth between the districts. The ready availability in the near future of pig-iron, finished steel and copper in the State has to result in larger growth of metal products and machinery industries. A large programme is already on the anvil through the large industrial units of Jamshedpur, Ranchi, Barauni and Bokaro. For removal of regional imbalances in industrial growth, suitable growth centres with provision of necessary infra-structure facilities at such centres will have to be set up in Bhagalpur Division. The comparatively thickly populated areas of North Bihar and South Bihar would require a large number of consumer goods industries including a whole group of light engineering, chemicals, agricul-

ture and live-stock based industries. The Chotanagpur Plateau would be exploited to the maximum for the benefit of the large industrial base already created. Establishment of ancillary industries and the creation of adequate tertiary activities around large scale factory sites would receive special attention. Necessary social overheads and infra-structure facilities will be built up, particularly in areas endowed with growth potential. Side by side, these efforts would be supplemented by adequate provision for establishment of industries in the State public sector calculated to generate enterpreneurial activities in the semi-urban and rural areas of the State as also to create capacity in sectors considered vital for the economy or where private investment is halting. The consumer industries and agro-based industries will be developed on a dispersed basis, both in terms of ownership and region, with adequate fiscal and credit support in order to ensure the emergence of new entrepreneurs and co-operatives for meeting the growing demand.

HEALTH.

In public health matters and eradication of communicable diseases an attempt will be to keep abreast of the rest of the country, though in the fields of training of medical personnel and provision of medical care, the existing relative backwardness may have to continue. The concerted efforts to raise the per-capita income and the standard of living through agricultural production programmes and industrial development of the State would depend to a large extent on the success of the Family Planning Programme. Special emphasis, therefore, will be laid on the Family Planning Programme to cover the rural and urban areas in order to bring about a significant reduction in the birth rate.

EDUCATION.

An attempt will be made to strike a healthy balance between the inevitable expansion and improvement programmes. Efforts would be made to increase as far as possible the percentage of enrolment of children in primary and middle schools, to improve the standards of education at secondary and university levels, and to provide increased facilities for teaching of science subjects. Measures will also be taken for qualitative improvement of the existing arrangements for technical education at both Degree and Diploma levels. Special emphasis will be given to schemes meant for combating the unemployment problems of engineers and other technical personnel.

CHAPTER IV.

Financial Resources for the Fourth Five Year Plan.

Section I.—Review of the scheme for financing of the Third Plan.

Before considering the resources for the State's now Fourth Five Year Plan, it will be useful to review in brief the position regarding financing of the State's Third Five Year Plan. The summary statement below gives the salient features of the financing of the Third Five Year Plan.

(RS. IN CRORES.)

— —	Original Third Plan Estimates.	Actuals	Difference.
1	2	3	4
1. Total outlay in Third Plan ..	337.04	318.23	(—)18.81
2. State resources ..	118.77	104.87	(—)13.90
(a) Balance from current revenues ..	22.34	70.35	(+)48.01
(b) Additional Taxation ..	41.00	23.19	(—)17.81
(c) Market loans ..	23.00	20.82	(—)2.18
(d) Contribution from small savings, etc.	42.50	31.33	(—)11.17
(e) Unfunded debt(net) ..	8.00	9.62	(+)1.62
(f) Net balance of other miscellaneous capital receipts over non-plan capi- tal disbursements.	(—)34.39	(—)55.92	(—)21.53
(g) Contribution from public enterprises	16.32	(—)1.10	(—)17.42
(h) Withdrawal from reserves, etc. ..	Nil	(+)6.58	(+)6.58
3. Central assistance ..	218.27	213.36	(—)4.91

Fuller details have been furnished in Appendix I of this chapter.

2. It would be seen that there was a shortfall of Rs. 4.91 crores in the Central assistance and of Rs. 13.90 crores in the State's contribution from its own resources. The actual performance in the Third Plan thus fell short of the target by Rs. 18.81 crores. The Chinese aggression in 1962 also affected the performance to some extent inasmuch as the plan outlays had to be deliberately kept low both in 1962-63 and 1963-64 in order to find more funds for meeting the needs of defence.

3. The shortfall in the State's resources was due largely to (i) a large shortfall in the miscellaneous capital receipts over capital disbursements (minus Rs. 55.92 crores), (ii) non-implementation of certain measures of additional taxation relating to the rural sector, (iii) failure of the public enterprises to make any contribution to the State revenue for financing the plan and (iv) shortfall in receipts under share of small savings and market loans. The substantial net increase in the non-plan capital disbursement over non-plan capital receipts was mainly due to the fact that against an estimate of Rs. 30.74 crores towards repayment of loans to the Centre, the actual payment came to Rs. 75.22 crores and the recovery of loans and advances given by the State Government fell short of expectation by Rs. 8.68 crores.

4. Under additional taxation, the shortfall was mainly due to the fact that the State Government were unable to implement the proposal of increase of land rent. The financing of the plan was, however, made possible by exercising of very rigid control over non-plan expenditure since 1962-63. Even the normal maintenance expenditures on capital assets like roads, buildings, irrigation works, etc., were cut down to such an extent that the assets have considerably deteriorated. As a result of these measures the balance from the current revenues rose to Rs. 70.35 crores as against the original estimate of Rs. 22.34 crores.

Section II.—Review of the financing of the ad hoc plans during the years 1966-67 to 1968-69.

5. In October-November, 1966, a draft of the Fourth Five Year Plan for the State was drawn up after discussion with the Planning Commission and the tentative outlay fixed was Rs. 545.14 crores which was to be financed by Central assistance of Rs. 292 crores and the State's resources of Rs. 253.14 crores. On account of a number of factors it was decided to put off the formulation of the Fourth Five Year Plan to a later date. In the meanwhile, the continuity in the planning process was maintained by taking recourse to *ad hoc* annual plans during each of the three years from 1966-67 to 1968-69. During these years attempt was made to devote more attention to the consolidation of the development work done earlier rather than to the expansion of developmental activities.

6. A review of the financing of the *ad hoc* annual plans during each of the above three years is, therefore, called for before proceeding to assess the State's resources for the new Fourth Five Year Plan. The salient features about the financing of the three *ad hoc* annual plans are explained in the subsequent paragraphs.

7. The summary statement given below will indicate the break-up of resources for financing the plan in 1966-67 :—

(RUPEES IN CRORES.) 1966-67.			
	Scheme of financing.	Actuals.	Variation.
(I) Outlay for the Plan	72.84	82.63	(+)9.79
(II) State's resources—			
(1) Balance from current revenue at 1965-66 rate of taxation.	15.76	1.20	(—)14.56
(2) Additional Taxation in 1966-67	2.09	2.28	(—)0.19
(3) Loans from the public (net)	6.00	4.08	(—)1.92
(4) Share in small savings	8.50	7.28	(—)1.22
(5) Unfunded debt (net)	2.50	1.74	(—)0.76
(6) Miscellaneous capital receipts (net)	(—)9.66	11.51	(+)21.17
(7) Contribution of public enterprises	1.31	Nil	(—)1.31
(8) Total State's normal resources	26.50	28.09	(+)1.59
(9) Withdrawal from reserves or increase in overdraft (including <i>ad hoc</i> loan from Government of India, if any).	2.84	4.95	(+)2.11
(10) Total State's resources including withdrawal from Reserve, etc.	29.34	33.04	(+)3.70
III. Central assistance	43.50	49.59	(+)6.09
Total resources for the Plan	72.84	82.63	(+)9.79

8. It would be seen that there was an increase in the State's total resources by Rs. 3.70 crores and in the Central assistance by Rs. 6.09 crores. The result was that the original plan outlay of Rs. 72.84 crores was exceeded by Rs. 9.79 crores in the actuals.

9. The increase in the State's resources was mainly due to the increase in the miscellaneous capital receipts over non-plan capital disbursements (Rs. 21.17 crores) as also in the increase in overdraft by Rs. 2.11 crores. These increases were, however, set off to some extent by an over all deterioration in the balance from current revenues by Rs. 14.35 crores, and further deterioration in loans from

public (net) (Rs. 1.92 crores), share in small savings (Rs. 1.22 crores), unfunded debt (Rs. 0.76 crores) and contribution from public enterprises (Rs. 1.31 crores). The increase in the capital receipts was mainly on account of larger loan (Rs. 36.75 crores) received from the Centre and comparatively less expenditure on repayment of Central loans (Rs. 12.76 crores) and lower outlay on non-plan Capital projects. Such a position emerged on account of the serious drought in the State and larger assistance received from the Centre in the form of loan. The deterioration in the balance from the current revenues was mainly because of shortfall in revenue receipts on account of the serious drought. Land Revenue alone accounted for a shortfall of Rs. 6.79 crores. The position was further affected adversely on account of the decrease in the non-tax revenue by about Rs. 4 crores. This was mainly due to fall in the estimated receipt from water rates by over Rs. one crore on account of the serious drought situation in the State and a fall in the estimated interest receipts by about Rs. 6 crores. This heavy fall in interest receipts was due to the fact that the Bihar State Electricity Board from whom an interest payment of Rs. 3.85 crores was estimated, did not pay anything by way of interest during the year in question. The expenditure on the non-plan side also shot up by about Rs. 9. crores. The large increase in revenue expenditure was due to heavy expenditure on famine relief (Rs. 9 crores). The drought conditions in the State also affected adversely collection in small savings which resulted in a shortfall of Rs. 1.22 crores in the receipts from small savings. There was no surplus from any public sector undertakings and that resulted in shortfall of Rs. 1.31 crores during the year 1966-67. The increase of Rs. 6 crores in the Central assistance was on account of the additional Central assistance made available to the State for rural electrification and energisation of tube-wells in the State in the context of the serious drought situation.

10. The summary statement below would explain the salient facts about the financing of the Annual Plan, 1967-68 :—

(RUPEES IN CRORES.)
1967-68.

	Scheme of financing.	Actuals (Preliminary).	Variation.
I. Outlay for the Plan	66.36	66.30	(—)0.06
II. State's resources—			
(1) Balance from current revenue at 1965-66 rate of taxation.	(—)14.98	(—)14.31	(+)0.67
(2) Additional Taxation in 1966-67 and 1967-68.	2.60	5.19	(+)2.59
(3) Loans from the public (net)	1.91	3.48	(+)1.57
(4) Share in small savings	7.50	7.72	(+)0.22
(5) Unfunded Debt (net)	6.00	6.17	(+)0.17
(6) Miscellaneous Capital receipts (net)	(—)19.49	(—)30.96	(—)11.47
(7) Contribution of public enterprises	..	..	..
(8) Total State's normal resources	(—)16.46	(—)22.71	(—)6.25
(9) Withdrawal from reserves or increase in overdraft (including <i>ad hoc</i> loan from Government of India, if any.)	31.32	37.51	(+)6.19
(10) Total State's resources including withdrawal from Reserves, etc.	14.86	14.80	(—)0.06
III. Central assistance	51.50	51.50	..
Total resources for the Plan	66.36	66.30	(—)0.06

It would be seen that there was a shortfall of Rs. 6.25 crores in the State's normal resources but that was counter-balanced by increase in overdraft by Rs. 6.19 crores leaving a net shortfall of Rs. 6 lakhs. The result was that against a total outlay of Rs. 66.36 crores as originally envisaged the plan outlay for the year 1967-68 was Rs. 66.30 crores.

11. The shortfall in the State's resources was mainly due to a large increase in deficit balance of miscellaneous capital receipts over non-plan capital disbursements [(—) Rs. 11.47 crores], which was offset by the increase in additional taxation (Rs. 2.59 crores), increase in loans from public (Rs. 1.57 crores), increase in the share of small savings (Rs. 0.22 crores) and increase in unfunded debt (Rs. 0.71 crores) and increase in balance from current revenues (Rs. 0.67 crores). The increase in additional taxation is due to larger receipts from the measures undertaken in 1966-67 and 1967-68 than what was originally anticipated. The increase in the loans from public is on account of the fact that when the Annual Plan was formulated a gross borrowing of Rs. 4.00 crores was assumed which included market borrowing of Rs. 0.50 crores by the Bihar State Electricity Board. As against this, the Electricity Board did not raise any loan and the State Government floated a loan of Rs. 5 crores. The result was that there was a net increase in the gross borrowings by the State Government by Rs. 1.50 crores. The net deterioration in the balance of miscellaneous capital receipt over capital disbursements was mainly accounted for by shortfall in the receipt of loans from the Centre by about Rs. 11 crores and a net out-flow of Rs. 8.63 crores under State Trading in foodgrains. These shortfalls in the resources were made up to the extent of Rs. 8 crores by less expenditure under loans and advances by the State Government. There was, therefore, a net deterioration in the miscellaneous capital receipts by Rs. 11.47 crores.

12. The summary statement below will explain in brief the salient features about the financing of the State's Annual Plan for 1968-69:—

(RUPEES IN CRORES.)
1968-69.

	Scheme of financing.	Latest Estimate.	Difference.
I. Outlay on Plan	70.70	65.76	(—)4.94
II. State's resources—			
(1) Balance from current revenues at 1965-66 rates of taxation.	9.77	2.28	(—)7.49
(2) Additional taxation in 1966-67 to 1968-69.	13.78	5.58	(—)8.20
(3) Loans from public (net) ..	1.87	1.37	(—)0.50
(4) Share in small savings ..	7.50	7.50	..
(5) Unfunded Debt (net) ..	6.00	5.83	(—)0.17
(6) Miscellaneous Capital receipt (net) ..	(—)21.82	(—)18.03	(+)3.79
(7) Contribution from public enterprises ..	3.00	Nil	(—)3.00
(8) Total State's normal resources ..	20.10	4.53	(—)15.57
(9) Withdrawal from reserves or increase in overdrafts (including <i>ad hoc</i> loans from Government of India, if any).	(—)1.90	(+)9.63	(+)9.63
(10) State's resources including withdrawal from reserves, etc.	18.20	(—)1.90	(—)5.94
III. Central assistance	52.50	53.50	(+)1.00
Total resources for the Plan	70.70	65.76	(—)4.94

It will be seen that there is likely to be a shortfall in the State's resources by Rs. 5.94 crores and an increase in the Central assistance by Rs. 1 crore leading to a net shortfall of Rs. 4.94 crores in the resources for the Plan. The increase of Rs. one crore in the Central assistance is on account of extra Central assistance provided for meeting the U. P. Government's claim against this State on account of execution of Gandak Project. The result is that according to the latest estimate, the State's plan, excluding an outlay of Rs. 5 crores which has to be met by additional resources of equivalent amount to be raised by the Bihar State Electricity Board, will come to Rs. 65.76 crores. The shortfall in the State's resources of Rs. 5.94 crores is explained mainly by the fact that while in the scheme of financing decided at the time of finalisation of the Annual Plan a contribution of Rs. 5 crores by the Bihar State Electricity Board was included in the State's resources, but in the latest estimate this contribution by the Bihar State Electricity Board has been excluded because the receipts from the Electricity Board will not appear in the State's Budget. Consequently the plan expenditure to be met by the Electricity Board out of their contribution of Rs. 5 crores has also been excluded. It will thus be clear that even in the latest estimate an overall plan of Rs. 70.76 crores is envisaged but for presentational purposes both the receipts and outlay of Rs. 5 crores to be provided for by the Electricity Board have been excluded. After excluding the receipt of Rs. 5 crores from the Electricity Board, the shortfall in State's resources comes to Rs. 0.94 crore. This is on account of a shortfall of Rs. 7.49 crores in the balance from current revenues, Rs. 6.20 crores in additional taxation, (after excluding Rs. 2 crores to be raised by Electricity Board) Rs. 0.50 crore on account of loans from the public, and Rs. 0.17 crore on account of unfunded debt. These shortfalls will be made up partly by an increase in the miscellaneous capital receipts (Rs. 3.79 crores) and an increase in the overdrafts by Rs. 9.63 crores. The main reason for shortfall in the balance from current revenue is that at the time of the formulation of the plan a total receipt of Rs. 15.34 crores was assumed from land revenue but according to the latest estimate the total receipt will not exceed Rs. 12.08 crores leading to a shortfall of Rs. 3.26 crores. There has also been an increase in revenue expenditure under the head 'Education' by Rs. 5.41 crores on account of the implementation of Kothari Commission's recommendations and on account of payment of arrear pay to the teachers of the non-Government Primary and Secondary schools. Under additional taxation the shortfall is due to non-implementation of the following taxation measures assumed by the State Government and also due to the fact that an additional receipt of Rs. 2.88 crores anticipated from mines as a result of some High Court judgment in respect of colliery owners is not likely to materialise as the colliery owners have taken the matter to the Court again:—

(RUPEES IN CRORES.)

(i) Increase in the rates of cesses	..	..	..	2.00
(ii) Increase in ladden weights of trucks	..	..	..	0.40
(iii) Raising of Motor Vehicles tax on trucks and buses			..	0.40
(iv) Tax on non-agricultural tenancy	..	..	..	0.10
(v) Urban land tax	..	..	..	0.10
(vi) Monopoly sale of Kendu leaves	..	..	..	0.15
(vii) Settlement of Mahua trees	..	..	..	0.08
(viii) Departmental working of forest coupes and departmental sale of timber.				0.07
Total	..	..	..	3.30

As has already been explained an additional receipt of Rs. 2 crores anticipated on account of revision of the rates of electricity tariff by the Bihar State Electricity Board has been excluded in the latest estimate. The improvement in the miscellaneous capital receipts by Rs. 3.79 crores is due to increase in the estimate of recoveries of loans and advances by Rs. 2 crores and decrease in the repayment of loan to the Centre by Rs. one crore and a shortfall of about Rs. one crore under disbursement of loans and advances. As has been explained above, there is a shortfall of Rs. 3 crores under "Contribution from Public Undertakings" because the receipt from Electricity Board on this account has been excluded in our estimates. The net result of the above variations will be that for financing a plan of Rs. 65.76 crores (excluding the outlay of Rs. 5 crores to be met by the Electricity Board from their own resources) the State Government will have to run into overdraft of Rs. 9.63 crores.

Section III.—Assessment of State's own resources for the new Fourth Five Year Plan.

13. For the Fourth Plan the State's own resources have been assessed at Rs. (—)3,52.55 crores without taking into consideration the additional taxation measures to be undertaken during the Fourth Plan period. The details are as follows:—

				(Rs. in crores.)
(1) Balance from current revenues	..	..	..	(—)3,43.65
(2) Loans from the Public (net)	..	..	..	19.27
(3) Share of small savings	..	..	..	56.00
(4) Miscellaneous capital receipts	..	..	..	(—)72.24
(5) Unfunded debt (net)	..	..	..	31.50
TOTAL				(—)3,09.12
(6) Deduct <i>ad hoc</i> loan from the Centre	..	..	..	(—)33.80
TOTAL				(—)3,42.92
(7) Liquidation of indebtedness to R. B. I. at the end of 1968-69.	..	..	..	(—)9.63
TOTAL				(—)3,52.55

14. In assessing the balance from the current revenues, provision has been made for a total committed expenditure of Rs. 79.32 crores on account of the three annual *ad hoc* plans. The estimate also takes into account an additional liability of Rs. 63.83 crores on account of the following:—

				(Rs. in crores.)
(i) Implementation of Gajendragadkar award and payment of additional allowance to non-Government primary and secondary school teachers.	..	..	..	53.34
(ii) Re-organisation of districts	..	..	..	3.43
(iii) Police re-organisation	..	..	..	7.06
TOTAL				63.83

The above additional commitments are unavoidable. The employees of the State Government have been agitating for grant of additional cost of living allowance on the basis of Gajendragadkar's recommendation. Recently they resorted to strike also and the State Government have been actively considering their demand. It is expected that a decision will be taken in the course of the current financial year. The additional liability on this account has, therefore, to be taken into consideration. Apart from the above fresh expenditure for which provision has been made in the estimate, there are certain heads of expenditure like "Public Works" and "Medical" where substantially increased expenditure has been provided in the interest of the proper maintenance of the capital assets and to afford reasonable facilities for the treatment of patients in the hospitals. The expenditure on maintenance of roads and buildings will rise from about Rs. 4.00 crores in the current year to Rs. 13.25 crores in the next and subsequent years. The reason for this increase is that the capital assets are on the point of being wiped out because in the last seven or eight years drastic cuts have been imposed on the maintenance expenditure under these heads. The scales of diet and medicines provided in the hospitals at present are so low that it is not possible to afford reasonable medical facility to the patients. It has been decided to raise the present scales of diet and medicines by 100 per cent. This will entail an additional expenditure of Rs. 1.32 crores during each year of the Fourth Plan. The growth of non-Plan expenditure under different heads has been assumed at varying rates ranging between 4 per cent to 7 per cent. In view of the fact that the expenditure on the non-Plan side has been subjected to very severe cuts from the beginning of the Third Plan it is felt that unless the leeway is made up and a reasonable rate of growth is provided for the future it will not be possible to maintain the required minimum efficiency.

15. The most distressing feature of the State's finance is that on account of the heavy debt burden, repayment and interest liability have been increasing. It is, therefore, felt that unless adequate appropriations are made from the current revenues, the adverse effect on the State's finances in the years to come cannot be staved off. A total appropriation of Rs. 1,44.71 crores to the Sinking Fund has been provided from revenue account in the estimates in addition to the payment of the interest of Rs. 1,70.97 crores on all loans outstanding at the end of 1968-69 and on fresh market loans during the Fourth Plan period as also on fresh loans from the Centre on account of small savings and for non-Plan purposes. The likely impact of debt servicing on account of fresh loans to be raised during the Fourth Plan for State's plan schemes has, however, been kept out of account according to the instructions of the Planning Commission.

Current Receipts :

16. In estimating the receipts under the various heads varying rates of growth between 1 per cent to 8 per cent have been assumed on the basis of past trends and the likely economic development in the future. Land revenue is, however, a fixed charge and further increase can be secured only with increase in rates. On account of the rise in the prices of foodgrains there has been shrinkage of the acreage under sugarcane and as such cess on sugarcane is not likely to show any improvement. The receipts from irrigation have been worked out carefully on the basis of the latest available information regarding utilisation from existing sources and new projects. The Electricity Board is not likely to pay more than Rs. 17 crores of interest during the entire Fourth Plan period. Full payment of interest has been assumed from the Damodar Valley Corporation and the Road Transport Corporation. The share of Central Taxes has been estimated on the basis of the recommendation of the Fourth Finance Commission and has been based on the budget estimates of the current year. A growth rate of 5.5 per cent has been assumed in the share of income-tax and rate of growth of 7.9 per cent has been assumed in respect of share of Union Excise Duties.

17. Details of calculation of the balance of current revenues are given below :—

(Rupees in crores.)

	1969-70, Estimates.	1970-71, Estimates.	1971-72, Estimates.	1972-73 Estimates.	1973-74, Estimates.	Total.
	1	2	3	4	5	6
I. REVENUE RECEIPTS.						
1. Share of Central Taxes ..	42.15	44.75	47.54	50.52	53.85	2,38.81
2. State Taxes ..	74.46	75.76	76.12	78.30	80.60	3,85.24
3. Non-tax Revenue ..	24.09	27.54	29.23	29.96	29.98	1,40.80
4 Transfer from funds ..	1.00	1.00	1.00	1.00	1.00	5.00
5. Grant from the Centre ..	2.86	2.76	4.46	2.56	2.46	15.10
TOTAL—I ..	1,44.56	1,51.81	1,58.35	1,62.34	1,67.89	7,84.95
II REVENUE EXPENDITURE						
1. Non-Developmental ..	1,04.30	1,07.13	1,12.62	1,12.51	1,17.16	5,53.72
2. Non-Plan Developmental ..	80.19	81.46	87.36	90.78	95.43	4,35.22
3. Maintenance expenditure on Plan schemes taken up since the commencement of 1966- 67 and expected to be com- pleted by the end of 1968-69.	14.88	15.02	15.71	16.48	17.23	79.32
4 Transfer to funds ..	1.40	1.40	1.40	1.40	1.40	7.00
5. Revision of dearness allowance	10.05	10.35	10.66	10.98	11.30	53.34
TOTAL—II ..	2,10.82	2,15.36	2,27.75	2,32.15	2,42.52	11,28.60
BALANCE FROM CURRENT REVENUE (I II).	(—)66.26	(—)63.55	(—)69.40	(—)69.81	(—)74.63	(—)3,43.65

The revenue gap of Rs. 3,43.65 crores as revealed in the above table can reasonably be hoped to be bridged by additional devolution of share of Central Taxes and grants on the basis of the recommendations of the Fifth Finance Commission. For the purpose of the assessment of the State's resources for the Fourth Five Year Plan, the balance from the current revenues may, therefore, be assumed to be nil.

Miscellaneous Capital Receipts :

18. The net balance of miscellaneous non-plan capital receipts over non-plan capital disbursements has been estimated at Rs. (—)72.24 crores. The details of calculations are given below :—

(Rs. in crores.)

	1969-70, Estimates.	1970-71, Estimates.	1971-72, Estimates.	1972-73, Estimates.	1973-74, Estimates.	Total.
	1	2	3	4	5	6
I. CAPITAL RECEIPTS.						
1. Loans from Centre ..	23.62	26.26	30.83	31.44	34.19	1,46.34
2. Loans from R.B.L., L.I.C. and N.C.D.W. Board.	2.00	2.50	3.00	3.50	4.00	15.00

(Rs. in crores)

	1969-70, Estimates.	1970-71, Estimates.	1971-72, Estimates.	1972-73, Estimates.	1973-74, Estimates.	Total.
	1	2	3	4	5	6
3. Cash credit advance from the State Bank of India.	10.00	10.00	10.00	10.00	10.00	50.00
4. Recoveries of Loans and Advances	23.94	31.44	31.77	31.71	33.97	1,52.83
5. Sinking Fund (net) ..	19.92	20.21	20.71	22.36	23.210	1,06.41
6. Deposits and Advances (Net) ..	(-)-2.00	(-)-2.00	(-)-2.00	(-)-2.00	(-)-2.00	(-)-10.00
7. Remittances (Net).. ..	(-)-1.00	(-)-1.00	(-)-1.00	(-)-1.00	(-)-1.00	(-)-5.00
TOTAL—I ..	76.48	87.41	93.31	96.01	1,02.37	4,55.58
II. CAPITAL EXPENDITURE.						
1. Repayment of loans to Centre	47.16	57.12	61.59	64.33	67.38	2,97.58
2. Repayment of loans to others	0.50	0.48	0.47	0.54	0.56	2.55
3. Cash credit advance from the State Bank of India.	10.00	10.00	10.00	10.00	10.00	50.00
4. Non-Plan capital outlay ..	2.29	2.75	3.20	3.21	3.37	14.82
5. Non-Plan loans and advances..	23.53	26.37	31.29	31.85	34.75	1,47.79
6. Outlay on Centrally-sponsored Schemes.	1.00	1.00	1.00	1.00	1.00	5.00
7. State Trading (Net) ..	..	..	..	..	..	..
8. Payment of compensation to Zamindars including Compensation Bonds.	1.67	1.81	1.96	2.16	2.48	10.08
TOTAL—II ..	86.15	99.53	1,09.51	1,13.09	1,19.54	5,27.82
BALANCE OF MISCELLANEOUS CAPITAL RECEIPTS (I—II).	(-)-9.67	(-)-12.12	(-)-16.20	(-)-17.08	(-)-17.17	(-)-72.24

Non-Plan Capital Expenditure :

19. The above estimate provides for repayment to the Government of India of Rs. 2,97.58 crores on account of loans advanced to the State Government up to the end of 1968-69 and fresh loans to be advanced during the Fourth Plan period on account of share of small savings and for other non-Plan purposes. This does not take into account the repayment liability of fresh loans to be advanced by the Government of India for Fourth Plan schemes. The estimate also provides for disbursement of a total loan of Rs. 1,47.79 crores to cultivators and others including short term loans. The estimate also provides for a sum of Rs. 5.71 crores on account of construction of new buildings required in connection with re-organisation of districts and police re-organisation. The outlay on Centrally-sponsored scheme has been deliberately kept at Rs. 5 crores, at the rate of Rs. 1 crore per year as it is anticipated that the number of Centrally-sponsored schemes will be drastically curtailed and it will be financed mainly by grants from the Centre.

Non-Plan Capital Receipts :-

20. A total sum of Rs. 1,46.34 crores has been assumed as loans from the Centre for non-plan and Centrally-sponsored schemes including short-term loans. In view of the imperative need for increase in production of foodgrains provision of Rs. 1.34.54 crores has been made for short-term loans to cultivators. As regards recoveries of loans and advances, a total sum of Rs. 1,52.83 crores has been assumed. Out of the total appropriation of Rs. 1,44.41 crores to be made from the revenue account for reduction and avoidance of debt, it is proposed to make an investment of Rs. 38 crores leaving Rs. 1,06.41 crores for meeting the repayment liability of various loans during the Fourth Plan period. The estimates under "Deposits and Advances" and "Remittances" have been made on the basis of past trends.

Loans from the Public :

21. A gross borrowing of the order of Rs. 32 crores has been assumed from the market during the Fourth Plan period. As against this, the repayment liability is expected to be of the order of Rs. 12.73 crores leaving a net balance of Rs. 19.27 crores.

Share in Small Savings :

22. A total sum of Rs. 56 crores has been assumed during the Fourth Plan period by way of State's share in small savings collection. This order of State's share will require securing a net investment of Rs. 84 crores during the Fourth Plan period. This is slightly on the high side but in view of steady growth of the economy and the determination to tap the rural savings it may be possible to achieve the target.

Contribution from Public enterprises :

23. No contribution from any public undertaking has been estimated during the Fourth Plan period. A careful examination of the financial prospects of the Bihar State Electricity Board, which is the largest public undertaking of this State, shows that it may not be realistic to expect any contribution from the Board over and above payment of the interest charges of Rs. 17 crores. The Bihar State Road Transport Corporation is also not likely to make any contribution to the State revenue over and above the payment of interest due from them. Small receipts have started coming from the Damodar Valley Corporation as the State's share of surplus on 'Power' and a total sum of Rs. 1.05 crores has been estimated for the Fourth Plan period on this account and included under the head "Electricity Receipts" under "Multi-purpose River Valley Projects" in the revenue account. No other public sector undertaking is likely to be in a position to make any contribution during the Fourth Plan period.

Unfunded debt :

24. The estimates of net receipts under the head "Unfunded Debt" is based on the assumption that a portion of the dearness allowance which is being credited to the General Provident Fund of the employees will not be allowed to be withdrawn during the Fourth Plan period except in case of retirements, etc.

Institutional Financing :

25. The estimate of resources for the Fourth Five Year Plan does not take into account any institutional finance for the Fourth Plan because the outlay proposed to be financed out of institutional finance has also been kept out of the State's Fourth Plan. Moreover, the position of institutional finance being uncertain it is not possible to take that into account at this stage.

26. *General.*—It will thus appear that during the Fourth Plan period the State will not be able to contribute any resources for the Plan from its existing normal sources. The gap as revealed in the above assessment of the State's resources can at best be hoped to be bridged by larger devolution of Central taxes and grants as a result of the recommendation of the Fifth Finance Commission. The only method by which the State can hope to mobilise additional resources for the plan is through additional taxation.

27. *Additional Taxation.*—The following measures of additional taxation are proposed for the Fourth Plan period. The receipts estimated from these measures have been indicated against each.

(Rupees in crores.)

1. Doubling of land rent and cess	47.50
2. Raising of water rates for lift and flow irrigation	15.00
3. Increase in Electricity Duty on high tension consumption by $\frac{1}{2}$ %.	5.00
4. Mineral development cess	15.00
5. Increase in royalty on minor minerals ..	1.50
6. By taxation of consumption of coal by colliery owners themselves.	1.50
7. Imposition of sales tax on country spirit ..	2.50
8. State Lottery	5.00
9. Increase in the rate of sales tax on luxury goods from 10% to 12%.	1.00
10. Agricultural income tax	2.50
11. Charge on indoor and outdoor patients in hospitals.	2.50

Total	99.00
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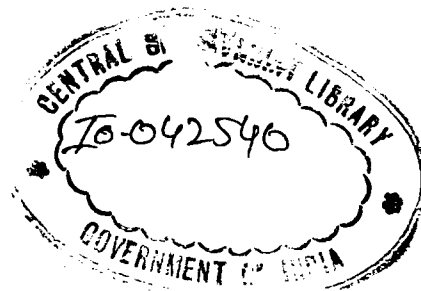
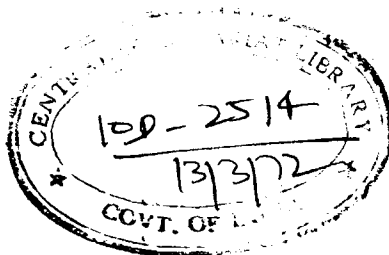
28. *Conclusion.*—If Bihar's back-log of backwardness is to be reduced in the next decade, the State should have a plan considerably larger than of Rs. 500 crores. However, in the context of the constraints set by the extremely difficult financial situation, the State Government will find very hard even to finance a plan of Rs. 500 crores which would necessitate a contribution of Rs. 200 crores from the State Government. Even to raise resources of the order of Rs. 90 crores as indicated in the foregoing paragraphs, the State will have to go in for additional taxation on an unprecedented scale. While the State has no option but to go in for the proposed measures of additional taxation, however, unpalatable or unpopular they be, that alone will not be enough. More generous assistance will be required from the Central Government. Such assistance should also include a rescheduling of the repayment of Central loans,

APPENDIX I—concl'd.

COMPARISON OF ACTUAL FINANCING OF THE THIRD PLAN WITH THE SCHEME OF FINANCING PREPARED AT THE TIME OF ITS FORMULATION—concl'd.

(Rupees in crores.)

Heads of Accounts.	Estimates adopted in Third Plan.	1961-62 Accounts.	1962-63 Accounts.	1963-64 Accounts.	1964-65 Accounts.	1965-66 Accounts.	Total of Actuals, Third Plan.	Difference.
1	2	3	4	5	6	7	8	9
(c) Sale of treasury bills .. ..	..	..	..	..	(- )2.97	(+)2.97	..	..
From floating debt —								
(d) Increase in ways and means advances from Reserve Bank of India. .. ..	..	(+ )1.49	..	..	(- )3.90	(+)10.85	(+)8.44	(+)8.44
(e) Increase in cash credit loans from the State Bank of India. .. ..	..	(+ )0.50	2.54	(-)1.42	(-)1.62	(+)5.50	(+)5.50	(+)5.50
(f) Increase in overdrafts, i.e., gap in resources. .. ..	..	(+ )6.61	(-)8.02	(-)7.53	(+)2.50	(-)0.92	(-)7.36	(-)7.36
(g) Ad hoc loans from the Centre .. ..	..	..	5.50	(-)1.80	(-)1.80	(-)1.90	..	..
9. Total State resources including withdrawal from Reserves, etc., (II and III).	1,18.77	22.52	17.49	20.01	23.36	21.49	1,04.87	(-)13.90
IV. CENTRAL ASSISTANCE	2,18.27	30.55	34.57	38.55	49.03	60.66	2,13.36	(-)4.91
(a) Grants .. ..	..	8.85	9.30	7.02	6.71	12.86	44.74	..
(b) Loans .. ..	..	21.70	25.27	31.53	42.42	47.80	1,68.62	..
V. AGGREGATE RESOURCES FOR THE PLAN (II, III and IV).	3,37.04	53.07	52.06	58.56	72.39	82.15	3,18.23	(-)18.81



CHAPTER V.

Description of Sectoral Programmes.

A. AGRICULTURAL PROGRAMMES.

SECTION 1.

AGRICULTURAL PRODUCTION

The economy of Bihar is predominantly rural and agricultural. About 92 per cent of the people live in villages and 86 per cent of its population is dependent on agriculture. About 77 per cent of all workers are employed in agriculture. Agriculture constitutes nearly 60 per cent of the total State income of which the income from agricultural production sector alone accounts for about 47 per cent. The net area of cultivation per capita is only 0.42 acre for the State as a whole and only 0.35 acre in the Tirhut Division. The average size of holding in the State is about 2.94 acres and over 80 per cent holdings are below 5 acres. Cultivation is mainly dependent on rainfall. As rainfall is often inadequate and erratic droughts occur not infrequently over large parts of the State. The North Bihar plains are also liable to suffer from heavy floods. It is needless to emphasise that the economy of State can be raised by strengthening the agricultural base by rapid expansion of agricultural productivity to the maximum extent possible.

The average annual production of foodgrains in Bihar at the commencement of the First Plan was around 51 lakh tonnes. After allowing for transfer of some areas to West Bengal, the adjusted figure was 49 lakh tonnes. The actual production during the last year of the First Plan (1955-56) was 52 lakh tonnes and it increased to 72.84 lakh tonnes in 1960-61. Thus the linear growth rate for the First Plan period was 1.2 per cent and for the Second Plan period 8 per cent. During the Third Plan period the actual production increased to 75.21 lakh tonnes in 1963-64 and was more or less around the same figure (75.35 lakh tonnes) during 1964-65. During subsequent years the production declined considerably due to unfavourable weather conditions resulting in drought and famine over large parts of the State. The actual production of foodgrains during 1967-68 has been provisionally estimated at 73.08 lakh tonnes.

On the basis of the average production of foodgrains during the Second Five Year Plan, the base of 60 lakh tonnes was adopted for the Third Five Year Plan. The agriculture production schemes included in the Third Plan were estimated to create an additional production potential of 20.27 lakh tonnes of foodgrains but the actual additional potential created was only 12.73 lakh tonnes. Shortfall in area brought under irrigation and in consumption of fertilisers were mainly responsible for shortfall in achievement of production potential. Inadequate allotment of fertilisers to the State and delay in dispatches contributed to a large extent to the low level of consumption.

The base for the Annual Plan 1966-67 was kept at 73 lakh tonnes. The target of additional production potential to be created and actual achievement during the three years 1966-67 to 1968-69 are given below :—

	Target of additional foodgrains production.	Potential created.
By the end of 1966-67	6.05	(—)0.29
By the end of 1967-68	10.16	5.91
By the end of 1968-69	16.51	10.72
		(anticipated)

During 1966-67 the State had to face unprecedented drought and famine over large parts of the State. Short-term measures capable of yielding quick results were undertaken. High yielding varieties programme was undertaken in compact areas in the Intensive Agricultural District Programme and in Intensive Agricultural Area Programme. Special emphasis was placed on summer cultivation.

The acreage under high yielding varieties programme increased from 2.08 lakh acres in 1966-67 to 11.51 lakh acres in 1967-68 and is likely to cover an area of 15.31 lakh acres during 1968-69. Cultivation of short duration crops and programme of multiple cropping was also introduced specially in the areas having assured irrigation. In addition to the high yielding varieties programme other short duration varieties of paddy were introduced from different States and short duration varieties of maize and smaller millets were introduced. In addition to this, measures were intensified to exploit ground water resources and minor irrigation programme was accelerated considerably. Emphasis was also placed on promotion of subsidiary food such as potato and sweet potato, other tubers and vegetables in order to increase quickly the caloric value of food. As a result the area under potato increased from 2.51 lakh acres to 3.05 lakh acres in 1967-68.

Measures taken for determining the priorities and objectives :

The strategy of Agricultural Development will be based on tackling the problems connected with the maximum utilisation of the infra-structure in the following four areas :—

- (1) The irrigated areas where irrigation water is assured for summer, kharif and rabi seasons lying primarily in the commands of the River Valley Projects like Sone, Kosi and Gandak Commands.
- (2) Irrigated areas lying under the command of the State tube-wells, medium irrigation schemes and assured rainfall areas like the sub-montaneous region of the Himalayas in North Bihar and some of the districts in the plateau region of Chotanagpur and Santhal Parganas.
- (3) Plateau region of Chotanagpur and Santhal Parganas and other South Bihar districts like South Shahabad, South Gaya, Monghyr, certain portion of Bhagalpur districts, etc., where rainfall is deficient and where the main emphasis has to be given to soil conservation methods and dry-farming techniques.
- (4) Economically backward areas.

The greatest potentiality for agricultural production lies in the areas falling in category I and, therefore, Intensive Agricultural District Programmes, High Yielding Varieties Programme and Multiple Cropping Programmes have been visualised for this area mainly falling within the districts of Shahabad, Purnea, Saharsa and Champaran.

Under category II, I. A. A. Programmes have been taken up for the greater utilisation of the irrigation potential. Wherever possible in these areas also, High Yielding Varieties and Multiple Cropping Programmes have been taken up. The districts coming under this category are Patna, Gaya, Saran, portions of Muzaffarpur, Darbhanga, Bhagalpur, Monghyr, Ranchi and Santhal Parganas.

Under category III, the Soil Conservation work is mostly concentrated in Ranchi, Hazaribagh, Singhbhum, Dhanbad and Palamau districts of Chotanagpur Division and also in Santhal Parganas, the plateau areas of Bhagalpur, South Monghyr, South Gaya and South Shahabad.

Under category IV, special schemes for backward areas have been taken up, for example, Special Package Programme for jute development has been taken up in Kishanganj block, Special Package Programme for oilseed development specially on groundnut has been taken up in Palamau district of Chotanagpur Division and special Integrated Development Programme for Adhaura Block of Shahabad district, Simdega and Gumla Subdivisions of Ranchi district and a few blocks in the border areas of North Bihar are under consideration.

Price policy for increased agricultural production :

Keeping in view the high stipulated growth rate of 9.67 per cent during the Fourth Plan it is essential that the price policy should be so oriented as to help in achieving this high rate and the targets fixed for different programmes. The principal aim of price policy should be stabilization of price of agricultural products as both protection and incentive to the agriculturist producer. In this connection, the State in consultation with the Government of India, will have to design and implement a policy so as to help in (i) maintenance of parity between competing crops in the interests of the vital agricultural output programme (ii) maintenance of desirable price ratios between the various agricultural crops and (iii) smoothing of seasonal fluctuations in agricultural prices to a minimum.

While the desirability of holding the price level of foodgrains is not to be questioned, care should be taken that this operation does not deprive the farmers of their economic return. They should rather be given a guarantee of a certain minimum level which is so essential in the interest of increased production. Attempts should be made to supply inputs like fertilisers, seed, pesticides, etc., at a lower price so as to avoid inflationary tendencies caused due to increased cost of cultivation and subsequently registering high level of prices.

Overall strategy of agricultural development :

The strategy of Agricultural Development during the Fourth Plan will be based on :—

- (a) the intensification of the High Yielding Varieties Programme in all areas under the command of River Valley Projects as also other assured irrigational sources,
- (b) change of the cropping pattern and adopting multiple cropping practices wherever irrigational water and soil moisture is available,
- (c) increasing the output of cash crops through Intensive Cultivation Programme and thereby assuring higher income to the cultivators,
- (d) increasing warehousing facilities and selling centres,
- (e) construction of storage facilities for improved seeds,
- (f) meeting the demand of the cultivators in respect of increased consumption of fertilisers due to the introduction of high yielding varieties and adoption of improved technology,
- (g) setting up a seed corporation for production, distribution and storage of improved seeds particularly of high yielding varieties,
- (h) smoothening the distribution machinery of agricultural inputs like fertilisers, pesticides and agricultural implements and allowing the private sector to operate and thereby making the inputs easily available to and within the easy reach of cultivators,
- (i) straightening and strengthening the existing organisation of extension machinery,
- (j) stream-lining the existing Research organisation by creation of better facilities,
- (k) setting up Agricultural University in the State with the object of raising the levels of research and training, and
- (l) establishing for the present, three Kisan Vidyapiths for training the cultivators and their sons so that they can adopt themselves to the changing technology of Agriculture.

The following objectives have been kept in view for the Fourth Five Year Plan :—

- (i) To ensure a higher rate of growth in agricultural production and productivity in order to attain self-sufficiency and to the extent possible aim for surplus in foodgrains.
- (ii) To increase agricultural production to meet the needs of industries and export.
- (iii) To take suitable steps for providing ancillary services such as marketing, storage and warehousing facilities and price support to ensure a better return to the farmers for their farm produce.
- (iv) To correct the short comings that have been experienced in the development of agriculture in the first three Five Year Plans and the last three Annual Plans and provide for stability in agricultural production.

The population of the State according to 1961 census was 46.46 million and the projected population by the end of the Fourth Plan period (1973-74) is estimated at 63.15 million. During the Third Plan the requirement of foodgrains was calculated at the rate of 17.5 ounces per day per adult. During the Fourth Plan this has been taken at the rate of 18.3 ounces of foodgrains per person per day. On the basis of this, the requirement of foodgrains would be 113.11 lakh tonnes, assuming 100 of population as equivalent to 86 in adult units. The above requirement of 113.11 lakh tonnes also includes 10 per cent for livestock, seeds etc.

Base for the Fourth Plan :

In order to calculate additional production for the Fourth Plan normally the average production of the previous five years should be taken as the base for the future plan period, but as 1966-67 was a drought year during which famine conditions prevailed in the State, it would not be realistic to include that year for purposes of calculation of the figures.

The production of 5 years from 1963-64 (excluding 1966-67) has been taken into account for calculating average production in order to fix the base for the Fourth Plan. The average for 1963-64 to 1967-68 comes to about 73 lakh tonnes and to this additional production potential likely to be created during 1968-69 has been added. The table below will explain the basis of calculation :—

Year.	Production in lakh tonnes.		
1963-64	75.24
1964-65	75.35
1965-66	67.97
1967-68	73.08 (Provisional)
			291.64

Average 73.00 approx.

Additional production potential likely to be created during 1968-69.	4.81
Total	77.81
Say	78.00

-Programme Targets :

Assuming 78 lakh tonnes as the base for the Fourth Five Year Plan, the additional food production potential to be created through different inputs at the end of 1973-74 will be 37.71 lakh tonnes. This will mean an average annual increase of 9.67 per cent which is much higher than the national average. The total production by 1973-74, therefore, will be 115.71 lakh tonnes.

The additional production potential of 37.71 lakh tonnes of foodgrains is proposed to be achieved through the developmental programmes indicated in the statement.

STATEMENT SHOWING PHYSICAL TARGET AND PRODUCTION POTENTIAL OF FOOD-GRAINS PROPOSED TO BE CREATED DURING THE FOURTH PLAN.

Name of programme.	Unit.	Base (1968-69).		Physical target during Fourth Plan.		Yardstick.	Additional production potential to be created in lakh tonnes.	
		All crops.	Food-grains.	All crops.	Food-grains.			
1	2	3	4	5	6	7	8	
1. Irrigation	.. lakh acres	..	..	56.57	25.88(a)	½ tonne/acre.	6.47
2. Chemical fertilisers—								
(i) Nitrogenous in terms of A/S.	lakh tonnes.	2.89	0.65(b)	12.05	3.05(b)	2 tonnes	4.80	
(ii) Phosphatic in terms of S.S.P.	"	1.73	0.08(c)	7.33	0.64(c)	1 tonne/acre.	0.56	
3. Urban Compost	.. "	1.00	0.70	2.00	1.40	1/30 tonne/acre.	0.02	
4. Improved seeds (other than H.V.P.).	lakh acres	..	1,18.00	Nil	1,30.00	1/27 tonne/acre.	0.44	
5. Soil conservation	.. "	..	..	..	2.29	1/20 tonne/acre.	0.11
6. Land reclamation	.. "	..	..	..	0.55	1/3 tonne/acre.	0.18
7. Multiple cropping	.. "	..	19.00	..	45.00	1/3 tonne/acre.	8.67	
8. H.V.P.	.. "	..	15.31	..	40.00	2/3 tonne/acre.	16.46	
Total								37.71
Base								78.00
Grand total								115.71

(a) Exclude 24.69 (40.00—15.31) and 6 lakh acres to be brought under H.V.P. and commercial crops respectively.

(b) 0.65 and 3.05 lakh tonnes do not include 1.67 and 7.20 lakh tonnes respectively required for H.V.P.

(c) 0.08 and 0.64 lakh tonnes do not include 1.30 and 5.64 lakh tonnes respectively required for H.V.P.

No credit is being taken for the following :—

- (i) In rural compost for which it is difficult to make precise assessment of its direct contribution to increase agricultural production.
- (ii) The Plant Protection measures which do not directly lead to increase production but only prevent losses.
- (iii) Improved cultural practices, for which again it is difficult to make a precise assessment of the direct contribution to increase agricultural production.

Improved Seed Programme :

Coverage under improved seeds (other than H.V.P.).—The total area under food crops in the State is 238.83 lakh acres. Out of which, 131.05 lakh acres are under paddy, 17.50 lakh acres under wheat and about 20.30 lakh acres under maize which are the main three crops of the State. It is, therefore, proposed to saturate the area under these main crops with improved seeds during the Fourth Plan period.

Area covered with the improved seeds by the end of the Second Plan was 20.17 lakh acres. During the Third Plan, the target was to cover additional 118 lakh acres which has been achieved. During 1966-67, the coverage under improved seeds came down to 62 lakh acres only due to the catastrophic drought which the State had to face. Arrangement was made to supply improved seeds of paddy and wheat from outside the State during 1967-68 in order to wipe out the deficit and meet the despatch demand. Only 118 lakh acres under improved seeds is expected to be achieved by 1968-69. Taking this as a base for the Fourth Plan, it is expected that by the end of the Fourth Plan, another 12 lakh acres will be covered by improved seeds making a total of 130 lakh acres. This will give an additional food production of 0.44 lakh tonnes.

The system of seed multiplication and distribution at Village Level will be reorganised on the basis of seed village scheme. The seed villages have now to be mostly located near S.M. and S.D. or District Farms to facilitate closer supervision of better and frequent technical know-how to growers.

Seed for H.V.P.—The State has been depending heavily for seeds of high yielding varieties of maize on the National Seed Corporation. During the Fourth Plan, it is proposed to be self-reliant in the matter of seed production for Hybrid Maize. It is proposed to put in about 2,000 acres under Hybrid Maize production on Seed Multiplication Farms and also to provide a few Seed Processing Plants for this purpose. The Seed Processing Plants will also cater for seed processing of other high yielding varieties crops like paddy and wheat and also of some of the registered growers who may produce seed.

It is proposed to grow seeds of high yielding varieties of wheat in 7,000 acres and of paddy in 3,000 acres on the Government farms. In order to make this programme effective, the resources at the Seed Multiplication Farms and Subdivisional Farms have to be strengthened. More assured irrigation facilities have to be provided and storage arrangements have to be made. It is proposed to have a seed godown of about 1,000 tonnes capacity for each district headquarters and a godown of 500 tonnes capacity in some of the Subdivisions of high yielding variety programme districts during the Fourth Plan. The capacity may, however, vary in case of Chotanagpur Division and Santhal Parganas. It is proposed to provide about Rs. 17.96 lakhs for construction of seed godowns and for staff to manage these godowns. Separate provision will be made under S. M. Farm for constructing scientific godowns on Government Farms.

A Seed Act has been promulgated by Parliament, and Seed Rules under this Act have also been framed. It is proposed to promulgate the Seed Act in this State, to begin with the Sone, Kosi and Gandak Canal Commands. At the initial stages only the high yielding varieties crops will be covered under the Seed Act. This will entail technical, managerial and financial liabilities. A Seed Corporation, an autonomous body, will be established to handle this whole complex of seed development programme.

It is proposed to provide Rs. 111.57 lakhs during the Fourth Plan period. An outlay of Rs. 25.11 lakhs has been suggested for the Annual Plan 1969-70.

Manures and Fertilisers :

Fertilisers.—The consumption of chemical fertilisers, by the end of the Third Plan period was 1.68 lakh tonnes, the break-up of which is as follows:—

Fertiliser.	Consumption level reached during the Third Plan.
Nitrogenous in terms of A/S..	.. 1.31 lakh tonnes.
Phosphatic in terms of S.S.P.	.. 0.35 lakh tonnes.
Potassic in terms of Muriate of Potash	0.04 lakh tonnes
	1.68 lakh tonnes.

The last two Annual Plan period showed marked increase in the demand for fertilisers due to the following reasons:—

- (i) Price increase of agricultural commodities.
- (ii) Introduction of H.V.P. and the Multiple Cropping Programme.
- (iii) Educational and scientific demonstration programme conducted in package blocks.

During the three annual plans (1966—69), the target and actual or anticipated fertiliser consumption has been as follows:—

(IN LAKE TONNES.)

Year.	Target.				Actual level reached or expected to reach.			
	Nitrogenous A/S.	Phosphatic S.S.P.	Potassic K2O.	Total.	Nitrogenous.	Phos phatic.	Potassic.	Total.
1	2	3	4	5	6	7	8	9
1966-67	.. 3.90	0.75	0.15	3.90	1.17	0.22	0.04	1.43
1967-68	.. 4.00	1.50	0.20	5.70	2.20	0.67	0.05	3.12
1968-69	.. 5.00	3.00	0.68	8.68	2.39	1.75	0.36	5.00

A target of 20.68 lakh tonnes of fertiliser consumption has been proposed for the Fourth Five Year Plan out of which 14.04 lakh tonnes will be required for High Yielding Varieties Programme and the remaining for other programmes as shown in the table given below:—

Fertiliser.	Unit.	Base.	Consumption level proposed to be reached during the 4th Plan.				Total.
			For H.V.P.	For good grains other than H.V.P.	For commercial crops.		
1	2	3	4	5	6	7	
Nitrogenous in terms of A/S ..	Lakh acres	2.89	7.20	3.05	1.80	12.05	
Phosphatic in terms of S.S.P. ..	Lakh acres	1.73	5.64	0.64	1.05	7.33	
Potassic in terms of Muriate of Potash.	Lakh acres	0.38	1.20	0.02	0.08	1.30	
Total ..		5.00	14.04	3.71	2.93	20.68	

Yearwise break-up of above target for H.V.P. other than H.Y.V. and commercial crops including fruits and vegetables is given in following tables:—

TABLE 'A'

Year.	Fertiliser requirement for H.V.P. (in lakh tonnes).				Total.
	Nitrogenous in terms of A/S.	Phosphatic in terms of S.S.P.	Potassic in terms of Muriate of Potash.		
1	2	3	4	5	
1968-69(Base)	1.67	1.30	0.28	3.25
1969-70	3.78	2.96	0.63	7.37
1970-71	5.04	3.95	0.84	9.83
1972-73	6.84	5.36	1.14	13.34
1973-74	7.20	5.64	1.20	14.04

The requirement for H.V.P. has been calculated from 1969-70 at the rate of 80 N, 50P₂ O₅ and 40K₂O lbs. per acre.

While calculating the production potential proposed to be created during the Fourth Five Year Plan and additional production due to fertiliser for H.V.P. has been accounted for under the H.V.P. and not under fertilisers.

TABLE 'B'

Requirement of fertilisers for foodgrains other than H.V.P. (in lakh tonnes).

Year.			Nitrogenous in terms of A/S.	Phosphatic in terms of S.S.P.	Potassic in terms of M.P.	Total.
	1		2	3	4	5
1969-70	1.16	0.17	0.02	0.35
1970-71	1.47	0.24	0.02	1.73
1971-72	1.98	0.32	0.02	2.32
1972-73	2.39	0.40	0.02	2.81
1973-74	3.05	0.64	0.02	3.71

TABLE 'C'

Requirement of fertilisers for commercial crops (in lakh tonnes).

Year.			Nitrogenous in terms of A/S.	Phosphatic in terms of S.S.P.	Potassic in terms of M.P.	Total.
	1		2	3	4	5
1969-70	0.80	0.45	0.08	1.33
1970-71	1.00	0.60	0.08	1.68
1971-72	1.20	0.70	0.08	1.98
1972-73	1.50	0.25	0.08	2.43
1973-74	1.80	1.05	0.08	2.93

TABLE 'D'

Yearwise requirement of fertilisers (in lakh tonnes).

Year.			Nitrogenous in terms of A/S.	Phosphatic in terms of S.S.P.	Potassic in terms of M.P.	Total.
	1		2	3	4	5
1969-70	5.74	3.58	0.73	10.05
1970-71	7.51	4.79	0.94	13.24
1971-72	9.66	6.10	1.18	16.94
1972-73	10.73	6.61	1.24	18.58
1973-74	12.05	7.33	1.40	20.68

The following steps are proposed to be taken to streamline fertiliser distribution system:—

- (a) Previously the Bihar State Co-operative Marketing Union had a monopoly of distribution of straight fertilisers. This monopoly has now been broken and licences issued for distribution of fertilisers to private trade, to Food Corporation of India and Fertiliser Corporation of India also.
- (b) The number of sale agents will be increased, so that fertiliser is available to the cultivators in their villages.
- (c) Short term credit facilities will be given to farmers so that they are in a position to purchase fertilisers.

Manures :

The level of utilisation of urban compost at the end of the Third Five Year Plan (1965-66) was 0.92 lakh tonnes and increased to 1 lakh tonnes in 1967-68. At present 62 municipalities are covered and it is proposed to cover additional 20 centres during the Fourth Five Year Plan, and increase the production to 2 lakh tonnes. It is also proposed to give grants to municipalities for Sewage Development for utilisation of sludge. Under local manurial resources programme, the production of manures increased from 10.91 lakh tonnes at the end of the Second Plan to 34.86 lakh tonnes in 1965-66, and is likely to be 55.00 lakh tonnes at the end of the current year (1968-69). It is proposed to increase the production to 90 lakh tonnes by the end of the Fourth Plan period.

A provision of Rs. 49.43 lakhs has been made for manures during the Fourth Plan. An outlay of Rs. 5.43 lakhs is proposed for the Annual Plan, 1969-70.

Horticultural Development :

During the Third Five Year Plan 0.39 lakh acre of new orchards were planted and 1.06 lakh acres of old orchards rejuvenated. Efforts were also made to increase the area under vegetable cultivation specially around the industrial towns and additional 3.41 lakh acres were brought under vegetable cultivation. During 1966-67 and 1967-68 the area under new orchards was increased by 10,658 acres, 47,172 acres of old orchards were rejuvenated and additional 1.88 lakh acres were brought under vegetable cultivation.

During the Fourth Five Year Plan it is proposed to bring an additional area of 50,000 acres under new orchards and rejuvenate 1 lakh acres of old orchards, and bring additional 30,000 acres under vegetable cultivation. It is proposed to provide Rs. 58.26 lakhs during the Fourth Plan. The outlay during 1969-70 will be Rs. 14.51 lakhs.

Plant Protection:

The scheme of plant protection was started in the year 1951-52, with 31 plant protection centres. The number of centres was doubled in the Second Plan. By the end of the Third Plan, 192 plant protection centres were in operation, at the rate of one centre for every three blocks. The area treated with plant protection measures was 3 lakh acres in the First Plan, 60 lakh acres in the Second Plan and 66 lakh acres in the Third Plan. During the Annual Plans 1966-67, 1967-68 the area covered was 18.54 lakh and 34.48 lakh acres respectively. During 1968-69 the target is to cover 38.75 lakh acres including 15.31 lakh acres of high yielding varieties. During the Fourth Five Year Plan it is proposed to cover 112 lakh acres including 40 lakh acres under high yielding varieties. The number of plant protection centres will increase from 252 to 435. Experience has shown that the

normal plant protection organisation fails to be effective in case of widespread attack of pests and diseases. Hence it is proposed to provide 24 training-cum-mobile units. At present 25 per cent subsidy is allowed only on newer and less common pesticides. It is proposed to continue the usual 50 per cent subsidy on plant protection equipments.

Plant Protection Measures for H. V. P. :

With the higher dose of fertiliser used on the High yielding varieties, the adoption of adequate plant protection measures has to be made to meet the requirements in full by mobilising the internal supplies. For effective Plant Protection work, it has been decided to provide a mobile unit in each Plant Protection Unit of the High Yielding Varieties Programme districts. It is proposed to provide 24 such mobile units. The requirement of Plant Protection equipments like power and hand operated sprayers and dusters and pesticides will also go up and arrangements will be made to fulfil these demands. Recently fertilisers and pesticides have also been released for sale through private trade, and it is expected that this will help in increasing pesticide use among the farmers.

The major function of the extension agencies will be education, training and demonstration in Plant Protection measures to the farmers. To be effective, it has been proposed to have at least one Plant Protection Unit in each of the High Yielding Varieties Programme blocks. There are already 125 such Units and it is proposed to open 61 more Plant Protection units. It is proposed to provide Rs. 265.30 lakhs during the Fourth Plan. Outlay during 1969-70 will be Rs. 36.32 lakhs.

Agricultural Implements:

The objective is to provide improved agricultural implements to at least 10 per cent of the farming population of the State for efficient utilisation of manual and animal power for optimum agricultural production. During the Third Plan 1.20 lakh agricultural implements were supplied to the farmers at 50 per cent subsidy. During the Fourth Plan, it has been decided that subsidy of 25 per cent should be allowed on implements costing Rs. 100 to Rs. 500. It is proposed to distribute 15,290 agricultural implements involving subsidy of Rs. 8.55 lakhs and to distribute 1.55 lakh implements without any subsidy. 9 District Workshops will be established and tractors will be hired to cultivators in the intensive cultivation areas in Shahabad and Purnea Districts. A provision of Rs. 43.32 lakhs has been made for the Fourth Five Year Plan out of which Rs. 14.20 lakhs will be spent during 1969-70.

Commercial Crops:

Jute.—The acreage during the Third Plan under jute and mesta was 4.87 lakh acres and the total production was 10.73 lakh bales, giving an average yield of 2.20 lakh bales. During 1966-67, 5.06 lakh acres were covered under jute and mesta but in 1967-68, the acreage went down to 4.84 lakh acres with a total production of 10.08 lakh bales. The shortfall is due to increased cultivation of high yielding varieties crops which fetch high prices to the cultivators, adverse jute-paddy ratio and unfavourable weather conditions.

During the Fourth Plan, the objective is to maintain the normal jute acreage and to attain additional production, by increasing yield per acre and also to improve the quality. With this aim in view and to have a realistic target in the present changed context, it is proposed to increase yield per acre of jute from 2.2 bales to 3.0 bales and that of mesta from 1.85 bales to 2.5 bales giving a total production of 12.00 and 2.50 lakh bales of jute and mesta respectively. These targets are likely to be achieved through the introduction of high yielding strains,

extension of double cropping programme, adoption of intensive cultivation of jute. The target for additional production of jute during 1969-70 is 1 lakh bales.

Sugarcane.—The programme under this commercial crop contemplates continuance of extension measures to bring improvement in sugarcane production and sugar recovery. The target for the Third Five Year Plan was an annual production of 73.0 lakh tonnes to be achieved by the end of the plan period. But the production came down to 60.45 lakh tonnes. The main reason for the shortfall in the production of sugarcane was the low price of sugarcane as compared to other crops and high yielding varieties of foodgrains. Grain fetched better return than sugarcane. The production of sugarcane further came down to 45.09 and 40.31 lakh tonnes during 1966-67 and 1967-68 respectively.

Due to increase in cane prices acreage under sugarcane during the planting year 1967-68 (crop year 1968-69) has gone up and, therefore, it is expected that total production of sugarcane will be near about 60.00 lakh tonnes as against 40.31 lakh tonnes during 1967-68.

For the Fourth Plan, the target of additional production of 17 lakh tonnes of sugarcane without increasing the acreage has been contemplated by increasing the average yield to 26 tonnes per acre in the intensive sugarcane cultivation area and 18 tonnes for the whole State against the average of 14 tonnes per acre. This is expected to bring the total annual production to 77.0 lakh tonnes at the end of the Fourth Five Year Plan. It is also proposed to improve communication facilities by constructing roads around Sugar Factory areas. A sum of Rs. 136 lakhs has been provided during the Fourth Plan to complete the road already taken up during previous plans. It is expected that production in 1969-70 will be 62.10 lakh tonnes.

Oil-seeds.—The production of oil-seeds at the end of the Third Plan was 0.86 lakh tonnes and by the Fourth Plan, it is proposed to achieve 2.14 lakh tonnes, the additional production being 1.28 lakh tonnes. During 1969-70 the production of oil-seeds is likely to be 1.33 lakh tonnes.

It is proposed to bring 1.44 lakh acres under Groundnut by 1973-74. The strategy for achieving the above target is adoption of intensive cultivation to the existing area under oil-seeds without affecting the area under food crops. A "Package" of improved practices will also be introduced for oil-seeds like linseed, rapeseed and mustard.

Tobacco.—The acreage under tobacco in the State is about 43,000 acres. During the Third Plan the target was to bring 18,000 acres under improved varieties and to have additional production of 5,000 tonnes against which achievement was 18,500 acres and 2,500 tonnes respectively. This amounted to a total production of 16,500 tonnes against the normal production of 14,000 tonnes. The shortfall was mainly due to increase in the excise duty which discouraged the cultivators from putting in more tobacco crop in the field. During the Fourth Plan period the target is to cover 30,000 acres under improved varieties so as to have a total production of 23,500 tonnes, i.e., an additional production of 7,000 tonnes by the end of plan period. The target of additional production during 1969-70 has been kept at 1,500 tonnes.

Cotton.—Intensive experimentation on cotton cultivation in the State, particularly in Chotanagpur Plateau, has opened up possibilities of obtaining yield as high as 45 mds. per acre seed cotton and average yield of 25 to 30 mds. per acre under proper management. The Cotton Development Programme was undertaken by the State Government in 1964-65 and implemented during 1965-66, but the results were not encouraging on account of unfavourable circumstances. During the second year of the programme, seeds brought from outside got soaked during

transit. It was also found that proper supervision would be difficult if the entire plateau region were brought under this programme at one time. It has, therefore, been decided to implement this scheme during Fourth Plan in two or three districts only in the plateau region. It is expected that by the end of the Plan period, the coverage under Cotton will be about 10,000 acres.

The following provision has been made for commercial crops during the Fourth Plan and Annual Plan 1969-70:—

(RS. IN LAKHS).

			Fourth- Plan.	Annual- Plan, 1969-70.
1. Jute Development	..	..	61.65	10.07
2. Sugarcane Development	..	..	184.00	20.94
3. Oil-seeds Development	..	..	7.50	1.50
4. Tobacco Development	..	..	6.34	1.25
5. Cotton Development	..	..	7.95	2.47
6. Lac Development	..	..	16.00	2.00

Agricultural Education and Training:

The demand for agricultural graduates has slumped recently and so no expansion of college education is proposed in the Fourth Five Year Plan either at the under-graduate or post-graduate level. However, provision has been made for missing links in the staffing pattern in order to bring the three Agricultural Colleges at par with each other and for providing the much needed equipment and accommodation of staff. It is also proposed to establish an Agricultural University in the State during the Fourth Plan.

As regards education below the University level, agricultural schools had been started in each of the 17 districts of the State during the First Five Year Plan with a provision of 100 seats in each school. The Village Level Workers are given a two-year's intensive training in Agriculture and Animal Husbandry and the successful trainees are given Diploma. The diploma-holders are further trained for 7 months at the four Extension Training Centres, one for each Division before being employed in the Blocks. As the demand for V. L. Ws. in the Blocks has been met, it has been decided to reduce the number of Agricultural Schools from 17 to 10 and also to integrate the extension training with the subject-matter training at the Agricultural Schools, so that there will be 10 integrated extension training centres in the Fourth Five Year Plan in place of the present 17 Agricultural Schools and the four extension training centres.

With the introduction of high yielding varieties, it has been felt that the farmers should be trained in the improved cultivation practices and imparted education regarding the high yielding varieties programme. Keeping this aim in view, one centre at Arrah popularly called Kisan Vidyapith has already been established and another centre at Purnea is likely to be established in 1968-69. This programme is being implemented as a Centrally-sponsored Scheme. Similarly, two centres at Arrah and Purnea are likely to be started for the upgrading of Gram Savak Training Centre.

As regards other training programmes, provision has been made for refresher courses for staff including the V. L. Ws. and for training of farmers at the Block and Halka levels. Provision has also been made in the Fourth Five Year Plan for deputing V. L. Ws. to Agricultural Colleges for the degree course. It is proposed to provide Rs. 192.29 lakhs during the Fourth Plan period. The outlay during 1969-70 will be Rs. 24.33 lakhs.

Agricultural Research:

The organisation of an agricultural research in the State has been progressively strengthened during previous plan periods and reorganised to play its role in stepping up agricultural production. It is now necessary that the scientists should make the required laboratory investigations without which further field experimentation is not likely to yield commensurate results. It is with this objective that the Fourth Plan for the research organisation of the State has been drawn up and it mainly comprises filling up of gaps by provision of buildings and equipment to laboratories and physical facilities to research farms. A provision of Rs. 87.80 lakhs has been made for the Fourth Plan. It is proposed to provide Rs. 38.80 lakhs during 1969-70.

Agricultural Statistics:

It is proposed to provide Rs. 2.50 lakhs for extension of the scheme relating to area and production of fruits and vegetables. The object of the scheme is to collect statistics of area and production of fruits and vegetables in Bihar. Pilot studies have been conducted on mangoes, liches, bananas and jack fruits. It is proposed to extend these surveys and to undertake surveys on important vegetables. Rs. 0.50 lakh will be spent during 1969-70.

Intensive Cultivation Programme:

High Yielding varieties Programme.—Based on the experience gained in the working of I. A. D. P. and Intensive Agricultural Area Programme it was felt that even within the I. A. A. P. districts, the production efforts be concentrated in a more limited area which are more responsive and have high intensity of irrigation in order to achieve a rapid break-through in agricultural productivity. This objective assumed greater importance and urgency in view of the yawning gaps between requirements of and availability of food supply as a consequence of the two successive droughts in 1965-66 and 1966-67 and also on account of availability of some high yielding varieties of paddy, wheat and hybrid maize which are responsive to higher dose of fertilisers. The introduction of High Yielding Varieties Programme has been a major break-through in the agricultural strategy of this State. This new strategy consists of introduction of the new high yielding varieties of paddy, like Taichung Native-I and IR-8, wheat like Lerma Rojo, S227, S308, etc. and

Hybrid maize and Composite maize varieties. In Bihar this programme was initiated in 1967-68 and during a short period of two years, the programme has made tremendous impact as will be evident from the following table :—

Coverage Under High Yielding Varieties Programme

(Area in lakh acres.)

Year.	Paddy.	Maize.	Wheat.	Total.
1	2	3	4	5
1966-67 ..	0.99	0.33	0.66	2.08
1967-68 ..	5.73	1.28	4.50	11.51
1968-69 ..	7.70	1.61	6.00	15.31

During the Fourth Five Year Plan it is proposed to cover 40.00 lakh acres under High Yielding Varieties Programme. Details are given in the table below :—

Year.	Paddy		Wheat.	Maize.	Total.
	Khariif.	Summer.			
1	2	3	4	5	6
1968-69 (Base) ..	5.00	2.70	6.00	1.61	15.31
1969-70 ..	7.00	3.50	8.50	2.00	21.00
1970-71 ..	9.00	4.50	11.50	3.00	28.00
1971-72 ..	12.00	5.00	15.00	4.00	36.00
1972-73 ..	13.00	5.00	15.00	4.50	38.00
1973-74 ..	14.00	5.00	16.00	5.00	40.00

Requirement of inputs such as seeds, fertilisers, etc. has been indicated under the respective programmes,

Scheme for Intensive Cultivation of Rice, Maize and Wheat:

Encouraged by the achievement of the I. A. D. P., Shahabad, the Intensive Cultivation Programme for production of rice and maize was taken up in six districts of this State, namely, Patna, Gaya, Saran, Champaran, Santhal Parganas and Ranchi in the year 1963-64. A phased programme for covering all the blocks at the rate of 10 C. D. blocks each year was adopted, as a result of which most of the blocks in these districts should have been covered by the end of the Third Plan period. The scheme started functioning, though partially, in the Kharif season during 1963-64 in 60 blocks and was extended to 59 more blocks during the year 1964-65, 25 more blocks were added from the Rabi 1965-66, thereby making a total of 144 blocks. It was expected to cover 180 blocks by the end of the Third Five Year Plan period. But due to financial stringency, this scheme could not be extended to more blocks.

The State Government also started an Intensive Cultivation Programme of wheat in 9 blocks in Monghyr District from Rabi, 1965. The general approach to this programme was the same as that of I. A. D. P., Shahabad. The staffing and expenditure was also on the same pattern as that of I. A. D. P., Shahabad. The objective was to maximise the production of wheat and other important crops that come in rotation by intensifying extension efforts and supplying the agricultural inputs. The idea was to utilise to the maximum the irrigation potential created due to the completion of the Badua Dam and Kharagpur Lake and also other Medium Irrigation Schemes. During 1967-68, the scheme was reviewed and it was found that the irrigation potential was limited and there was not much scope of continuing this programme on the I. A. D. P. pattern. It was, therefore, decided to convert the Monghyr, I. A. D. P. to I. A. A. pattern. Thus there are now 153 I. A. A. blocks working in this State. During the Fourth Plan, it is proposed to add 41 blocks under the I. A. A. Out of the 153 blocks taken under I. A. A. during the Third Plan period, it is proposed to upgrade 20 blocks of Champaran in the I.A.A.-cum-H.V.P. pattern. Thus, ultimately only 194 blocks will remain under I.A.A. during Fourth Plan period. A scheme of Area Development Programme for the Eastern Kosi Canal Command area consisting of the district of Purnea and Saharsa was sanctioned on the same staffing and expenditure pattern as the I.A.D.P., Shahabad. Originally 9 blocks in Saharsa and 6 blocks in Purnea were taken from Rabi, 1965-66 under this programme. This programme was extended to 7 more blocks in Purnea District in the year 1966-67. Thus bringing 22 blocks under the Area Development Programme.

During the Fourth Plan, it is proposed to extend the I.A.A.-cum-H.V.P. programme on the basis of I.A.D.P. staffing and expenditure pattern to 19 blocks in Saharsa and Purnea Districts and 5 additional blocks in Champaran District which will come under the command of the Gandak Project. 20 more blocks in Champaran District will be upgraded to the I.A.A.-cum-H.V.P. Also 3 extension blocks attached to the Agricultural Colleges at Kanke, Sabour and Dholi are under the I.A.A.-cum-H.V.P. staffing pattern. Thus, by the end of the Fourth Plan, there will be 89 such blocks.

It is proposed to provide Rs. 5,45.93 lakhs during the Fourth Plan. Rs. 90.62 lakhs will be spent during 1969-70.

Multiple Cropping Programme:

Multiple Cropping Programme has been launched as a major plan of the new agricultural strategy for attainment of self-sufficiency in food production. During the Fourth Plan period, it is proposed to bring additional 26 lakh acres under Multiple Cropping Programme.

The yearwise break-up of proposed coverage under Multiple Cropping (Food-grains) is as follows:—

Year.				Proposed coverage in lakh acres.
1969-70	..	..	..	28.00
1970-71	..	..	..	35.00
1971-72	..	..	..	40.00
1972-73	..	..	..	42.00
1973-74	..	..	..	45.00

In order to create consciousness amongst farmers and educate them about this new technology, a new scheme of Multiple Crop Demonstration has been introduced.

Pulses:

In any scheme of multiple cropping where suitable patterns have to be evolved suiting particular situations, apart from increasing the percentage of intensity of cropping, care has to be taken to introduce such crops in the cropping pattern which will in the long run help in maintaining soil health and soil fertility. With this in view it is proposed to introduce legumes in the cropping pattern, specially short duration pulses which could be used as pulses for human consumption and also as green manuring for maintaining the health and fertility of the soil. The two important kharif pulses are Moong and Arhar and it is proposed to introduce short duration varieties of Moong and Arhar during the Fourth Plan under the Multiple Cropping Programme. The introduction of pulse in the revised cropping pattern under the Multiple Cropping Programme is thus expected to correct the nutritional imbalance of our diet.

It is proposed to provide Rs. 15.25 lakhs for Multiple Crop Demonstration during the Fourth Plan. The outlay during 1969-70 will be Rs. 3 lakhs.

Land Development:

It is estimated that there are 22.80 lakh acres of culturable waste-lands in Bihar of which 2.33 lakh acres have been reclaimed so far. During the Third Five Year Plan the land reclamation activities were mainly confined to the plateau region. Uplands with gentle slopes were reclaimed by manual labour and the heavily gullied areas reclaimed through tractors and dozing units. Contour bunding and bench terracing were done and the total area reclaimed during the Third Five Year Plan was 67,635 acres. 22,581 acres were reclaimed during 1966-67 and 1967-68. About 10 lakh acres are likely to be reclaimed during the current year (1968-69).

It is proposed to provide Rs. 55 lakhs during the Fourth Five Year Plan for land development and reclaim 55,000 acres of culturable waste-lands. An outlay of Rs. 10 lakhs is kept for the Annual Plan, 1969-70 and it is proposed to reclaim 10,000 acres of waste-lands.

Consolidation of holdings:

The consolidation of holdings is being carried out at present in Patna, Muzaffarpur, Gaya and Dhanbad districts. During the Third Five Year Plan 1.05 lakh acres were consolidated against the target of 5.31 lakh acres. At present 1,173 villages have been taken up and work on 4 lakh acres is in various stages of progress. The progress of the work has been far from satisfactory. The poor progress is mainly due to non-co-operation of farmers. Much time is spent in explaining the benefits of consolidation and persuading them to agree to consolidation.

Though, according to the Bihar Consolidation of Holdings and Prevention of Fragmentation Act (1956), the consolidation work could be done compulsorily, the approach adopted so far has been of persuasion. It is felt that unless the work is done compulsorily it may not be possible to achieve the desired results. During the Fourth Five Year Plan it is proposed to provide Rs. 15 lakhs for consolidation. The scheme will continue in blocks already taken up so that the work in hand will be completed.

Survey and Settlement:

The importance of up-to-date record of rights can not be over emphasised. With the limited resources the State Government have been paying attention to this problem and considerable progress has been made. The revisional settlement operations in Purnea District were completed in 1957-58. Major Revisional Survey and Settlement operations are in progress in the districts of Singhbhum, Shahabad, Muzaffarpur, Gaya, Darbhanga, Bhagalpur and Saharsa. The work of general settlement in the districts of Singhbhum and Muzaffarpur is in the concluding stage, but the work regarding urban survey and settlement of fair rent which has been taken up subsequently is to be complete. The minor settlement operations in the Hazaribagh District is almost complete. During the Fourth Five Year Plan it is proposed to provide Rs. 209 lakhs for survey and settlement operations. Survey operations will be continued in the districts of Singhbhum, Muzaffarpur, Shahabad, Saharsa, Bhagalpur, Gaya and Darbhanga. It is expected that settlement operations will be completed during the Fourth Five Year Plan in five districts, namely, Singhbhum, Muzaffarpur, Shahabad, Saharsa and Purnea. Fair rent settlement in Purnea, Gaya and Darbhanga districts will be carried over to the Fifth Five Year Plan. During the Annual Plan, 1969-70 it is proposed to provide Rs. 45 lakhs.

Other programmes include extension measures, agricultural information service, expansion of extension machinery at different levels. The outlay for Agricultural Production Sector during the Fourth Plan period is proposed at Rs. 20,96.72 lakhs. It is proposed to provide 3,60.72 lakhs during the Annual Plan 1969-70.

SECTION 2

MINOR IRRIGATION.

Minor Irrigation Schemes help in quicker utilisation of surface and ground water resources. As such schemes are generally completed within one or two working seasons they are capable of yielding results quickly. Physiographical conditions in the State do not make it possible to bring more than 50 per cent of the sown area under Major and Medium Irrigation Schemes. Hence, adequate attention has to be given to minor irrigation schemes in order to improve the agriculture economy of the State. Except for ground water schemes which are of a durable nature other schemes if not properly maintained quickly go out of use. Even the tube-wells have limited life and start showing signs of failure after 15 to 20 years or even earlier. Since most of the minor irrigation schemes are privately owned and maintained, some allowance has to be made for their depreciation due to inadequate repairs and maintenance. Accurate information of this aspect is not available. But at the time of the formulation of the Third Plan, it was estimated that the stabilised area under minor irrigation scheme was about 7.75 lakh acres in 1955-56 and 17.75 lakh acres in 1960-61. The irrigation potential created up to the end of the Third Plan (1965-66) was estimated at 26 lakh acres. It is anticipated that area covered by minor irrigation schemes would be about 36.73 lakh acres at the beginning of the new Fourth Five-Year Plan to commence from 1969-70.

The plateau region of the State is lagging behind in irrigation facilities. Only minor and medium flow irrigation schemes are feasible in the plateau region. Surface percolation wells also are costlier. There were also inadequate irrigation facilities in the districts of Muzaffarpur, Darbhanga, Saharsa and Purnea. But in Purnea and Saharsa districts, irrigation from Kosi Project has begun. During the Third Plan, sinking of State tube-wells was again taken up and 109 additional tube-wells were drilled in sugarcane areas. Stress was laid on bigger minor irrigation schemes in the plateau region of the State. 486 bigger minor irrigation schemes with an additional irrigation potential of 2.2 lakh acres were completed during the Third Five Year Plan. The State had to face unprecedented drought during the year 1966-67. Underground water sources were tapped in large number and lift irrigation schemes were taken up. About 7,800 diesel pumping sets were distributed to the cultivators in 1966-67 and more than 8,000 additional sets in the year 1967-68. Anticipated achievement in the current year 1968-69 is likely to be 8,000. The annual achievement during 1966-67 was more than the total of three plans taken together. Similarly up to the end of the Third Plan there were 10,556 electrical pumping connections. During 1967-68, 14,012 additional electrical connections were provided and during the 1967-68 the additional number was 15,807. In the year 1968-69, it is proposed to give about 17,000 electrical connections. Significant progress was also achieved in sinking private tube-wells. 3,806 private tube-wells were sunk during the Third Five Year Plan period. In 1966-67, 1,107 new private tube-wells were drilled and in 1967-68, 2,881 additional tube-wells were sunk. During 1968-69 it is proposed to sink 8,000 tube-wells.

It is proposed to make a significant impact during the Fourth Plan through a fairly large number of minor irrigation schemes. The strategy in the Fourth Plan will be as follows :—

- (a) Topmost priority will be given to the spillover schemes so that irrigation potential is quickly generated and utilised. The total amount required for the completion of such schemes will be Rs. 4,92.00 lakhs.

- (b) The main emphasis will be on utilisation of ground water resources. The experience of the drought period has shown that ground water schemes are more useful and dependable than surface water schemes which generally provide supplemental irrigation during Kharif season but are not of much help in intensive cultivation.
- (c) The number of State tube-wells would be increased in selected areas.
- (d) Area development schemes in compact blocks have been taken up in the districts of Patna, Monghyr, Darbhanga and Purnea with assistance from Agricultural Refinance Corporation. Additional Schemes would be taken up in areas where electrical energy will be available.
- (e) Drilling capacity in the State sector has been considerably increased by procuring additional number of rigs and boring plants. This will be further increased by purchasing more drilling rigs and other accessories.
- (f) Comprehensive ground water investigation for optimum utilisation of ground water resources will be carried out.
- (g) To ensure quicker utilisation of irrigation potential water courses up to one cusec will be constructed and cultivators will be persuaded to construct field channels quickly.
- (h) Large number of derelict, pynes, Ahars and Bunds have been repaired under the hard manual labour scheme programme during 1966-67. The remaining work will be executed by utilising wheat assistance from the World Food Programme in addition to Government efforts. A number of voluntary agencies have been participating in the minor irrigation programme. A project in Simdega Block (Ranchi district) has been initiated under Indo-German Project. In Turkaulia Block (Champanan district) a Norwegian Aid Project is in operation. A rig has been donated and there is a programme of loan facilities from the project to sink 50 private tube-wells in that area. Two rigs have been donated by the Freedom From Hunger Campaign for Vaishali area (Muzaffarpur district). The Bihar Relief Committee are also executing minor irrigation schemes.

During the Fourth Five Year Plan, it is proposed to provide Rs. 55 crores for minor irrigation schemes so as to create additional irrigation potential of 28.26 lakh acres. The State Agriculture Department will be allotted Rs. 47.24 crores and will create additional irrigation potential of 26.72 lakh acres. A sum of Rs. 7.76 crores would be spent by the Irrigation Department to create additional potential of 1.54 lakh acres. Though the plan allocation will be Rs. 55 crores minor irrigation programme costing Rs. 1,48.36 crores will be executed. A sum of Rs. 12 crores has been provided in the plan for purchase of share debentures of the State Land Mortgage Banks for financing private tube-well programme through Land Mortgage Banks and Agriculture Refinance Corporation. Rs. 1 crore will be given as share capital contribution to State Agro-Industries Development Corporation which will advance credit to farmers for purchase of electric and diesel pumps through hire-purchase. 50,000 surface percolation wells will be constructed. 50,000 open borings will be made. 1,000 State tube-wells and 40,000 private tube-wells will be sunk. 1.25 lakh electric pumps and 40,000 diesel pumps will be distributed.

The outlay over different types of schemes is as follows :—

Name of schemes.	Physical target (no. of units).	Total cost (Rs. in lakhs).	Plan provision (Rs. in lakhs).	Area in thousand acres to be irrigated.
1	2	3	4	5
<i>Schemes of Agriculture Department—</i>				
1. S. P. Wells	50,000	9,00	1,57	1,00
2. Lift Irrigation from rivers, etc.	..	80	80	..
3. Installation of Electric Pumps.	1,25,000	28,13	1,00	6,25
4. Installation of Diesel Pumps.	40,000	14,40	..	4,00
5. Private tube-wells ..	40,000	48,00	12,00	8,00
6. Open borings	50,000	4,00	70	1,00
7. State tube-wells ..	1,000	1	1	2 00
8. Rahats	30,000	2 40	42	60
9. Bigger M. I. Schemes ..	..	10,47	10,47	2,62
10. Minor Ahar, Pynes, etc. ..	..	5,00	88	1,25
11. Ground Water Surveys ..	..	30	30	..
12. Survey of Surface Water Schemes.	..	50	50	..
13. Equipments .. ..	..	2,00	2,00	..
14. Staff .. ..	..	6,50	6,50	..
15. Irrigation Co-operative ..	..	10	10	..
TOTAL—AGRICULTURE DEPARTMENT.	..	1,41,60	47,24	26,72

Schemes of Irrigation Department—

Name of scheme.	No. of units.	Total cost during Fourth Plan (Rs. in lakhs).	Total Plan provision (Rs. in lakhs).	Area in thousand acres to be irrigated.
1	2	3	4	5
A. Spill-over Schemes—				
1. Flow Schemes ..	48	1,19	1,19	38
2. Drainage Schemes ..	9	18	18	..
3. Pumping sets along Ganga and Burhi Gandak Rivers.	..	1,64	1,64	56
TOTAL—SPILL-OVER SCHEMES.	..	3,01	3,01	94
B. Tube-well/Channels ..	..	25	25	} 60
C. Construction of water courses in completed schemes.	..	70	70	
D. New Dams or Reservoir Schemes.	..	3,80	3,80	
TOTAL—IRRIGATION DEPARTMENT.	..	7,76	7,76	1,54
GRAND TOTAL ..	..	1,48,36	55,00	28,26

The demand for irrigation facilities has increased tremendously and it is not possible to meet the demand with the limited financial resources of the State Government. Hence, the policy regarding pattern of subsidy and direct loan by

State Government has been changed and rates of subsidy have been revised and reduced considerably. At present subsidy is being allowed as follows :—

Kinds of works.	For hilly areas.	For rest of Bihar.
	Per cent	Per cent
1. S.P. wells (including repair of old S. P. wells) ..	50	50
2. S.P. wells with higher diameters in hilly areas ..	50 Subject to a limit of Rs. 5,000 as subsidy per well.	Nil.
3. Open boring without strainers	50	50
4. Rahats	50	50
5. Minor Ahar, Pynes, and Bundhs	25	25
6. Private tube-wells (including open boring with strainers).	25	25
7. 2" tube-wells	25	25
8. 1½" Hand Pump	50	50
9. Bigger Minor Irrigation Schemes	25	25

The State working group on Minor Irrigation has recommended abolition of subsidies on minor irrigation schemes during the Fourth Plan. The matter regarding total abolition of subsidy or to reduce the rate of subsidy gradually on S. P. wells, borings and rahats from 50 per cent to 25 per cent in the first two years of the Fourth Plan and 12.5 per cent in the remaining period of the Plan ; and to continue the subsidy of 25 per cent on Minor Anars and Pynes at 25 per cent during the first two years and then reduce to 12.5 per cent in the last two years of the Plan is under consideration of the State Government. Pending the final decision of the Government, provision in the Plan has been made on the basis of gradual reduction in subsidy as mentioned above. It is proposed to provide Rs. 11 crores for minor irrigation sector during 1969-70 and create an additional potential of 5.71 lakh acres. The State Agriculture Department will spend Rs. 9 crores and create a potential of 5.31 lakh acres and State Irrigation Department will be allotted Rs. 2 crores to create additional potential of 0.40 lakh acres.

SECTION 3

SOIL CONSERVATION.

The Chotanagpur plateau region, the escarpment zone and the sloping lands of South Bihar lying between the plateau and the plain are the worst eroded areas of the State. The catchment areas of the Southern rivers which flow into the Ganga or flow out of Bihar into West Bengal or Orissa lie largely in the Chotanagpur plateau region and the adjoining areas. There are vast stretches of sloping uplands under intermittent cultivation, deep gullied lands and denuded forest lands which contribute heavily towards peak floods and high silt load in the rivers. Soil erosion from the sloping uplands as well as from forest lands has been going on for years resulting in depleted fertility and consequent loss of yields from agricultural as well as forest crops. There is, therefore, immediate need for undertaking intensive soil conservation measures on agricultural lands, wastelands and forest lands in the South Bihar and Chotanagpur both as a measure of flood reduction and as a means to increase production from these lands. A number of river valley projects have been executed in Chotanagpur, two of the most important projects are the D. V. C. and the Mayurakshi. In addition, a large number of irrigation projects have been executed by the State Irrigation Department. The catchment areas of these projects suffer seriously from the malady of soil erosion and these need to be tackled urgently. It has been roughly estimated that about 58 lakh acres comprising about 14 per cent of the total area of the State suffer seriously from the malady of soil erosion and require soil and water conservation measures. In North Bihar, the greatest problem is that of coarse and medium silt load in River Kosi. The irrigation canals are getting choked up with large silt deposits reducing the irrigation capacity of the canals. As the entire catchment of River Kosi lies outside India, in Nepal, the matter needs to be taken up with His Majesty's Government of Nepal by the Government of India at the highest level. A few soil conservation schemes were started in the middle of the Second Plan period. About 78,000 acres were treated with soil conservation measures during the Second Plan period. During the Third Plan period the area treated rose to 2.80 lakh acres. It is expected that additional area of 1.29 lakh acres would be covered with soil conservation measures during the three-year period, 1966-67 to 1968-69. In the Fourth Plan it is proposed to bring 2.16 lakh acres of agricultural lands under contour bunding, reclaim 12,500 acres of gullied lands and construct 500 high level bunds, silt traps and other engineering structures. 64,000 acres would be afforested. A provision of Rs. 300 lakhs is made for soil conservation schemes during the Fourth Plan period.

It is proposed to provide Rs. 33 lakhs for soil conservation schemes during 1969-70. Physical targets include afforestation over 5,400 acres and soil conservation measures over 45,000 acres of agricultural land.

SECTION 4

AYACUT DEVELOPMENT PROGRAMME.

In order to ensure speedy and full agricultural benefits from irrigation projects, a programme of Ayacut Development is proposed to be taken up in Kasba Block of Purnea District. In the initial stages about 3,500 acres would be covered. Additional area would be taken up with the experience gained and availability of funds. The essential ingredients will be crop planning, regulation of irrigation supplies, proper distribution and application of irrigation water, drainage facilities, land shaping, soil survey, arrangement for adequate supply of input factors such as seeds and fertilisers, extension and demonstration, storage and marketing facilities, communication, agro-industrial development, etc. Loan assistance will be arranged for by the State Government through the Co-operative Sector, Land Mortgage Banks, etc. The institutional credit required in the first three years will be Rs. 27 to 30 lakhs. A provision of Rs. 12.00 lakhs is proposed during the Fourth Plan period to meet the cost of works, equipments and staff. During 1969-70, the expenditure will be Rs. 1.00 lakh.

SECTION 5

ANIMAL HUSBANDRY.

According to the Livestock Census of 1966, the total livestock population in Bihar is 287 lakhs and the poultry population is 108 lakhs. Of the total livestock population, cattle number 188 lakhs, of which 58 lakhs are breedable cows and she-buffaloes. The existence of large number of livestock which roughly works out at one livestock per two human beings in a State which has the third highest density of population in India necessitates a careful study and planning of animal husbandry measures. The Nutritional Advisory Committee has recommended that for a balanced diet every adult should take, among other things, 10 oz. of milk, 3 oz. of meat and fish and one egg per day. As against this diet, the availability of milk, meat and eggs in Bihar has been considerably low as will be revealed by the following figures :—

Items.	1951.	1956.	1961.	1966.	Standard recommended.
1	2	3	4	5	6
1. Milk including milk products per adult per day.	4.4 oz.	4.3 oz.	4.0 oz.	3.5 oz.	10. oz.
2. Meat (all kinds)	..	2.2 lbs. per day.	3 lbs. per day.	3.4. lbs. per day.	3 oz. per day or 68 lbs. per year.
3. Eggs per adult per annum.	3.6	3.6	5.1	12	365

The main objective of the Animal Husbandry programme should be to make available required quantities of milk, milk products, meat and eggs for ideal nutrition. The Animal Husbandry programme has also to make considerable contribution in respect of providing traction power to bullocks, rural transport and organic manure.

The following objectives have been kept for Animal Husbandry programme during the Fourth Plan :—

- (a) To increase the production of milk and milk products.
- (b) To increase the draught capacity of bullocks by improved breeding and better feeding.
- (c) To increase the production of eggs and poultry meat by improving the breeds of poultry.
- (d) To increase the production of wool and mutton by improving the breeds of sheep.
- (e) To increase the production of pig meat by improving the breeds of pigs.
- (f) To provide adequate facilities for treatment of livestock and ensure protection by preventive measures.
- (g) To ensure increased production of feeds and fodder.
- (h) To train personnel in specialised fields.
- (i) To conduct researches on livestock problems.

The plan provision and expenditure in respect of Animal Husbandry programmes during the last three plans and annual plans since 1966-67 are as follows :—

				(Rs. in lakhs.)	
				Plan provision.	Expenditure.
First Plan	..	..	..	1,22.40	99.40
Second Plan	..	..	..	5,18.34	3,67.54
Third Plan	..	..	..	4,69.00	3,97.55
Annual Plan, 1966-67	..	..	..	92.60	59.9
Annual Plan, 1967-68	..	..	..	60.00	52.32
Annual Plan, 1968-69	..	..	..	60.00	60.00

(Anticipated).

The expenditure has been less than the plan provision largely on account of the fact that budget provision was not made to the full extent required due to inadequacy of resources.

An outlay of Rs. 4,09.37 lakhs has been provided for the Fourth Plan. Details regarding important programmes to be undertaken are given below :—

Cattle Development :

There are 58 lakh breedable cows and she-buffaloes in the State. In order to bring about all round cattle development, it is necessary to cover the entire breedable population in a controlled programme involving breeding, feeding, disease control, weeding, management and marketing. This programme has been mainly undertaken in the Ganga plains where the level of cattle resources is better than other areas. The plateau region of the State which is predominantly inhabited by Adivasis and other backward classes of people remains comparatively behind as the cattle of these areas are nondescript and degenerated. Cattle in this region are mainly maintained on natural grazing as the scope for cultivation of improved types of fodder is limited. 17.40 lakhs of breedable cows and she-buffaloes have been brought under controlled breeding programme by 1968-69. Thus, only 30 per cent of the total breedable population have been covered and there is considerable leeway to be made up in this direction. Recognising the need for organising cattle development programme on the lines of intensified package programme for crops and linking cattle development with dairy schemes, the cattle breeding policy has been revised. The salient features are :—

- (1) Selective breeding in certain specified tracts, viz., areas of Intensive Cattle Development Blocks.
- (2) Increase in milk production by upgrading the nondescript with recognised breeds.
- (3) Cross breeding with exotic breeds in hilly and other areas.

Two intensive cattle development blocks, namely, Patna-Arrah and Barauni-Begusarai were sanctioned during December, 1964 as a Centrally sponsored scheme under the crash programme. One block is located in the districts of Shahabad and Patna, covering, 7 community development blocks of Shahabad district and 6 community development blocks of Patna district. The other block is in the district of Monghyr covering 14 community development blocks. In each intensive development block one lakh breedable cows and she-buffaloes have been brought under controlled breeding. In addition to the breeding programme provision has also been made for veterinary aid and disease control, registration and milk recording, introduction of high yielding milch cattle, feeds and fodder development.

Subsidies and production incentives are given and development of co-operative societies is undertaken. During the Fourth Five Year Plan, it is proposed to continue the two intensive cattle development blocks till 1971-72, after which the scheme would be transferred to non-plan as a committed scheme for meeting its continuing expenditure. A food processing plant at an estimated cost of Rs. 10.57 lakhs would be set up. It is also proposed to establish two more I.C.D. blocks in the milk shed areas of Arrah-Buxar in the district of Shahabad, and Samastipur in the district of Darbhanga. These two new I. C. D. blocks will be started from the third year of the Fourth Plan. Each of the two blocks will cover 50,000 breedable cows and she-buffaloes. A provision of Rs. 1,49.90 lakhs has been made for the intensive cattle development blocks during the Fourth Plan period, Rs. 76.66 lakhs for the existing blocks and Rs. 73.24 lakhs for the new blocks.

There are 7 cattle farms in the State namely Patna, Dumraon, Pusa, Purnea, Gouria Karma, Hotwar (Ranchi) and Saraikela. Adequate irrigation facilities do not exist on these farms. As it is necessary to utilise the available land to the maximum extent for production of quick growing fodder such as hybrid maize, Napier, Berseem, etc. In addition to providing irrigation facilities, it is also proposed to maintain one unit of exotic cattle in one farm till a separate farm for this purpose has been established. Bulls are distributed for natural servicing in areas where all weather roads do not exist for the transportation of semen for artificial insemination. During the Fourth Plan it is proposed to continue the scheme and distribute 1,000 bulls at a cost of Rs. 10.00 lakhs. The total outlay during the Fourth Plan under the schemes of Cattle Development will be Rs. 1,96.51 lakhs of which Rs. 28.91 lakhs will be spent during 1969-70.

Poultry Development

The total poultry population is 1,08 lakhs. Under the Poultry development programme, 48 poultry farms and 92 rearing centres are functioning which are mostly concentrated in the plateau region. About 30,000 layers of improved breed are maintained. Credit facilities are available to poultry breeders through the two intensive poultry development blocks and two intensive eggs and poultry production-cum-marketing centres located at Patna and Ranchi. The poultry development programme has caught the imagination of the people and production of improved eggs has gone up from 17.65 crores in 1961 to 91.14 crores in 1967.

Members of scheduled castes and scheduled tribes who are traditional breeders of poultry have been greatly benefited by this programme. During the Fourth Five Year Plan, it is proposed to develop poultry in an intensive way. Arrangements will be made for transport, distribution of eggs and poultry meat. Attention will also be given to credit, supply and distribution of production requisites. A co-ordinated poultry breeding programme will also be introduced in all the divisional poultry farms. Two Intensive Egg and Poultry Production-cum-Marketing centres and two intensive Poultry Development Blocks are functioning at Patna and Ranchi. As industrial townships of Bokaro and Patratu are coming up it is proposed to locate one Intensive Egg and Poultry Production-cum-Marketing centre at Bokaro during 1968-69 and another at Patratu in 1969-70. Each centre will cover 3 Community Development Blocks and in each block there will be 200 units. In addition, it is also proposed to set up a 5,000 layers poultry farm at Patratu. Two poultry dressing plants are functioning at Patna and Ranchi. During the Fourth Plan it is proposed to set up one additional plant at Bokaro. Extension facilities will be continued to poultry breeders by training 5,000 farmers and distributing 5,000 sets of equipments and 5 lakh one day old chicks at 25 per cent subsidy to Scheduled Castes and Scheduled Tribes. It is also proposed to reorganise the existing 48 poultry farms and 92 hatching and rearing centres into 15 farms and 20 rearing centres on technically sound and economical

basis. It is proposed to provide Rs. 56.73 lakhs for poultry development programmes during the Fourth Plan period. An expenditure of Rs. 12.43 lakhs will be incurred in 1969-70.

Piggery Development

The total population of pigs in the State is 6.4 lakhs. Five pig farms and 25 piggery development blocks are functioning in the State. Out of 5 farms 4 are located in the plateau region of Chotanagpur and one in the district of Shahabad. Out of 25 piggery development blocks 21 are located in the plateau region, 3 in the district of Patna and one in Monghyr district. One bacon factory is being established at Ranchi. Pig development programme has made a great headway in the traditional pig breeding areas and Adivasis have been greatly benefited by this programme. The schemes of Pig Breeding Farm-cum-Bacon Factory was sanctioned in December, 1964 as a centrally sponsored scheme under crash programme. The scheme envisages setting up of a Bacon Factory, Pig Breeding Farm and Development of piggery blocks around the factory area. 50 pigs will be slaughtered daily at the initial stage for bacon. A pig breeding farm and 10 piggery development blocks have been started. The factory buildings are nearing completion and it is expected that the factory will be commissioned in September, 1968. During the Fourth Plan, it is proposed to establish additional 3 units and 10 blocks around Ranchi to facilitate the bacon factory to reach its capacity. Subsidy will also be given to pig breeders for purchase of sows, construction of pig houses, supply of feeds and boars. The total outlay for piggery development schemes during the Fourth Plan will be Rs. 59.29 lakhs of which Rs. 14.13 lakhs will be spent during 1969-70.

Sheep Development

There are 12.4 lakhs Sheep in the State. Two sheep breeding farms and 20 sheep breeding and wool extension centres are functioning in the State. The programme is mainly concentrated in the plateau region of the State. The main objective of sheep development will be to increase the production of wool and mutton. It is proposed to breed and multiply Marwari sheep and use them for upgrading local sheep. It is also proposed to cross local ewes with rams of exotic fine woolled types. To increase the production of mutton it is proposed to introduce Benaur Sheep. During the Fourth Five Year Plan it is proposed to distribute 3,200 ewes and 320 rams among farming communities. A mass drenching of sheep will also be done to prevent parasitic infestation. The sheep breeding farm at Chatra will be expanded.

Fodder Development

One fodder bank and several hay making centres are functioning in the State. Wild edible grasses are cut from the forests for making hay. The fodder bank is located at Barwadih (Palamau District) and there are 3 hay making centres in Palamau, 3 in Hazaribagh and one in Singhbhum district. In addition, fodder demonstrations are carried out in Community Development Blocks and intensive cattle development blocks. During the Fourth Five Year Plan, it is proposed to continue the fodder bank and establish two seed production farms in the existing farms at Patna and Purnea. A provision of Rs. 12.98 lakhs has been made for this programme during the Fourth Plan.

Disease Control

Disease control is necessary for any programme of livestock development. At the end of the First Plan there was one dispensary or hospital for every 79,000 cattle, spread over an area of 291 square miles. By the end of the Second Plan

there was one hospital or dispensary for every 31,000 cattle spread over 113 square miles. No new dispensary was opened during the Third Plan and 632 hospitals and dispensaries were functioning in 1965-66. During the Fourth Plan period it is proposed to establish 20 new veterinary dispensaries.

Other Programme

Other programmes to be undertaken during the Fourth Plan include introduction of one year postgraduate diploma courses (Veterinary clinic, Gynaecology, Poultry, Sheep and Swine husbandry) at veterinary colleges (Rs. 2.88 lakhs), expansion of Livestock Research Station (Rs. 5.55 lakhs), Training of Personnel (Rs. 2.98 lakhs), I. C. A. R. Schemes (Rs. 4.43 lakhs), Ambulatory Clinics (Rs. 2.67 lakhs) etc. It is also proposed to establish Caracass Utilisation centre (Rs. 4.70 lakhs) and a modern slaughter house (Rs. 3.50 lakhs).

As a result of Animal Husbandry programmes to be undertaken during the Fourth Plan it is expected that production of milk will increase from 15.53 lakh tonnes to 16.10 lakh tonnes in 1973-74. Similarly production of meat is likely to increase from 0.68 lakh to 0.89 lakh tonnes, and that of wool from 16.17 lakh lbs. to 17.31 lakh lbs. Significant increase will be achieved in the production of eggs, from 135.23 crores eggs to 209.11 crores eggs—that is an increase of 54.6 per cent.

It is proposed to provide Rs. 70 lakhs for Animal Husbandry programmes during 1969-70,

DAIRYING AND MILK SUPPLY.

Bihar has a large population of live-stock but the per capita availability of milk is not only very low but has also been going down owing to a large increase in the human population. The per capita availability of milk was 4.4 oz. in 1951, 4.3 oz. in 1956, 4.0 oz. in 1961 and 3.5 oz. in 1966. Viewed against the standard requirement of 10 oz. of milk per adult per day, it appears that Bihar has to make considerable progress in the dairy and milk supply sector for reaching the minimum per capita requirement of milk required for a balanced diet. The urban areas continue to attract cattle owners on account of the high prices of milk there and this also creates problems of urban hygiene in towns and cities.

In Bihar, while the North and South Bihar plains have milk production potentialities which can be developed, in the Chotanagpur plateau region, there is need to organise supply arrangements to meet increasing demand for milk. In North Bihar fertile alluvial soil is conducive to development of milk production. Dairying has developed in Begusarai subdivision and parts of districts of Muzaffarpur and Darbhanga. Shahabad and Patna districts have also good potentialities for dairy development. In the Chotanagpur plateau region natural conditions are not conducive to milk production but the demand for milk in the industrial areas is very high. Hence in such areas emphasis has to be given to organised milk supply after transporting milk or milk products from other parts of the State.

In the First Plan, a rapid survey of milk production in selected areas was conducted and co-operative milk unions were organised at Patna, Bhagalpur and Muzaffarpur. In the Second Plan, adequate emphasis was given to dairying milk. Supply schemes were initiated under the control of the State Government at Gaya and Hotwar (Ranchi). The establishment of a rural creamery at Barauni with a capacity of 2,000 Kgs. of cream per day and a bigger dairy at Patna to handle 10,000 litres of milk per day were taken up but the schemes could not make much headway during the Second Plan period. During the Third Plan, the Milk Supply Scheme at Gaya was commissioned, chilling centres were established at Jehanabad and Maner and the rural creamery at Barauni was also commissioned. A dairy plant was installed at Dumraon and seven extension units were established in the milk-shed areas. The outlays in the First, Second and Third Plans were Rs. 5.58 lakhs, Rs. 41.21 lakhs and Rs. 109.76 lakhs respectively. Certain schemes such as the Barauni Composite Plant Factory and Dhanbad Milk Supply could not be implemented during the Third Plan, on account of delay in despatch of plant and equipments from Sweden and difficulties in obtaining foreign exchange. Lack of adequately qualified personnel, and limitation of resources were also factors responsible for the slow progress.

During the three Annual Plans 1966-67, 1967-68 and 1968-69, some progress was achieved in the spill-over schemes, namely, Barauni Composite Milk Plant, Dhanbad Milk Supply Scheme and Darbhanga Milk Supply Scheme. As regards the composite milk plant, building plan and estimates have been prepared. Imported equipments under Swedish credit have been received and stored at site. On the advice of the Ministry of Food and Agriculture, the work of preparation of a feasibility report has been entrusted to the National Dairy Development Board. Dhanbad Milk Supply Plant will primarily reconstitute milk powder to be produced at Barauni Composite Plant, as there will not be enough milk in and around the industrial belt. This scheme will be developed as a link project of the composite plant.

In the Fourth Plan emphasis would be given on consolidation and development of projects taken in hand rather than on expansion through new schemes. Only

three new projects involving comparatively small outlay would be taken up as support to existing schemes. The objectives of the Fourth Plan will be as follows: —

- (a) Completion of spill-over dairy schemes.
- (b) Consolidation and expansion of the existing dairy schemes to meet the increasing demand of milk in cities.
- (c) Continuation of the scheme for training of personnel in dairying.
- (d) Intensifying rural extension work including organisation of milk collection and assembling centres for supply of milk to the dairy plants.
- (e) Formation of Dairy Development Corporation to streamline administration and increase the efficiency of dairy projects.
- (f) Establishment of milk depots in industrial towns.
- (g) Establishment of rural dairies for distribution of milk in small towns and supply of surplus milk to the dairy factories.

The outlay proposed during the Fourth Plan is Rs. 200 lakhs. Out of this amount Rs. 106 lakhs would be spent on spill-over projects, namely, Barauni Composite Milk Plant (Rs. 75 lakhs), Darbhanga Milk Supply Scheme (Rs. 13 lakhs) and Dhanbad Milk Supply Scheme (Rs. 18 lakhs).

The Composite Milk Plant at Barauni will handle 40,000 to 50,000 litres of milk per day to begin with and in the second phase the capacity would be increased to 80,000 to 100,000 litres per day. This plant will be the mother plant for the development of the dairy industry in Bihar. With its establishment development programmes for milk production in North Bihar can be intensified. Composite plant will also help to even out the supply and demand during flush and lean seasons of the existing milk schemes. Darbhanga Milk Supply Scheme will handle 6,000 litres of milk per day. Dhanbad Milk Supply Scheme is designed to supply 10,000 litres of milk per day to the industrial population of Dhanbad, Jharia, Sindri and Gomoh. Two existing dairy projects—Patna (10,000 litres) and Gaya (6,000 litres) are handling only 30 to 40 per cent of their installed capacity. The Plant at Ranchi (6,000 litres) has been set up but not commissioned due to non-availability of water supply and non-completion of buildings. The poor output of the existing plants at Patna and Gaya is mainly due to lack of proper organisation for milk procurement and suitable arrangements for disposal of surplus milk during flush period and inadequate supply during lean period. Uneconomical price of milk paid to the producers and the drought which prevailed in the State during last two years were also the reasons for short supply. Steps have been taken to overcome some of these shortcomings. However, the most important problem has been the disposal of surplus milk during flush season. It is hoped that with the commissioning of Barauni Composite Milk Plant, this difficulty will be overcome and the existing plants would run to their full capacity. After these plants have been able to reach their installed capacity, it is proposed to expand their installed capacity. Patna plant will be expanded from 10,000 to 20,000 litres, Gaya Plant from 6,000 to 10,000 litres and Ranchi Plant from 6,000 to 10,000 litres. The expansion will be phased during the fourth and the last year of the Fourth Plan. A sum of Rs. 24 lakhs has been provided for expansion of existing projects. Steps would also be taken for development of milk production, organisation of hygienic collection of milk and development of village milk co-operatives. Rural dairy extension programmes would be intensified by strengthening dairy extension units, giving managerial assistance to co-operative societies, supply of milk, chilling and testing outfits. Special attention will also be given to the training of personnel. Provision has also been made to set up a Dairy Development Corporation after the Composite Milk Plant at Barauni has started functioning.

The new schemes to be started in the Fourth Plan are the establishment of a dairy depot and distributing centres in Bokaro Steel City (Rs. 8.00 lakhs), establishment of small rural dairy-*cum*-milk collection and chilling centres (Rs. 10.00 lakhs) and Muzaffarpur Milk Supply Scheme (Rs. 5.00 lakhs).

It is proposed to provide Rs. 40.00 lakhs for Dairy Development Schemes during the Annual Plan, 1969-70.

SECTION 7

FORESTS

The National Forest Policy lays down that at least 33.3 per cent of the total land area should be under Forests. Against this, Forest area in Bihar is 31,427 sq. kms. or 18 per cent of the total of land area. Except for 921 sq. kms. of forest area in the Champaran district North Bihar plains has no forests. The Chotanagpur plateau region also has good forests. More than 75 per cent of these forests are erstwhile private forests which were brought under scientific management for the first time about the year 1950. Such forest areas are burdened with rights of various kinds and are subjected to excessive grazing. As a result, the present yield from such forests is only 0.1 ton per acre per year against the potential of 0.5 ton.

During the First Five Year Plan the most important scheme was to demarcate and bring under scientific management the private forests which were taken over by the Government. To manage the increased forest area, a large number of forest staff were trained. The most significant achievement during the first three plan periods was afforestation. By the end of March, 1968, a total area of 1.25 lakh hectares had been taken up for afforestation including the rehabilitation of degraded Sal forests. Large areas of vacant lands and scrubs falling within the demarcated forests were planted with Bamboo, Sisso, Eucalyptus, Teak and Semul. Emphasis was also laid on improvement of forest communications. The length of forest roads which was about 2,800 kms. in 1950-51 increased to 11,858 kms. by the end of 1967-68. 2,800 buildings were constructed to provide accommodation to all categories of staff particularly those living in the interior. During the Third Five Year Plan as a welfare measure to Adivasis living in the Rajmahal subdivision of Santhal Parganas district, the scheme of renovation of Sabai basis was taken up. In addition to giving employment and royalty to the Adivasi population, it has also yielded 95,000 quintals of Sabai grass for paper mills.

The annual production of industrial wood and firewood for Bihar is about 5 lakh tonnes each. It has been estimated that the gap in demand and supply of industrial wood in 1975 would be about 10 lakh tonnes. A large number of coal mines in Bihar also require continuous supply of pit props, coggings and tram-line sleepers. The paper and pulp industries are also feeling dearth of cellulosic raw materials. While it is possible to achieve some appreciable increase in the production of Bamboo from the present level of 2 lakh tonnes, by and large the increase has to be in the field of hard wood.

The approach to the Fourth Five Year Plan, therefore, will be to aim at increasing the production of main forest produce, timber, firewood and bamboo by planting blanks and unproductive areas falling within forest demarcation, with fast growing economic species, ensuring full and proper exploitation by the introduction of improved methods of exploitation and by bringing improvement in communication facilities. The use of inferior species after proper seasoning and treatment will be promoted. Canal banks, road sides and private and public waste lands will also be taken up for plantation as part of farm forestry. Degraded forests will be rehabilitated and fire protection measures will be strengthened.

Against the expenditure of Rs. 258 lakhs in the State Plan during the Third Plan, a provision of Rs. 335 lakhs is proposed for forestry sector. The plan provides for afforestation over 1,425 hectares in North Bihar. 800 hectares would be planted with match wood species, 2,200 hectares with bamboo and 2000 hectares with teak. About 8,000 hectares would be planted with quick growing species. The scheme of improved forest exploitation at present working in the

districts of Hazaribagh, Monghyr and Santhal Parganas would be extended to other districts. 140 depots would be run for supplying firewood, poles etc. to local people at reasonable rates. 1,000 km. of roads would be constructed and improved. The growth of trees would be boosted by carrying out cultural operations over an area of 3 lakh hectares.

During the annual plan, 1969-70, it is proposed to provide Rs. 54 lakhs for forestry schemes. The programme includes plantation of 1,510 hectares of quick growing species. 285 hectares of afforestation would be done in North Bihar. 270 hectares teak, 430 hectares bamboos and 80 hectares of match wood plantation programme would be carried out during the year.

SECTION 8.

FISHERIES

Development of inland fisheries has considerable potential in Bihar. No proper survey of fisheries resources and assessment of fish production has been done in the State so far. It has been roughly estimated that water area available from tanks and reservoirs, natural marshes and depressions, rivers and canals is about 7 lakh acres. Rivers in this State are the natural sources of fish seed production. Due to increase in the number of fishing population and indiscriminate exploitation of rivers there is danger of losing these natural fish seed resources. The effect of this indiscriminate fishing is already seen in the River Sone where availability of major carps hatchings has gone down to a great extent. In the circumstances, it is necessary to bring all riverine fisheries under the scientific management.

Fisheries development programmes started with a modest effort in the First Plan period. 36 Government tanks were taken over for fisheries management and about 69 lakhs of fish seed were distributed, the outlay being Rs. 7.83 lakhs. During the Second Plan, 217 tanks were taken up for production of fish seed, the outlay being Rs. 30.29 lakhs. The annual production of fish was about 37,000 tonnes at the end of the Second Plan period. During the Third Plan, 9.45 crores of fry and fingerlings have been distributed against the target of 10 crores. 789 tanks were improved as against the target of 1,000 tanks. 93,000 acres of water area were stocked with fry and fingerlings against the target of one lakh acres. It is estimated that the production of fish at the end of the Third Plan was about 42,000 tonnes. The outlay in the Third Plan was Rs. 57.62 lakhs.

During the period 1966-67 to 1968-69 the expenditure likely to be incurred on fisheries schemes would amount to Rs. 52.32 lakhs. The expected annual distribution of fish seeds would be about 4 crores. Nine composite fish farms were established by the end of 1968 and it is likely that six additional such farms would be started during 1968-69. The total fish production is likely to increase to about 48,000 tonnes.

It is estimated that the total annual requirement for the consumption of fish for Bihar comes to 3 lakh tonnes while Bihar has a total potential of 1.20 lakh tonnes. Thus the present production is about one-third of the potential and much less than the requirement.

The objectives during the Fourth Five Year Plan are to make available fish seeds of economic importance, make improvement in tanks to suit fish culture, rehabilitate natural fisheries, bring additional reservoir area under fish production, undertake judicious exploitation of riverine fisheries and to educate and train fish-growers in scientific methods of fish culture. It is proposed to have an outlay of Rs. 200 lakhs during the Fourth Plan. Important targets include creation of additional production potential of 20,000 metric tonnes of fish production bringing the total production of fish in the State to 68,000 tonnes at the end of the Fourth Plan period. Against the total requirement of 300 million of quality fish seed about 100 million quality fish seeds would be produced and additional 60,000 acres of water area would be put under production. 50 additional nurseries would be constructed. 45 composite fish farms of 500 acres of water would be established during the Fourth Plan. Adequate attention would be given to training of technical personnel and members of Fishermen's Co-operative Societies. Loans will be advanced to fishermen's co-operatives and private pisciculturists. Instead of efforts being scattered all over the State specific areas would be selected which have the potential to produce more fish and improvement will be made on a compact basis on scientific lines. To achieve this objective intensive fish production scheme has been taken up in 30 selected blocks in the districts of Darbhanga, Saharsa, Purnea, Hazaribagh and Patna. Additional 25 blocks would be taken up in Muzaffarpur, Champaran, Ranchi, Palamau and Gaya districts.

It is proposed to provide Rs. 19.50 lakhs for the fisheries sector during 1969-70.

WAREHOUSING AND MARKETING**Warehousing :**

Provision of adequate storage facilities for agricultural produce has an important role in agricultural development. Plan provision under this sector is utilised as share capital contribution to Bihar State Warehousing Corporation. The Corporation also gets an equal contribution from the Central Warehousing Corporation on a matching basis. The scheme was taken up during the Second Five Year Plan and the total share capital contribution by the two share holders till 1966-67 was of the order of Rs. 26 lakhs. The State Government made a further contribution of Rs. 2 lakhs during the current year. At present 18 units are functioning at important Mandies and business centres of the State. The Corporation could not achieve significant results due to various factors such as sharp decline in food prices. Depositors shied from pledging their goods in view of the Food Procurement Orders of Government. Unsettled market condition and curbs on advance against foodgrains also made the depositors reluctant to utilise warehousing facilities. Due to these reasons most of the Warehouses were incurring losses and to reduce the deficit, Government stocks were stored. It is now expected that due to recent increase in rates of storage charges the Corporation would be able to show profit. It is proposed to make an allocation of Rs. 20.00 lakhs by way of share capital contribution to the State Warehousing Corporation. The Central Warehousing Corporation would also contribute another Rs. 20.00 lakhs on a matching basis. During 1969-70, it is proposed to make a provision of Rs. 2.50 lakhs. The State Warehousing Corporation propose to construct two godowns and one Cold Storage during 1969-70.

Agricultural Marketing :

To ensure proper return to the farmers for their produce, it is necessary to develop agricultural marketing. The regulation of markets, grading of the produce and market intelligence are the three important factors which cumulatively ensure better return to the farmers.

There are 314 wholesale markets in Bihar. In order to improve efficiency of the markets and to eliminate malpractices, the Bihar Agricultural Produce Markets Act was passed in 1960 and the rules were finalised in 1962. During the Third Five Year Plan 60 wholesale markets were regulated. For the Fourth Plan period it is proposed to undertake regulation of 40 additional wholesale markets. 30 grading units were set up during the Third Plan and the target for the Fourth Plan is additional 20 grading units in the regulated markets. At present market intelligence is obtained from 44 centres. 10 additional centres would be covered in the Fourth Plan. It is also proposed to set up a cell to undertake marketing survey and research in the field of marketing costs, margins, grade standards, packing and transport. The total outlay on Agricultural Marketing during the Fourth Plan would be Rs. 20 lakhs.

During 1969-70, it is proposed to provide Rs. 1.00 lakh for Agricultural Marketing. Four new markets would be regulated and two market intelligence centres would be set up.

B. CO-OPERATION AND COMMUNITY DEVELOPMENT.

SECTION 1

CO-OPERATION

Co-operatives have to play an increasing role in agricultural production, marketing, processing, distribution, supply of credit and other required inputs. The schemes under the sector are mainly agriculture oriented.

During the Third Five Year Plan stress was laid on credit and marketing. Rs. 10.40 crores were advanced in shape of short-term and medium-term credit to cultivators in 1965-66 and 85 per cent of the villages were covered by primary agricultural credit societies. 23 per cent of the rural families were served by these co-operatives and loan advanced per member amounted to Rs. 237. As a result of the scheme of revitalisation of Primary Co-operative Societies, their number was reduced from 30,000 to 16,500 by 1966-67. Rs. 15 crores were advanced as short and medium-term credit in 1967-68 and the amount is likely to increase to Rs. 20 crores during the current year (1968-69). Coverage of rural families increased to 27 per cent in 1967-68. Rs. 2 crores were given as long-term credit during 1967-68 and it is proposed to advance Rs. 9 crores during the current year. 52 additional Vyapar Mandals were organised and marketing through Vyapar Mandals amounted to Rs. 92.55 lakhs. 141 rural godowns were constructed for storage of agricultural inputs by primary societies. Sales through consumers' stores amounted to Rs. 15.49 crores. The number of Central Co-operative Banks in the State which was 51 by the end of the First Five Year Plan was reduced to 28 during 1965-66 as a result of re-organisation under which weak and defunct banks were amalgamated with neighbouring sound banks. In addition there are 33 branch banks functioning in the State. At the end of the Third Five Year Plan the paid up share capital of the State Co-operative Banks was Rs. 66.13 lakhs and working capital amounted to Rs. 9.43 crores while the deposits were Rs. 5.13 crores. During 1966-67 paid up share capital of the State Co-operative Banks increased to Rs. 66.30 lakhs and the deposits also went up to Rs. 6 crores. Working capital of the banks also increased to Rs. 16.10 crores, and the reserve was Rs. 54.26 lakhs.

Marketing of agricultural produce also increased from Rs. 92.55 lakhs in 1965-66 to Rs. 134 lakhs in 1966-67. Under co-operative farming only 7 Co-operative Farming Societies could be organised. The total land brought under joint cultivation is about 22,703 acres. The deep rooted suspicion of farmers of losing their ownership over land, lack of adequate financial support, lack of effective machinery and defects in tenancy law, have been the reasons for slow progress.

During Fourth Five Year Plan it is proposed to provide Rs. 600 lakhs for co-operative development. The outlay during the Fourth Five Year Plan and the Annual Plan 1969-70 will be distributed as follows :—

	(Rs. in lakhs.)	
	Total Fourth Five Year Plan.	Annual Plan — (1969-70)
Credit	160.26	18.03
Marketing	130.00	13.90
Processing other than Sugar Factory	125.00	6.00
Co-operative Farming	13.45	2.75
Co-operative Training and Education	31.50	6.30
Administration	44.00	16.07
Others	95.79	11.95
Total	600.00	75.00

During the Fourth Five Year Plan emphasis will be given on increasing agricultural production by meeting the requirements of farmers for credit, supply of fertilizers and other inputs. Agricultural potentialities of the State have increased considerably due to irrigation provided from Kosi, Sone and Gandak Projects. Irrigation Schemes have also been implemented in Monghyr, Bhagalpur and other districts of the State. Simultaneously with the increase in agricultural production, marketing and processing activities have also to be intensified. In order to improve the economic condition of the tribals and weaker sections, suitable schemes like forest, lac, fisheries, labour, co-operatives will be expanded. Hence, the strategy during the Fourth Five Year Plan will be: effective implementation of crop loan system, linking of credit with marketing, intensive programme for development of co-operative marketing and credit, strengthening of credit structure of the societies, reduction of overdues, and increasing the activity of the Land Development Banks.

Agricultural Credit :

It is proposed to achieve the target of 50 per cent coverage of rural families against 27 per cent at the end of 1967-68. Rs. 70 crores would be advanced as short and medium-term loans and 100 crores as long-term finance. In order to achieve this target the structure of 16,500 potentially viable Agricultural Credit Societies will be strengthened by increasing the present rate of managerial subsidy from Rs. 1,800 to Rs. 2,500 per society. This would enable the societies to have trained managers who can maintain the registers and cash-books of the society in proper manner. At present there are 28 Central Co-operative Banks with 33 branches. 17 more branches will be opened during 1968-69. 50 additional branches are proposed to be opened during the Fourth Five Year Plan at the rate of 10 branches per year. As the business of Central Co-operative Banks is likely to expand, the staffing pattern will be strengthened by providing the banks with a General Manager. It is also proposed to strengthen the share capital structure of the banks by providing share capital contribution. The State Land Development Bank propose to advance long-term credit of Rs. 100 crores during the Fourth Plan. This will need borrowing from open market to the extent of Rs. 95 crores, through floatation of debentures and the rest through its own resources. The bank has 45 branches and 20 additional branches will be opened in 1968-69. 50 additional branches will be opened during the Fourth Plan. Rs.100 lakhs will be provided as share capital contribution to the Bank. Additional share capital contribution will be made to Central Co-operative Banks and to the Primary Societies to increase their borrowing capacity. Agricultural credit stabilisation fund will be strengthened so that there is no serious dislocation in case of crop failure or famine. Provision has also been made for outright grant to Central Co-operative Banks and Primary Credit Societies to safeguard them against possible loss which might arise on account of more liberalised policy of financing the weaker sections of the community. Relief and guarantee fund will also be built up for giving grants to co-operative institutions to write off unrecoverable losses due to repeated natural calamities.

Marketing :

Marketing Societies play an important role in meeting the requirements for increasing production by establishing linkage of credit with marketing and supply of agricultural inputs. The demand for such marketing societies has increased particularly in Purnea and Saharsa districts where irrigation from Kosi Project is available. It is proposed to organise 60 Vyapar Mandals during the Fourth Five Year Plan. Rs. 10 lakhs will be provided as share capital contribution to the State Co-operative Marketing Union. 200 rural godowns will be sanctioned, 10 Vyapar Mandals would be given loan for purchase of trucks in order to facilitate movement of seeds, fertilizers and other inputs. Provision will also be made for Price Fluctuation Fund to enable marketing societies to absorb losses arising out of fluctuation of price of agricultural commodities handled by them.

Processing :

13 rice mills of sheller type and 2 modern rice mills have been set up so far. During the Fourth Five Year Plan it is proposed to provide 18 modern rice mills and strengthen the existing sheller types. In the potato-growing areas of the State, Cold Storages are in great demand. So far 11 Cold Storages have been sanctioned. It is proposed to establish 5 additional cold storages during the Fourth Five Year Plan. 4 food processing units have been set up for processing of mangoes, *lichies*, papaya and guavas in the districts of Muzaffarpur, Darbhanga and Purnea. Two additional units are likely to be set up during the current year. As these units would need expansion, provision has been made during the Fourth Five Year Plan. Managerial subsidy will also be provided. It is also proposed to set up 4 units for processing special crops like pulses, oil-seeds, chillies, garlic and *Haldi*.

Co-operative Farming :

At present there are 280 joint co-operative farming societies in the State and Rs. 26.50 lakhs have been advanced as financial assistance to them. Due to various reasons the scheme has not been able to achieve desirable success. A scheme to revitalize and consolidate these societies has now been taken up. It is proposed to provide Rs. 13.45 lakhs during the Fourth Five Year Plan to finance 48 societies in shape of share capital contribution, development loans, subsidy and managerial societies.

Co-operative Training and Education :

Success of co-operative development depends upon adequately trained personnel to manage the work of primary co-operative societies, central co-operative banks and their branches, marketing, processing and consumers' unions. The State Co-operative Federation arranges for the training of non-officials and also conducts conferences, seminars and study tours. Existing 3 co-operative training institutes will be continued during the Fourth Five Year Plan. Revised member education programme has been included in the Plan. State Co-operative Federation will be given grant and subsidy to conduct training courses, etc. A provision of Rs. 31.50 lakhs has been made during the Fourth Five Year Plan.

Administration :

Keeping in view the present and future co-operative development programmes in the State, it is essential that the administrative structure both at the State headquarters and in the field is reorganised and strengthened. The work in the field has increased considerably and lack of an officer of proper status at the Divisional Headquarters for close supervision, effective guidance and liaison with the officers of agriculture and other departments is keenly felt. It is, therefore, proposed to provide at each of the 4 divisions of State a Joint Registrar with adequate delegation of powers. Two Joint Registrars would be deputed from the State headquarters and two new posts are proposed to be created. It is proposed to create the post of Managing Director for Mokamah Co-operative Spinning Mill. Other new posts to be created are the Deputy Registrar (Marketing and Processing), Additional Administrative Officer, Special Officer, Deputy Director, of Statistics. The Audit side of the department requires strengthening in the field and also at the level of apex co-operative institutions, etc.

An Engineering Cell will also be established for effective technical guidance and supervision of a large number of marketing and processing units. A provision of Rs. 44.04 lakhs has been made as follows :—

			Rs. in lakhs.
Headquarters staff	...	..	2.22
Staff at divisional level	...	..	12.29
Statistical Cell	...	..	3.29
On Audit wing	...	...	26.24
Total			44.04

Miscellaneous Schemes:

In order to benefit the weaker sections of the society, it is proposed to organise and give financial assistance to 15 Washermen's Co-operative Societies, 5 Transport Societies, 25 Boat Traffic Societies, 13 Riksha-pullers' Societies, 100 Forest Societies, 100 Labour Societies, 5 District Labour Unions, 63 Fishermen's Societies and one Fishermen's Marketing and Development Union and 20 Lac-growers' Co-operative Societies.

The Scheme of Consumers' Co-operatives was so far being financed as a Centrally-sponsored Scheme. This has now been transferred to the State sector. There are 21 wholesale stores and about 640 retail units including 240 under the Centrally-sponsored Scheme, 10 departmental stores, and a State Federation. 10 Consumers' Stores are likely to be set up during 1968-69. The constraint of financial resources do not permit to make adequate provision for this scheme from the State sector. During the Fourth Five Year Plan, 3 wholesale stores will be organised and existing units will be given share capital contribution. 25 existing Primary Consumers' Co-operatives will be strengthened and 5 new societies will be organised. 24 large-sized retail units will be opened and 15 Consumers' Industries Co-operatives would be set up. 3 University Consumers' Co-operatives have already been financed by the way of share capital contribution and managerial subsidy. During the Fourth Five Year Plan, it is proposed to cover the remaining three Universities and 15 Colleges. It is also proposed to give financial assistance (Rs. 20 lakhs) to 88 Vyapar Mandals and 385 village level societies to enable them to distribute consumer goods in rural area. A provision of Rs. 80 lakhs has been made during the Fourth Five Year Plan for Consumers' Co-operatives.

SECTION 2
COMMUNITY DEVELOPMENT

There are 587 blocks in the State. At present 127 of them are in Stage I, 190.5 in Stage II and 269.5 in Post-Stage II. During the conference of the Chief Ministers held in Madras in June, 1968, there was a consensus of opinion that there should be no rigidity about the span of life of Stage I and Stage II blocks because on account of frequent financial difficulties, funds to the extent of full schematic provision was generally not available in a period of five years. In Bihar, due to shortfall in previous years none of the blocks which will still be in Stage I during the year 1969-70 would have spent full schematic provision. Therefore, all of them will have to be given at least one year's extension. The position of various stages of C. D. Blocks after getting one year's extension will be as follows :—

	1969-70		1970-71		1971-72		1972-73		1973-74		
	April.	October.	April.	October.	April.	October.	April.	October.	April.	October.	
1	2	3	4	5	6	7	8	9	10	11	
Stage I	..	90	90	43	..	..	..	..	..	..
Stage II	..	199	181	228	271	248	225	196	166	131	90
Post-stage II		298	316	316	316	339	362	391	421	456	497
TOTAL		587	587	587	587	587	587	587	587	587	587

According to the schematic programme a block in Stage I is to be provided with Rs. 12 lakhs which comes down to Rs. 5 lakhs in Stage II. Due to financial stringency, it has not been possible to make adequate allocation according to schematic requirements for Community Development sector during the Third Five Year Plan and the subsequent three annual plans. During the Third Plan an expenditure of Rs. 26,43.87 lakhs was incurred. During 1966-67 and 1967-68 the amounts spent were Rs. 3,39.17 lakhs and Rs. 2,99.56 lakhs respectively. The approved outlay for the current year is Rs. 2,56.01 lakhs.

During the Third Five Year Plan, 29.5 lakhs maunds of improved seeds were distributed, 1,12.8 lakhs maunds fertilizers were used, 10.7 lakhs compost pits were dug, and 6.4 lakhs demonstrations were held. Besides, 168 seed multiplication farms were set up which produced 1.5 lakhs maunds of improved seeds. Under Animal Husbandry Programme, a large number of veterinary health sub-centres were set up throughout the State at the rate of three centres per block. 6.6 lakhs animals were artificially inseminated and 12.2 lakhs were castrated; 2.1 lakhs pedigree birds were supplied. The Minor Irrigation Programme has been mainly concentrated on the construction of S. P. wells, distribution of Rahats and construction and repair of minor irrigation schemes, costing up to rupees ten thousand. All these programmes were taken up on the basis of people's participation, and mostly benefited the small farmers. Forty thousand *pucca* wells were constructed and 8 thousand repaired. From 1966-67, the provision for Agriculture Production Programme (including Animal Husbandry and Minor Irrigation) was transferred

from C. D. budget to agriculture budget. This period coincided with widespread drought in the State and the work in the field of Minor Irrigation which was taken up to combat the situation created by drought has been impressive. During 1966-67 and 1967-68, 10,623 and 17,721 wells were constructed respectively.

Up to the end of Third Five Year Plan 505 buildings of health sub-centres were constructed and in the subsequent two years 284 were added. A number of health sub-centres have also suffered because of lack of adequate number of doctors. The programme of construction and repair of drinking water wells was continued. During the Third Five Year Plan 12,081 such wells were constructed and 7,837 were repaired; in addition, 8,315 soakage pits and 64,066 rural latrines were also constructed.

The programme of communication mainly consisted of construction of culverts with link roads. During the Third Five Year Plan, 8,628 culverts were constructed while 2,450 miles of existing *katcha* roads were improved and 1,278 miles of new *kutchra* roads were constructed.

Under Rural Arts, Crafts and Industries Programme, a large number of Training-cum-Production Centres were opened in the blocks, which gave training in blacksmithy, carpentry, toy-making, embroidery, leather and bamboo works, etc. There were 238 such centres, which moved from place to place in the blocks, each one of them having a senior instructor, and other necessary staff. The artisans who were given training in the centres were also awarded nominal scholarships. The trainees after completing their training were supposed to form Industrial Co-operative Societies. The programme aimed at reviving the traditional crafts of the village and introducing improved practices.

At the time of the formulation of the Third Five Year Plan, it was felt that the Training-cum-Production Centres were not proving a success to the extent desired. This impression deepened in subsequent years. It was found that the centres were not attracting adequate number of serious trainees, and there was no follow-up of the persons trained in these centres, which resulted in non-utilisation of training. The results did not justify the annual expenditure of about Rs. 24.00 lakhs on these centres, and hence it was decided to abolish all the Training-cum-Production Centres running in the Blocks except 64 Tailoring-cum-Cutting Training-cum-Production Centres.

The construction of block headquarters buildings and houses for the staff also lagged behind mainly due to lack of funds. So far only 306 block headquarters buildings have been completed in 587 Blocks of the State. The number of incomplete buildings stands at 136.

During the Fourth Plan period, more emphasis would be placed on agricultural programmes in the C. D. Blocks. Hence, some modifications in the existing schematic pattern are proposed during the Fourth Plan period. Under the existing schematic budget Rs. 3.90 lakhs are provided for agricultural programmes (including Animal Husbandry and Minor Irrigation) in Stage I and Rs. 1.35 lakhs in Stage II Blocks. In the Fourth Five Year Plan this provision will be increased subject to the availability of resources to Rs. 4.50 lakhs and Rs. 1.95 lakhs respectively. Similarly, feeling the need of improving village communications, a provision of Rs. 85,000 (in place of existing Rs. 50,000) has been made for Stage II Blocks also. These adjustments have been made within the over-all schematic ceiling of Rs. 12 lakhs and Rs. 5 lakhs respectively for Stage I and Stage II Blocks by correspondingly reducing the provisions under establishment of Block headquarters, education, social education and rural arts and crafts.

It is proposed to provide Rs.15,14.41 lakhs for the Community Development sector during the Fourth Five Year Plan. An outlay of Rs. 2,68.02 lakhs is proposed for the year 1969-70. The distribution of outlay over various types of schemes during the Fourth Five Year Plan and the Annual Plan, 1969-70 is as follows :—

	Fourth Five Year Plan.	Annual Plan, 1969-70.
1. Block Headquarters excluding Project Office ..	3,21.91	1,20.00
2. Agriculture and Animal Husbandry	1,40.74	8.02
3. Irrigation	1,65.76	..
4. Health and Rural Sanitation	1,52.00	45.00
5. Education	66.01	5.00
6. Social Education	53.34	5.00
7. Communication	2,57.14	25.00
8. Rural Arts, Crafts and Industries	57.27	16.00
9. Housing for staff including Project Office ..	3,00.24	44.00
TOTAL	15,14.41	2,68.02

SECTION 3

PANCHAYATS.

At present Panchayati Raj institutions are functioning in Ranchi, Bhagalpur and Dhanbad districts of the State. During the Fourth Five Year Plan it is proposed to provide Rs. 60 lakhs for the Panchayat sector, and undertake programme of training of Panchayat functionaries, strengthening the State Directorate of Panchayati Raj, advancing loans and matching grants to Panchayati Raj Institution. A provision of Rs. 3.69 lakhs has been made for strengthening the existing two Mukhia Training Centres. In the three districts of the State where Panchayati Raj Scheme is being implemented, there are about 24,000 Panchayat functionaries. Considering past experience regarding the percentage of attendance, it is proposed to train 10,000 such functionaries. A sum of Rs. 1.90 lakhs would be spent on strengthening the State Directorate of Panchayati Raj by establishing an audit wing and creating the posts of Subdivisional Panchayat Officers.

It is proposed to help Panchayati Raj Bodies to build up self-generating and revenue yielding assets in order to improve their financial position. Rs. 10 lakhs will be given as loans to deserving Panchayats if schemes are formulated by them for raising their revenue for building remunerative assets.

The Panchayati Raj Institutions should also have adequate resources to discharge the responsibilities and functions devolving on them. In order to provide incentive to Panchayats for increasing their resources by taxation matching grant has been proposed. Per capita incidence of Panchayati Raj taxation in Bihar is only 1.77 paise which is among the lowest in India. There is vast potential for resource mobilisation in rural areas. Rs. 44.14 lakhs have been provided for matching incentive grant to Panchayats.

During 1969-70 it is proposed to provide Rs. 5 lakhs.

C. IRRIGATION AND POWER.

SECTION 1

IRRIGATION.

Provision of irrigation facilities is a basic prerequisite of agricultural development. Without this facility it would not be possible either to increase agricultural production, or bring about a change in the agricultural practices in the State. This basic facility, however, is available in Bihar only to a limited extent, i. e., to an area of about 5 million acres in a total cropped area of about 26-27 million acres. Even this area of irrigation is subject to variations, depending upon rainfall and other conditions. The stable irrigated area, i. e., the area under Government canals of the major and medium type, is still smaller, i. e., about three million acres. This area is also not uniformly spread through all the districts of the State. There is need, therefore, for extension of the irrigation facilities on a larger and uniform scale. This need appears more pressing considering the plentiful water resources available in the State which are capable of irrigating more than 10 million acres of cultivated area.

In the First Plan, a sum of Rs. 9.81 crores was spent on irrigation schemes as a result of which irrigation potential of 3.09 lakh acres was created. The potential utilised in the period was 2.26 lakh acres. In addition, another sum of Rs. 1.28 crores was spent on the irrigation portion of the Kosi Project outside the plan. In the Second Plan, the total expenditure on irrigation schemes was Rs. 28.52 crores which included an expenditure of Rs. 12.43 crores on the Kosi, Rs. 1.23 crores on the Gandak and Rs. 1.95 crores on the Sone Projects. The additional irrigation potential created in the period was 6.57 lakh acres and the potential utilised 4.32 lakh acres. In the Third Plan period, the expenditure on major and medium irrigation schemes was of the order of Rs. 65.36 crores, including an expenditure of Rs. 21.21 crores on the Kosi, Rs. 15.82 crores on the Gandak, Rs. 12.44 crores on the Sone, Rs. 2.77 crores on the Rajpur and Rs. 0.41 crore on the Western Kosi Projects. In addition, a sum of Rs. 1.27 crores was also spent on the Nepal benefits portion of the Gandak Project. The additional irrigation potential created in the period was 5.99 lakh acres. This included a potential of only 2.65 lakh acres from the Kosi Project against a target of 14.05 lakh acres. No potential accrued from the Rajpur and Gandak Projects, though targets for the same had been kept at 1.00 and 4.50 lakh acres respectively. The potential utilised, including that of the earlier years, was 6.15 lakh acres. This again included utilisation of potential to the extent of 1 lakh acres only from the Kosi Project against a target of 8.43 lakh acres. The target of utilisation of irrigation potential from the Rajpur (1.00 lakh acres) and Gandak (2.00 lakh acres) projects was also not fulfilled.

At the close of the Third Plan, it was felt that the progress of the utilisation of the irrigation potential was not satisfactory and special measures were required to be taken for stepping up the same. The State Government therefore took a number of steps to remedy the situation of under-utilisation of irrigation potential. One of these steps related to the synchronisation of works on various parts, i. e., head works, canals etc., of the irrigation projects. Another step related to the construction of water courses up to 2 cusecs or lower capacity as part of the project works in the absence of which utilisation was lagging behind. The third step related to construction of field channels. The State Government enacted a legislation, the Bihar Irrigation Field Channels Act, which laid down the responsibility for construction of the field channels on the beneficiaries themselves. In the event of their failure, the legislation provided for the Panchayat Samatis, or the District Panchayat Parishads, or the State Government to construct the field channels and realise the cost of the same from the beneficiaries. Fourthly, with a view to promoting co-ordinated development between agriculture and allied activities, a Kosi Area Development Commissioner

with appropriate status in the concerned departments of Government was appointed. Besides, facilities of concessional water rates and loan assistance for levelling and improving the land through the good offices of the State Land Mortgage Bank and the Agricultural Refinance Corporation were also given. Finally, the State Government decided to impose a compulsory cess on the farmers residing within the command of irrigation projects, to be set off against the water rate payable by them, in order to induce them to make better use of the available irrigation facilities.

In the period of the annual plans, 1966-69, total expenditure on irrigation schemes is estimated to be Rs. 55.64 crores. This includes, besides the expenditure on the continuing schemes, two new items of expenditure in the current year (1968-69), viz., contribution of Rs. 1 crore to U. P. for certain common works of the Gandak Project and Rs. 0.70 crore on the Sone High Level Canals scheme which has recently been sanctioned by the Planning Commission. In addition, a sum of Rs. 4.26 crores was also spent on the Nepal Benefits portion of the Gandak Project. The additional irrigation potential created in the period is estimated to be 15.94 lakh acres. This includes a potential of 11.35 lakh acres from the Kosi Project, 2.00 lakh acres from the Rajpur Canal, 1.54 lakh acres from the Gandak Project and 0.03 lakh acres from the Sone High Level Canals scheme. The additional utilisation in the period is estimated to be 7.36 lakh acres, including 4.90 lakh acres from the Kosi Project, 0.60 lakh acres from the Rajpur Canal, 0.28 lakh acres from the Gandak Project and 0.01 lakh acres from the Sone High Level Canals scheme. The table below summarises the position regarding the progress of irrigation potential and utilisation from 1950-51 to 1968-69 :—

Period.	Lakh acres.	
	Potential.	Utilisation.
1950-51	9.97	9.97
1951—56	3.09	2.26
1956—61	6.57	4.32
1961—66	5.99	6.15
1966—69	15.94	7.36
Total	41.56	30.06

In the Fourth Plan, the proposals are estimated to cost Rs. 1,12.30 crores. This includes a sum of Rs. 12 crores for payment to Uttar Pradesh on account of certain common works of the Gandak Project. In addition, a sum of Rs. 13.28 crores would also be needed for Nepal Benefits portion broken up between Gandak Project (Rs. 5.50 crores) and the Tenughat Project (Rs. 7.78 crores). In 1969-70, the requirement of funds is estimated to be Rs. 20 crores, including Rs. 11.5 crores for the Gandak, Rs. 3.05 crores for the Kosi, Rs. 1.68 crores for the Sone, Rs. 0.62 crore for the Rajpur and Rs. 0.50 crore for the Western Kosi Canal schemes. In addition, a sum of Rs. 6.78 crores is required for the Nepal Benefits portion of the Gandak (Rs. 2.50 crores) and the Tenughat Projects (Rs. 4.28 crores). Of the total of Rs. 1,12.30 crores in the State Fourth Plan, Rs. 97.46 crores would be spent on spill-over schemes, Rs. 13.99 crores on new schemes and Rs. 0.85 crore on investigation schemes. The spill-over schemes include the Kosi (Rs. 14.22 crores), the Gandak (Rs. 59.50 crores), the Sone Barrage (Rs. 0.08 crore) and High Level Canals (Rs. 8.14 crores), the Chandan (Rs. 4.50 crores), the Western Kosi (Rs. 5 crores) and the Rajpur (Rs. 2.46 crores) canals scheme. The new schemes include the North Koel (Rs. 5 crores), the Sundar Reservoir (Rs. 2.49 crores), the Mohane Barrage (Rs. 1.91 crores) and the Bagmati Barrage (Rs. 1.54 crores) schemes. The schemes proposed

are expected to create an irrigation potential of 30.25 lakh acres in the Fourth Plan period and 6.73 lakh acres in 1969-70. The utilisation of potential during Fourth Plan period is estimated to be 28.31 lakh acres, including 3.53 lakh acres in 1969-70. The Gandak, the Sonc High Level and Rajpur Canals schemes are expected to be the major contributors to the expansion of the irrigation system in the period. The details of schemes are given below.

Gandak Project :

The Gandak Project is a dual purpose project, having benefits of irrigation and power. Its benefits would extend to areas in Nepal besides those in Uttar Pradesh and Bihar. In Bihar, it would irrigate 28.45 lakh acres (gross cropped area) in the districts of Saran (11.35 lakh acres), Champaran (7.58 lakh acres), Muzaffarpur (7.30 lakh acres) and Darbhanga (2.22 lakh acres). The net irrigable area, however, is estimated to be 24.22 lakh acres. The portion of the Project which Bihar is executing is estimated to cost Rs. 119 crores against the first sanctioned estimate in 1958 of Rs. 36.56 crores and the second unapproved estimate in 1965 of Rs. 94.92 crores. The increase in project costs is due mainly to rise in cost of land, labour and materials and enlargement of the scope of the work. In the latter are included new works such as construction of water courses upto 2 cusecs capacity (Rs. 8.94 crores), Ghorasahan (Rs. 3.72 crores) and Dhanaha (Rs. 0.45 crore) Branch Canals and Main Western Canal in Nepal. Though the scheme was first taken up in the Second Plan and a sum of Rs. 1.23 crore was also spent in the period on the preliminaries, it was administratively approved only in March, 1962. In the Third Plan, the expenditure on the scheme was Rs. 15.82 crores, besides Rs. 1.27 crores on the Nepal Benefits portion. In the period of the annual plans, 1966-69, the expenditure is estimated to be Rs. 31.05 crores, excluding Rs. 4.26 crores on the Nepal Benefits portion. The total expenditure on the Project till 1968-69 is estimated to be Rs. 53.64 crores. The irrigation potential created and utilised till 1968-69 is estimated to be 1.54 and 0.28 lakh acres respectively.

In the Fourth Plan, it is proposed to spend Rs. 65 crores on the Project. This estimate includes Rs. 5.50 crores for Nepal Benefits portion and Rs. 12 crores to be paid to Uttar Pradesh for certain common works. In terms of physical benefits, it is proposed to complete the Barrage in all respects by June, 1969, the Nepal Benefits schemes by June, 1970, the Tirhut Canal system, partly (in the priority zone from 0 to 273 R. D.) by 1968-69 and partly by 1970-72, the Dhanaha Canal by 1972 and the Saran Canal by 1973. The financial and physical targets for creation and utilisation of irrigation potential (net) in the different years of the Fourth Plan are indicated below :—

	Expenditure (Rs. in crores).		Physical (Lakh acres).	
	State Plan.	Nepal Benefits.	Potential.	Utilisation.
1	2	3	4	5
1969-70	11.50	2.50	4.20	1.18
1970-71	12.00	2.50	5.04	2.16
1971-72	12.00	0.50	5.04	3.16
1972-73	12.00	..	3.70	3.96
1973-74	12.00	..	4.70	4.57
TOTAL	59.50	5.50	22.68	15.03

Kosi Project :

This is a multi-purpose project, having irrigation, flood control and power benefits. The irrigation benefits are estimated to cover an area (net) of 12.23 lakh acres in the districts of Purnea (8.12 lakh acres) and Saharsa (4.11 lakh acres). The gross irrigable area in the two districts is estimated to be 14.05 lakh acres. The flood control benefits are estimated to cover an area of 5.28 lakh acres in Bihar and 1.27 lakh acres in Nepal. The latest revised estimate of the cost of the project, excluding the power portion, is Rs. 92.02 crores against the original estimate (in 1954-55) of Rs. 44.76 crores. In this, the share of irrigation works is estimated to be Rs. 59.57 crores against the original estimate of Rs. 24.81 crores. The increase in project costs is due mainly to rise in the cost of land, labour and materials and introduction of certain new elements in the project estimates, such as water courses upto one cusec capacity and drainage schemes, etc. The scheme was first taken up for execution in 1954-55. The flood control portion was completed in 1958-59 and the Barrage in 1963-64. The canal system together with the distributaries and water courses is expected to be completed by 1970-71. By the end of 1968-69, the total expenditure on the project is estimated to be Rs. 72.60 crores. In terms of physical work, 244 crore cubic feet of earth-work in a total of 245 crore cubic feet has been completed. Similarly, out of 1,904 canal structures, 1,789 have been completed and 69 are in various stages of construction. In respect of water courses, the number of those completed till December, 1967 is 2,840 against a total of 7,272. About 85 lakh feet of field channels have also been constructed so far. The progress of expenditure and physical benefits from the project in the different plan periods is given below :—

	Expenditure (Rs. in crores).		Physical benefits (lakh acres).		
	Irrigation.	Flood Control.	Potential.	Utilisation.	
1	2	3	4	5	
1951—56	..	1.28	3.03	..	..
1956—61	..	12.43	11.54	..	..
1961—66	..	21.21	9.91	2.65	1.00
1966—69	..	10.43	2.78	11.35	4.90

In the Fourth Plan, the amount required for the irrigation portion of the project is estimated to be Rs. 14.22 crores. Of this, Rs. 11.22 crores would be spent on residual works and Rs. 3 crores on drainage. The residual works include works such as construction of extra cross drainage Works, plantation, inlets, escapes and additional bridges etc., on the branch canals and distributaries. The drainage works have become more pressing because of the high water table in the area which after irrigation rises further and causes salinity and waterlogging in the soil. The total cost of the drainage scheme is estimated to be Rs. 7.38 crores but only Rs. 3 crores are being provided in the Fourth Plan. By the end of the Fourth Plan, the utilisation of irrigation potential from the scheme would go up by 5 lakh acres, i.e., at the rate of 1 lakh acres per year. The requirement of funds for the scheme in the next year (1969-70) is estimated to be Rs. 3.05 crores.

Rajpur Canal :

The scheme is expected to provide irrigation to an area of 3.97 lakh acres in the district of Saharsa lying between Bhanga Dhar and the Eastern Embankments. The latest revised cost of this scheme is estimated to be Rs. 6.82 crores against the original estimate of Rs. 4.67 crores. The scheme was taken up for execution in the Third Plan period and a sum of Rs. 2.77 crores was spent on the same. In the period of the annual plans, 1966-69, the expenditure on the scheme is estimated to be Rs. 1.64 crores. By the end of 1968-69, the total expenditure on the scheme is estimated to be Rs. 4.41 crores. In terms of physical work, 45.7 crore cubic feet of earth work in a total of 50.56 crore cubic feet has been completed. Similarly, 190 canal structures in a total of 356 have been completed. Some water courses have also been constructed. The creation and utilisation of irrigation potential till 1968-69 is estimated to be 2.00 and 0.60 lakh acres respectively.

In the Fourth Plan, a sum of Rs. 2.46 crores has been provided for this scheme. The targets for creation and utilisation of irrigation potential have been kept at 2.00 and 2.50 lakh acres respectively. In 1969-70, the requirement of funds for the scheme is estimated at Rs. 0.62 crore and the targets for creation and utilisation of irrigation potential have been kept at 2.00 and 0.50 lakh acres respectively.

Western Kosi Canal:

The scheme is expected to irrigate 8.03 lakh acres in the district of Darbhanga and in the Saptari District of Nepal. The latest revised cost of the scheme is estimated to be Rs. 19.69 crores against the original estimate of Rs. 13.49 crores. This scheme was included in the Third Plan and a sum of Rs. 41.27 lakhs was spent on the preliminaries connected with the same. In the period of the annual plans, 1966-69, the total expenditure is estimated to be Rs. 4.77 lakhs. The scheme has not progressed mainly because of certain difficulties which have arisen in the alignment of the canal. In the Fourth Plan, a sum of Rs. 5 crores has been provided for the scheme. No irrigation potential is likely to be created from this scheme in the Fourth Plan period.

Sone Project:

This project consists of three parts, viz., re-modelling of the Sone Canal, construction of a Barrage and High Level Canals. To begin with, only the first two parts were sanctioned. The latest revised cost of the first two parts is estimated to be Rs. 18.32 crores against the original estimate of Rs. 14.43 crores. The scheme was taken up in the Second Plan and a sum of Rs. 1.95 crores was spent on the same. In the Third Plan, the expenditure on the scheme was Rs. 12.44 crores. In the period of the annual plans, 1966-69, the expenditure is estimated to be Rs. 3.85 crores. The total expenditure till 1968-69 on the scheme comes to Rs. 18.24 crores. The scheme is practically complete. The irrigation potential created and utilised from the scheme is estimated to be 3.07 and 3.73 lakh acres respectively.

The High Level Canals Scheme is estimated to cost Rs. 8.84 crores. It has been sanctioned in the current year (1968-69) and the expenditure on the same is estimated to be Rs. 70 lakhs. The targets for creation and utilisation of irrigation potential from the scheme in the current year have been kept at 3 and 1 thousand acres respectively.

In the Fourth Plan period, a sum of Rs. 8.14 crores has been provided for the scheme. The scheme is expected to create an irrigation potential of 2.57

lakh acres in the period of which 1.74 lakh acres is expected to be utilised. The funds required next year are estimated at Rs. 1.60 crores. The targets for creation and utilisation of irrigation potential next year have been kept at 16 and 4 thousand acres respectively.

Chandan Dam Project:

This scheme envisages construction of an earthen Dam, 6,625 feet long and 132 feet high, on the river Chandan near village Lakshmipur in Bhagalpur district and a High Level Canal with supporting distributory system for the same. It is expected to have an irrigation potential of 1 lakh acres. The total cost of the scheme is estimated to be Rs. 9.92 crores. The expenditure till 1968-69, is estimated to be Rs. 5.42 crores. The potential created till 1968-69 is estimated to be 0.24 lakh acres.

In the Fourth Plan, a sum of Rs. 4.50 crores has been provided for this scheme. The requirement of funds in the next year (1969-70) is estimated at Rs. 1 crore. The target for creation of irrigation potential from this scheme in the Fourth Plan period has been kept at 0.76 lakh acres. In 1969-70, however, no potential is likely to be created.

North Koel Reservoir Scheme:

This is a new scheme which is proposed to be taken up in the Fourth Plan period. The scheme would augment supplies of water at the Sone Barrage and irrigate about 2.61 lakh acres areas in the districts of Gaya and Palamau. The scheme consists of a Dam across the North Koel river at Kutku, a Diversion Weir on the river at Mohammadganj and a High Level Canal system. The cost for the Dam has been estimated at Rs. 5.46 crores, that for the Diversion Weir Rs. 0.74 crore and for the High Level Canals Rs. 6.96 crores, i.e., a total of Rs. 13.16 crores. A sum of Rs. 5 crores has been provided for the scheme in the entire Fourth Plan period. No expenditure is required to be made in the next year.

Besides the above major schemes, the Fourth Plan proposals also contain outlays of Rs. 12.55 crores on 23 medium irrigation schemes. Of these, 14 are spill-over and 9 new schemes with outlays of Rs. 3.56 and Rs. 8.99 crores respectively. The spill-over schemes are the Kamla (Rs. 50.44 lakhs), Morwe (Rs. 1.79 lakhs), Uderasthan (Rs. 20 lakhs), Arraj (Rs. 4 lakhs), Banki Left (Rs. 11.50 lakhs), Roro (Rs. 10 lakhs), Bijoy (Rs. 1.78 lakhs), Sona Weir (Rs. 7.30 lakhs), Kanchi Weir (Rs. 5.50 lakhs), Kckro (Rs. 5.50 lakhs), Khudia (Rs. 12.18 lakhs), Mushakhand (Rs. 163 lakhs), construction of water courses (Rs. 60 lakhs) and other continuing schemes (Rs. 12.18 lakhs). The new schemes are the Sundar Reservoir scheme (Rs. 2.49 crores), the Mohare Barrage scheme (Rs. 1.91 crores), the Bagmati Barrage scheme (Rs. 1.55 crores), the Paimar Reservoir scheme (Rs. 0.90 crore), the Nakti Reservoir scheme (Rs. 0.71 crore), the Baksha Dam scheme (Rs. 0.67 crore), the Lohagarhi Reservoir scheme (Rs. 27 lakhs), Ghaghar Reservoir scheme (Rs. 25 lakhs) and Batre Reservoir scheme (Rs. 25 lakhs). A sum of Rs. 25 lakhs would also be spent on investigation of medium irrigation schemes. The total irrigation potential likely to be created from these medium irrigation schemes in the Fourth Plan period is estimated to be 2.24 acres. The target of utilisation of irrigation potential from the same has been kept at 4.04 lakh acres.

SECTION 2

FLOOD CONTROL.

Floods are an endemic feature of North Bihar. Every year the snow-fed Himalayan rivers overflow their banks and cause extensive damage to vast areas. It is necessary, therefore, to control this ravage of nature.

During the first two Plan periods, flood control schemes were taken up outside the Plan. A sum of Rs. 22.44 crores was spent on the same. The most important of the flood protection schemes was the construction of the Kosi embankments extending to about 150 miles on either side of the river and giving protection to an area of 5.28 lakh acres in Bihar and 1.27 lakh acres in Nepal. Embankments were also constructed on certain other rivers like the Burhi Gandak, Bagmati, Adhwara and Kamla Balan giving protection to about 23.07 lakh acres. By the end of the Second Plan, the total area protected against the floods in the State was 53.22 lakh acres, including an area of 24.87 lakh acres protected in the pre-Plan period.

In the Third Plan, flood protection schemes were treated as a part of the State Plan and a provision of Rs. 9 crores was made for the same. The actual expenditure, however, was Rs. 13.65 crores. The excess was due to heavy floods in the different years of the Plan period. The area protected from floods in the period increased by 3.62 lakh acres against the target of 3.50 lakh acres.

In February, 1964, the Government of India constituted a High Level Committee to examine and assess the problem of floods in the various States and to recommend remedial measures for the same. In its report submitted in December, 1964, the Committee suggested an outlay of Rs. 3,16 crores for the country as a whole and Rs. 42 crores in Bihar during the Fourth Plan period (1966—71). In the period of the annual plans, 1966-69 the expenditure, however, is estimated to be Rs. 4.47 crores. Considering the recommendations of the High Level Committee, it appears necessary to step up the outlay on flood control schemes.

In the Fourth Plan, a sum of Rs. 8 crores has been proposed for flood protection schemes. In 1969-70, the provision required is Rs. 1.50 crores. The schemes are of two types, viz, those which would extend the benefits to new areas and those which would strengthen the existing schemes. Under the latter group, there are three schemes. One of them relates to special repairs of the existing Kosi embankments. It has been found that as a result of the gradual raising of the pond level of the Kosi Barrage a great deal of seepage takes place on the eastern embankment side, causing serious breaches, such as those which took place at Dalwa and Kanauli earlier. The existing embankments, therefore, have to be properly maintained and repaired. The annual cost of such repairs has been estimated to be about a crore of rupees. The State Government have decided that individual repairs involving an expenditure of Rs. 10 lakhs or more should be charged to capital account and all other repairs to revenue account. On this basis, the cost of special repairs (chargeable to capital account) in the Fourth Plan has been estimated to be Rs. 60 lakhs per annum, or Rs. 3 crores in all. The second scheme in the group relates to construction of a second series of embankments within the existing Kosi embankments more close to the river so as to wrest more land for normal cultivation. If this is done, the existing embankments will function as the second line of defence and the area protected will be more secure. Further constricting the river will also deepen its course increasing its hydraulic efficiency and sand transportation capacity. This scheme is not yet fully investigated, though its tentative cost is estimated to be about Rs. 15 crores. The third scheme in the group relates to

protective works along the western embankments at Jalpapur, a village in Nepal, where heavy erosion is taking place. Under the Kosi Agreements, it is incumbent on the State Government to protect such areas against erosion. The scheme, which has been worked out in consultation with the Central Water and Power Research Station, Poona contemplates construction of permeable spurs and dredging of the river. It is estimated to cost Rs. 89.97 lakhs in Phase I and Rs. 2,47.50 in Phase II, i.e., in all Rs. 3,37.47 lakhs. These estimates have also been approved by the Kosi Technical Advisory Committee. It has not been possible to provide fully for all these three schemes. The provision tentatively for them has been kept at about Rs. 3.20 crores in the entire Plan period and about Rs. 60 lakhs in 1969-70. In addition to these three schemes, an outlay of Rs. 1.75 crores in the Fourth Plan is also required to be made for certain spill-over schemes (such as Sikrahna, Bagmati, Kamla, Kamla Balan and Mokameh Tal, etc.) of the Irrigation Department. The requirement of funds for these schemes next year is estimated to be Rs. 61 lakhs.

The schemes belonging to the group benefiting the new areas are those which would cover the Western Kosi Canal area, the upper reaches of the Bagmati and Kamala Balan, the lower reaches of the Adhwara and the entire Mahananda basin. Besides, some town protection schemes have also been included. Since most of these schemes cover areas where irrigation schemes have either been completed, or are contemplated, in the Plan period, it is necessary to make these areas free from floods. The requirement of funds for these schemes in the Fourth Plan period is estimated to be about Rs. 2.05 crores and about Rs. 29 lakhs in 1969-70.

SECTION 3

POWER

Power is an important overhead for agricultural and industrial development. In spite of its rich coal and water resources, however, the State has lagged behind in power development. This is evident from the fact that electricity accounts for only about 7 per cent of the total energy consumption in the State as against about 12 per cent in West Bengal, 11 per cent in Madras, 10 per cent in Maharashtra and 8 per cent in Punjab and Mysore. Moreover, a great bulk of the power generated is consumed by the large-scale industries and only a little is left either for the small-scale industries, or for domestic, commercial, or irrigation purposes. It is necessary, therefore, not only to develop power but also to take it to the far corners of the State so as to resuscitate the villages, promote village and small-scale industries and increase agricultural as well as industrial production.

In the First Plan, a sum of Rs. 9.46 crores was spent on different power development schemes. As a result, the length of sub-transmission and low tension lines increased from 3,200 and 80 K. Ms. respectively in 1950-51 to 4,685 and 1,365 K. Ms. in 1955-56. The number of towns and villages electrified increased from 10 in 1950-51 to 364 in 1955-56. Similarly, the number of pumps energised increased from 110 to 1,253. The State Government also set up 9 deisel power stations with an installed capacity of 7 M. W. In the Second Plan, the outlay on power schemes was Rs. 31.14 crores. In this period, the State Government set up the Bihar State Electricity Board to take charge of the power development schemes. Work on the Barauni Thermal Power Station with an installed capacity of 30 M.W. also commenced in the period. In the last year of the Second Plan period, steps were taken for setting up a thermal power station at Patratu to cater to the requirements of H. E. C. None of these generation schemes, however, was completed. The installed capacity of the Board increased to 19 M.W., the length of sub-transmission and low tension lines to 11,742 and 5,930 K.Ms. respectively. The number of towns and villages electrified increased to 2,475 and that of pumps energised to 3,135.

In the Third Plan, the expenditure on power programmes was Rs. 94.05 crores. At the end of this period, installed capacity of the State Electricity Board increased to 59 M.W. The length of transmission lines increased to 964 K. Ms. and those of sub-transmission and low transmission lines to 18,855 and 11,545 K. Ms. respectively. The number of towns and villages electrified increased to 3,990 and that of pumps energised to 10,556.

In the period of the annual plans 1966—69, the outlay on power schemes is estimated to have increased further by Rs. 59.19 crores. The installed capacity of the State Electricity Board's generating stations is also estimated to have increased to 313 M.W. In this period, the length of transmission lines is expected to go up to 2,372 K. Ms. and those of sub-transmission and low tension lines to 27,800 and 23,678 K. Ms. respectively. The number of towns and villages electrified is estimated to have increased to 7,626 and that of pumps energised to 51,625. It would thus be seen that the rural electrification programme in this period expanded considerably. This was due to special steps that were taken in the wake of the famine that occurred in 1967.

In the Fourth Plan period, the State Government's contribution to the State Electricity Board schemes has been kept at Rs. 114 crores. The State Government would also invest Rs. 5 crores on the power programmes of the D. V. C. in the period. The State Electricity Board expect to raise about Rs. 30 crores in the Fourth Plan period from other financial institutions, such as the Life

Insurance Corporation (Rs. 10 crores), the Agricultural Refinance Corporation (Rs. 10 crores), the Commercial Banks (Rs. 5 crores) and its Consumers (Rs. 5 crores). The State Electricity Board would thus have a total programme of about Rs. 144 crores. Of this, Rs. 43.31 crores would be spent on generation schemes, Rs. 25.19 crores on trunk transmission, Rs. 25 crores on sub-transmission and Rs. 50 crores on rural electrification schemes. A sum of Rs. 50 lakhs is also proposed to be spent on investigation schemes.

Besides the outlays of Rs. 144 crores by the State Electricity Board in the Fourth Plan period, the Board would also have outlays of Rs. 8.57 crores outside the Plan. Of this, Rs. 3.68 crores is for Gandak Power House, Rs. 2.26 crores for Gandak transmission schemes and Rs. 2.63 crores for inter-State links. Since the Gandak power and transmission schemes would be gifted to Nepal, their cost is being borne by Government of India in the form of grant. The inter-State links proposed would connect the Bihar grid with U. P. on the one hand and Orissa on the other. These links have been suggested by the Vij Committee of the Government of India.

The details of the different schemes of the State Electricity Board are given below:—

Generation :

The schemes already sanctioned are the Barauni and Patratu Thermal and Kosi and Subarnarekha Hydel Power Stations. The total cost of these schemes is estimated at Rs. 124.82 crores. The expenditure till 1968-69 on these schemes is estimated to be Rs. 79.62 crores. In other words, a sum of Rs. 45.20 crores is required to complete them. The actual provision made, however, is only Rs. 43.31 crores. The schemes when completed would have an installed capacity of 905 MW. The demand for power in 1973-74 as assessed by the Load Survey Directorate of the C. W. P. C. is estimated at 827 MW against 605 MW assessed by the Vij Committee till 1970-71. To satisfy a load of 827 MW, an installed capacity of 1,125 MW would be needed. This is on the assumption that 8 per cent reserves for auxiliary consumption and 20 per cent reserve for statutory overhaul and spinning reserves would be needed. In other words, by the end of the Fourth Plan, Bihar would have a shortage of power to the extent of 220 MW. In fact, the shortage would be greater unless integrated operation of the grids in the Eastern Region is ensured. The details of the generation schemes are given below:—

(RS. IN CRORES).

			Estimated Expenditure Cost.	Provision in till 1968-69.	Installed Fourth Plan. Capacity (MW).
	1	2	3	4	5
Barauni	19.14	18.64	0.50	145
Patratu	52.71	52.63	0.08	400
Patratu Extension	33.90	2.58	31.32	220
Kosi	6.17	5.22	0.95	10
Subarnrekha	12.90	0.55	10.46	130
TOTAL	124.82	79.62	43.31	905

Transmission :

For better utilisation of power, it is necessary to link the different generating stations such as Gandak, Barauni, Patratu and Kosi. It is also necessary to link the Bihar Grid with D. V. C. and other neighbouring grids. The transmission schemes in the past have suffered a set-back due to inadequate provision. The total cost of the transmission schemes is estimated to be Rs. 38.72 crores and the expenditure till 1968-69 Rs. 13.53 crores. The balance of Rs. 25.19 crores has been provided in the Fourth Plan. Of this, Rs. 5.28 crores would be spent on spill-over schemes of the Third Plan, Rs. 13.36 crores on schemes included in the old Fourth Plan (1966-71) and Rs. 6.55 crores on new schemes. By the end of the Fourth Plan, the total length of transmission lines is expected to increase by 1,341 circuit K. Ms., *i.e.*, to 3,583 circuit K. Ms.

Sub-Transmission and Distribution :

Sub-transmission and distribution schemes are the next important group of schemes for utilisation of power. They have to ensure that power flows uninterruptedly to all areas and in equal strength. With a view to ensuring this, Rs. 25 crores have been provided in the Fourth Plan. Under the scheme, 33 KV lines would increase by 3,390 circuit K. Ms. Similarly, 11 KV and low tension lines would increase by 4,000 circuit K. Ms. each. By the end of the Fourth Plan, the total length of 33 and 11 KV and L. T. lines is expected to go up to 9,300, 25,890 and 27,678 circuit K. Ms., respectively.

RURAL ELECTRIFICATION.

Bihar has been far behind some of the Southern States of India in respect of rural electrification, the total number of towns/villages electrified till 1968-69 being 7,626 and 51,625 respectively and the number in Andhra, Maharashtra and Madras for the same till March, 1968 being 4,595 and 89,659, 6,855 and 90,002 and 8,018 and 3,44,151 respectively. This is not because demand for rural electrification is not there. In fact, there are about 45,000 applications for pump connections pending before the State Electricity Board. Considering the importance of the programme, therefore, a sum of Rs. 50 crores has been provided for this in the Fourth Plan. Of this, Rs. 10 crores would come from the Life Insurance Corporation, Rs. 10 crores from the Agricultural Refinance Corporation and Rs. 5 crores from the consumers through payment of cost of service connections. The target for electrification of villages/towns and pumps in the Fourth Plan period has been kept at 12,500 and 1,25,000 respectively. By the end of the Fourth Plan, the number of towns/villages and pumps electrified is expected to go up to 20,126 and 1,76,625 respectively.

In 1969-70, the power programmes of the State Electricity Board are estimated to cost Rs. 21 crores. In this, State Government's contribution would be Rs. 17 crores and the rest the State Electricity Board would raise from Life Insurance Corporation (Rs. 2 crores), Agricultural Refinance Corporation (Rs. 1.50 crores) and consumers (Rs. 0.50 crores), mainly for their rural electrification programmes. Of Rs. 21 crores, Rs. 4.93 crores would be spent on generation, Rs. 4.97 crores on transmission, Rs. 5 crores on sub-transmission and Rs. 6 crores on rural electrification schemes. The targets for electrification of towns/ villages and pumps during the year has been kept at 1,250 and 15,000 respectively.

The State Government would also contribute Rs. 1.50 crores to the D. V. C. Power programmes in the next year.

D. INDUSTRY AND MINING.

SECTION 1

INDUSTRIES.

Bihar is quite rich in mineral and other industrial resources. The economy of the State, however, continues to be predominantly agricultural and rural, with only about 7.7 per cent of the workers engaged in household and manufacturing industries against 18.1 per cent in Kerala, 15.6 per cent in West Bengal, 13.4 per cent in Madras, 12.9 per cent in Gujarat, 12.6 per cent in Punjab, 12.3 per cent in Andhra and Maharashtra and 10.6 per cent in the country as a whole. Similarly, factory establishments and small enterprises contribute only about 10 per cent to the State income as against their share of 17.3 per cent in the national income. There is also widespread unemployment and under-employment both in the field of agriculture and industries. The State Unemployment Committee has estimated that about 4.7 million workers employed in State's agriculture are redundant. There is also regional disparity in the levels of development of the different parts of the State. It is necessary, therefore, to have an accelerated industrial development programme in the State with a view to promoting balanced development of the different regions of the State and affording employment opportunities to all able-bodied persons.

In the First Plan, the outlay on industries was Rs. 1.03 crores. During this period, work on the State Superphosphate Factory was started and the Bihar State Financial Corporation set up in order to provide financial facilities to the entrepreneurs in the State. In the field of small-scale and cottage industries, a few pilot schemes of assistance and training were also taken up. In the Second Plan, the outlay on industries was Rs. 8.87 crores. During this period, a High Tension Insulator Factory was set up at Ranchi. In the last year of the plan period, the Bihar State Industrial Development Corporation was also set up for managing the State enterprises and for providing financial and other assistance to the private sector industries. In the field of small-scale and cottage industries, 4 industrial estates were set up at Biharsharif, Darbhanga, Patna and Ranchi. For the training of existing artisans and new entrants to the industry, a Central Polytechnic at Gulzarbagh, an Institute of Industrial Designs at Patna and model training-cum-production centres and women's industrial schools were also started.

In the Third Plan, the expenditure on industries was Rs. 9.67 crores. During this period, considerable progress was achieved in the industrial development programmes. The High Tension Insulator Factory was completed and brought into commercial production. The production in the State Superphosphate Factory also increased from about 12,000 tonnes in 1961 to 22,000 tonnes in 1965-66. During this period, steps were also taken to set up an Electrical Equipments Factory and a Malleable Cast Iron Foundry at Ranchi. In addition, several private sector industrial units engaged in the production of paper, electric cables, textile fibres, spun pipes and cement were given considerable financial assistance. In the field of the small-scale and village industries, the Bihar State Small-Scale Industries Corporation was set up to manage the various promotional and commercial schemes of the State Government and to extend raw materials as well as marketing facilities, to the small enterprises. The industrial estates programme was also expanded so as to include new areas in Muzaffarpur, Darbhanga, Purnea, Daltonganj, Ramnagar, Lakhisarai, Barun and Murliganj. Rural Industries Projects at Buxar, Nawada, Pusa and Dumka were also started during the period under the Centrally-sponsored Schemes. With a view to ensuring orderly growth of industrial complexes and providing such co-ordinated facilities as developed factory sites, power transport, and others, an Industrial Development

Authority was also constituted in the State. The Authority took steps to develop industrial sites at Adityapur, Patna and Ranchi. A Tribal Designs Centre at Ranchi on the lines of the Institute of Industrial Designs, Patna was also set up to bring about an improvement in the tribal crafts.

In the period of the Annual Plans, 1966—69, the total expenditure on various Industrial Development Schemes is estimated to be Rs. 6.25 crores. During this period, the Bihar State Agro-Industries Development Corporation and a model rice Mill at Bikramganj were set up. The State Spun Silk Mill at Bhagalpur also made considerable progress in this period. Due to paucity of resources, the programme for small-scale and village industries was not expanded and was kept more or less at the maintenance level. The State Government also created and filled up the post of an Industrial Development Commissioner for ensuring more vigorous activity in the industrial field.

In the Fourth Plan, the total outlay on industrial development schemes has been kept at Rs. 16.50 crores. Of this, Rs. 10.00 crores would be spent on schemes relating to the large and medium industries and Rs. 6.50 crores on village and small-scale industries. Under the large and medium industries programme, the schemes include assistance to the Bihar State Industrial Development Corporation (Rs. 2.35 crores), the Bihar State Financial Corporation (Rs. 2.35 crores) and the private sector industries (Rs. 1.50 crores). Besides, outlays would also be made on the establishment of the State Spun Silk Mill (Rs. 85 lakhs), industrial areas (Rs. 1.20 crores), land acquisition and rehabilitation in public sector industrial projects areas (Rs. 1 crore), subsidy for industrial housing (Rs. 5 lakhs) and strengthening of the Development Wing (Rs. 20 lakhs) of the Industries Department. Under the small scale and village industries programme, the schemes include the industrial estates and areas (Rs. 1 crore), small scale industries (Rs. 3.30 crores), khadi and village industries (Rs. 5 lakhs), handlooms (Rs. 80 lakhs), powerlooms (Rs. 40 lakhs), handicrafts (Rs. 40 lakhs) and sericulture (Rs. 55 lakhs). The details of some of the important schemes are given below :

Assistance to the Bihar State Industrial Development Corporation :

The State Government set up the Bihar State Industrial Development Corporation in 1960 which started its operations in May, 1961. The Corporation is entrusted with the responsibility of managing the State industrial undertakings which are the Superphosphate and the High Tension Insulator factories. Both these factories are at present working below their rated capacity. It is proposed to make them work at full capacity and also to treble and double the capacity of the State Superphosphate factory (to 2,16,000 tonnes per annum) and the High Tension Insulator factory (to 4,800 tonnes per annum) respectively. The cost of expansion of the State Superphosphate factory is estimated to be Rs. 55 lakhs and that of the High Tension Insulator factory Rs. 87.25 lakhs. No expenditure has been incurred on these schemes so far. The provisions made in the Fourth Plan proposals are Rs. 50 lakhs for the State Superphosphate factory and Rs. 18.50 lakhs for the High Tension Insulator factory.

The Corporation is also planning to set up two more factories, namely, the Electrical Equipments Factory and the Malleable Cast Iron Foundry. The total cost of the Electric Equipments Factory is estimated at Rs. 224.92 lakhs and the expenditure till March 1968 Rs. 83.50 lakhs. So far, land for the factory has been acquired and civil works are in progress. Similarly, most of the equipments have either been imported or indigenously procured. In the Fourth Plan, a sum of Rs. 141.42 lakhs has been provided for the scheme. The Malleable Cast Iron Foundry is still in a preliminary stage and as such only a token provision of Rs. 5 lakhs has been made for the same.

The Corporation has also to be assisted to meet its under-writing commitments in respect of private sector industries. The total amount of these commitments is estimated at Rs. 126.92 lakhs of which Rs. 106.92 lakhs have been met till March, 1968. The balance amount of Rs. 20 lakhs has therefore been provided in the plan.

Bihar State Financial Corporation :

The Corporation was set up in the First Plan itself. Since then, its activities have been expanding. It is expected that in the Fourth Plan substantial demands would be made on the funds of the Corporation from the private sector industries for financing their development programmes. The Corporation can no doubt raise its own resources by accepting deposits, or by borrowing either from the Reserve Bank and other financial institutions or from the market. Since the total of these resources available to the Corporation may not be large, nor the terms of repayment long enough, it is considered necessary to augment the funds of the Corporation through loans by the State Government. The total provision in the Fourth Plan for the scheme has been kept at Rs. 234.75 lakhs.

Establishment of Industrial areas :

The State Government have decided to acquire and develop land as spear-heads of industrial growth at Adityapur, Barauni, Bokaro, Patratu and Ranchi. The total cost of land plus the cost of development is estimated at Rs. 7.80 crores. Deducting the cost of land likely to be realised in advance from the bulk buyers, the net cost works out to Rs. 7.40 crores. Adding to this the cost of development of land already acquired in those areas, estimated to be Rs. 4.41 crores, the total requirement for the scheme comes to Rs. 11.81 crores. Since finance of this order would not be available and also expenditure on the scheme might be low, depending on the state of possession of land, availability of building materials, equipments, personnel, procedural delays and other formalities, the provision for the scheme has been kept at Rs. 120 lakhs.

Land Acquisition and Rehabilitation :

From time to time, the State Government have acquired land for location of central public sector projects in the State and have also been called upon to meet the cost of acquisition of land and rehabilitation of displaced persons. During the Second Plan, the expenditure on the scheme was Rs. 97.66 lakhs. In the Third Plan period, the expenditure was Rs. 110.55 lakhs. A sum of Rs. 16 lakhs has also been spent in the years 1966-67 and 1967-68. In the light of past experience, a provision of Rs. 100 lakhs in the Fourth Plan has been kept for the scheme. The areas covered under the scheme include Barauni and Bokaro.

State Spun Silk Mill :

The scheme for establishment of a Spun Silk Mill in the State was investigated as early as 1948. It was also included in the First and Second Plans, but on account of foreign exchange and other difficulties, it did not make any progress. In 1965, after the slump in the export trade of tasar, the State Government urged upon the Central Silk Board to give their clearance for the scheme. In July, 1966, the Central Silk Board cleared the scheme. Subsequently, steps were taken to obtain industrial licence, acquire land and also study the techno-economic feasibility of the project. The Techno-economic Report, prepared by a Japanese Consultant, has estimated the total cost of the scheme at Rs. 141.25 lakhs. In this, the cost of the imported machines would be Rs. 63 lakhs. By 1968-69, expenditure of Rs. 56 lakhs is expected to be incurred on the scheme, including the cost of imported and indigenous machinery and construction of buildings, etc. The balance amount of Rs. 85.25 lakhs, therefore, has been provided in the Fourth Plan.

Small-scale Industries :

The State Government have been implementing schemes relating to technical, training, financial, marketing and organisational assistance to the small-scale industries. In the Fourth Plan period, these schemes would not only continue but also be strengthened. In particular, it is proposed to extend to the small-scale units in the State loan assistance of Rs. 2 crores in the plan period. A scheme costing Rs. 34 lakhs has also been formulated to organise and assist industrial co-operative societies in different sectors and areas of the State's economy. Similarly, a sum of Rs. 10 lakhs has been provided for establishment of forest-based industries in the State. The concrete schemes in this regard are establishment of a complete match box unit at Koderma in Hazaribagh, a match splint factory at Bagaha in Champaran district, 2 Pressure Treatment Plants for wooden poles and installation of 100 machines for manufacturing ropes from Sabai grass at Sahebgunj and Goelkera.

Special schemes costing Rs. 10 lakhs for North Bihar have also been framed. The schemes includes establishment of industrial estates at Saharsa, Kishanganj and Sakari, rural industries pilot project at Saharsa, straw board manufacturing unit at Motihari or Chanpatia, khari salt refinery at Mehsi or Hazipur, salt-peter refinery at a suitable place in Muzaffarpur district, electric and diesel pumps at Bettiah or Araria, tractor servicing and light engineering workshops at a suitable place in Purnea district, agricultural implements units at Sitamarhi or Supaul and a complete match box manufacturing unit at Ramnagar in Champaran district.

The Bihar State-Small-Scale Industries Corporation would also be assisted to the extent of Rs. 50 lakhs in the Fourth Plan period.

Industrial Estates and Areas :

It is proposed to provide a sum of Rs. 1 crore for this scheme. Of this, Rs. 60 lakhs would be spent on the expansion of the existing industrial estates at Muzaffarpur, Bhagalpur, Purnea and Daltonganj and establishment of 2 urban industrial estates at Bokaro and Monghyr and 2 rural industrial estates.

Under the scheme of development of industrial areas for small-scale industries, sites at Adityapur, Barauni, Bokaro, Patratu and Patna would be developed. The total cost of acquisition and development of land in these places is estimated to be Rs. 2.80 crores. But on account of paucity of resources a sum of Rs. 40 lakhs only has been provided.

Handlooms :

Bihar has nearly 1,64,000 registered handlooms. There are 1,161 Weavers' Co-operative Societies spread throughout the State producing about 2.35 crore yards of cloth. Still there are weavers who are outside the co-operative fold and as such suffer from various disabilities. It is necessary, therefore, to assist and organise them. The State Government have been implementing in the past schemes of assistance of various kinds to the handloom weavers in the State. These schemes related to rebates on sales of handloom cloths, publicity and propaganda, award of prizes, sales emporia, supplies of looms and accessories, subsidy etc. It is proposed to continue these schemes in the Fourth Plan. In particular, it is proposed to reorganise the Bihar Cottage Industries and expand the Bihar Co-operative Spinning Mill. A sum of Rs. 80 lakhs has been provided for these schemes in the Fourth Plan.

Powerloom :

The Government of India have allotted 7,000 powerlooms to the State Government for installation in Bihar. Of these, about 3,500 powerlooms are expected to be distributed among the handloom weavers in the State and the rest among the educated unemployed and small entrepreneurs. The cost of installation of 3,500 powerlooms in the handloom sector together with other costs is estimated to be Rs. 2.75 crores. On account of paucity of resources, however, only a sum of Rs. 4 lakhs has been provided for the same.

Handicrafts :

Bihar is quite famous for its handicrafts, particularly its stone and Sikki works. In recent times, they have also been exported abroad and have earned foreign exchange. It is necessary, therefore, to develop the handicrafts in the State to their full capacity. Schemes have thus been framed for the expansion of the Institute of Industrial and Tribal Designs at Patna and Ranchi; supply of tools; training and mobile demonstration centres, procurement and marketing facilities, publicity and exhibition. The total provision for the various schemes relating to handicrafts has been kept at Rs. 40 lakhs.

Sericulture :

Bihar possesses all the three varieties of silk, namely, eri, mulberry and tasar. It excels others, however, in its tasar silk. In view of the importance of the silk industry in the State, schemes of development have been implemented in the various plans. These include establishment of silk seed stations, improved reeling and spinning facilities, marketing and financial assistance, etc. In the Fourth Plan, these schemes would be continued. In addition, a Spun Silk Mill at Bhagalpur will be set up. The Government Silk Institute at Bhagalpur and the Tasar Silk Institute at Chaibasa would also be expanded and strengthened. The provision for these schemes has been kept at Rs. 55 lakhs.

In 1969-70, the requirement of funds for the various industries schemes is estimated at Rs. 325 lakhs, i.e., Rs. 225 lakhs for large and medium industries and Rs. 100 lakhs for village and small-scale industries.

SECTION 2

MINERALS.

Bihar is the leading mineral producer in India. In 1965, it accounted for about 38 per cent of the total value of minerals raised in the country. It is necessary to explore and prove the reserves of the various minerals in the State and to exploit them fully.

In the First Plan, there was no scheme for mineral development, though certain posts of Mining Officers were created outside the plan to look after the collection of revenue from mines, inspection of mines and examination of cases for grant of mining leases and prospecting licenses, etc. In the Second Plan, an outlay of Rs. 10 lakhs was made on mineral development schemes and a combined Directorate of Mines and Geology created.

In the Third Plan, the provision for mineral development was Rs. 20 lakhs. The actual expenditure, however, was Rs. 68 lakhs. During this period, the Directorate was further strengthened by creating, among others, Limestone and Iron-ore Development Cells. A separate department of Mines and Geology was also created and placed under the charge of an officer of the rank of Divisional Commissioner. The department streamlined the procedure for processing of applications for lease and prospecting of mining areas. The Bihar Land Reforms Act was also amended to enable the State to get into direct touch with the lessees and sub-lessees and to resume unworked areas. In order to rehabilitate and stabilise the mica industry, the State Government set up a Bihar Mica Syndicate to purchase, process and export mica. The State Government also took up the management of the Saphi Mica Mines which produces the best quality ruby mica in the country and earns valuable foreign exchange.

In the period of annual plans, 1966—69, the total expenditure on mineral development schemes is estimated to be Rs. 57.07 lakhs. During this period, the Department of Mines was further strengthened by appointment of one Superintending Engineer and three District Mining Officers, with supporting staff, purchase of drilling machines and 5 weigh-bridges. A Geological laboratory at Hazaribagh was also set up with Petrology and Chemicals sections. Besides these, the other normal activities of the Mines Department were continued. The Geological Wing also participated in the exploration of ground water resources for sinking of wells during the famine of 1967.

In the Fourth Plan period, a sum of Rs. 4.60 crores has been provided for the different mineral development schemes. The schemes include expansion of the Mines and Geological Wing of the Department, together with a Ground Water Cell, construction of a permanent building for the Geological Laboratory at Hazaribagh, establishment of a Bihar State Mineral Development Corporation, investments in the Bihar Mica Syndicate and Saphi Mica Mines, installation of weigh-bridges and improvement of road communications.

Under the mining expansion plan, it is proposed to split up heavy mining districts into circles at a cost of Rs. 25 lakhs. Similarly, the scheme for the expansion of the geological wing, estimated to cost Rs. 79 lakhs, envisages appointment of more staff for intensifying geological exploration and mineral prospecting programmes with special emphasis on mineral raw materials. The scheme of Geological Laboratory, estimated to cost Rs. 20 lakhs, aims at completing the building for the laboratory and adding three more sections to the same. The new sections proposed are Coal and Clay, Palaeontology and Ore Dressing and Beneficiation Sections. The scheme for Bihar State Mineral Development Corporation (Rs. 190 lakhs) aims at prospecting, proving and mining of minerals such as bauxite, coal, copper, limestone and iron-ore. The investments in the Bihar Mica Syndicate (Rs. 20 lakhs) are required to be made for setting up Mica Grinding and Die and Cut Mica Plants,

which would enable the State to set up mica-based industries. The investments in the Saphi Mica Mines (Rs. 10 lakhs) would enable the department to open seven out of the eleven known mica mines in the area. The expenditure on weigh bridges (Rs. 3 lakhs) is meant for construction of buildings and installation of the bridges, etc. Finally, an outlay of Rs. 104 lakhs on mineral roads is considered important from the point of view of opening of mining areas. These roads would be located in the iron-ore and limestone bearing areas of the State. The roads and bridges contemplated are Barajamada-Baraiburu-Chotanagara and the Baraiburu-Gua-Salai road bridges, the Chotanagara-Salai, Salai-Manoharpur, the Akbarpur-Pipradih and Nagar-Untari-Bhawnathpur roads. These are estimated to cost Rs. 153 lakhs. Owing to paucity of resources, however, only a sum of Rs. 104 lakhs has been allotted for the same in the Fourth Plan period.

The requirement of funds next year, *i. e.*, 1969-70, for the different mineral development schemes is estimated at Rs. 50 lakhs.

E. TRANSPORT AND COMMUNICATIONS.

SECTION 1

ROADS.

Transport is a necessary condition of development. It not only facilitates movement of men and materials from one part of the country to another but also induces growth in particular areas. Adequate transport facilities should therefore not only follow but also may precede developments. While planning transport facilities, it is also necessary to pay due attention to the needs of different areas and modes of transport.

The State Government's development efforts in the past have taken necessary care for building up an adequate and efficient system of road and road and water transport. In the First Plan, a sum of Rs. 10.78 crores was spent on development of roads in the State. As a result of this, the length of roads under the State P. W. D., including the national highways, increased from 3,025 miles in 1950-51 to 5,544 miles in 1955-56. In the Second Plan, another sum of Rs. 14.80 crores was spent on roads and the length of P. W. D. roads in 1960-61 increased to 7,646 miles. In the Third Plan, the total expenditure on roads was Rs. 15.56 crores. The length of P. W. D. roads by the end of 1965-66, rose to 9019 miles. In the period of the annual plans, 1966-69, the expenditure on roads of different kinds is estimated to have increased by Rs. 9 crores and the length of P. W. D. roads to 9,320 miles. It would thus be seen that in the last 18 years the length of roads under the State P. W. D. has more than trebled. In fact, the progress in respect of metalled roads has been much more, the mileage of the same having increased from 2,101 in 1950-51 to about 7,436 in 1968-69. Similarly, the progress in respect of Major District Roads in the period has been spectacular, the length of these roads having increased from 102 miles in 1950-51 to over 5,130 miles in 1968-69.

In spite of the impressive progress, however, the road net work in the State is not considered adequate, if targets laid down under the Nagpur Plan (1943-61) or the Chief Engineer's Plan (1961-81) are taken into account. Moreover, there are other deficiencies as well. These are the predominantly single-lane (width of about 12 feet) character of State roads, numerous missing links and weak bridges, absence of by-passes, level-crossings/over-bridges and ferries. There are also areas, particularly along the Nepal border and around the new industrial complexes where road facilities are quite inadequate. Similarly, the roads in the rural and municipal areas also require considerable improvement.

The State Government's Fourth Plan proposals aim principally at removing the existing and projected deficiencies in the road system of Bihar. There are three elements of the State's road development plan, costing in all Rs. 23.20 crores. These relate to the P. W. D., C. D. P. (District Board) and L. S.-G. Departments. The P. W. D. road plan is estimated to cost Rs. 3 crores in 1969-70 and Rs. 21 crores in the Fourth Plan. Of the latter, Rs. 14 crores would be spent on spill-over schemes and Rs. 7 crores on new schemes. The total cost of spill-over schemes with the P. W. D. is estimated to be Rs. 18.18 crores with a road length of 1,765.5 miles. With the proposed outlay of Rs. 14 crores on the same, it would be possible to metal about 1,360 miles of roads in the plan period and the balance of the cost and road mileage would be carried over to the Fifth Plan period.

As far as the new schemes are concerned, the outlay of Rs. 7 crores would be distributed as follows: strengthening and widening of existing roads and replacement of weak bridges Rs. 2 crores, though sanctions would issue for works worth Rs. 4.40 crores with a road length of 504 miles; new roads Rs. 1.50 crores against fresh sanctions of Rs. 9.31 crores; missing major bridges, including the Ganga Bridge at Buxar (Rs. 1 crore) and Patna (Rs. 0.30 crore), Rs. 2.37 crores against total sanctions for Rs. 3.62 crores; replacement of level crossings with

over-bridges Rs. 0.58 crore; tools and plants Rs. 0.20 crore, research and training, ferries and others Rs. 0.10 crore each and inspection bungalows Rs. 0.05 crore. The State Plan outlays on new schemes, however, are exclusive of expected receipts from the C. R. F. (ordinary) allocation which have been estimated to be Rs. 2.17 crores, Rs. 0.21 crore for strengthening and widening of existing roads and replacement of weak bridges, Rs. 1.63 crores for new roads and Rs. 0.33 crore for missing major bridges. This means that P. W. D. would carry into the Fifth Plan schemes costing Rs. 13.48 crores, Rs. 4.18 crores being the cost of 405.5 miles of spill-over road schemes, Rs. 2.19 crores on account of strengthening and widening of existing roads and replacement of weak bridges, Rs. 6.18 crores being the cost of 414 miles of new roads and Rs. 0.92 crore on account of missing major bridges.

During the Fourth Plan, P. W. D. would be able to metal about 1,443 miles of roads, besides strengthening and widening of existing roads. At the end of the Fourth Plan, the total road mileage under the P. W. D. would be 9,817 against 17,452 miles envisaged under the Chief Engineer's Plan. This would give an average of 21.4 miles of road per lakh of population in 1974 against the corresponding average of 111.87 miles for the country as a whole.

The C. D. P. (District Board) road Plan is estimated to cost Rs. 1.20 crores in the Fourth Plan and Rs. 0.15 crore in 1969-70. The outlay on District Board roads will be used almost entirely for improvement of rural roads. If the outlay on Other District Roads under the P. W. D. road plan, which is estimated to be Rs. 4.05 crores in the Fourth Plan and Rs. 0.56 crores in 1969-70, is also added to this, as has been recommended by the Government of India Committee on Rural Roads, the share of rural roads in the total road plan of Rs. 23.20 crores would work out to Rs. 5.25 crores in the Fourth Plan and Rs. 0.71 crore in 1969-70, i. e., about 22.6 and 21.8 per cent respectively. Although the outlay exceeds the minimum level prescribed by Government of India for rural roads, it is not expected to make any significant impression on the rural road situation. There are in all about 27,000 miles of rural roads in the State of which about 1,100 miles are metalled, about 13,500 miles are *katcha* but motorable and the remaining 12,400 miles are all *katcha*, unbridged and unmotorable. With the proposed order of outlays, however, about 100 miles including the mileage of P. W. D. roads, can be metalled and about 60 miles made motorable, though *katcha*.

Similarly, there are about 1,485 miles of municipal roads but most of them are in a deplorable state. Due to congestion and pressure of traffic they are going from bad to worse. It is, therefore, proposed to provide Rs. 1 crore in the Fourth Plan and Rs. 0.10 crore in 1969-70 for improving municipal roads under the L. S.-G. Plan.

SECTION 2

ROAD TRANSPORT.

With the growth of population, national and per capita incomes, progress in urbanisation and change in the habits of the people, demand for passenger road transport facilities increases. The Committee on Transport Policy and Co-ordination of the Government of India has estimated the increase in passenger traffic in the period 1950-51 to 1964-65 to be of the order of 16.3 per cent per annum. It is necessary, therefore, to provide for adequate passenger transport facilities in the State.

Keeping in view the need for development of an adequate, economical and efficient system of transport, a programme of nationalisation of passenger road transport in the State was started in January, 1953. In the First Plan, however, nationalised road transport was not included in the State's Development Plan, although an investment of Rs. 1.73 crores was made in the same. By March 1956, the number of routes nationalised was 86 with a route mileage of 2,855. The vehicle strength of the State Road Transport stood at 431 with 289 schedules. In the Second Plan, another sum of Rs. 1.68 crores was invested. The number of routes nationalised increased to 192 with a route mileage of 10,554. The total number of vehicles also increased to 611 and the number of schedules to 442. The progress in the Second Plan period was somewhat slow because until the establishment of the Bihar State Road Transport Corporation in May, 1959 the allocation for the programme was kept at a restricted level.

In the Third Plan, fresh investments of Rs. 3.42 crores were made by the Corporation. The number of routes nationalised increased to 376 with a route mileage of 23,606. The number of vehicles increased to 1,146 and that of schedules to 822. The progress in the period was thus quite satisfactory. In the period of the annual Plans, 1966-69, however, additional investments of only about Rs. 1.90 crores were made by the Corporation, the State Government's share in the same being Rs. 1.32 crores. There was no expansion in the activities of the Corporation in the period. The finances of the Corporation were also strained in the period due to its inability to replace old vehicles, procure sufficient spares and monopolise the routes completely.

The Fourth Plan schemes of the Bihar State Road Transport Corporation aim principally at improving its financial working. This is sought to be achieved by suitable augmentation of the existing services and by replacement of private permits that are likely to expire in the period in the already nationalised areas of the State. A study of the working of the various schedules of the Corporation has shown that at least 13 per cent of its schedules requires immediate augmentation. These schedules are generally heavily over crowded and have a revenue yield of Rs. 1.80 or above per bus mile. If the needs of these schedules are not met, there may be serious deterioration in the services. Similarly, if the permits due to expire in the nationalised areas in the next five years are not replaced, a vacuum might be created in those areas. It is necessary, therefore, that both these needs of the Corporation, namely, augmentation of existing services and replacement of expiring permits, are met in the Plan period. Assuming a mere 5 per cent increase in the existing schedules and also a reserve capacity of only 25 per cent, the cost of augmentation is estimated to be Rs. 214.20 lakhs. Similarly, the cost of replacement of permits, with a reserve capacity of 25 per cent, is estimated to be Rs. 101.50 lakhs. The total cost on account of both augmentation and replacement thus works out to Rs. 315.70 lakhs. Since the reserve requirements normally work out to 33 per cent of the total, it would also be necessary to purchase about 329 new engines which would cost another Rs. 55 lakhs. Adding a sum of Rs. 1.80 lakhs for departmental vehicles, the total cost on account of vehicles works out to Rs. 372.50 lakhs. The estimate on account of the cost of land (Rs. 20.25 lakhs) and buildings (Rs. 49.75 lakhs) required for strengthening the

workshops, depots and passenger sheds facilities comes to Rs. 70 lakhs. The requirement on account of tools, plants and machinery is estimated to be Rs. 12.50 lakhs. In all, therefore, the Corporation plan is estimated to cost Rs. 455 lakhs in which the State's share would be Rs. 300 lakhs and those of the railways and the Corporation Rs. 100 and 55 lakhs respectively. With this order of investments, the Corporation hopes to increase its number of schedules to 1,181 with an effective mileage of about 516 lakhs. The income per bus mile is expected to go up to Rs. 2 and expenditure to Rs. 1.976.

There would still remain, however, another requirement of the Corporation which cannot be met with the proposed order of investments. This relates to extension of the activities of the Corporation to new areas which is estimated to cost Rs. 114.80 lakhs.

SECTION 3

INLAND WATER TRANSPORT.

Bihar has potential for development of extensive waterways. At present, the stretch of the Ganga between Buxar and Rajmahal, extending over a length of 303 miles, and that of the Ghagra having a length of 100 miles remain un-utilised. The Joint Steamer Companies in the private sector which operated services along and across these rivers have also closed down since January, 1958. It is considered, therefore, necessary to develop water transport in the State by making use of this natural resource.

In the Third Plan, a provision of Rs. 30 lakhs was made for development of water transport in the State but it remained unutilised. Similarly, although a sum of Rs. 5 lakhs was provided in the Central Sector of plan for development of water transport facilities in the State, only Rs. 2.64 lakhs were spent over development of ghat roads. The main difficulty in the implementation of the water transport schemes in the State has been the lack of a suitable organisation.

In the Fourth Plan proposals, a sum of Rs. 20 lakhs has been provided for the various schemes. These include setting up of a technical organisation (Rs. 3.5 lakhs), purchase and operation of a motor launch for survey and investigation (Rs. 5 lakhs), marking of channels (Rs. 1 lakh), renovation of old ghats (Rs. 1.50 lakhs), approach road to ghats (Rs. 5.36 lakhs) and provision of terminal facilities at ghats (Rs. 3.64 lakhs). In 1969-70, a sum of Rs. 4 lakhs is proposed to be spent over purchase of motor launch and other equipments (Rs. 3 lakhs), setting up of the technical organisation (Rs. 0.50 lakh) and approach road to ghats (Rs. 0.10 lakh).

SECTION 4

TOURISM.

Bihar abounds in places of tourist interest. They are either gifts of nature, or places of historic or religious importance, or modern industrial complexes. Until the Second Plan, however, schemes of tourist development were not taken up. During the Second Plan period, schemes for tourist development were taken up for the first time. A separate Directorate of Tourism was created and 5 Tourist Information Centres at Bodhgaya, Gaya, Nalanda, Rajgir and Ranchi were also opened.

In the Third Plan, a sum of Rs. 10 lakhs was provided for the various tourist development schemes but the expenditure incurred was Rs. 7.2 lakhs only. The short-fall occurred because a number of building projects were not taken up due to national emergency and consequent financial stringency. During this period, 7 new Tourist Information Centres at Dhanbad, Hazaribagh, Jamshedpur, Netarhat, Patna, Sasaram and Vaishali were set up. The scheme for Tourist Rest Houses at Netarhat, Rajgir and Vaishali were also initiated. While the Tourist Rest House at Vaishali was completed in the plan period, construction of those at Rajgir and Netarhat advanced considerably. During the period a tourist bus and three tourist vans were also received for operation at Gaya, Dhanbad, Patna and Rajgir.

In the period of annual plans, 1966—69, the expenditure on tourist schemes is estimated to be Rs. 11.44 lakhs. During this period, 5 Tourist Information Centres at Darbhanga, Deoghar, Monghyr, Motihari and Raxaul were set up. The scheme relating to the Aerial Ropeways at Rajgir, following the gift of necessary equipment from the Japanese Buddhist Society, was also taken up. Transport facilities were further improved as a result of acquisition of another vehicle which is now plying at Vaishali. The Tourist Rest Houses at Netarhat and Rajgir are also completed except for the furnishings.

In the Fourth Plan, some re-organisation of schemes has taken place. Part II schemes, which were Centrally Sponsored Schemes, have been abolished and completely integrated with the Central Part I schemes. It is understood that as a result of this the Government of India have tentatively decided to take up and finance entirely schemes relating to Tourist Reception Centres at Patna and Nalanda, Development of the area around the Mahabodhi Temple at Bodh Gaya, Tourist Bungalow/Youth Hostel at Ranchi/Netarhat and Tourist Bungalow at Raxaul. The cost of these schemes are not known. The State Government's own proposals are estimated to cost Rs. 23 lakhs in the Fourth Plan and Rs. 4 lakhs in 1969-70. The schemes include strengthening of the tourist organisation (Rs. 3.50 lakhs), expansion of transport facilities (Rs. 3 lakhs), completion and initiation of building projects (Rs. 12 lakhs), tourist publicity (Rs. 2.50 lakhs) and establishment of 10 new Tourist Information Centres (Rs. 2 lakhs). Under the scheme of strengthening the tourist organisation, it is proposed to re-organise the Directorate of Tourism into three wings of Administration and Planning, Publicity and Travel Trade Management. Similarly, transport and accommodation facilities are also proposed to be provided at all those places where Tourist Information Centres have been set up. The selection of places where fresh Tourist Information Centres are to be set up would be made after annual plan allocations are finalised.

F. SOCIAL SERVICES.

SECTION 1

GENERAL AND CULTURAL EDUCATION.

Our planned efforts under education have not been significant as compared to the achievements of the other leading States. The reason for this educational backwardness in this State could perhaps be ascribed to its geo-physical traits and the predominantly agricultural bias of its economy. Being a land-locked State, without adequate facilities of communication, this State suffered neglect from the ex-rulers of this country prior to independence. This becomes evident from the figures of educational achievements of 1951 when the country opted for development through planning. In Bihar the percentage of school-going children in the age-group of 6—11 in 1951 was 27.9 only when the average for the country as a whole was 42.6. Similarly for children in the age-group 11—14, the percentage of enrolment was 7.8 as against the all-India average of 12.7. A substantial investment was required to put Bihar at par with the other States. But unfortunately due to economic handicaps this could not be made possible. Rather we could not even keep on with the pace of development in the other States. The result was that the gap in educational backwardness that this State has been suffering from could not be reduced. On the contrary it further widened.

2. During 1951 to 1966 the percentage of enrolment in Primary schools increased from 27.9 per cent to 54.3 per cent and in Middle schools it increased from 7.8 to 18.6 per cent. The number of Primary schools rose from 23.6 thousand to 44.5 thousand, Middle schools from 2,172 to 7,100 and the Secondary schools from 643 to 2,275. The table below will give the comparative position of educational expansions in Bihar and India:—

			1951.	1956.	1961.	1966.
1. <i>Enrolment (in lakhs)</i> —						
(a) <i>Classes I—V</i> —						
India	..	..	192	252	350	515
Per cent	..	..	(42.6)	(52.9)	(62.4)	(78.5)
Bihar	..	..	14.65	17.81	31.84	39.59
Per cent	..	..	(27.9)	(35.7)	(50.7)	(54.3)
(b) <i>Classes VI—VIII</i> —						
India	..	..	31	43	67	110
Per cent	..	..	(12.7)	(16.5)	(22.5)	(32.2)
Bihar	..	..	2.23	2.77	5.35	7.13
Per cent	..	..	(7.8)	(10.3)	(17.1)	(18.6)
(c) <i>Classes IX—XI</i> —						
India	..	..	12	19	29	53.4
Per cent	..	..	(5.3)	(7.8)	(20.6)	(17.8)
Bihar	..	..	1.5	1.43	3.28	4.54
Per cent	..	..	(5.1)	(5.9)	(12.1)	(13.5)

			1951.	1956.	1961.	1966.
<i>(d) University Stage—</i>						
India	..	..	4	7	9	11
Per cent	..	..	(0.9)	(1.5)	(1.8)	(1.9)
Bihar	..	..	0.23	0.45	0.80	1.04
Per cent	..	..	(0.5)	(0.7)	(1.5)	(1.8)
2. Percentage of students reading science at University stage—						
India	..	..	(38.1)	(33.0)	(34.1)	(42.5)
Bihar	..	..	(16.4)	(20.5)	(25.0)	(31.5)

But unfortunately against this initial back-log, the per capita expenditure on education has been the lowest in Bihar among all the States in India. For example, the per capita expenditure on education in 1965-66 was Rs. 3.9 in Bihar as against Rs. 15.5 in Kerala, Rs. 10.5 in Madras, Rs. 9.8 in Mysore, Rs. 9.0 in Punjab, Rs. 8.7 in Madhya Pradesh, etc.

3. In the Third Plan against a provision of Rs. 34.00 crores, the actual expenditure on General and Cultural Education was Rs. 23.32 crores. The reason for this shortfall was that funds in annual plans could not be provided to the extent anticipated. During this period 7.75 lakhs additional children were enrolled in Primary schools and 1.78 lakhs in Middle schools. The percentage of children enrolled rose from 50.7 to 54.3 in the 6—11 age-group and from 17.1 to 18.6 in the 11—14 age-group. In Secondary schools and at the University stage an additional 1.26 lakhs and 0.84 lakh children were enrolled respectively.

4. In the three years from 1966-67 to 1968-69 the Social Services Sector, particularly education, suffered due to inadequate provision of funds. The outlay on education was just sufficient to maintain the minimum level of development and no expansion was possible. The position at the end of 1968-69 would thus be that while the country as a whole would be achieving an enrolment of over 80 per cent for the age-group 6—11, Bihar would be reaching only 57.4 per cent. Similarly in the age-group 11—14 Bihar's figure would be 19.7 per cent against 35.7 per cent enrolment for the entire country.

5. While the emphasis has so far been solely on the expansion of education, the Fourth Plan also envisages its improvement. Providing free and compulsory education at the primary stage has been the main problem in the field of education in this State. Even with our best efforts with the outlay that it would be possible to provide for education, it would not be possible for us to reach by the end of 1973-74 the level that the country has already reached by the end of the Third Plan period. It calls for special attention from all concerned.

6. The low percentage of enrolment in the Primary schools is attributable to two main factors—poor enrolment of girls due to the socio-economic conditions prevailing in this State and a very high percentage of drop-outs. Of the 44.4 lakhs children reading in Primary schools in 1968-69, 33.10 lakhs are boys and only 11.34 lakhs are girls which in terms of percentage of population of 6—11 year age-group comes to 84 per cent for boys and 29.87 per cent for girls. The fact,

therefore, stands out that universality of enrolment involves primarily the enrolment of girls. Suitable measures would have to be adopted during the Fourth Plan period for raising girls enrolment. Drop-out or wastage has been the other problem in this field. It has been a bane of primary education in Bihar and is showing a rising trend in the past few years. It used to be about 50 per cent till the commencement of the Second Plan in the stage of primary education. As enrolment was stepped up with the sanction of additional facilities in the Second Plan, the number of drop-outs began to increase. In 1961, the percentage of drop-outs (of those who were enrolled in 1958) was 68.1 per cent. In 1966, this has risen to 78.2 per cent. These problems would have to be tackled carefully during the Fourth Plan period. But since due to lack of financial resources it would not be possible to make adequate provision for this sector it would not be possible to reach the desired level of development.

7. Against an actual expenditure of Rs. 23.32 crores in the Third Plan it is proposed to provide Rs. 35.00 crores during the Fourth Five Year Plan, which will be distributed as follows :—

Outlay on General and Cultural Education.

Head.	Rs. in lakhs.
(1) Elementary Education	22,03.95
(2) Secondary Education	3,38.50
(3) University Education	3,43.00
(4) Teacher Education	1,27.00
(5) Social Education	90.00
(6) Educational Administration	1,30.05
(7) National Service and Physical Education ..	48.00
(8) Development of languages and Book Production	1,37.50
(9) Special Institution of Higher learning ..	45.00
(10) Miscellaneous	9.00
TOTAL	35,00.00

8. During the Fourth Plan period it is proposed to enrol 15 lakhs additional children in the Primary schools and 4.13 lakh children in the Middle schools. With this additional enrolment, the percentage of school-going children would be increased from 57.4 per cent to 69.6 per cent for the children in the age-group 6—11 and from 19.7 per cent to 26.8 per cent for the children in the age-group 11—14. This expansion would require appointment of 37,000 additional teachers in the Primary schools and 3,000 additional teachers in the Middle schools. The cost on this inevitable expansion alone would be of the order of 17.9 crores. One of the important reasons for low enrolment percentage in Bihar has been that our schools were not attractive enough and lacked the necessary facilities. At present about 20 per cent of the Primary schools in this State have no buildings of their own. It is, therefore, proposed to construct 5,000 additional class rooms and improve 5,000 existing class rooms. In order to improve the position regarding enrolment of girls it is proposed to appoint more and more lady teachers in the schools, provide incentives for women teachers to take up jobs even in out of the way places, provide incentives to girls enrolled by way of stipends, mid-day meals, provide school uniforms, etc. It is also proposed to provide separate common-rooms and sanitary facilities for girls in the mixed schools. For checking the increasing rate of drop-outs, it is proposed to strengthen the machinery of supervision

and streamline the administration. Drop-outs are also expected to get reduced by provision of school buildings and other necessary facilities that are badly needed for orderly running of the schools.

9. At the secondary stage emphasis during the Fourth Plan would be improvement of quality of education and science teaching. Reorganisation of courses including vocationalisation and implementation of other programmes recommended by Education Commission would have to be taken up. It is also proposed to strengthen selected secondary schools and provide special scholarships for talented students.

10. For university education it is proposed to spend Rs. 3,43 lakhs during the Fourth Plan period. It would be spent mainly on improvement of quality and provision of staff quarters, students hostels, students welfare activities, scholarships, etc. Besides these, it is expected that another sum of Rs. 4,57.00 lakhs would be spent on University Education by the University Grants Commission. The enrolment would increase from 1.20 lakhs to 1.46 lakhs. At present about 34 per cent of the University students are enrolled in science courses. At the end of the Fourth Plan the percentage would increase to 39. It is proposed to develop existing institutions by providing additional facilities like laboratories, library, staff quarters, students hostels, etc.

11. Under the programme of Training of Teachers no expansion of teaching facilities is proposed. It would, however, be necessary to improve the existing institutions by providing the facilities that are wanting. In all other fields of education, like Social Education, Physical Education, Cultural Education, etc. it would not be possible to do much excepting consolidation of the progress already made.

12. Against a provision of Rs. 245 lakhs on general and cultural education in the current year it is proposed to spend Rs. 300 lakhs in 1969-70 with the following break-up :—

				(RS. IN LAKHS.)
Elementary Education .. .. .	..	..	..	98.00
Secondary Education .. .. .	..	..	..	43.00
University Education including institutes of higher learning and research.				58.00
Teachers Training .. .. .	..	..	..	20.00
Social Education .. .. .	..	..	..	15.00
Cultural Education .. .. .	..	..	..	5.00
Other Educational programmes .. .. .	..	..	..	61.00
Total				300.00

In the next year it is proposed to enrol 2.75 lakh children in the Primary schools and 0.69 lakh children in the Middle schools. As a result of this enrolment percentage of children in the age-group 6—11 and 11—14 would respectively go up from 57.4 to 59.9 and from 19.7 to 20.8.

SECTION 2

TECHNICAL EDUCATION.

Technical Education in Bihar has expanded rapidly during the three plans. The existing institutions were expanded and new institutions have been established. As a result of these, at the end of the Third Five-Year Plan, intake capacity at degree level stood at 1,376 and at diploma level 2,129. The Table below gives plan-wise progress in intake capacity:—

	1950-51	1955-56	1960-61	1965-66
<i>Degree level—</i>				
Intake capacity ..	132	192	1,176	1,376
Outturn ..	..	..	652	1,100
<i>Diploma level—</i>				
Intake capacity ..	100	390	1,505	2,129
Outturn ..	..	..	700	1,392

Even though the Table above indicates the pace with which Technical Education has been expanded during the different plan periods, the progress has not only been confined to increase in the number of intake, but new faculties of Engineering have also been introduced.

The rapid expansion of facilities during the recent years has severely strained the resources of existing institutions with the result that the present Engineering Colleges and Polytechnics suffer from overall shortage of teachers, equipment, instructional buildings, hostels, etc. Moreover, as a result of the set-back during the Third Plan due to national emergency, many of the schemes could not be taken up or completed. After the Third Plan due to growing unemployment of technical personnel especially at the degree level there has been a reduction in the intake in Engineering colleges from 1,376 to 1,220. In the case of diploma level institutions, it was brought down to 1,719 from 2,129. There is a proposal for further reduction in admissions and even for closing down some of the institutions.

The emphasis during the Fourth Plan will be on qualitative improvement instead of any quantitative increase and consolidation of the existing schemes. Emphasis will also be given on completion of schemes already taken up and on the implementation of schemes which were approved but could not be taken up during the Third Plan. The proposed new schemes have been prepared keeping in view the primary objective of qualitative improvement.

Against an outlay of Rs. 2.35 crores in the Third Plan an outlay of Rs. 5.42 crores has been proposed for technical education in the Fourth Plan. With this outlay it would be possible to provide Rs. 206 lakhs for completion of the schemes taken up during the Third Plan period. For taking up schemes of improvement of quality which would include modernisation of existing institutions and reorientation of the courses of study, training of teachers, scholarships, revision of staff structure, starting special courses and sandwich courses, etc. a provision of Rs. 184 lakhs is being made. Another provision of Rs. 152 lakhs is proposed for providing certain necessary amenities like hostels and staff.

The allocation proposed for technical education in Fourth Plan, i.e., 1969-70, is Rs. 45 lakhs. With this allocation it would not be possible to take up any new scheme in the first year. Only a token sum of Rs. 2.00 lakhs has been proposed for students amenities and Rs. 1.60 lakhs for scholarships. The remaining part of the outlay has been proposed for completion of continuing schemes.

SECTION 3

HEALTH AND FAMILY PLANNING.

The last eighteen years of planning has seen in Bihar considerable expansion and improvement of medical and health facilities. The opening of primary health centres and sub-centres according to a well defined pattern, has extended medical care and public health activities to remote rural areas. Mortality rate has been reduced considerably. Small-pox, Cholera and Malaria have been substantially controlled. Deaths from Plague and Kala-azar have almost become unknown. Facilities of medical education and training have also been considerably expanded. Yet in the ratio of hospital beds and doctors to the population, Bihar is still far behind the all-India average.

During the Third Plan period good progress was made in the field of control of communicable diseases. Of the 42 units engaged in malaria eradication work in this State, 27 units would be in maintenance phase, 10.7 units in consolidation phase and 4.3 units in attack phase by the end of 1968-69. Small-pox eradication work was intensified and more than 30 million vaccinations were done during the Third Plan period. Under the programmes of V.D. Control, leprosy control and anti-T.B. measures, fairly satisfactory progress was made. In spite of the difficult resource position during this period about 2,600 hospital beds were added. But the extensive programme of control of communicable diseases proved to be too expensive to allow even a modest progress in the field of medical education and medical care. Out of the total expenditure of Rs. 1,554.00 lakhs during the Third Plan on Health and Family Planning, Rs. 900.00 lakh was spent on control of Communicable Diseases alone.

During the three years from 1966-67 to 1968-69 not much progress could be made due to non-availability of adequate funds and whatever was available was mostly consumed by the programme of control of communicable diseases. Of Rs. 725.32 lakhs spent during these three years on Health and Family Planning Programme in this State about Rs. 400.00 lakhs was spent on control of communicable diseases.

Against an outlay of Rs. 15.54 crores in the Third Plan, it is proposed to make a provision of Rs. 16.65 crores in the Fourth Plan with the following distribution :—

(Rs. in lakhs.)

Heads of Development.	Fourth Plan Proposal.	1969-70 Proposal.
(i) Medical Education, Training and Research ..	5,23.00	1,07.00
(ii) Medical Care, including hospitals, dispensaries and Primary Health Centres.	9,25.00	1,14.20
(iii) Control of Communicable Diseases ..	82.00	10.00
(iv) Indigenous System of Medicine	34.00	7.70
(v) Other Programmes	1,01.00	21.10
Total	16,65.00	2,60.00

During the Fourth Plan period, a good number of schemes under Control of Communicable Diseases, Indigenous System of Medicine, Post-graduate education and the entire programme of Family Planning would be run as Centrally Sponsored Schemes in which Government of India would meet hundred per cent of the expenditure.

Medical Education, Training and Research.—At present there are three Government medical colleges at Patna, Ranchi and Darbhanga and one private medical college at Jamshedpur with total intake capacity of 610 annually. This is far below the requirements in the State. At the end of the Third Plan, the total number of doctors in Bihar was 7,992 and the doctor: population ratio was 1:6458 against the all-India ratio of 1:5800. It is, therefore, necessary that the output of doctors is increased rapidly so that medical facilities could be made available to the vast population in the State. It is proposed to open a new medical college at Bhagalpur with an annual admission capacity of 100 during the Fourth Plan period. Admission capacity in the three existing Government medical colleges is also proposed to be raised so that by the end of the Fourth Plan total annual intake capacity in Bihar is increased to 800. For the proposed medical college at Bhagalpur the site has been selected and work is going on for acquiring 288 acres of land at an estimated cost of Rs. 30.00 lakhs. A provision of Rs. 2,40.00 is being proposed for the Bhagalpur Medical College out of which Rs. 1,86.00 lakhs would be utilised for construction of an integrated college building, staff quarters and hostels. No new hospital for this college is proposed to be set up. The existing Sadar Hospital at Bhagalpur would be suitably expanded for meeting the requirements of clinical teaching. Provisions of Rs. 35.00 lakhs for Patna Medical College, Rs. 40.00 lakhs for Darbhanga Medical College and Rs. 46.00 lakhs for Ranchi Medical College is being proposed for improvements and expansions of these colleges in order to raise the admission capacity to 200 in each of them. A provision of Rs. 15.00 lakhs is also being proposed primarily for completing the building for the Patna Dental College.

The position regarding availability of nurses in this State is very unsatisfactory. The total intake in the three Government nursing schools at Patna, Darbhanga and Ranchi is only 110. It is proposed to increase the intake in these three places to 220. Besides these, it is proposed to start one new nursing school at Bhagalpur under the Family Planning Programme with a total of 100 admissions. Thus the total admissions capacity in Bihar would become 420 at the end of the Fourth Plan period. Under Teaching of Pharmacy, it is proposed to open one new school at Darbhanga with an annual intake of 60. At present there is only one such school at Patna with an annual intake capacity of 60. To meet the requirement of a large number of Sanitary Inspectors, Basic Health Workers, Laboratory Technicians, etc., it is proposed to open a school at Darbhanga during the Fourth Plan.

Medical care, including Hospitals, Dispensaries and Primary Health Centres:—The total number of hospital beds available in Bihar is far short of requirements of the vast population in the State. In terms of bed population ratio, at the end of the Third Plan, while for the whole country a bed was available to every 2,900 population, in Bihar it was 1:3,900. Substantial effort would have to be made to improve the position in this field. By expanding the teaching hospitals, District hospitals, Subdivisional hospitals, and other hospitals it is proposed to add 7,876 additional beds during the Fourth Plan period. Even though it would have been desirable to add a larger number of beds, paucity of financial resources would stand in the way.

According to the revised programme of work, all the Primary Health Centres at the lowest level would have to take up the responsibility of maintenance of all the national programmes, like anti-malaria maintenance, anti-small-pox maintenance, tuberculosis control, Leprosy control, collection of vital statistics etc. Under the new thinking for the anti-malaria maintenance programme, it is necessary to provide one additional Sanitary Inspector in each Block and to provide a basic health worker at the rate of one for every 10,000 population. For primary health centres, it is necessary to have a dispensary at the block headquarters. In 10 places, it is necessary to provincialise existing dispensaries of

Local Bodies. There are other 77 blocks which have no dispensary at all at the headquarters. It is necessary to establish new dispensaries at these places. It is proposed to open one additional dispensary in 100 such C. D. Blocks, where the population has exceeded one lakh.

Control of Communicable Diseases:—So far this programme has been accounting for the largest share of the outlay on Health. The results too have been quite impressive in this field. The high priority given to programmes of eradication of Malaria and Small-pox in the Third Plan has yielded good results and these two diseases, which have been the greatest health hazard in this State, have substantially been controlled. Yet generous provision would be required for completing these two schemes during the Fourth Plan period. In the new Fourth Plan these two schemes, along with Tuberculosis control, Filariasis, Trachoma, V. D. control, Cholera control, etc. would be under the category of "Centrally Sponsored Schemes" and Government of India will make full provision for these. Under the State Plan, however, Rs. 82.00 lakhs is proposed to be provided for the Leprosy Control Programme. During the Fourth Plan period, it is proposed to open 10 Leprosy Control Units. The Leprosy Hospitals at Gaya and Deoghar and the clinics at Patna city and Darbhanga would have to be improved and expanded. Re-constructive Surgery facility is proposed to be provided at Gaya, Patna, Deoghar and Brambay. Besides these, one hundred Surgery Education and Treatment Centres are proposed to be opened. A grant of Rs. 5.00 lakhs is also proposed for the Hind Kustha Nivaran Sangh.

Indigenous System of Medicine:—Under this group a provision of Rs. 34.00 lakhs is proposed in the State sector for opening of new Ayurvedic and Unani dispensaries, expansion of Patna Ayurvedic College, construction of new Tibbi College and Homeopathic College buildings, etc. During the Fourth Plan period 15 Ayurvedic and 15 Unani Dispensaries are proposed to be opened at the rate of three each, annually. Commissioning of 64 additional beds in the Patna Ayurvedic College Hospital and construction of new buildings with hospitals for Patna Tibbi College and Patna Homeopathic College are also proposed. Provincialisation of Ayurvedic and Unani dispensaries belonging to the Local Bodies has also been contemplated for which a provision of Rs. 2.00 lakhs has been proposed.

Other Health Programmes:—The rapid expansion of medical and health facilities in this State calls for strengthening of the administrative set-up on the health side. For reorganising and strengthening of the administrative machinery during the Fourth Plan period, a provision of Rs. 20 lakhs has been proposed. Provisions have also been made for strengthening of the Public Health Laboratories and the Virus Laboratory, Student Health Services, prevention of food adulteration, Drug Control Programme, Epidemiological unit, etc.

Family Planning:—In recent years Family Planning has come to be one of the most important national programmes. The efforts made during the last three plans in the direction of Family Planning in Bihar has been feeble. During the period from 1966-67 to 1968-69, however, the programme has gathered considerable momentum. On the recommendation of Mukherjee Committee an intensive programme has been launched with the object of bringing down the birth rate from 40 to 25 per thousand during the next ten years. In the new Fourth Plan, Family Planning will be a Centrally Sponsored Scheme in which Government of India will meet hundred per cent of the cost.

For 1969-70 annual plan a provision of Rs. 260.00 lakhs has been proposed for Health. Of this Rs. 107.00 lakhs is proposed under Medical Education, Rs. 114.20 lakhs under Medical care, Rs. 10.00 lakhs under control of Communicable Diseases, Rs. 7.70 lakhs under Indigenous System of Medicine and Rs. 21.10 lakhs under other programmes.

SECTION 4.

WATER SUPPLY AND SANITATION.

In spite of the efforts made in the previous plans the backlog to be covered in both Rural and Urban Water-Supply and Sanitation facilities is still very large. The present position is that only the 17 district headquarters towns, 20 out of 41 mufasil subdivisional towns and 10 other towns have protected water-supply. Very little has been done under the drainage and sewerage programme. Only part of the capital city of Patna has been provided with storm drainage so far.

Against an outlay of Rs. 5.9 crores in the Third Plan for water-supply and sanitation, it is proposed to provide a sum of Rs. 21.56 crores during the Fourth Plan for the following purposes :—

			(Rs. in lakhs.)
1. Getalsud Water-Supply Scheme	..		7,60
2. Urban Water-Supply	..	..	6,86
3. Urban Drainage	..	..	5,10
4. Rural Water-Supply	..	..	2,00
Total	..	..	21,56

The Getalsud Water-Supply Scheme was taken up during the Third Plan period for providing supply of water to the township of Ranchi and a number of Central Government establishment in the vicinity. It is a combined project for water-supply and hydro-electricity. The original estimated cost of the water-supply part of the project was Rs. 10,56 lakhs. There has been a slight increase in the estimated cost of the project, as indicated below :—

			(Rs. in lakhs.)	
			Original estimated cost.	Revised estimated cost.
Dam and Appurtenant Works	..		6,80	8,17
Water-Supply first and Second phase	..		6,26	6,26
Total	..		13,06	14,43

Out of original estimated cost of Rs. 13,06 lakhs, Rs. 2,50 lakhs was the share of the Bihar State Electricity Board for hydro-electric portion of the project. Thus Rs. 10,56 lakhs was the estimated cost for water-supply alone. Since the cost on Dam and Appurtenant Works have gone up by Rs. 1,37 lakhs, the share of the Electricity Board for the hydro-electric portion would also go up proportionately. So far no contribution has been received from the Bihar State Electricity Board for their share of the cost of the dam. During the Fourth Five Year Plan a provision of Rs. 7,60 lakhs is required to be made for completing the water-supply project. The share of the Bihar State Electricity Board on account of the cost on hydro-electric portion of the dam has

been included in this provision, which would be realised from the Board in due course. By the end of the first year of the Fourth Plan, the entire dam portion of the work and the first phase of water-supply would be completed. The remaining part of the project, i. e., the second phase of water-supply would be taken up in subsequent years of the Fourth Plan.

It is proposed to provide a sum of Rs. 6,86 lakhs for Urban Water-Supply in the Fourth Plan. Of this, Rs. 99 lakhs would be required on account of revision of sanctioned estimated cost of schemes taken up during the previous plans. Because of a rapid increase in population in some of the towns, the existing capacity of water-supply requires augmentation. A provision of Rs. 1,00 lakhs is, therefore, being proposed for extension and reorganisation of the existing schemes. During the drought of 1966-67, a large number of water-supply schemes were taken up as a relief measure. Some of these schemes require conversion into regular water-supply units of permanent utility. It is proposed to take up 16 such schemes during the Fourth Plan. Thirteen of these schemes are at subdivisional towns, where the importance of the place necessitates taking up of these schemes. The remaining three schemes are at Barhiya, Ramgarh and Jaridih where the population exceeds 20,000 according to 1961 census. A sum of Rs. 1,62 lakhs would be required for this during the Fourth Plan. In order to provide piped water-supply facility in all the subdivisional towns in the State during the Fourth Plan period the remaining subdivisional towns would also have to be covered under the urban water-supply programme. For this a provision of Rs. 92 lakhs has been proposed. It is also proposed to provide a sum of Rs. 2,33 lakhs for providing water-supply in some of the populous new towns.

Under sanitation programme practically very little has been done in this State. We have, so far, been able to provide with storm drainage in part of the capital city of Patna. On the basis of the requirements of drainage and sewerage facilities in this State, a number of schemes have been formulated for the towns of Patna, Ranchi, Gaya, Muzaffarpur, Darbhanga, Bhagalpur, Monghyr and Katihar. The total estimated cost of these schemes would come to about Rs. 11 crores. In view of shortage of funds, it is proposed to provide a sum of Rs. 5,10 lakhs during the Fourth Plan period for taking up Drainage and Sewerage Schemes at Patna and Ranchi only.

There are 68,515 villages in the State having a total population of more than 425 lakhs according to 1961 Census. A survey conducted at the instance of Government of India in the year 1966, revealed that at least 15,587 populated villages did not have any hygienic source of water-supply and about 36,000 villages had inadequate source of drinking water supply. It would not be possible to cover this backlog during the Fourth Plan period. For the Fourth Plan, however, it is proposed to make a provision of Rs. 2,00 lakhs for rural water-supply. Of this, Rs. 1,65 lakhs is proposed for construction of drinking wells and Rs. 35 lakhs for piped water-supply. The emphasis has been placed on well construction programme which may not be as hygienic as piped water-supply but will be cheaper and benefit a larger proportion of the population over a wider area. During the Fourth Plan period, it is proposed to cover about 10,000 villages under the drinking water well construction programme.

For 1969-70, it is proposed to provide the sum of Rs. 4,75 lakhs for Water-Supply and Sanitation. Of this, Rs. 400 Lakhs would be provided for the Getalsud Water-Supply Project, Rs. 20 lakhs for Urban Water, Supply, Rs. 25 lakhs for Urban Drainage and Rs. 30 lakhs for Rural Water-Supply Schemes.

SECTION 5
HOUSING.

Improvement of housing conditions has an important bearing on the growth of a healthy nation. Industrial workers, economically weaker sections, Harijans, landless and houseless agricultural workers and slum dwellers, etc. particularly need assistance in the matter of improved housing conditions. Despite the schemes included in the First, Second and Third Five Year Plans, the shortage of housing facilities continues. During the last few years the growth of new and heavy industries in the industrial belts in Bihar has aggravated the housing problem which calls for urgent attention.

2. There are four important schemes under this sector, namely, the Integrated Subsidised Housing Scheme, the Low Income Housing Scheme, Village Housing Scheme and the Scheme of Slum Clearance and Improvement. Under the Integrated Subsidised Housing Scheme about 2,830 houses were constructed during the First Plan period for the Industrial workers. During the Second Plan period about 4,980 houses were constructed for Industrial workers at Jamshedpur, Adityapur, Kumardubi and Katihar. During the Third Plan period the progress was hampered by national emergency. However, during this period 4,377 houses were constructed at Gomia, Dalmianagar and Jamshedpur. During the three years from 1966-67 to 1968-69 the scheme continued to suffer because of the stringent financial conditions prevailing in the State. About 700 houses were constructed during 1966-67 and 1967-68. In the current year about 200 more houses are expected to be constructed at Gomia.

3. Low and Middle Income Housing Scheme was initiated in the last year of the First Plan. The Scheme, however, gathered momentum in the Second Plan during which period 2,145 houses were constructed throughout the State. During the Third Plan the scheme suffered a set-back due to non-availability of funds and only 1,152 houses could be constructed. During 1966-67, 332 and 170 houses respectively were constructed.

4. The Village Housing Scheme was introduced during the Second Plan with a view to ameliorating the appalling housing conditions in the villages where majority of the population live. But due to the poor economic condition of villagers and lack of consciousness on their part in the matter of better housing facilities, the scheme did not make much progress. During the Third Plan period also the scheme failed to become much popular and only 80 houses could be constructed during the Third Plan period. During 1966-67 and 1967-68, this scheme was discontinued. In the current year's plan, however, a provision of Rs. 2.00 lakhs has been made for taking up the scheme in seven selected villages.

5. The Slum Clearance and Improvement scheme has been introduced from the Second Plan period with a view to clearing the slum that have grown and are daily growing for want of planned building in the urban areas. During the Second Plan two slum clearance schemes at Gaya and Patna were sanctioned but only one project of Patna, that is for 64 tenements, was completed during the Plan period. In the Third Plan about 208 tenements were constructed. This scheme too like the Village Housing Scheme continued to remain unpopular.

6. Against an outlay of Rs. 278.40 lakhs for Housing during the Third Plan period, it is proposed to provide Rs. 500.00 lakhs during the Fourth Plan with the following distribution :—

		(Rupees in lakhs.)	
		Outlay proposed, 1969—74.	Outlay proposed, 1969-70.
1. Integrated Subsidised Housing :			
(a) Housing for Industrial Workers	190	}	18
(b) Housing for economically weaker sections	100		
2. Housing for Low Income group people	175		9
3. Housing for rural people including Harijans, landless, agricultural workers.	25		3
4. Slum clearance/improvement scheme	10		..
Total ..	500		30

Under the Integrated Subsidised Housing Scheme it is proposed to construct 2,741 houses for Industrial workers at a total cost of Rs. 190.00 lakhs. Out of this, Government would directly construct 2,000 houses at Gomia, Jamshedpur and Dhanbad at a cost of Rs. 140.00 lakhs. The remaining sum of Rs. 50.00 lakhs would be spent on giving financial assistance to the employers for construction of 714 houses for Industrial Workers. For the economically weaker section of the community, that is persons whose monthly income does not exceed Rs. 350 it is proposed to construct 1,428 houses at a cost of Rs. 100.00 lakhs.

Under the Low Income Group Housing Scheme, it is proposed to construct 708 houses directly by the Government at a cost of Rs. 88.50 lakhs. Besides this, Rs. 86.500 lakhs would be advanced as loan to various housing co-operative societies and individuals enabling construction of 692 houses.

Even though the Village Housing Project did not become popular in this State, the State Government is keen and serious to see that the scheme makes progress during the Fourth Plan. This would depend on the response and zeal of the rural people and also of the local officers. It is proposed to spend Rs. 20.00 lakhs during the Fourth Plan with which 330 houses would be constructed, 1,334 house sites would be improved and improvement of streets and drains in 30 villages would be taken up. Another sum of Rs. 5.00 lakhs is proposed to be made available for the establishment of the rural housing cell.

Slum clearance and improvement has been a Centrally-sponsored scheme during the Third Plan period in which the Government of India shared 75 per cent of the cost. The requirements of spill-over schemes so far taken up alone comes to Rs. 73.30 lakhs out of which the share of the State Government should be Rs. 18.32 lakhs. But from the present indications it appears that this scheme would now become a State Scheme. An outlay of Rs. 10.00 lakhs is being proposed in the Fourth Plan for taking up part of spill-over commitment. Out of the total provision of Rs. 500.00 lakhs proposed for housing in the Fourth Plan, the outlay kept for 1969-70 is Rs. 30 lakhs. Under Integrated Subsidised Housing and Low Income Group Housing Schemes respectively 256 and 72 houses would be constructed. Village Housing Scheme would be taken up in three villages.

URBAN DEVELOPMENT.

To secure orderly development of towns and cities, town planning is indispensable. The number of towns and cities in Bihar increased from 108 in 1951 to 153 in 1961 and their population rose from 2.63 million to 3.91 million in the period. Increase in urban population necessitates provision of amenities as also measures to check the haphazard growth of the cities.

During the Third Plan, Town Planning authorities were set up at Bodh Gaya, Bokaro and Rajgir. Work was also started on the preparation of Master Plans for adityapur-Jamshedpur, Barauni-Begusarai, Dehri-Sasaram and Dhanbad-Sindri complexes and for Bhagalpur, Bodh Gaya, Bokaro, Darbhanga, Gaya, Hazaribagh, Muzaffarpur, Patna, Patratu, Rajgir and Ranchi.

Against an outlay of Rs. 41.55 lakhs in the Third Plan, it is proposed to provide Rs. 60 lakhs for Urban Development in the Fourth Plan. Of this Rs. 19.60 is proposed for establishment of Improvement Trusts and Town Planning authorities, Rs. 30 lakhs for preparation of Master Plans, Rs. 7 lakhs for provision of civic amenities, like construction of municipal markets, etc. and Rs. 3 lakhs for setting up of a Central Valuation Organisation. The Central Valuation Organisation is proposed to be set up on a statutory basis to help local bodies to assess the value of property and realise taxes on the same. Besides, the proposal also includes provision of training in town planning. For 1969-70 a provision of Rs. 10 lakhs has been proposed.

SECTION 7

WELFARE OF BACKWARD CLASSES.

There is a large percentage of tribal and backward classes population in the State. According to the census of 1961, Bihar had a little over 6.5 million persons belonging to the Scheduled Castes, and a little over 4.2 million persons belonging to the Scheduled Tribes. Of the total population of Scheduled Castes and Scheduled Tribes in the country, about 11.38 per cent was concentrated in Bihar, where they comprised 23.12 per cent of the State's population. Apart from the Scheduled Castes and Scheduled Tribes, there is a large number of persons in this State who belong to 'Other Backward Classes'. No separate enumeration was done of these 'Other Backward Classes' in the 1961 census but their population was well over 6.2 millions or 15.7 per cent of the State's population according to the 1951 census. Thus about 40 per cent of Bihar's population is constituted of people belonging to Scheduled Tribes and Scheduled Castes and other Backward Classes for whom a special responsibility has been placed on the State under the Constitution.

The programme of welfare of Backward Classes could be divided under the categories of schemes for educational development, economic uplift and provision for health, housing and other facilities. The emphasis so far has been on the programme of educational development. In the previous plans the scheme implemented for educational development included the award of pre-matric stipends, scholarships, freeships, boarding grants, hostel facilities and aid to the voluntary organisations for running educational institutions. Under the programme of economic uplift subsidies were given for agricultural purposes, like purchase of ploughs, bullocks, improved seeds and fertilizers. Among the other schemes of economic development were establishment of grain-golas, supply of poultry birds, pigs, milch cattle, etc. Programmes of welfare of Backward Classes also included subsidies for housing, medical aid and construction of drinking water-wells.

Against an outlay of Rs. 4.73 lakhs in the Third Plan it is proposed to provide a sum of Rs. 5.00 lakhs in the Fourth Plan. The distribution of the proposed outlay on different types of programmes is indicated below :—

(Rupees in lakhs.)

		Educational programme.	Economic uplift.	Health, Housing, etc.	Total.
1	2	3	4	5	
Scheduled Tribes	..	188.60	53.40	23.00	265.00
Scheduled Castes	155.20	23.90	20.90	200.00
Other Backward Classes	..	35.00	..	..	35.00
TOTAL	..	3,78.80	77.30	43.90	5,00.00

Scheduled Tribes.—Emphasis in the Fourth Plan would continue to be on educational development. As regards developmental projects under Agriculture, Industries, Communication, etc., every effort will be made to ensure that tribal

areas get their due share. Of the proposed outlay of Rs. 2,65 lakhs for the welfare of Scheduled Tribes, Rs. 1,88.60 lakhs is proposed to be spent on educational programmes. Efforts in the previous plans have made education popular among these people. During the Fourth Plan, it is proposed to award stipends to 4,100 high school students, 36,110 primary and middle school students and 3,340 students reading in technical institutions. 1,62,500 school students would be exempted from payment of tuition fees. Besides, it is proposed to open five new residential schools and 40 Adivasi hostels. Under the programme of economic uplift, 47 grain-golas would be opened and agricultural subsidy would be given to 5,200 families for purchase of bullocks, seeds, etc. A provision of Rs. 23 lakhs is being proposed for health, housing and other facilities, out of which Rs. 15.90 lakhs would be spent on construction of 1,272 drinking water-wells.

Scheduled Castes.—An outlay of Rs. 2.00 lakhs is proposed for the welfare of Scheduled Castes. Of this, Rs. 1,55.20 lakhs would be spent on educational development, Rs. 23.90 lakhs on economic uplift and Rs. 20.90 lakhs on health, housing and other facilities. It is proposed to award stipends to 57,100 high school students, 95,620 primary and middle school students and 1,170 students in technical institutions. Six residential schools and 28 Harijan hostels would be opened and book grants would be awarded to 4,800 students. Schemes of economic uplift includes grant of agricultural subsidy to 3,140 Harijan families for purchase of bullocks, seeds, agricultural implements, etc. Under the programme of provision for health, housing, etc., it is proposed to construct 1,180 drinking water-wells.

Other Backward Classes.—Persons belonging to these classes are provided with educational facilities only. During the Fourth Plan, it is proposed to spend Rs. 35 lakhs on grant of stipends to 20,770 high school students, 17,600 primary and middle school students and 375 students in technical institutions.

For 1969-70, an allocation of Rs. 70 lakhs has been proposed. Of this, Rs. 36.95 lakhs would be spent on Scheduled Tribes, Rs. 26.75 lakhs on the Scheduled Castes and Rs. 6.30 lakhs on other Backward Classes.

SECTION 8

SOCIAL WELFARE.

Social Welfare Programme aims at providing the certain supplementary welfare services and supporting voluntary efforts towards eradication of social evils. This sector is concerned mainly with programmes and schemes relating to women welfare, eradication of beggary, social defence, rehabilitation of the handicapped and allied matters.

Against an outlay of Rs. 19 lakhs in the Third Plan it is proposed to provide a sum of Rs. 20 lakhs in the Fourth Plan. One important feature in the Fourth Plan will be that the Family and Child Welfare Programme which has been accounting for the largest chunk of expenditure in the previous plans will be transferred to the Central Plan and, therefore, no provision on the scheme is required to be made in the State's Plan. This will make room for a little better provision on other schemes. The distribution of the proposed outlay of Rs. 20 lakhs will be as indicated below:—

				(Rs. in lakhs.)
Women Welfare	..	..	..	1.12
Eradication of Beggary		..	..	3.44
Social Defence	..	..	..	8.25
Rehabilitation of the Handicapped			..	2.67
Grant-in-aid to Voluntary Organisation			..	4.20
Training, Research and Administration			..	0.32
			Total	20.00

Under the scheme of Women Welfare it is proposed to expand and reorient the existing After-Care-home at Patna which was established in the Second Plan period. Under the scheme of eradication of beggary it is proposed to establish a reception centre at Patna and work centre at Deoghar for the beggars. It is also proposed to expand the Beggars' Home at Patna for accommodating disabled beggars. The Social Defence Programme is concerned primarily with the problem relating to prevention of crime and treatment of offenders. It is proposed to set up Remand homes and Children's homes for the care and protection of juvenile delinquents. Besides, the programme includes award of stipends to handicapped children reading in schools and colleges, and grant-in-aid to voluntary organisations looking after the work of eradication of social evils.

For 1969-70, a provision of Rs. 1 lakh has been proposed for the schemes of Social Defence, rehabilitation of the handicapped and grant-in-aid to Voluntary Organisations.

CRAFTSMEN TRAINING AND LABOUR WELFARE.

A steady supply of skilled and trained personnel is an essential pre-requisite for the success of industrial development. Accordingly, considerable emphasis was given in the previous plans to the training of Craftsmen. At the end of the Second Plan there were 18 Industrial Training Institutes in the State with about 5,000 seats. At the end of the Third Plan the number of the Institutes rose to 29 with about 13,000 seats. During the years from 1966-67 to 1968-69 though no new institutes were opened, a total of about 800 seats were added in some selected institutes. About 3,000 apprentices are undergoing training under the Apprentices Act.

The rapid expansion of the training programme in the previous plans has resulted in the shortage of trained instructors, equipment, accommodation and other facilities. Emphasis in the Fourth Plan, therefore, would be on removing these deficiencies. The duration of training in some of the courses was reduced from two years to one as a result of reorganisation of the training programme in 1966. This has increased the turn-over of the Institutes even without an actual increase in the number of seats. At the same time employment potential has also shrunk in some of the trades and vocations. This calls for diversification of the training programme on the basis of availability of employment opportunities.

Against the expenditure of Rs. 2.46 lakhs on Craftsmen and Apprenticeship Training Programme in the Third Plan, an outlay of Rs. 3.50 lakhs has been proposed for the Fourth Plan, out of which Rs. 2.93 lakhs is on Craftsmen Training, Rs. 48 lakhs on Apprenticeship Training and Rs. 9 lakhs on other schemes. A large bulk of the proposed outlay would be on spill-over expenditure of buildings and equipments. For completing the buildings for the Institutes and hostels and also for making up deficiency in equipment an amount of Rs. 160 lakhs has been provided. There is paucity of training aids and training materials and even text-books of suitable standard for the trainees of the Industrial Institutes are not available. For ensuring uniformity of standard of training in all the Institutes, it is, therefore, proposed to establish a central agency which can constantly keep in touch with the changing techniques and prepare exercises and other training materials for all the Institutes. A provision of Rs. 15 lakhs has been proposed for this. Besides these, the proposals include Refresher Training Courses for instructors, re-organisation of the Directorate, diversification of courses, construction of staff quarters, etc.

During the Fourth Plan it would be necessary to expand Apprenticeship Training. At present there are only 3,000 apprentices all over the State. The number of apprenticeship places available would have to be linked with the number of skilled workers engaged in industries. It is expected from the level of industrial development in Bihar that at the end of the Fourth Plan about 10,000 apprenticeship positions would be required. A sum of Rs. 48 lakhs is, therefore, proposed to be provided for expansion of apprenticeship positions from 3,000 at present to 10,000 at the end of the Fourth Plan.

For Labour Welfare and Administration, Employees' State Insurance Scheme and Man-power and Employment Programme, it is proposed to provide a sum of Rs. 60 lakhs in the Fourth Plan. Under Labour Welfare and Administration, it is proposed to strengthen the Factory Inspectorate and the machinery for enforcement of Labour Laws, reorganise Boilers Inspectorate and set up Training-cum-Production section in the State Labour Welfare Centres. A provision of Rs. 16 lakhs has been proposed for these.

At present about 65,000 family units are in receipt of medical benefit in the State through a net work static and mobile dispensaries and hospitals under the

Employees' State Insurance Scheme. It is expected to cover 2,300 additional family units at Ramgarh in the current year. During the Fourth Plan, it is proposed to cover 1,42,500 family units including workers of shops and commercial establishments. A sum of Rs. 14 lakhs has been proposed for this.

Planning for the development of man-power, resources is an integral part of economic planning. Man-power, particularly technical and specialised man-power, is the key resource required for economic development. In the Fourth Plan, a sum of Rs. 30 lakhs has been proposed for Man-power and Employment Schemes. It is proposed to open seven new Employment Exchanges and upgrade and expand the existing ones. The Employment Market Information Programme would also require expansion during the Fourth Plan. Besides, the proposals include construction of buildings for the exchanges, expansion of Employment Planning and Research Cell, etc.

For 1969-70, a provision of Rs. 60 lakhs has been proposed for Craftsmen Training and Labour Welfare Schemes. Of this, Rs. 46.50 lakhs is on Craftsmen Training, Rs. 8 lakhs on Apprenticeship Training, Rs. 2.25 lakhs on Labour Welfare and Administration, Rs. 3 lakhs on Man-power and Employment Schemes and Rs. 0.25 lakh on Employees' State Insurance Scheme.

SECTION 10

PUBLIC CO-OPERATION

Public co-operation both in formulation and implementation of the plan scheme is an important factor for the success of our developmental plans. So far the schemes under public co-operation have been Centrally-sponsored in which the expenditure was shareable between the Centre and the State Government in the ratio of 60: 40. Under the revised pattern of Central assistance, the programme is expected to be kept in the State Sector. Due to financial difficulties very little could be provided for schemes under this programme during 1966-67, 1967-68 and 1968-69

For the new Fourth Plan, an outlay of Rs. 5.00 lakhs is being proposed for Public Co-operation with the following distribution :—

					<i>(Rs. in lakhs.)</i>
(1) Planning Forums	..	..	..	..	1.45
(2) Association for Moral and Social Hygiene			..	..	0.50
(3) Research cell for Public Co-operation in Planning Department					1.35
(4) Others	..	..	..	..	1.70
Total					5.00

Annual phasing for this programme would be as indicated below :—

(Rs. in lakhs.)

1969-70	1970-71	1971-72	1972-73	1973-74	1969—74
1	2	3	4	5	6
0.50	1.00	1.10	1.20	1.20	5.00

Planning Forum.—At present there are about 130 Planning Forums organised in different colleges in the State. It has been found from experience that the grants given to the Planning Forum could be better utilised by reorganising the programme.

It is, therefore, proposed to organise debates and essay competition at the college level and State level on subjects relating to Planning. We feel that this would be more useful and the students would participate in the programme with more enthusiasm. The operating part of this scheme would be that the various planning Forums would arrange debating competition on certain given subject and recommend two or three best speakers for participating in the debates to be held at the University level. The University will ultimately send three or four best speakers to participate in the debates to be held at the State level. The cost on travelling allowances as well as prizes, etc., for the participants would come to about Rs. 10,000 annually. Similarly for arranging essay competition the approximate cost would come to Rs. 5,000. Besides these, grants will be made to some selected planning forums for conducting evaluation studies, survey, etc.

Association for Moral and Social Hygiene.—The State branch of this association has so far been getting a grant of Rs. 7,500 annually from us. It is proposed to enhance the grant to Rs. 10,000 annually during the Fourth Plan period.

Research Cell for Public Co-operation Programme.—This cell is proposed to be created for studying and identifying the sectors in which voluntary organisations could be of effective help. The cell would also formulate schemes that will be more effective in ensuring co-operation from the people. It is proposed to provide Rs. 1.35 lakhs in the Fourth Plan for this scheme.

Others.—A lump provision of Rs. 1.70 lakhs, therefore, is being proposed for schemes like National Consumer's Service through which an effective price resistance movement, check in food adulteration, consumer consciousness, etc., are expected to be built up.

For 1969-70 provision of Rs. 0.50 lakh is being proposed for the public co-operation programme. The major portion of this provision will be for the Planning Forums under which statewide debating and essay competitions would be held for making the student community more interested and involved in the developmental efforts in the country. Besides these, some of the capable planning forums would be entrusted with some evaluation study, survey, research, etc. The distribution of the provision of Rs. 0.50 lakh will be as follows:—

		(Rs. in lakhs.)
(1)	Planning Forum ...	0.25
(2)	Grant to Association for Moral and Social Hygiene	0.10
(3)	Creation of research cell on Public Co-operation	0.15
	Total	0.50

G. MISCELLANEOUS.

SECTION 1

STATISTICS.

Statistics is vital to both Plan formulation and evaluation. In a federal set up, it is also necessary that all the constituent units collect and compile statistics on a uniform basis. If this is not done, a gap anywhere will constitute a gap everywhere. In order to avoid this situation, the Planning Commission have evolved, following the recommendations of the Conference of Central and State Statisticians in July, 1965, a set of nine schemes to form the core of a national system of statistics. These schemes are (a) Improvement of State Income estimates, (b) Creation or strengthening of a unit of Statistics for Resources Planning, (c) Creation or strengthening of a Unit for Mechanical Tabulation of Data, (d) Training Programme, (e) Preparation of Municipal Statistics Year Books and District Statistical Hand Books, (f) Collection of Statistics relating to Village and Small Scale industries, (g) Survey of Goods Traffic by road, (h) Survey of Distributive Trade, and (i) Housing Statistics. In the Fourth Plan proposals of the State Government an attempt has been made to include as many as seven of the nine core schemes, six in the Statistics sector and one in the Industries sector. The schemes not included are Survey of Distributive Trade and a unit for Resources Planning.

The outlay for the general Statistics schemes has been proposed to be kept at Rs. 16 lakhs. In addition, another sum of Rs. 2.50 lakhs has been proposed for agricultural statistics schemes. The requirement of funds for general Statistics and agricultural statistics schemes in 1969-70 has been estimated at Rs. 2.50 lakhs and Rs. 0.50 lakh respectively. The details of the schemes proposed are given below :—

Creation of a Training Section.—The Directorate of Statistics has a cadre strength of over a thousand consisting of Junior and Senior Statistical Assistants, Supervisors and Statistical Officers. In addition, there are about 12,000 V. L. Ws. and Karmacharis who act as primary reporting agencies. A great bulk of this statistical personnel, however, does not have either theoretical knowledge or practical experience of statistics as a result of which the outturn of work is of poor quality. The amateurish character of the statistical personnel is mainly due to the existing recruitment and promotion rules. Pending a revision of these rules, the only way out appears to be to give them adequate training. With this end in view, a training programme has been formulated which is estimated to cost Rs. 3.65 lakhs in the Fourth Plan and Rs. 0.57 lakh in 1969-70. Under the programme, about a hundred people will be trained every year in batches of 25 each, making a total of five hundred in the entire plan period. The training will be of three months' duration and will be organised both at the Headquarters and in the four Divisions. The programme at the Headquarters will cover the statistical personnel of the Department while that in the Divisions will cover the primary reporters. The entire programme will be managed by a Deputy Director and three Assistant Directors. These posts would be created during the plan period.

Strengthening of a Mechanical Tabulation Unit and Creation of an Analysis Section.—The Mechanical Tabulation Unit was first created in 1957 in the Directorate of Statistics to process the data thrown up by the National Sample Survey. Since then, it has been working with a few operators in a single shift. Owing to the inadequacy of the staff, it has not been possible for the unit to process the data beyond the sixteenth round, though the N. S. S. have finished their twenty-second round. Similarly, it has not been possible either to analyse the data, or to prepare any report. It is, therefore, proposed to strengthen the Unit by addition of suitable staff and also provide for an analysis section for the same. The amount required for this in the Fourth Plan period is Rs. 8.12 lakhs and

Rs. 1.41 lakhs in 1969-70. The scheme visualises appointment of an Assistant Director and other complement of staff. If the scheme is implemented, not only the back-log in tabulation of data will be cleared but it would also be possible to analyse the same and produce reports on them.

Improvement of State Income estimates.—The Directorate of Statistics estimates and releases an annual paper on the State's income. There are several gaps, however, in the estimate of State's income. Moreover, there are no estimates of district incomes. It is proposed, therefore, to fill in the gaps in the State income estimates by collecting fresh data on the subject and to evolve suitable methodology for computation of district incomes. The total cost of the scheme in the Fourth Plan period is estimated to be Rs. 2.38 lakhs and the amount required in 1969-70 is Rs. 0.41 lakh. The implementation of the scheme would also require appointment of an Assistant Director and other necessary staff.

Housing and Municipal Statistics.—Presently, there is no data of building activity either in the public or in the private sector. This gap constitutes a serious handicap in the estimate of State and district incomes, or in solving the housing and urban development problems. It is, therefore, proposed to create Housing and Municipal Statistics cells in the Public Works Department and the Local Self-Government Department for collecting data relating to building activities in the public and private sectors respectively. Each of these cells would be staffed by two Senior Statistical Assistants. The cost of the scheme in the Fourth Plan period is estimated to be Rs. 0.73 lakh and the provision in 1969-70 has been kept at Rs. 0.11 lakh.

Survey of Goods Traffic.—There is no data available at the moment in regard to movement of goods by road. This deficiency hampers formulation of particular policies and programmes relating to supply and commerce, road and road transport development. It also constitutes a gap in the estimation of State income. The scheme, therefore, proposes to fill in this gap in data through surveys of goods traffic by road. In the Fourth Plan period, however, only two surveys, one in 1970-71 and another in 1973-74, are planned. The surveys would be organised at fifty selected centres throughout the State. The surveys would be conducted with the help of the district authorities. The total cost of the scheme in the Fourth Plan period is estimated to be Rs. 1.12 lakhs. No provision of funds is required to be made in 1969-70.

Agricultural Statistics.—One of the significant gaps in agricultural statistics relates to the estimates of the area and production of fruits and vegetables. In the past, some attempts have been made to fill in this gap through pilot surveys of mangoes, liches, bananas and jackfruits. Similarly, attempts have been made to estimate the area and production of vegetables such as potatoes and onions. The attempts, however, are not considered adequate. It is, therefore, proposed to cover more fruits and vegetables. The total cost of the scheme is estimated to be Rs. 2.50 lakhs and the cost in year 1969-70 Rs. 0.50 lakh. The implementation of this scheme would require appointment of a Statistical Officer and other staff.

SECTION 2

INFORMATION AND PUBLICITY.

In the First Plan, information and publicity schemes were not included in the plan, though 3,146 Community Listening sets were purchased and installed in the different villages of the State. In the Second Plan period the Directorate of Public Relations was suitably strengthened and a field organisation with 6 Field Publicity Units and 23 Information Centres was also built up. A workshop at the headquarters for repair of departmental vehicles was also established. The number of Community Listening sets purchased and installed was 3,931. In the Third Plan, the Field Publicity Units and Information Centre schemes were extended to 17 Subdivisions. In addition, 2 Mobile Exhibition Units and 2 rural dramatic troupes were also set up. The number of Community Listening sets purchased and installed during the period was 2,000. In the period of the annual plans, 1966—69, there was no fresh activity except organisation of rural radio forums the number of which is expected to reach a figure of a thousand by the end of year 1968-69.

In the Fourth Plan period, a sum of Rs. 25 lakhs has been proposed for the various information and publicity schemes. The requirement of funds in 1969-70 is estimated to be Rs. 5 lakhs. The details of some of the important schemes included in the sector are as indicated below :—

Community Listening sets.—It is proposed to purchase and distribute 2,000 Community Listening sets in the different villages of the State in the Fourth Plan period. The sum required for the purpose would be Rs. 6.65 lakhs in the entire plan period and Rs. 0.90 lakh in 1969-70. The number of sets that would be purchased and distributed in 1969-70 is kept at 400.

Information Cells.—In pursuance of the recommendations of the Study Team on Information and Community Centres, it is proposed to establish six Information Cells in selected groups of Government Departments at a cost of Rs. 2.70 lakhs in the Fourth Plan period. The Cells would collect and disseminate information about the activities of the Government Departments in which they would be located. Each of them would be managed by an Assistant Director and other staff which posts would be created in the plan period. In 1969-70, three such Cells would be set up at a cost of Rs. 0.73 lakh.

Field Publicity Units and Information Centres.—It is proposed to establish 9 Field Publicity Units and 9 Information Centres at the Subdivisional headquarters of the State which are not already covered under the scheme. It is proposed to appoint an Additional District Public Relations Officer and a Receptionist each, together with other staff, for manning the Field Publicity Units and Information Centres respectively. The total cost of the scheme in the Fourth Plan period is estimated to be Rs. 7.65 lakhs. In 1969-70, 3 Field Publicity Units and Information Centres are proposed to be set up at a cost of Rs. 1.75 lakhs.

Workshops.—Although a workshop was set up in the Second Plan period at the State's headquarters for repair of departmental vehicles and equipments, it has not yet been possible to construct a building for the same and the workshop has to work in hired private buildings and pay heavy rents. It is, therefore, proposed to construct a building at Patna for the same at an estimated cost of Rs. 2 lakhs. It is proposed to spend Rs. 1 lakh over the scheme in 1969-70.

In addition to the above scheme, it is also proposed to have a Mobile Exhibition Unit (Rs. 1 lakh), a rural dramatic troupe (Rs. 0.50 lakh), publications on the life and work of great men of Bihar (Rs. 0.50 lakh) and 500 rural radio forums (Rs. 0.50 lakh). The schemes relating to Press Advertisements (Rs. 1.50 lakhs) and Film Publicity (Rs. 2 lakhs) would also be continued.

SECTION 3

EVALUATION.

Evaluation of plan programmes is a necessary complement of the planning process. It enables location of difficulties and shortcomings in the programmes so as to make suitable amends in the same. With this end in view, the State Government set up a Directorate of Evaluation in the State in 1960 in the Planning Department which was later integrated with the Directorate of Statistics. In the last few years, the Directorate of Statistics and Evaluation has taken up studies relating to high yielding varieties programme, major, medium and minor irrigation programmes, improved agricultural practices programmes, key village programmes, village and small-scale industries programmes and Panchayati Raj. The scale of the evaluation efforts, however, is not considered adequate. It is, therefore, proposed to take up more programmes for evaluation by suitable strengthening of the evaluation organisation in the State. The total cost of the scheme in the Fourth Plan period is estimated to be Rs. 5 lakhs and that in 1969-70 Rs. 0.50 lakh. The provision will be just sufficient to strengthen the organisation at the headquarters level. It will not enable setting up of any regional evaluation units in the State.

CHAPTER VI.

ORGANISATIONAL MEASURES.

In course of the three Five Year Plans the different Development Departments of the State Government have been strengthened from time to time, at different levels, according to necessity. In the Agriculture Department the post of Agriculture Production Commissioner was created towards the end of the Third Plan with the object of ensuring co ordination at a high level between Agriculture, Co-operation, Community Development and Minor Irrigation Departments connected with the agricultural production. With the availability of irrigational facilities in the Kosi river valley area various local problems regarding construction of field channels, supply of agricultural inputs, services of experts and other extension workers, cropped up and it was felt that a high-level officer with wide powers and having his headquarters in the locality could not only solve these problems as they came up but also give guidance and advice to the local officials and non-officials in making the drive for agricultural production a success. Accordingly the post of Kosi Area Development Commissioner was created in the rank of a Divisional Commissioner. This has paid rich dividends in the rapid development of the area.

The growth of industries in the State, particularly in the private sector, has been lagging behind. Some of the reasons advanced are the want of proper liaison with private enterprise ; inadequate publicity of the facilities that are available ; want of encouragement to potential entrepreneurs and lack of co-ordination in the drive for industrialisation. In order to remove these difficulties the State Government has recently created the post of an Industrial Development Commissioner in the rank of a Divisional Commissioner. The IDC will be primarily a field officer with powers delegated by different departments. His main job will be to remain in close touch with the problems in the field, resolve difficulties at the spot as far as possible and pursue various pending matters at different levels. It is expected that it would be possible for this officer to energise industrial development in the State.

The co-operative movement which was weak in this State is gradually gaining strength. To enable the co-operative institutions to play their part fully in the present context of increasing emphasis on institutional financing particularly in the agricultural field, it is essential to improve supervision and also to strengthen the managerial staff. In the Fourth Five Year Plan it is proposed to increase financial assistance from the State to the co-operative societies to enable them to appoint full-time managers. Arrangement will also be made for the proper training of these managers. Arrangement is also being made for more frequent inspections and audit of co-operatives.

Though Gram Panchayats have been in existence in Bihar for about 20 years, democratic decentralisation was introduced at the district and block levels in the shape of Zila Parishads and Panchayat Samitis only four years ago. The Bihar Panchayat Samitis and Zila Parishads Act is at present in force in three out of seventeen districts of the State. The State meets the total cost on the pay and allowances of the Panchayat Sevaks of about 11,000 Gram Panchayats. Suitable grants are also made to the Panchyati Raj Institutions at the block and district levels. In the 'Panchayati Raj' districts the staff engaged in development work transferred to Panchayat Samitis and Zila Parishads are under the administrative control of these bodies though technical supervision rests with the concerned departments of Government. The question of reorganisation of staff particularly at the village level in order to streamline the administration is under the active consideration of the State Government. At the district level the Collector is the co-ordinator of all development activities and he functions as the leader of the team of the different district level technical officers of the concerned departments. Similarly at the block level the B. D. O. functions as the leader of the development team but there is scope for greater utilisation of the block as a common agency for all local development works. By the end of the Fourth Five Year Plan most of the development blocks will be either in stage II or post-stage II phase. The State Government are considering how best the staff in the block can be utilised fully, keeping in view the programme of extension of Panchayati Raj to a larger number of districts.

CHAPTER VII.

REVIEW OF THE ECONOMIC CONDITION OF BACKWARD CLASSES, SMALL FARMERS, LANDLESS LABOURERS, VILLAGE ARTISANS, ETC.

The backward classes consist of the scheduled tribes, the scheduled castes and other castes notified from time to time as being educationally and economically backward by the State Government.

A little less than 40 per cent of Bihar's population is composed of such people. According to the 1961 census the scheduled tribes numbered over 42 lakhs, the scheduled castes 65 lakhs and other backward classes well over 62 lakhs (according to the 1951 census). While the scheduled tribes inhabit the Chotanagpur Plateau, including Santhal Parganas, the scheduled castes and other backward classes are spread throughout the State.

The tribal population is overwhelmingly rural in nature, the 1961 census showing 97.39 per cent of them living in the villages. Again 78.1 per cent of the Adivasi workers of all categories depend on agriculture for their livelihood. Though 60% of the cultivating tribal households have between one and five acres of land and 30 per cent have between 2.5 and five acres, these figures being higher than the average Bihar rates, the tribal farmer is less prosperous than his counterpart in the plains because of the low productivity of the Chotanagpur Plateau soil. In addition, the Chotanagpur Tenancy Act, by restricting the transfer of Adivasis' lands, has made it difficult for them to secure long-term and medium-term agricultural credit from recognised institutions by pledging their lands. The large-scale alienation of Adivasis' lands and the illegal transfer of possession of their lands to outsiders by means of collusive civil suits, together with the acquisition of Adivasis' lands for large industrial projects located in Chotanagpur, have added to the complications.

Some of the measures proposed for the economic betterment of the tribals are :—

- (a) *Giving them agriculturists subsidies for the purchase of bullocks, seeds, etc.*—In the Fourth Plan the provision is for 26 lakhs to benefit 5,200 tribals. In the Third Plan Rs. 12.65 lakhs were spent on this.
- (b) *Subsidies for the development of horticulture.*—Under this scheme it is proposed to supply free seeds, grass, saplings, fertilizers, etc. up to the maximum limit of Rs. 200 worth per Adivasi per year. This is a new scheme and Rs. one lakh has been provided in the Fourth Plan.
- (c) *Subsidies for cottage industries.* A provision of Rs. 2.5 lakhs has been provided in the Fourth Plan as against Rs. 1.37 lakhs in the Third Plan.
- (d) *Distribution of improved bucks and boars.*—Rs. 1 lakh is proposed to be spent on this item.
- (e) *Distribution of improved poultry.*—Rs. 1 lakh is proposed to be provided for this item in the Fourth Plan.
- (f) *Construction of hill Path Ways.*—Rs. 1 lakh has been earmarked for this in the Draft Fourth Plan. Rs. 4.35 lakhs was spent on this item in the Third Plan.

Apart from these special schemes, a number of schemes in the general programmes of development have been selected with an eye to the benefit which will accrue to the tribal population from them. For example, in the Irrigation Plan the Sunder Reservoir Scheme and the Mohane Barrage Scheme are primarily meant for the benefit of the tribals.

Under Industries, the Tassar Silk Rearing Scheme will be expanded in order to provide a gainful subsidiary occupation to supplement the meagre income of the Adivasis.

Under the Forestry Programme a number of activities like the construction of forest roads, silt-retention dams and weirs working of forest coupes, etc., will provide large-scale employment opportunities to the tribal people. Forest workers co-operative societies are being organised with a view to improve the economic condition of the Adivasis. Nearly 200 such societies have been organised so far. In the Fourth Plan a provision of Rs. 3.80 lakhs for giving financial assistance to 40 co-operative societies has been made.

In addition the State Government are currently examining if any special schemes can be taken up for the benefit of the tribals with additional grant from the Government of India, over and above grants already available under Article 275 of the Constitution.

As regards scheduled castes, agriculture is their main-stay but no less than 54.9 per cent of scheduled caste workers of all categories consist of agricultural labourers. The average size of land holding of a scheduled caste cultivator is also very small. 47.5 per cent of their cultivating households have holdings of less than one acre. The occupational diversification of scheduled castes is also less than that of the other people living in the plains of Bihar.

The scheduled castes will be economically helped by the following schemes in the Fourth Plan :—

- (a) *Subsidies to Harijan agriculturists for purchase of bullocks, seeds and agricultural implements and also for wasteland reclamation*—A provision of the Rs. 15.70 lakhs is being made in the Fourth Plan to benefit 3,140 persons. The subsidy is limited to a maximum of Rs. 500 per family.
- (b) *Subsidy for cottage industry and other professions in the Fourth Plan.*—Rs. 5 lakhs is expected to be given as subsidy to scheduled castes, to establish them in cottage industries or professions such as running of tea-stalls, laundry shops, hair-cutting saloons etc. 1 000 persons should be benefited.
- (c) *Organisation of co-operative societies for the municipal and conservancy staff.*—This scheme consists of saving Harijans from heavy indebtedness to professional money-lenders through the financing of sweepers' co-operative credit societies organised through the Bihar Harijan Sevak Sangh. A provision of Rs. 3.20 lakhs is proposed to be made in the Fourth Plan.

The other backward classes will be benefiting from the general programmes of economic development. However, in view of their economic backwardness, some special educational schemes like the award of stipends, book grants, etc. are envisaged for them in the Fourth Plan.

About 61% of the agricultural labour households in Bihar possess their own land and 39% work on others lands. Again 75% of the cultivators have holdings of five acres or less.

The problems of these small farmers are—

- (a) uneconomic holdings.
- (b) non-availability and poor distribution of the necessary inputs.
- (c) lack of proper training in the uses of modern technology.
- (d) inadequacy of agricultural credit.
- (e) lack of irrigation facilities.

The measures proposed in the Fourth Plan include subsidies in the supply of irrigational water and distribution of implements. In the Jute-growing areas of North Bihar subsidies in the supply of seeds, in the foliar spraying of urea and in providing better retting facilities are visualised. In Chotanagpur subsidies for groundnut seeds will continue. Arrangements for hiring agricultural implements will be made by setting up two implement-hiring centres in the Fourth Plan. Sale points for fertilizers, pesticides, etc will be increased in number and taken to the interior villages to facilitate the distribution of these commodities to the small farmers.

39% of the agricultural labour households in Bihar are without land. Because of the old feudal system the tradition of sweated labour without commensurate wages has been very strong. The landless labourers in the absence of alternative forms of employment lean very heavily on the charity of the ex-landlords. Now their occupational mobility has increased because of more industrialisation in many parts of the State.

The landless labourers are proposed to be settled on reclaimed waste lands in the Fourth Plan. 20,47,014 acres of waste land were still to be reclaimed at the beginning of 1968-69.

The village artisans enjoyed the patronage of the ex-landlords in the old feudal times. The abolition of Zamindaris has left a vacuum which the State has been trying to fill. The main problems of village artisans are lack of institutional finance and the inadequacy of marketing facilities for their products.

Some of the measures proposed for the Fourth Plan are :—

- (1) Meeting the establishment expenses of the Khadi and Village Industries Board and also the cost on schemes like the special rebate on the sale of Khadi, etc. The total outlay in the Fourth Plan is Rs. 5 lakhs.
- (2) Financing the scheme of a rebate on the sale of handloom cloth. The rebate will popularize cotton handloom cloth. Rs. 10 lakhs is being provided for this in the Fourth Plan.

Assistance to the handloom industry also includes the following items with the amounts earmarked for each :—

Publicity and propaganda (Rs. 1 lakh), award of prize (Rs. 00.50 lakh), establishing sales emporia (Rs. 00.40 lakh) and regional depots (Rs. 00.10 lakh), purchase of samples of handloom (Rs. 00.60 lakh), supply of looms and accessories (Rs. 2.5 lakhs), subsidy to enable the Reserve Bank of India to give loans to Weavers Co-operative Societies at a low rate of interest (Rs. 4 lakhs), managerial assistance to Weavers Co-operative Societies (Rs. 1 lakh), housing colony for weavers (Rs. 10 lakhs), re-organisation of Bihar's cottage industries (Rs. 10 lakhs), grant to apex union of Weavers' Co-operative Societies (Rs. 1.5 lakhs), share-capital loan to cotton weavers (Rs. 7.5 lakhs), working capital loan to cotton weavers co-operative societies (Rs. 10 lakhs).

The proposed assistance to the woollen industry consists of:—

- (1) providing share capital to wool weavers (Rs. 2.75 lakhs) ;
- (2) supply of improved looms and appliances (Rs. 0.50 lakh),
- (3) financing a rebate on woollen handloom cloth (Rs. 0.50 lakh), ;
- (4) setting up a carding and spinning unit and a finishing unit (Rs. 3 lakhs).

For the silk handloom industry the following are some of the measures proposed :—

- (1) providing a share capital of Rs. 1 lakh to silk weavers.
- (2) providing a working capital loan to silk weavers (Rs. 2 lakhs).
- (3) supply of improved appliances to silk weavers (Rs. 0.50 lakh).

For the development of handicrafts 40 lakhs have been earmarked in the Fourth Plan. Stone-working is one of the ancient crafts of the State and an outlay of Rs. 2 lakhs is proposed for the Fourth Plan. For the marketing of handicrafts Rs. 10 lakhs is proposed to be spent on establishing a permanent marketing and export agency at the State level. For the development of sericulture Rs. 55.09 lakhs is being kept aside in the Fourth Plan.

APPENDIX

ANNEXURE II.
DRAFT FOURTH FIVE YEAR PLAN (1969-74).
STATEMENT I.
OUTLAYS AND EXPENDITURE 1966 to 1969.

(Rs. in lakhs.)

Serial no.	Head/Sub-Head.	1966-67		1967-68		1968-69	
		Approved outlay.	Actual expenditure.	Approved outlay.	Actual expenditure.	Approved outlay.	Anticipated expenditure.
1	2	3	4	5	6	7	8
1 AGRICULTURAL PROGRAMMES—							
1.1	Agricultural Production	6,20.00	4,28.39	3,12.74	2,02.80	3,25.00	3,28.41
1.2	Minor Irrigation	6,45.00	10,67.89	11,46.11	13,00.38	10,47.00	10,47.29
1.3	Soil Conservation	42.00	37.64	18.00	31.32	33.00	33.00
1.4	Ayacut Development Programme ..	Included under item no. 1.1.					
1.5	Animal Husbandry	1,12.00	59.79	60.00	52.32	60.00	60.00
1.6	Dairy and Milk Supply	44.00	19.20	30.00	12.39	40.00	26.50
1.7	Forests	58.00	47.52	40.00	39.61	48.00	48.00
1.8	Fisheries	45.00	18.70	20.00	15.14	20.00	18.48
1.9	Warehousing and Marketing	9.00	0.50	2.00	1.00	2.00	2.00
	TOTAL	15,75.00	16,79.63	16,28.85	16,54.96	15,75.00	15,63.68
2 CO-OPERATION AND COMMUNITY DEVELOPMENT.							
2.1	Co-operation	51.00	25.67	38.00	24.61	49.00	49.00
2.2	Community Development	3,00.00	3,40.23	2,62.00	3,42.15	2,64.00	2,64.00
2.3	Panchayats	7.46	1.39	..	..	..	..
	TOTAL	3,58.46	3,67.29	3,00.00	3,66.76	3,13.00	3,13.00
3 IRRIGATION AND POWER—							
3.1	Irrigation	15,00.00	20,48.00	14,12.50	16,95.76	17,26.00	18,86.00
3.2	Flood Control	71.00	1,81.74	1,18.00	1,96.29	1,50.00	1,50.00
3.3	Power	21,00.00	23,28.98	19,00.00	17,14.82	15,75.00	18,75.00*
	TOTAL	36,71.00	45,58.72	34,30.50	36,06.87	34,51.00	39,11.00
4 INDUSTRY AND MINING—							
4.1	Large and Medium Industries ..	95.52	1,02.59	1,72.11	1,77.19	1,50.00	1,15.00
4.2	Mineral Development	50.00	12.26	20.00	14.81	30.00	30.00
4.3	Village and Small Industries ..	1,20.00	93.74	50.00	47.12	55.00	90.00
	TOTAL	2,65.52	2,08.59	2,42.11	2,39.12	2,35.00	2,35.00

* The Board has planned to execute work worth Rs. 18,27 lakhs on the assumption that the Board will be able to arrange a loan of Rs. 3,00 lakhs from L. I. C. and A. R. C.

STATEMENT I *conold.*

(Rs. in lakhs.)

Serial no.	Head/Sub-Heads.	1966-67		1967-68		1968-69	
		Approved outlay.	Actual expenditure.	Approved outlay.	Actual expenditure.	Approved outlay	Anticipated expenditure.
1	2	3	4	5	6	7	8
5	TRANSPORT AND COMMUNICATIONS—						
5.1	Roads	2,75.00	2,83.54	1,46.00	2,03.85	4,00.00	4,13.00
5.2	Road Transport ..	48.00	44.00	30.00	35.00	53.00	53.00
5.3	Inland Water Transport	4.00	..	..	..	..	..
5.4	Tourism	3.00	3.51	4.65	4.93	3.00	3.00
	TOTAL	3,30.00	3,31.05	1,80.65	2,43.78	4,56.00	4,69.00
6	SOCIAL SERVICES—						
6.1	General Education	2,93.25	2,18.65	2,25.00	2,22.95	2,45.00	2,45.00
6.2	Technical Education	72.91	55.42	35.00	37.27	45.00	45.00
6.3	Health	2,54.90	2,48.46	2,40.00	2,16.46	2,60.00	2,60.00
	(a) Water-Supply (Urban)	2,75.00	1,92.56	2,23.00	2,02.21	2,75.00	2,75.00
	(b) Water-Supply (Rural)	10.00	8.79	5.00	5.00	6.00	6.00
6.4	Housing	30.00	27.24	13.00	12.56	10.00	10.00
	(a) Urban Development	10.00	7.05	8.50	3.90	..	..
6.5	Welfare of Backward Classes	64.55	59.06	59.60	49.83	60.00	60.00
6.6	Social Welfare	2.35	1.60	1.25	1.22	1.00	1.00
6.7	Labour and Labour Welfare	63.95	26.34	39.40	19.79	40.00	39.02
6.8	Public Co-operation	0.25	0.18	0.30	0.15	..	..
	TOTAL	10,77.16	8,45.55	8,50.05	7,71.34	9,42.00	9,41.02
7	MISCELLANEOUS—						
7.1	Statistics	1.38	2.50	1.51	3.59	2.00	3.60
7.2	Information and Publicity	5.00	2.47	2.05	0.82	2.00	2.05
7.3	Evaluation Machinery .. ..	..	..	0.49	..	..	0.24
	TOTAL—MISCELLANEOUS	6.38	4.97	4.05	4.41	4.00	5.89
	GRAND TOTAL	72,83.52	79,95.60	66,36.21	68,87.24	69,76.00	74,38.59

ANNEXURE—
DRAFT FOURTH FIVE-YEAR
STATEMENT
Proposed Plan

Serial no.	Head/Sub-head.	1969-70.			1970-71.		
		Total.	Capital.	Foreign Exchange.	Total	Capital.	Foreign Exchange
1	2	3	4	5	6	7	8
1. AGRICULTURAL PROGRAMME—							
1.1	Agricultural Production	3,61.72	1,48.25	2.78	4,96.34	1,89.92	2.68
1.2	Minor Irrigation	11,00.00	6,08.00	30.00	11,10.00	5,96.00	..
1.3	Soil Conservation	33.00	9.50	..	54.00	21.00	..
1.4	Ayacut Development Programme						Included
1.5	Animal Husbandry	70.00	..	..	89.38	..	..
1.6	Dairy & Milk Supply	40.00	..	..	40.55	..	..
1.7	Forest	54.00	40.39	0.10	68.56	49.15	0.80
1.8	Fisheries	19.50	1.36	..	44.22	4.68	..
1.9	Warehousing & Marketing	3.50	2.60	..	8.76	4.92	..
	TOTAL	16,81.72	8,10.10	32.88	19,11.81	8,65.67	3.48
2. CO-OPERATION AND COMMUNITY DEVELOPMENT—							
2.1	Co-operation	75.00	26.46	..	1,23.73	61.89	..
2.2	Community Development	2,68.02	2,68.02	..	4,39.27	4,39.27	..
2.3	Panchayats	5.00	5.00	..	10.83	10.83	..
	TOTAL	3,48.02	2,99.48	..	5,73.83	5,11.99	..
3. IRRIGATION AND POWER—							
3.1	Irrigation	20,00.00	20,00.00	15.00	26,55.87	26,55.87	5.00
3.2	Flood Control	1,50.00	1,50.00	..	1,67.84	1,67.84	..
3.3	Power	18,50.00	18,50.00	1,00.00	28,40.00	28,40.00	2,00.00
	TOTAL	40,00.00	40,00.00	1,15.00	56,63.71	56,63.71	2,05.00
4. INDUSTRY AND MINING—							
4.1	Large & Medium Industries	2,25.00	2,04.10	40.00	1,55.00	1,44.00	..
4.2	Mineral Development	50.00	43.87	..	1,36.50	1,21.04	..
4.3	Village and Small Scale Industries	1,00.00	77.39	..	1,20.00	92.75	..
	TOTAL	3,75.00	3,25.36	40.00	4,11.50	3,57.79	..

II.

PLAN (1969-74).

ii.

Outlays.

(Rs. in lakhs).

1971-72.			1972-73.			1973-74.			Fourth Plan Outlay.		
Total.	Capital.	Foreign Exchange.	Total.	Capital.	Foreign Exchange.	Total.	Capital.	Foreign Exchange.	Total.	Capital.	Foreign Exchange.
9	10	11	12	13	14	15	16	17	18	19	20
4,40.00	1,30.74	0.50	4,09.76	96.06	..	4,00.90	83.83	..	21,08.72	6,48.80	5.96
11,08.00	6,45.00	..	11,00.00	6,25.00	..	10,82.00	6,29.00	..	55,00.00	31,03.00	30.00
67.00	33.00	..	73.00	39.00	..	73.00	39.00	..	3,00.00	1,41.50	..
under item (1.1)—											
1,26.21	..	..	61.95	..	..	61.83	..	..	4,09.37	..	..
56.65	..	..	34.15	..	..	28.65	..	..	2,00.00	..	..
68.78	48.20	0.75	69.78	48.65	0.75	73.88	51.70	0.25	3,35.00	2,38.09	2.65
45.13	3.43	..	45.14	3.18	..	46.01	3.08	..	2,00.00	15.73	..
9.15	4.85	..	9.27	4.50	..	9.32	4.00	..	40.00	20.87	..
19,20.92	8,65.22	1.25	18,03.05	8,16.39	0.75	17,75.59	8,10.61	0.25	90,93.09	41,67.99	38.61
1,34.59	67.88	..	1,35.98	68.12	..	1,30.70	66.82	..	6,00.00	2,91.17	..
3,43.96	3,43.96	..	2,66.95	2,66.95	..	1,96.21	1,96.21	..	15,14.41	15,14.41	..
12.38	12.38	..	14.39	14.39	..	17.40	17.40	..	60.00	60.00	..
4,90.93	4,24.22	..	4,17.32	3,49.46	..	3,44.31	2,80.43	..	21,74.41	18,65.58	..
25,02.62	25,02.62	10.00	20,45.00	20,45.00	35.00	20,26.51	20,26.51	20.00	1,12,30.00	1,12,30.00	85.00
1,67.16	1,67.16	..	1,58.00	1,58.00	..	1,57.00	1,57.00	..	8,00.00	8,00.00	..
28,10.00	28,10.00	1,00.00	26,16.00	26,16.00	1,00.00	17,84.00	17,84.00	50.00	1,19,00.00	1,19,00.00	5,50.00
54,79.78	54,79.78	1,10.00	48,19.00	48,19.00	1,35.00	39,67.51	39,67.51	70.00	2,39,30.00	2,39,30.00	6,35.00
1,55.00	1,44.00	..	2,10.00	1,94.00	..	2,55.00	2,38.40	..	10,00.00	9,24.50	40.00
94.50	78.71	..	91.50	74.70	..	87.50	70.39	..	4,60.00	3,88.71	..
1,30.00	99.00	..	1,45.00	1,09.50	..	1,55.00	1,18.70	..	6,50.00	4,97.34	..
3,79.50	3,21.71	..	4,46.50	3,78.20	..	4,97.50	4,27.49	..	21,10.00	18,10.55	40.00

Serial no.	Heads/Sub-Heads.	1969-70.			1970-71.		
		Total.	Capital.	Foreign Exchange.	Total.	Capital.	Foreign Exchange
1	2	3	4	5	6	7	8
5. TRANSPORT & COMMUNICATIONS—							
5.1	Roads	3,25.00	3,25.00	..	5,69.50	5,69.50	..
5.2	Road Transport	60.00	60.00	11.27	87.26	87.26	12.48
5.3	Inland Water Transport	4.00	4.00	..	5.11	5.11	..
5.4	Tourism	4.00	2.20	..	4.50	2.40	..
	TOTAL	3,93.60	391.20	11.27	6,66.37	664.27	12.48
6. SOCIAL SERVICES—							
6.1	General Education	3,00.00	96.28	10.00	5,31.83	1,18.20	10.00
6.2	Technical Education	45.00	36.60	1.60	90.00	66.25	3.20
6.3	Health	2,60.00	1,53.00	1.00	3,51.00	2,30.00	2.00
	(a) Water Supply (Urban)	4,45.00	4,45.00	..	4,67.25	4,67.25	..
	(b) Water Supply (Rural)	30.00	30.00	..	50.00	50.00	..
6.4	Housing	30.00	30.00	..	80.00	80.00	..
	(a) Urban Development	10.00	10.00	..	12.50	12.50	..
6.5	Welfare of Backward Classes	70.00	0.45	..	80.41	0.75	..
6.6	Social Welfare	1.00	..	..	3.28	..	..
6.7	Labour & Labour Welfare	60.00	45.00	..	86.92	65.00	10.00
6.8	Public Co-operation	0.50	..	..	1.00	..	..
	TOTAL	12,51.50	8,46.33	12.60	17,54.19	10,89.95	25.20
7. MISCELLANEOUS—							
7.1	Statistics	2.50	..	..	3.78	..	..
7.2	Information & publicity	5.00	1.00	..	5.00	0.50	..
7.3	Evaluation machinery	0.50	..	..	1.10	..	..
	TOTAL	8.00	1.00	..	9.88	0.50	..
	GRAND TOTAL	80,57.24	66,73.47	211.75	1,09,91.29	91,53.88	246.16

(Rs. in lakhs.)

1971-72.			1972-73.			1973-74.			Fourth Plan Outlay.		
Total.	Capital.	Foreign Exchange.	Total.	Capital.	Foreign Exchange.	Total.	Capital.	Foreign Exchange.	Total.	Capital.	Foreign Exchange.
9	10	11	12	13	14	15	16	17	18	19	20
5,12.00	5,12.00	..	4,68.50	4,68.50	..	4,45.00	4,45.00	..	23,20.00	23,20.00	..
62.14	62.14	13.60	53.85	53.85	14.57	36.75	36.75	15.47	3,00.00	300.00	67.39
4.40	4.40	..	3.65	3.65	..	2.84	2.84	..	20.00	20.00	..
4.50	2.40	..	5.00	2.50	..	5.00	2.50	..	23.00	12.00	..
5,83.04	580.94	13.60	5,31.00	5,28.50	14.57	4,89.59	4,87.09	15.47	26,63.00	26,52.00	67.39
7,26.99	1,17.35	25.00	904.75	1,13.40	25.00	10,36.43	1,02.77	..	35,00.00	5,48.00	70.00
1,07.00	77.00	4.80	1,40.00	1,00.00	4.80	1,60.00	1,20.00	4.80	5,42.00	3,99.85	19.20
3,65.50	2,91.00	4.00	3,95.00	2,70.50	1.00	2,93.50	..	..	16,65.00	9,44.50	8.00
4,67.25	4,67.25	..	2,87.25	2,87.25	..	2,89.25	2,89.25	..	19,56.00	19,56.00	..
40.00	40.00	..	40.00	40.00	..	40.00	40.00	..	2,00.00	2,00.00	..
1,00.00	1,00.00	..	1,30.00	1,30.00	..	1,60.00	1,60.00	..	5,00.00	5,00.00	..
12.50	12.50	..	12.50	12.50	..	12.50	12.50	..	60.00	60.00	..
95.86	0.60	..	1,15.51	0.75	..	1,38.22	..	..	5,00.00	2.55	..
4.55	..	..	5.37	..	..	5.80	..	..	20.00	..	..
91.96	67.60	6.00	95.18	57.60	..	75.94	18.80	..	4,10.00	2,54.00	16.00
1.10	..	..	1.20	..	..	1.20	..	..	5.00	..	..
20,12.71	11,73.30	39.80	21,26.76	10,12.00	30.80	22,12.84	7,43.32	4.80	9,58.00	48,64.90	1,13.20
3.01	..	..	3.05	..	..	3.66	..	..	16.00	..	..
5.00	0.50	..	5.00	..	..	5.00	..	..	25.00	2.00	..
1.09	..	..	1.13	..	..	1.18	..	..	5.00	..	..
9.10	0.50	..	9.18	..	..	9.84	..	..	46.00	2.00	..
1,08,75.98	88,45.67	1,64.65	1,01,52.81	79,03.55	1,81.12	92,97.18	67,16.45	90.52	4,93,74.50	3,92,93.02	8,94.20

LIST OF SUB-HEADS
(ENCLOSURE TO ANNEXURE)

Serial no.	Heads/Sub-heads.	1969-70.			1970-71.		
		Total.	Capital.	Foreign Exchange.	Total.	Capital.	Foreign Exchange.
1	2	3	4	5	6	7	8
I. AGRICULTURAL AND ALLIED PROGRAMMES—							
(i) Agricultural Production.							
	1. Improved seeds Programme	25.11	21.76	..	32.53	23.81	..
	2. Manures and Fertilizers	5.43	2.96	..	16.57	12.13	..
	3. Plant Protection	36.32	10.00	..	56.88	14.43	..
	4. Agricultural Implements	14.20	7.82	..	6.72	..	..
	5. Commercial Crops	62.74	24.08	..	67.96	35.49	..
	6. Agricultural Education	24.33	3.56	..	53.18	31.19	..
	7. Agricultural Research	38.80	36.57	2.78	38.86	36.56	2.68
	8. Extension Training and farmers Education ..	Included under Sl. no. 6 (Agricultural Education).					
	9. Agricultural Statistics	0.50	..	..	0.49	..	..
	10. Intensive Cultivation Programme (IADP, IAAP, HVP, etc.)	90.62	27.48	..	110.94	14.00	..
	11. Land Development	10.00	10.00	..	10.50	10.50	..
	12. Consolidation of Holdings	2.00	..	..	3.25	..	..
	13. Others	61.67	4.02	..	98.46	11.81	..
	TOTAL	3,61.72	1,48.25	2.78	4,96.34	1,89.92	2.68
(ii) MINOR IRRIGATION—							
	1. New percolation wells	45.00	..	..	45.00	..	..
	2. Lift Irrigation from streams, reservoirs, etc. . .	97.00	97.00	..	90.00	90.00	..
	3. Installation of Electric Pumps	40.00	..	..	20.00	..	..
	4. Installation of Diesel Pumps .. .. .	..	..	..	..	..	..
	5. Others	9,18.00	5,11.00	30.00	9,55.00	5,06.00	..
	TOTAL	11,00.00	6,08.00	30.00	11,10.00	5,96.00	..
(iii) CO-OPERATION—							
	1. Credit	18.03	..	..	35.00	..	..
	2. Marketing	13.90	10.31	..	25.00	18.00	..
	3. Processing other than sugar factories and Large Processing Units.	6.00	6.00	..	29.00	28.32	..
	4. Co-operative Sugar Factories .. .. .	..	..	..	..	..	..
	5. Co-operative Farming	2.75	2.57	..	2.75	2.57	..
	6. Co-operative Training and Education	6.30	..	..	6.00	..	..
	7. Administration	16.07	..	..	6.48	..	..
	8. Others	11.95	7.58	..	19.50	13.00	..
	TOTAL	75.00	26.46	..	1,23.73	61.89	..

DEVELOPMENT
STATEMENT II)

(Rs. in lakhs).

1971-72.			1972-73.			1973-74.			4th Plan Outlay.		
Total.	Capital.	Foreign Exchange.	Total.	Capital.	Foreign Exchange.	Total.	Capital.	Foreign Exchange.	Total.	Capital.	Foreign Exchange.
9	10	11	12	13	14	15	16	17	18	19	20
27.07	17.01	..	17.45	11.16	..	13.41	8.00	..	1,11.57	81.74	..
10.08	4.25	..	9.27	3.35	..	8.08	3.10	..	49.43	25.79	..
55.60	9.21	..	54.08	3.85	..	62.42	7.75	..	2,65.30	45.24	..
7.11	..	..	7.50	..	..	7.79	..	..	43.32	7.82	..
70.59	31.28	..	73.36	33.96	..	77.05	31.54	..	3,41.70	1,62.35	..
49.24	27.39	..	54.14	12.44	..	31.40	9.64	..	1,92.29	84.22	..
5.33	3.00	0.50	2.38	..	..	2.43	..	..	87.80	76.13	5.96
..
0.50	..	..	0.50	..	..	0.51	..	..	2.50	..	..
1,14.66	13.40	..	1,16.29	11.60	..	1,13.42	7.60	..	5,45.93	74.08	..
11.00	11.00	..	11.50	11.50	..	12.00	12.00	..	55.00	55.00	..
3.25	..	..	3.25	..	..	3.25	..	..	15.00	..	..
89.57	11.20	..	80.04	8.20	..	69.14	1.20	..	3,98.88	36.43	..
4,40.00	1,30.74	0.50	4,09.78	96.06	..	4,00.90	83.83	..	21,08.72	6,48.80	5.96
23.00	..	..	22.00	..	..	22.00	..	..	1,57.00	..	..
57.00	57.00	..	..	..	..	..	..	..	2,44.00	2,44.00	..
20.00	..	..	20.00	..	..	..	..	..	1,00.00	..	..
..
10,08.00	5,88.00	..	10,58.00	6,25.00	..	10,60.00	6,29.00	..	49,99.00	28,59.00	30.00
11,08.00	6,45.00	..	11,00.00	6,25.00	..	10,82.00	6,29.00	..	55,00.00	31,03.00	30.00
36.00	..	..	36.23	..	..	35.00	..	..	1,60.26	..	..
30.30	22.00	..	30.55	22.05	..	30.25	22.00	..	1,30.00	94.36	..
30.00	29.31	..	30.00	29.32	..	30.00	29.32	..	1,25.00	1,22.27	..
..
2.75	2.57	..	3.00	2.75	..	2.20	2.00	..	13.45	12.46	..
6.50	..	..	6.70	..	..	6.00	..	..	31.50	..	..
7.00	..	..	7.45	..	..	7.00	..	..	44.00	..	..
22.04	14.00	..	22.05	14.00	..	20.25	13.50	..	95.79	62.08	..
1,34.59	67.88	..	1,35.98	68.12	..	1,30.70	66.82	..	6,00.00	2,91.17	..

1	2	3	5	6	7	8
II. IRRIGATION AND POWER—						
(i) Irrigation and Flood Control.						
1. Irrigation—						
(a) Continuing	19,51.00	19,51.00	15.00	25,00.87	25,00.87	5.00
(b) New	20.00	30.00	..	1,36.00	1,36.00	..
2. Flood Control Drainage, Anti-water logging and Anti-Sea erosion.	1,50.00	1,50.00	..	1,67.84	1,67.84	..
3. Investigation and Research	19.00	19.00	..	19.00	19.00	..
TOTAL	21,50.00	21,50.00	15.00	28,23.71	28,23.71	5.00
(ii) Power.						
1. Generation	4,93.13	4,93.13	..	13,00.00	13,00.00	1,00.00
2. Transmission and Distribution—						
(a) Inter-State links .. ..	..	..	..	..	..	..
(b) Trunk Transmission lines	4,96.87	4,96.87	1,00.00	6,00.00	6,00.00	50.00
(c) Others	5,00.00	5,00.00	..	5,00.00	5,00.00	50.00
3. Rural Electrification	2,00.00	2,00.00	..	3,30.00	3,30.00	..
4. Investigations	10.00	10.00	..	10.00	10.00	..
5. Miscellaneous .. ..	..	..	..	..	..	..
TOTAL	17,00.00	17,00.00	1,00.00	27,40.00	27,40.00	2,00.00
III. INDUSTRY AND MINING—						
(i) Large and Medium Industries.						
1. State Industrial Projects	85.25	74.25	40.00	..	..	..
2. Industrial Areas	14.00	13.50	..	25.00	24.00	..
3. Industrial Development Corporation	1,09.75	1,09.75	..	30.00	30.00	..
4. State Finance Corporation	0.10	0.10	..	50.00	50.00	..
5. Others	15.90	6.50	..	50.00	40.00	..
TOTAL (i)	2,25.00	2,04.10	40.00	1,55.00	1,44.00	..
(ii) Village and Small Industries.						
1. Handloom Industry	9.00	4.92	..	12.00	8.00	..
2. Power looms	3.00	2.75	..	7.00	6.75	..
3. Small-Scale Industries	61.00	53.15	..	65.00	55.00	..
4. Industrial Estates	12.00	11.95	..	18.00	17.00	..
(a) Rural .. ..	..	..	..	..	..	..
(b) Semi-Urban .. ..	..	..	..	..	..	..
(c) Urban .. ..	..	..	..	..	..	..

DEVELOPMENT—contd.

9	10	11	12	13	14	15	16	17	18	19	20
22,62.62	22,62.62	5.00	15,68.00	15,68.00	20.00	14,63.76	14,63.76	10.00	97,46.25	97,46.25	55.00
2,25.00	2,25.00	5.00	4,61.00	4,61.00	15.00	5,46.75	5,46.75	10.00	13,98.75	13,98.75	30.00
1,67.16	1,67.16	..	1,58.00	1,58.00	..	1,57.00	1,57.00	..	8,00.00	8,00.00	..
1.00	15.00	..	16.00	16.00	..	16.00	16.00	..	85.00	85.00	..
26,69.78	26,69.78	10.00	22,03.00	22,03.00	35.00	21,83.51	21,83.51	20.00	1,20,30.00	1,20,30.00	85.00
12,50.00	12,50.00	50.00	10,11.00	10,11.00	50.00	276.87	2,76.87	..	43,31.00	43,31.00	2,00.00
..
5,00.00	5,00.00	50.00	4,50.00	4,50.00	50.00	4,72.13	4,72.13	50.00	25,19.00	25,19.00	3,00.00
5,00.00	5,00.00	..	5,00.00	5,00.00	..	5,00.00	5,00.00	..	25,00.00	25,00.00	50.00
4,50.00	4,50.00	..	5,70.00	5,70.00	..	4,50.00	4,50.00	..	20,00.00	20,00.00	..
10.00	10.00	..	10.00	10.00	..	10.00	10.00	..	50.00	50.00	..
..
27,10.00	17,10.00	1,00.00	25,41.00	25,41.00	1,00.00	17,09.00	17,09.00	50.00	1,14,00.00	1,14,00.00	5,00.00
..	..	..	..	..	..	..	..	..	85.25	74.25	40.00
25.00	24.00	..	25.00	24.00	..	31.00	30.00	..	1,20.00	1,15.50	..
30.00	30.00	..	30.00	30.00	..	35.25	35.25	..	2,35.00	2,35.00	..
50.00	50.00	..	80.00	80.00	..	1,04.65	1,04.65	..	2,84.75	2,84.75	..
50.00	40.00	..	75.00	60.00	..	84.10	68.50	..	2,75.00	2,15.00	..
1,55.00	1,44.00	..	2,10.00	1,94.00	..	2,55.00	2,38.40	..	10,00.00	9,24.50	40.00
15.00	9.00	..	22.00	14.00	..	22.00	14.74	..	80.00	50.66	..
10.00	9.00	..	10.00	9.50	..	10.00	9.50	..	40.00	37.50	..
65.00	50.00	..	65.00	55.00	..	73.50	61.67	..	3,29.50	2,75.02	..
20.00	19.00	..	25.00	24.00	..	25.41	24.45	..	1,00.41	96.40	..
..
..
..

LIST OF SUB-HEADS

1	2	3	4	5	6	7	8
5. Handicrafts		4.00	0.45	..	7.00	3.00	..
6. Sericulture		10.00	4.17	..	10.00	3.00	..
7. Coir Industry .. ..		..	..	..	..	..	..
8. Khadi and Village Industries		1.00	..	..	1.00	..	..
	TOTAL (ii)	1,00.00	77.39	..	1,20.00	92.75	..
	TOTAL—(i) and (ii)	3,25.00	2,81.49	40.00	2,75.00	2,36.75	..
IV. ROADS—							
1. Spill-over		1,96.00	1,96.00	..	3,64.00	3,64.00	..
2. New		1,29.00	1,29.00	..	2,95.50	2,05.50	..
	TOTAL	3,25.00	3,25.00	..	5,69.50	5,69.50	..
	Of which :						
(a) Rural Roads		71.00	71.00	..	1,15.00	1,15.00	..
(b) Others		2,54.00	2,54.00	..	4,54.50	4,54.50	..
	TOTAL—(IV)	3,25.00	3,25.00	..	5,69.50	5,69.50	..
V. GENERAL EDUCATION—							
1. Elementary Education		98.00	19.04	..	2,82.12	30.50	..
2. Secondary Education		43.00	17.90	..	64.68	17.40	..
3. University Education		58.00	28.30	..	70.47	33.30	..
4. Teachers Training—							
(a) Elementary		13.50	8.00	..	15.10	8.00	..
(b) Secondary		6.50	2.00	..	9.40	2.00	..
5. Social Education		15.00	..	..	15.00	..	..
6. Other Educational Programmes.. ..		61.00	18.04	10.00	69.56	25.00	10.00
7. Cultural Programmes		5.00	3.00	..	5.50	2.00	..
	TOTAL	3,00.00	96.28	10.00	5,31.83	1,18.20	10.00
VI. HEALTH—							
1. Medical Education		89.00	69.00	1.00	90.00	77.00	2.00
2. Training Programmes		18.00	8.00	..	21.50	9.00	..
3. Hospitals and Dispensaries		88.30	49.00	..	1,28.50	1,03.00	..
4. Primary Health Centre		26.00	15.00	..	66.00	30.00	..
5. Control of Communicable diseases		10.00	2.00	..	17.00	2.00	..
6. Family Planning .. ..		..	..	..	..	..	..
7. Indigenous systems of Medicine		7.70	5.50	..	6.00	5.00	..
8. Other Programmes		21.00	4.50	..	22.00	4.00	..
	TOTAL—(HEALTH)	2,60.00	1,53.00	1.00	3,51.00	2,30.00	2.00

OF DEVELOPMENT- *contd.*

9	10	11	12	13	14	15	16	17	18	19	20
9.00	9.00	..	10.00	4.00	..	10.00	5.70	..	40.00	22.15	..
10.00	3.00	..	12.00	3.00	..	13.09	2.44	..	55.09	15.61	..
..
1.00	..	..	1.00	..	..	1.00	..	..	5.00	..	..
1,30.00	99.00	..	1,45.00	1,09.50	..	1,55.00	1,18.70	..	6,50.00	4,97.34	..
2,85.00	2,43.00	..	3,55.00	3,03.50	..	4,10.00	3,57.10	..	16,50.00	14,21.84	40.00
											..
3,22.00	3,2.00	..	2,80.00	2,80.00	..	2,78.00	2,38.00	..	14,00.00	14,00.00	..
1,90.00	1,90.00	..	1,88.50	1,88.50	..	2,07.00	2,07.00	..	9,00.00	9,20.00	..
5,12.00	5,12.00	..	4,68.50	4,68.50	..	4,45.00	4,45.00	..	23,20.00	23,20.00	..
1,14.00	1,14.00	..	1,13.00	1,13.00	..	1,12.00	1,12.00	..	5,25.00	5,25.00	..
3,98.00	3,98.00	..	3,55.50	3,55.50	..	3,33.00	3,33.00	..	17,95.00	17,95.00	..
5,12.00	5,12.00	..	4,68.50	4,68.50	..	4,45.00	4,45.00	..	23,20.00	23,20.00	..
4,47.32	37.00	..	6,06.70	41.50	..	7,69.81	49.46	..	22,03.95	1,77.50	..
70.71	17.40	..	82.18	14.90	..	77.93	5.40	..	3,38.50	73.00	..
83.84	35.20	..	87.34	32.00	..	88.35	34.20	..	3,88.00	1,63.00	..
15.70	8.00	..	16.80	8.00	..	13.90	3.00	..	75.00	35.00	..
10.70	2.00	..	11.95	2.00	..	13.45	2.00	..	52.00	10.00	..
18.60	..	..	20.15	..	..	21.25	..	..	90.00	..	..
75.12	16.75	25.00	73.63	14.00	25.00	45.24	7.71	..	3,24.55	81.50	70.00
5.00	1.00	..	6.00	1.00	..	6.50	1.00	..	28.00	8.00	..
7,26.99	1,17.35	25.00	9,04.75	1,13.40	25.00	10,36.43	1,02.77	..	35,00.00	5,48.00	70.00
73.00	85.00	4.00	78.00	61.00	1.00	81.00	..	..	4,11.00	2,92.00	8.00
23.50	15.00	..	25.50	15.00	..	23.50	..	..	1,12.00	47.00	..
1,58.00	1,41.00	..	1,63.50	1,30.00	..	78.70	..	..	6,17.00	4,23.00	..
68.00	40.00	..	86.00	58.00	..	62.00	..	..	3,08.00	1,43.00	..
14.00	4.00	..	12.00	2.00	..	29.00	..	..	82.00	1.00	..
..
6.00	2.00	..	6.00	2.50	..	8.30	..	..	34.00	15.00	..
23.00	4.00	..	24.00	2.00	..	10.00	..	..	1,01.00	14.50	..
3,65.50	2,91.00	4.00	3,95.00	2,70.50	1.00	2,93.50	..	..	16,65.00	9,44.50	8.00

1	2	3	4	5	6	7	8
Family Planning—							
(a)	Urban Family Welfare Planning Centre	..	..	..	..	..	..
(b)	Rural Family Welfare Planning Centre	..	..	..	..	..	..
(c)	Sub-Centres .. .. .	..	..	..	..	..	..
(d)	Personnel Trained in Family Planning	..	..	..	..	..	..
(e)	Sterilisation .. .. .	..	..	..	..	..	..
(f)	Intra-Uterine Contraceptive Device ..	..	..	..	..	..	..
TOTAL		..	..	..	..	..	..
VII. WATER SUPPLY AND SANITATION—							
Urban—							
(a)	Water-Supply	20.00	20.00	..	1,66.00	1,66.00	..
(b)	Sewerage and Drainage	25.00	25.00	..	1,21.25	1,21.25	..
(c)	Getalsud	4,00.00	4,00.00	..	1,80.00	1,81.00	..
TOTAL		4,45.00	4,45.00	..	4,67.25	4,67.25	..
Rural—							
(a)	Piped	7.00	7.00	..	7.00	7.00	..
(b)	Wells	23.00	23.00	..	43.00	43.00	..
TOTAL		30.00	30.00	..	50.00	50.00	..
VIII. HOUSING—							
1.	Subsidised Industrial Housing	18.00	18.00	..	44.00	44.00	..
2.	Low Income Group Housing	9.00	9.00	..	29.00	29.00	..
3.	Village Housing Projects	3.00	3.00	..	5.00	5.00	..
4.	Plantation Labour Housing .. .. .	..	..	..	..	..	..
5.	Slum Clearance (State's share) .. .. .	..	..	..	2.00	2.00	..
6.	Others .. .. .	..	..	..	..	..	..
TOTAL		30.00	30.00	..	80.00	80.00	..
IX. TOWN PLANNING AND URBAN DEVELOPMENT—							
1.	Town Planning	5.00	5.00	..	5.00	5.00	..
2.	Urban Development	5.00	5.00	..	7.50	7.50	..
TOTAL		10.00	10.00	..	12.50	12.50	..
X. WELFARE OF BACKWARD CLASSES—							
1. Scheduled Tribes.—							
(a)	Education	16.25	..	..	30.43	..	..
(b)	Economic Uplift	7.60	..	..	8.60	..	..
(c)	Health Housing as other schemes	3.10	..	..	3.75	..	..
TOTAL		36.95	..	..	42.78	..	..

1	2	3	4	5	6	7	8
2. Scheduled Castes—							
(a) Education		20.85	0.45	..	24.23	0.75	
(b) Economic Uplift		3.00	..	..	3.30	..	
(c) Health, Housing and Other Schemes ..		2.90	..	..	3.55	..	
TOTAL ..		26.75	0.45	..	31.03	0.75	
3. Other Backward Classes—							
(a) Education		6.50	..	..	6.55	..	
(b) Economic Uplift	
(c) Health, Housing and Other Schemes	
TOTAL of 1, 2 and 3 ..		70.00	0.45	..	80.41	0.75	
XI. SOCIAL WELFARE—							
1. Family and Child Welfare Project	
2. Women Welfare	0.25	..	
3. Child Welfare	
4. Eradication Beggary	0.03	..	
5. Rehabilitation of the Handicapped		0.35	..	..	0.67	..	
6. Social Defence		0.25	..	..	1.30	..	
7. Grant-in-aid to Voluntary Organisation ..		0.40	..	..	0.95	..	
8. Training, Research and administration	0.08	..	
9. Others	
TOTAL ..		1.00	..	..	3.28	..	
XII. CRAFTSMEN TRAINING AND LABOUR WELFARE—							
1. Craftsmen Training		46.50	40.00	..	68.75	60.00	10.00
2. Apprenticeship Training		6.00	5.00	..	10.00	5.00	
3. Part-time classes for Industrial workers	1.25	..	
4. Rural Training Institutes
5. Employment Service Schemes		3.00	..	..	3.30	..	
6. Labour Welfare administration		2.25	..	..	2.77	..	
7. Employees State Insurance		0.25	..	..	0.85	..	
TOTAL ..		60.00	45.00	..	86.92	65.00	10.00
XIII. INFORMATION AND PUBLICITY—							
1. Community Listening Schemes		0.90	..	..	1.70	..	
2. Others		4.10	1.00	..	3.30	0.50	
TOTAL ..		5.00	1.00	..	5.00	0.50	

OF DEVELOPMENT—concd,

9	10	11	12	13	14	15	16	17	18	19	20
30.18	0.60	..	36.28	0.75	..	43.66	..	..	1,55.20	2.35	..
3.85	..	..	5.70	..	..	8.05	..	..	23.90	..	..
3.95	..	..	4.90	..	..	5.60	..	..	20.90	..	..
37.98	0.60	..	46.88	0.75	..	57.31	..	..	2,00.00	2.35	..
6.80	..	..	7.40	..	..	7.95	..	..	35.00	..	..
..
..
95.86	0.60	..	1,15.15	0.75	..	1,38.22	..	..	5,00.00	2.85	..
..
0.20	..	..	6.33	..	..	0.54	..	..	1.37	..	..
..
1.00	..	..	1.16	..	..	1.23	..	..	3.45	..	..
0.50	..	..	0.55	..	..	0.62	..	..	2.69	..	..
2.00	..	..	2.25	..	..	2.35	..	..	8.15	..	..
0.85	..	..	0.95	..	..	0.95	..	..	4.10	..	..
..	..	..	0.08	..	..	0.08	..	..	0.24	..	..
..
4.55	..	..	5.37	..	..	5.80	..	..	20.00	..	..
66.75	58.25	6.00	67.75	54.75	..	43.25	16.00	..	2,93.00	2,29.00	16.00
10.00	5.00	..	10.00	..	..	10.00	..	..	48.00	15.90	..
1.25	..	..	1.25	..	..	1.25	..	..	5.00	..	..
2.00	1.75	..	1.00	0.25	..	1.00	..	..	4.00	2.00	..
6.90	2.60	..	7.90	2.60	..	8.90	2.80	..	30.00	8.00	..
3.20	..	..	3.67	..	..	4.11	..	..	16.00	..	..
1.86	..	..	3.61	..	..	7.43	..	..	14.00	..	..
91.96	67.60	6.00	95.18	57.60	..	75.94	18.80	..	4,10.00	2,54.00	16.00
1.35	..	..	1.35	..	..	1.35	..	..	6.65	..	..
3.65	0.50	..	3.65	..	..	3.65	..	..	18.35	2.00	..
5.00	0.50	..	5.00	..	..	5.00	..	..	25.00	2.00	..

DRAFT FOURTH FIVE YEAR
STATEMENT
IMPORTANT PROJECTS COSTING

Serial no.	Head of Development.	Total estimated cost.	Total expenditure by—		Fourth Plan outlay.	
			the end of 3rd Plan.	1968-69..	Total	Foreign exchange.
1	2	3	4	5	6	7
1. IRRIGATION AND POWER.						
A. IRRIGATION.						
1	Kosi Project (Original)	55,33	34,92	46,08	14,22	..
2	Gandak Project.. .. .	1,19,00	17,05	48,11	59,50	30
3	Sone Barrage Project (Original)	18,32	14,39	18,24	8	..
4	Sone High Level Canals	8,84	..	70	8,14	..
5	Rajpur Canal	6,82	2,77	4,42	2,46	..
6	Western Kosi Canal	19,69	41	46	5,00	25
7	North Koel Project	13,16	..	..	5,00	30
8	Chandan Reservoir Project	9,92	2,39	5,42	4,50	..
B. FLOOD CONTROL.						
1	Kosi Project (Original)	30,01	24,47	27,32	3,20	..
POWER.						
1	Barauni Thermal Power Station (1 × 15 × 2 × 50MW)	15,17.42	10,95.77	14,67.47	49.95	..
2	Patratu Thermal Power Station (4 × 50 + 2 × 100MW)	52,71.10	40,63.78	52,62.74	8.36	..
3	Kosi Hydrel Station (4 × 4.8 MW)	6,16.50	2,83.71	5,21.68	94.82	..
4	Patratu Thermal Power Station Extension (2 × 110 MW).	33,90.00	..	2,58.00	31,32.00	2,00.00
5	Subernrekha Project (2 × 65 MW)	12,90.00	5.85	54.97	10,45.87	..
6	Transmission Scheme	38,72.36	2,80.76	13,53.35	25,19.00	3,00.00
7	Sub-transmission and Distribution Scheme	25,00.00*	34,83.94	47,25.71	25,00.00	50.00
8	Rural Electrification	20,00.00*	5,59.03	21,60.80	20,00.00	..

*For Fourth Plan only.

PLAN (1969-74).

III.

Rs. 5 CRORES AND ABOVE.

(Rs. in lakhs.)

Outlay proposed.									
1969-70.		1970-71.		1971-72.		1972-73.		1973-74.	
Total.	Foreign exchange.	Total.	Foreign exchange.	Total.	Foreign exchange.	Total.	Foreign exchange.	Total.	Foreign exchange.
8	9	10	11	12	13	14	15	16	17
3,05	..	5,00	..	3,50	..	1,50	..	1,17	..
11,50	15	12,00	5	12,00	..	12,00	5	12,00	Nil
8
1,60	..	3,50	..	3,04	..	..	..	..	..
62	..	92	..	92	..	..	..	..	..
50	..	1,00	..	1,00	..	1,25	15	1,25	10
..	50	5	2,00	15	2,50	10
1,00	..	1,25	..	1,25	..	1,00	..	..	..
60	..	70	..	70	..	60	..	60	..
49.95
8.36
94.82
2,90.00	..	10,00.00	1,00.00	9,50.00	50.00	8,00.00	50.00	92.00	..
50.00	..	3,00.00	..	3,00.00	..	2,11.00	..	1,84.87	..
4,96.87	1,00.00	6,00.00	50.00	500.00	50.00	450.00	50.00	472.13	50.00
5,00.00	..	5,00.00	50.00	5,00.00	..	5,00.00	..	5,00.00	..
2,00.00	..	3,30.00	..	4,50.00	..	5,70	..	4,50.00	..

Annexure II.

DRAFT FOURTH FIVE YEAR PLAN (1969—74).

STATEMENT IV.

Check-list in respect of Principal Projects costing Rs. 5 crores and above.

1. Name of the Project with brief description and location. Kosi Project (Original)—It comprises the three following units :—

(i) Construction of a barrage across river Kosi near Hanumannagar on Indo-Nepal border;

(ii) Construction of flood embankment for a total length of 150 miles on both banks of Kosi river in Saharsa and Darbhanga districts of Bihar and part of Nepal; and

(iii) Canal system on the left bank to irrigate 14,05 lakh acres of land in the districts of Saharsa and Purnea and construction of water courses up to 1 cusec capacity.

2. Gestation period in years .. Unit I. Six years (1957 to 1963).
Unit II. Five years (1954 to 1959).
Unit III. Nine years (1959 to 1968).
and water courses up to one cusec.

Capacity—Two years more.

3. Cost estimates and outlays (Rs. round lakhs)—

(a) Total estimated cost—
(i) Total .. 85,34

(ii) Foreign exchange.. Nil

(b) Outlay and expenditure—

Expenditure up to 1968-69.		Outlay proposed 1969—74.		1969-70 approved.		1970-71 proposed.		Three years' total 1971—74.		Balance after 1973-74, if any.	
Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.
1	2	3	4	5	6	7	8	9	10	11	12
73,40	...	17,42	...	3,65	...	5,70	...	8,07	...	...	...

4. Programme of output/benefits—

Item.	Unit.	Progress up to 1968-69.	Target for Fourth Plan.	Phasing.		
				1969-70.	1970-71.	End of 1973-74.
1	2	3	4	5	6	7
Area under Irrigation—						
(a) Potential ..	000 Acres	14,00	..	..	..	..
(b) Utilisation ..	000 Acres.	5,90	5,00	1,00	2,00	5,00

5. Training of technical and managerial personnel.

Nil.

6. Employment (man-years)—

Fourth Plan (year by year).

1966-67 1967-68 1968-69

1969-70. 1970-71. 1971-72 1972-73. 1973-74.

I. Additional requirements.

Skilled—

(a) Technical	}	Nil.
(b) Non-technical		

Unskilled Nil.

II. Staff required on continuing basis.

					1968-69.	End of Fourth Plan.
Skilled—						
(a) Technical	..	..	..	..	7,00	5,20
(b) Non-technical	..	..	..	..	21,00	15,00
Unskilled	—	—	—	..	28,00	20,00

DRAFT FOURTH FIVE YEAR PLAN (1969—74).

STATEMENT IV.

Check-list in respect of Principal Projects costing Rs. 5 crores and above.

GANDAK PROJECT.

1. *Name of projects with brief description and location.*—The Gandak Irrigation and Power Project includes the following main units of works :—

- (i) A barrage across the river Gandak at Bhaisalotan (now re-named as Valmikinagar) about 2,500 ft. below the existing Tribeni Canal Head Regulator.
- (ii) The Main Western Canal with a command of 14.08 lakh acres (G. C. A.) in the district of Saran in North Bihar and 13.32 lakh acres (G.C.A.) in Uttar Pradesh. A separate canal will also take off above the Western under sluice of the barrage, which will have a command of 40,500 acres (G. C. A.) in the district of Bhairwa of the Western Nepal. The length of the Main Canal is 120 miles of which 11 miles will lie in Nepal, 66 miles in the districts of Gorakhpur and Deoria in Uttar Pradesh and the rest of 43 miles in the district of Saran in Bihar. The Main Western Canal in Bihar is known as "Saran Canal".
- (iii) The Main Western Canal with a gross command area of 18.41 lakh acres in the districts of Champaran, Muzaffarpur and Darbhanga of North Bihar and 1.15 lakh acres (G. C. A) in Parsa, Bara and Bawtahaat districts of Nepal. The Don Canal, which is a branch of the Main Canal will extend by 50 miles as the Nepal Eastern Canal for giving irrigation in Nepal. The existing Tribeni Canal will also be a branch of the Main Eastern Canal. The Main Eastern Canal will be 155 miles long and is known as "Tirhut Canal".
- (iv) A Hydro-electric Power House with an installed capacity of 15,000 K.W. on the Main Western Canal in Nepal.

The following two extension canals have also been included in the scope of the Project :—

- (a) A portion of Dhanaha P.-S of Champaran district which has been rendered flood-free by construction of an embankment along the river Gandak by the Irrigation Department has been included in the command of the Western Canal System. The command of the new branch canal will be 60,000 acres.
- (b) An area of about 1.67 lakhs lying between the command of the Nepal Eastern Canal and that of the Tribeni Canal (Extension Scheme) in the district of Champaran will be brought under irrigation by a new branch canal known as Ghorasahan Canal.

The actual irrigable area (crop area) in Bihar will be 28.45 lakh acres, the districtwise break-up of which is as below :—

District.				Irrigable area. [In lakh acres (crop area).]
Saran	...	...	...	11.35
Champaran	...	...	...	7.58
Muzaffarpur	...	...	...	7.30
Darbhanga	...	...	...	2.22
				28.45
			Total	28.45

2. *Gestation period in years.*—14 years (from 1960-61 to 1973-74).

3. *Cost estimates and outlays.*—(Rs. round in lakhs).

(a) *Total estimated cost.*—(i) Total—1,1900 (ii) Foreign Exchange—280.

(b) *Outlay and Expenditure* :—

Expenditure up to 1968-69.		Outlay proposed 1969--74.		1969-70 Approved.		1970-71 Proposed.		Three years, total (1971—74).		Balance after 1973-74, if any.	
Total.	F.E.	Total.	F.E.	Total.	F.E.	Total.	F.E.	Total.	F.E.	Total.	F.E.
1	2	3	4	5	6	7	8	9	10	11	12
53,64	2,50	65,00	3014,00	15	14,50	5	36,50	10	Nil	Nil	Nil
(a)		(b)									

(a) This includes Rs. 5,53 lakhs of Nepal Benefit Schemes.

(b) This includes Rs. 5,50 lakhs of Nepal Benefit Scheme of Gandak Project.

4. *Programme of Output*/Benefits.*—

Item.	Unit.	Progress up to 1968-69.	Target for Fourth Plan.	Phasing.		
				1969-70.	1970-71.	End of 1973-74.
1	2	3	4	5	6	7
(a) Potential (Gross)	'000	1,54	22,68	4,20	9,24	22,68
	acres.					
(b) Utilisation (Gross)	,,	28	15,03	1,18	3,34	15,03

*For Major and Medium Irrigation Projects, benefits in terms of gross potential created and gross utilisation should be indicated in respect of only those schemes which are included in the Plan.

5. *Training of technical and managerial personnel.*—At present there is no dearth of technical and managerial personnel. However, some technical officers are given special types of training in design and construction technique by sending them to Roorkee and in foreign countries under various technical aid programmes.

6. *Employment (Man-years).*—

	1966-67.	1967-68.	1968-69.	Fourth Plan (year by year).				
				1969-70.	1970-71.	1971-72.	1972-73.	1973-74.
1	2	3	4	5	6	7	8	9

I. *Additional requirements.*

Skilled—

(a) Technical ..	} 4,000	800	600	800	600	600	500	400
(b) Non-technical ..								
<i>Unskilled</i> ..	20,000	5,000	6,000	8,000	7,000	6,000	6,000	5,000

These figures include both the departmental and non-departmental employment and include the figures indicated under continuing phase. The figures for the year 1966-67 indicate total figures.

II. *Staff required on continuing basis*

<i>Skilled—</i>				1968-69.	End of Fourth Plan.
(a) Technical ..	..	..	..	} 200	200
(b) Non-technical ..	..	..	..
<i>Unskilled</i> ..	..	..	..	2,200	2,200

N.R.—Indicate norms or other basis adopted in calculating these estimates.

DRAFT FOURTH FIVE YEAR PLAN (1969—74).

STATEMENT IV.

Check-list in respect of Principal Projects costing Rs. 5 crores and above.

SONE BARRAGE PROJECT (ORIGINAL) AND SONE HIGH LEVEL CANALS.

1. *Name of project with brief description and location.*—The Sone Barrage Project is mainly a replacement to the existing old and outdated anicut at Dohri and it includes the following units of work:—

Unit I—Remodelling of Sone Canals.

Unit II—Construction of a new barrage at Indrapuri (district Shahabad) 5 miles up-stream of the existing Sone anicut, together with two Link canals.

Unit III—Construction of Eastern and Western High Level canals.

Besides stabilising irrigation in 7.34 lakh acres of the existing Sone Canal Command, the Sone Barrage Project envisages irrigation of an additional area of 3.07 lakh acres for completion of the Sone Remodelling Works.

It will also be possible to provide irrigation over another gross area of 4.25 lakh acres with the construction of Sone Eastern and Western High Level canals. The Planning Commission have given approval to the construction of this schemes. The net area irrigated from this scheme will be about 2.52 lakh acres (Western Canal—1.16 lakh acres+ Eastern Canal 1.36 lakh acres).

2. *Gestation period in years.*—12 years (1960-61 to 1971-72).

3. *Cost estimates and outlays.*—(Rs. round lakhs)—

(a) Total estimated cost—

(i) Total (ii) Foreign Exchange.

Remodelling of Sone canals	261*	Nil.
Barrage to Link Canals ...	11,82**	200
Sone High Level Canals ...	8,84	Nil.

*The Revised Estimate is expected to be of the order of Rs. 2,95 lakhs.

**The Revised Estimate is expected to be of the order of Rs. 15,37 lakhs.

(b) Outlay and expenditure—

Expenditure up to 1968-69.		Outlay proposed 1969-1974.		1969-70 Approved.		1970-71 Proposed.		Three years' Total (1971-74).		Balance after 1973-74, if any.	
Total	F. E.	Total	F. E.	Total	F. E.	Total	F. E.	Total	F. E.	Total	F. E.
1	2	3	4	5	6	7	8	9	10	11	12
Sone Barrage (Original)—											
18,24	2,00	8	Nil	8	Nil	..	..	..	..	Nil.	..
Sone High Level Canals.—											
70	Nil	8,14	..	1,60	..	8,50	..	8,04	..	Nil	..

4. Programme of output/benefits.—The figures indicate net area irrigated—

Item.	Unit.	Progress up to 1968-69.	Target for Fourth Plan.	Phasing.		
				1969-70.	1970-71	End of 1973-74.
1	2	3	4	5	6	7
I. Sone Barrage(Original)—						
(a) Potential	.. 000'acres	307	..	..	..	..
(b) Utilisation	.. ..	373	..	..	..	..
II. Sone High Level Canals—						
(a) Potential	.. ..	3	257	16	92	257
(b) Utilisation	.. ..	1	174	4	24	174

5. *Training of technical and managerial personnel.*—At present there is no derth of technical and managerial personnel. However some technical officers are given special types of training in design and construction technique by sending them to Roorkee and in foreign countries under various technical aid programmes.

6. *Employment (man-years).*—

—	1966-67	1967-68, 1968-69.	Fourth Plan, (year by year).						
			1969-70.	1970-71.	1971-72.	1972-73.	1973-74		
1	2	3	4	5	6	7	8	9	
I. Additional requirements.—									
Skilled.—									
(a) Technical	..	3,000	Nil	500	500	500	500	500	500
(b) Non-Technical	..								
Unskilled	..	10,000	Nil	2,000	1,000	2,000	1,000	1,500	1,500
II. Staff required on continuing basis.—									
Skilled—									
(a) Technical	50	..	..	..	..	..
(b) Non-technical	..								
Un skilled	600	..	..	600	..	..

N.B.—Indicate norms or other basis adopted in calculating these estimates.

DRAFT FOURTH FIVE YEAR PLAN (1969—74).

STATEMENT IV.

Check-list in respect of Principal Projects costing Rs. 5 crores and above.

RAJPUR CANAL SYSTEM.

1. *Name of the project with brief description and location.*—Irrigation of area between Eastern Kosi Embankment and Bhengadhar.—It comprises construction of a Branch Canal taking off from the Eastern Kosi Main Canal. There will be sub-branches, distributaries and minors to irrigate an area of 3.97 lakh acres in Saharsa district between the Eastern Embankment and western limit of sanctioned canal scheme.

2. *Gestation period in year.*—Ten years (1961-62 to 1971-72).

3. *Cost estimates and outlays (Rs. round lakhs).*—

(a) Total estimated cost—

(i) Total * 682

(ii) Foreign exchange Nil.

(b) Outlay and expenditure—

Expenditure up to 1968-69.		Outlay proposed 1969—74.		1969-70 Approved.		1970-71 Proposed.		Three years total 1971—74.		Balance after 1973-74, if any.	
Total.	F. E.	Total.	F. E.	Total.	F. E.	Total.	F. E.	Total.	F. E.	Total.	F. E.
1	2	3	4	5	6	7	8	9	10	11	12
442	..	246	..	62	..	92	..	92	..	..	..

4. *Programme of output/benefits.*—

Item.	Unit.	Progress up to 1968-69.	Target for Fourth Plan.	Phasing.		End of 1973-74.
				1969-70.	1970-71.	
1	2	3	4	5	6	7
Area under irrigation—						
(a) Potential	..	'000 acres	200	200	200	200
(b) Utilisation	60	250	50	250

5. *Training of technical and managerial personnel.*—Nil.

6. *Employment (man-years).*—

	Fourth Plan, (year by year.)								
	1966-67.	1967-68	1968-69.	1969-70.	1970-71.	1971-72.	1972-73.	1973-74.	
	1	2	3	4	5	6	7	8	9
I. Additional requirements—									
Skilled—									
(a) Technical	..	..	..	..	..	..	..	..	..
(b) Non-technical	.. Included in the report of Kosi Project (Original Scheme).								
Unskilled—									
II. Staff required on continuing basis—									
Skilled—									
				1968-69.					End of Fourth Plan.
(a) Technical	..			..					..
(b) Non-technical	.. Included in the report of Kosi Project (Original Scheme).								

ANNEXURE II.

DRAFT FOURTH FIVE YEAR PLAN (1969—74).

STATEMENT IV.

Check-list in respect of Principal Projects costing Rs. 5 crores and above.

WESTERN KOSI CANAL.

1. *Name of the projects with brief description and location.*—It comprises a Main Canal 70 miles long taking off from the right bank of Kosi Barrage with a capacity of 7000 cuses and designed to irrigate 8.03 lakh acres in the district of Saharsa in North Bihar and Saptari district of Nepal. The canal system will ensure irrigation facilities to the lands which are now subject to sever drought frequently. There is also a possibility of extending irrigation to about 25,000 acres in Nepal territory which is under examination.

2. *Gestation period in years*—10 years (1969 to 1979).—It has not yet started on account of difficulty in getting land in Nepal.

3. *Cost estimates and outlays.*—(Rs. round lakhs).—

(a) Total estimated cost—

(i) Total	..	..	19,69
(ii) Foreign exchange	..	..	25

OUTLAY AND EXPENDITURE.

Expenditure up to 1968-69.	Outlay proposed 1969—74.	1969-70 approved.	1970-71 proposed.	Three years— total (1971—74).	Balance after 1973-74, if any.
Total. Foreign exchange.	Total. Foreign exchange.	Total. Foreign exchange.	Total. Foreign exchange.	Total. Foreign exchange.	Total. Foreign exchange.
1	2	3	4	5	6
46	..	5,00	25	50	..
				1,00	..
				3,50	25
					14,23
					..

4. *Programme of output/benefits.*—

Item.	Unit.	Progress up to 1968-69.	Target for Fourth Plan.	Phasing.				
				1969-70.	1970-71.	End of 1973-74.		
1	2	3	4	5	6	7		
Area under irrigation—								
(a) Potential	000' acres	Nil	Nil	Nil	Nil	Nil
(b) Utilisation	000' acres	Nil	Nil	Nil	Nil	Nil

5. *Training of technical and managerial personnel.*—Nil.

6. *Employment (man-years).*—

Fourth Plan.									
	1966-67	1967-68	1968-69						
	1969-70	1970-71	1971-72	1972-73	1973-74				
	1	2	3	4	5	6	7	8	9
I. Additional requirements—									
Skilled—									
(a) Technical	..	Nil	Nil	Nil	100	200	200	200	200
(b) Non-technical	..	Nil	Nil	Nil	300	600	600	600	600
Unskilled	Nil	Nil	700	1,000	1,000	1,000	1,000
1968-69 End of Fourth Plan.									
II. Staff required on continuing basis—									
Skilled—									
(a) Technical	30	120			
(b) Non-technical	90	390			
Unskilled	100	500			

DRAFT FOURTH FIVE YEAR PLAN.

STATEMENT IV.

Check-list in respect of Principal Projects costing Rs. 5 crores and above.

NORTH KOEL PROJECT.

1. *Name of project with brief description and location.*—The North Koel Project includes construction of a dam on river North Koel, which is a tributary of River Sone, at village Kutku, in the District of Palamau, about 22 miles from Barwadih Railway Station. It will be possible to bring under irrigation a gross command area of 4.40 lakh acres through construction of North Koel High Level Canal and a diversion weir at Mohammadganj, about 65 miles downstream of Kutku, besides augmenting the supplies of water at the Sone Barrage.

2. *Gestation period in years.*—Six years (1971-72 to 1977-78).

Only investigation and preliminary works are expected to be done during the Fourth Plan period.

3. *Cost estimates and outlays (Rupees round lakhs).*—

(a) Total estimated cost—

(i) Total—13,16 (ii) Foreign exchange—30.

(b) Outlay and expenditures—

Expenditure up to 1968-69.		Outlay proposed 1969-74.		1969-70 approved.		1970-71 proposed.		Three year total (1971-74).		Balance after 1973-74, if any.	
Total.	Foreign exchange.	Total.	Foreign exchange.	Total.	Foreign exchange.	Total.	Foreign exchange.	Total.	Foreign exchange.	Total.	Foreign exchange.
1	2	3	4	5	6	7	8	9	10	11	12
Nil	Nil	5,00	..	Nil	..	Nil	..	5,00	30	8,16	..

4. *Programme of output/benefits.*—

Item.	Unit.	Progress up to 1968-69.	Target for Fourth Plan.	Phasing.				
				1969-70.	1970-71.	End of 1973-74.		
1	2	3	4	5	6	7		
(a) Potential	} 000' acres	Nil	Nil
(b) Utilisation	

5. *Training of technical and managerial personnel.*—At present there is no dearth of technical and managerial personnel. However, some technical officers are given special types of training in design and construction technique by sending them to Roorkee and in foreign countries under various technical aid programmes.

6. *Employment (Man-years).*—

—	1966- 67.	1967- 68.	1968- 69.	1969- 70.	Fourth Plan year by year			
					1970- 71.	1971- 72.	1972- 73.	1973- 74.
1	2	3	4	5	6	7	8	9
<i>I. Additional requirements—</i>								
<i>Skilled—</i>								
(a) Technical
(b) Non-technical
<i>Unskilled</i>
	Nil	Nil	Nil	Nil	Nil	1,000	500	500
	Nil	Nil	Nil	Nil	Nil	5,000	1,000	1,000
<i>II. Staff required on continuing basis—</i>								
<i>Skilled—</i>								
(a) Technical
(b) Non-technical
<i>Unskilled</i>
	50	50	..

N.B.—Indicate forms or others basis adopted in calculating these estimates.

DRAFT FOURTH FIVE YEAR PLAN (1969—74).

STATEMENT IV.

Check-list in respect of Principal Projects costing Rs. 5 crores and above.

1. Name of project with brief description and location.—Chandan Dam Project (Bhagalpur).

The scheme envisages construction of 6,625 ft. long and 132 ft. high earthen dam on the river Chandan near village Lakshmipur in Bhagalpur district and a high level canal with distribution system for irrigation of 1,00,000 acres of land.

2. Gestation period in year.—Seven years.

3. Cost estimates and outlays (Rupees round lakhs):—

(a) Total estimated cost—

(i) Total—9,92.00 (A).

(ii) Foreign exchange—Nil (B).

(b) Outlay and expenditure—

Expenditure upto 1968-69.		Outlay proposed 1969-74.		1969-70 approved.		1970-71 proposed.		Three years total (1971-74),		Balance after 1973-74, if any.	
Total	Foreign exchange.	Total	Foreign exchange.	Total	Foreign exchange.	Total	Foreign exchange.	Foreign	Total	Foreign	Total
542.24	..	449.73	..	10,000	..	125.00	..	224.76	..	Nil	..

4. Programme of out put/benefits—

Item	Unit.	Progress upto 1968-69.	Target for Fourth Plan.	Phasing.		
				1969-70.	1970-71.	End of 1973-74
Irrigation	.. 000 acres	24.00	76.00	..	..	76.00

5. Training of technical and managerial personnel.

6. Employment (man-years)—

	1966-67	1967-68	1968-69	Fourth Plan				
				1969-70	1970-71	1971-72	1972-73	1973-74

I. Additional requirements.

Skilled—

(a) Technical	60	60	60	60	60	60	60	Nil	Nil
(b) Non-technical	52	52	52	52	52	52	52	Nil	Nil
Unskilled ..	10,000	12,000	12,000	10,000	12,000	12,000	12,000	Nil	Nil

II. Staff required on continuing basis.

skilled—	1968-69.						End of Fourth Plan.
	(a) Technical	(b) Non-technical	Unskilled	(a) Technical	(b) Non-technical	Unskilled	
(a) Technical	24
(b) Non-technical	20
Unskilled	40

(A) The total cost of the entire Chandan Valley Project is Rs. 1,072 lakhs of which Rs. 992.00 lakhs is in respect of Dam High Level Canal and distribution system under Chandan Phase I Scheme. The total expenditure up to 1968-69 is Rs. 542.24 lakhs and Rs. 449.76 lakhs only will be required during the Fourth Plan to complete the scheme including the High Level Canal.

(B) The Chandan Reservoir Project is being constructed by the N. P. C. C., a Government concern who has utilized foreign exchange to the value of Rs. 40 lakhs for purchase of equipments which are being used on the Project.

DRAFT FOURTH FIVE YEAR PLAN (1969—74).

STATEMENT IV.

Check-list in respect of Principal Projects costing Rs. 5 crores and above.

1. *Name of the project with brief description and location.*—Barauni Steam Power Station (1×15+2×50 MW).

A steam power station consisting of three 15 MW generating units is already under operation at Barauni. The first two 15 MW generating units were the schemes of the Second Plan and the third 15 MW unit was approved by the Planning Commission for installation during the Third Five Year Plan for meeting the power requirement of Oil Refinery located at Barauni itself.

In addition to the three 15 MW units mentioned above, the Planning Commission also sanctioned as extension scheme the installation of two 50 MW sets at this station which are likely to be completed by 1969-70.

2. *Gestation period in years.*—Contract for the supply of plants and equipments for the two 50 MW units has been executed with M/s. Cekop of Poland. Civil works began in 1963-64 and the plant erection is in progress. Both the 50 MW generating units are expected to be commissioned by the middle of 1969. Thus the scheme is expected to be completed in six years.

3. *Cost estimates and outlays (Rupees round lakhs):*—

(a) Total estimated cost—

(i) Total—15,17.

(ii) Foreign exchange—7,03.

(b) *Outlay and Expenditure* —

Expenditure up to 1968-69.		Outlay proposed 1969.—74.		1969-70 Proposed.		1970-71 Proposed.		Three years Total (1971—74).		Balance after 1973-74, if any.	
Total.	Foreign Exchange.	Total.	Foreign Exchange.	Total.	Foreign Exchange.	Total.	Foreign Exchange.	Total.	Foreign Exchange.	Total.	Foreign Exchange.
1	2	3	4	5	6	7	8	9	10	11	12
1,467	700.00	50	50	..	..	..	..	..	..	..	..

4. *Programme output/benefits*—

Item.	Unit.	Progress up to 1968-69.	Target for Fourth Plan.	Phasing.		
				1969-70.	1970-71.	End of 1973-74.
1	2	3	4	5	6	7
1	MW	95	50	50	..	145

5. *Training of technical and managerial personnel.*—Fourteen Engineers have already been trained at Poland.

6. *Employment (man-years) :—*

— —	1966- 67.	1967- 68.	1968- 69.	Fourth Plan (year by year).				
				1969- 70.	1970- 71.	1971- 72.	1972- 73.	1973- 74.
1	2	3	4	5	6	7	8	9
<i>I. Additional requirement.</i>								
<i>Skilled—</i>								
(a) Technical	..	7	20	20	..	..	..	..
(b) Non-technical	..	5	5	10	..	..	..	..
<i>Unskilled</i>	25	50	25	..	..	..
<i>II. Staff required on continuing basis.</i>								
						1968- 69.	End of Fourth Plan.	
<i>Skilled—</i>								
(a) Technical	327	327
(b) Non-technical	86	86
<i>Unskilled</i>	400	400

DRAFT FOURTH FIVE YEAR PLAN (1969—74).

STATEMENT IV.

Check-list in respect of Principal Projects costing Rs. 5 crores and above.

1. *Name of the project with brief description and location.*—Patratu Thermal Power Station (4 × 50 + 2 × 100 MW).—Patratu Thermal Power Station is located near Patratu Railway Station at a distance of about 40 K.M. from Ramgarh in the district of Hazaribagh. The scheme was initiated in the Second Five Year Plan.

The erection of the first two 50 MW sets has been completed, the first 50 MW set being commissioned in September, 1966 and the second 50 MW set in June, 1967. Work on the remaining six sets is in the advance stage and they are likely to be completed by the end of 1969-70.

The plant and equipments are being supplied by V/O Machino-export of U. S. S. R. under the trade agreement between the Government of India and Government of U. S. S. R. The design of the power station has been prepared by "Teploelektro Proekt" of the U. S. S. R. in consultation with the Bihar State Electricity Board

2. *Gestation period in years.*—Although the scheme was initiated in the Second Five Year Plan, its execution continued during the Third Plan and is expected to be fully complete by 1969-70 during the Fourth Plan period. Thus the entire scheme will take nearly nine years for its execution.

3. *Cost estimates and outlay (Rupees round lakhs.)*

(a) Total estimated cost—

(i) Total—52,71.

(ii) Foreign Exchange—22,77.

(b) Outlay and Expenditure—

Expenditure up to 1968-69.	Outlay proposed 1969-74.	1969-70 proposed.	1970-71 proposed.	Three years' total (1971—74).	Balance after 1973-74, if any.						
Total	F. E.	Total F.E.	Total F.E.	Total F.E.	Total F.E.						
1	2	3	4	5	6	7	8	9	10	11	12
52,63	21,50.00	8	..	8	..	..	..	..	..	..	..

4. Programme of output/benefits.—

Item.	Unit.	Progress up to 1968-69.	Target for Fourth Plan.	Phasing.		
				1969-70.	1970-71.	End of 1973-74.
1	2	3	4	5	6	7
1	M W	200	200	200	..	400

5. *Training of technical and managerial personnel.*—Twenty Engineers have already been trained at U. S. S. R. and some Engineers have been trained in operation, etc., at Neyveli Project, Madras erected in collaboration with Russia.

6. Employment (man-years)—

Fourth Plan (year by year).

	1966-67.	1967-68.	1968-69.	1969-70.	1970-71.	1971-72.	1972-73.	1973-74.
I. Additional requirements.								
Skilled—								
(a) Technical	40	40	40	40	..	..	..
(b) Non-technical	8	10	12	5	..	..	..
Unskilled	40	40	40	40	..	..	..
II. Staff required on continuing basis.								
					1968-69.	End of Fourth Plan.		
Skilled—								
(a) Technical	2,377	2,487		
(b) Non-technical	594	604		
Unskilled	1,820	1,900		

DRAFT FOURTH FIVE YEAR PLAN (1969—74).

STATEMENT IV.

Check-list in respect of Principal Projects costing Rs. 5 crores and above.

1. *Name of the project with brief description and location—Kosi Hydrel Station (4×4.8 MW).*—A barrage has been constructed on the river Kosi near Hanuman Nagar in the district of Saharsa mainly for the purpose of flood control and irrigation. The canals, one on the eastern and another on the western side, take off from the barrage. At two miles down-stream on the eastern Kosi canal, a Power Station is under construction. The site is at an approximate distance of 37 K.M. from Bathnaha Railway Station on the North-East Frontier Railway in the district of Purnea, Bihar. The Power House has been designed for the installation of four generating units of 4.8 MW. The power house will be interconnected with other power stations in the grid of North Bihar. Out of the total generation of about 20 MW, 10 MW is earmarked for Nepal Government.

2. *Gestation period in years.*—The work on the Kosi Power Station was started in the year 1964-65. It is expected that the first two units will be commissioned by 1968-69 and the rest two by 1969-70.

Thus the entire scheme will be completed in five years time.

3. *Cost estimates and outlays.* (Rs. round lakhs):—

- (a) Total estimated cost—
 (i) Total—6,17.
 (ii) Foreign Exchange—87.
 (b) Outlay and Expenditure—

Expenditure up to 1968-69.	Outlay proposed 1969—74.	1969-70 proposed.	1970-71 proposed.	Three Years' Total (1971—74).	Balance after 1973-74, if any.
Total	F. E.	Total F.E.	Total F.E.	Total F.E.	Total F.E.
1	2	3	4	5	6
5,22	84.0	95	..	95	..

4. *Programme of out put/benefits*—

Item.	Unit.	Progress up to 1968-69.	Target for Fourth Plan.	Phasing		End of 1973-74.
				1969-70.	1970-71.	
1	2	3	4	5	6	7
1	M.W.	10	10	10	..	20

5. *Training of technical and managerial personnel.*—Four Engineers have been trained at Japan.

6. *Employment (man-years).*—

Fourth Plan (year by year).

		1966- 67.	1967- 68.	1968- 69.	1969- 70.	1970- 71.	1971- 72.	1972- 73.	1973- 74.
<hr/>									
I. Additional requirements.									
<i>Skilled</i> —									
(a) Technical ..	..	3	16	4	..	..	..	..	..
(b) Non-technical ..	..	4	4	2	..	..	..	..	..
<i>Unskilled</i> ..	..	15	15	20	..	..	..	..	..

II. Staff required on Continuing basis.

						1968-69.	End of Fourth Plan.
<i>Skilled</i> —							
(a) Technical ..	..	..	..	..	..	25	25
(b) Non-technical ..	..	..	..	..	..	10	10
<i>Unskilled</i> ..	..	..	..	..	..	50	50

DRAFT FOURTH FIVE YEAR PLAN (1969—74).

STATEMENT IV.

Check-list in respect of Principal Projects costing Rs. 5 crores and above.

1. *Name of the project with brief description and location.*—*Patratu Thermal Power Station Extension (2×110 MW).*—A power station of 400 MW capacity is already under erection at Patratu as spill-over scheme. The capacity is to be further augmented by installation of two 110 MW sets in addition to the 1st stage capacity as extension scheme. The main plant and equipments are to be procured from M/s. Bharat Heavy Electricals, Ltd. and the letter of intent has already been placed with them.

2. *Gestation period in years.*—The work of investigation was started during 1967-68 and the design work is still under progress. The first set of 110 MW is likely to be commissioned by 1971-72 and the second set by 1972-73. Some payments will have to be made during 1973-74 as well though the scheme will be completed by 1972-73 itself. Thus the scheme is expected to take 5 years for its execution.

3. *Cost estimates and outlay.*—(Rs. round lakhs)—(a) Total estimated cost—

(i) Total—33,90.

(ii) Foreign Exchange—200.

(b) Outlay and expenditure.

Expenditure up to 1968-69.		Outlay proposed, 1969-74.		1969-70, proposed.		1970-71, proposed.		Three Years' total (1971-74).		Balance after 1973-74, if any.	
Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.
1	2	3	4	5	6	7	8	9	10	11	12
2,58	..	31,32	2,00	2,90	..	10,00	1,00	18,42	1,00	..	..

4. *Programme of output/benefits.*—

Item.	Unit.	Progress up to 1968-69.	Target for Fourth Plan.	Phasing.		
				1969-70.	1970-71.	End of 1973-74.
1	2	3	4	5	6	7
1	MW	Nil	2,20	Nil	Nil	2,20
						i. e. 1971-72—110 MW 1972-73—110 MW

5. *Training of technical and managerial personnel.*—The Engineering staff already trained for stage I (400 MW) of the project will work for stage II (220 MW) also. Some specialised training, if needed, will be given at workshops in India itself.

6. *Employment (Man-Years).*—The requirement has been included under stage I of the project, hence no additional staff shall be required specifically for this extension scheme.

DRAFT FOURTH FIVE YEAR PLAN (1969—74)

STATEMENT IV.

Check-list in respect of Principal Projects costing Rs. 5 crores and above.

1. *Name of the project with brief description and location.*—Subarnrekha Hydro-Electric Project (2×65 MW).—There will be two power stations each with an installed capacity of 65 MW located at about 13 K.M. from Ranchi town, the nearest main Railway Station being Ranchi Junction. The dam on the river Subarnrekha 12 K.M. upstream of Hundroo falls of a maximum height of 116 ft. will have an effective catchment area of 280 square miles, with a total gross storage capacity of 2.84 lacs acre feet. On recommendation from C.W. & P.C. the project is being designed as a peaking plant for the eastern region for 3-4 hours daily operation in the evening at 15—20 per cent load factor. Water will be drawn from Subarnrekha Dam, circulated through the two power stations in cascade and discharged finally back into the Subarnrekha river at about 16 K.M. downstream. Construction of the Dam rests with the Irrigation Department. The letter of intent for the supply of plant and machinery has been issued on M/s. B.H.E.L.

2. *Gestation period in years.*—The clearance of Planning Commission was obtained in 1966. No substantial progress has been made except for investigation and design work as the civil works which have been entrusted to the Irrigation Department are yet to be completed. Actual work on intake structures is likely to be started in the year 1968-69 before the Irrigation Department completes the civil works. The scheme is expected to continue up to the end of 1973-74 when the installation of the 2nd 65 MW unit will be completed. Thus the entire scheme is to actually consume 4 years for its execution.

3. *Cost estimates and outlays.*—(Rs. round lakhs).—

(a) Total estimated cost—

(i) Total—12,90.

(ii) Foreign Exchange—x.

(b) Outlay and expenditure—

Expenditure upto 1968-69.		Outlay proposed, 1969—74.		1969-70, proposed.		1970-71, proposed.		Three years' total (1971—74).		Balance after 1973-74, if any.	
Total.	F.E.	Total.	F.E.	Total.	F.E.	Total.	F.E.	Total.	F.E.	Total.	F.E.
1	2	3	4	5	6	7	8	9	10	11	12
55	..	10,45.87	..	50	..	3,00	..	6,95.87	..	1,89.13	..

4. Programme of Output/benefits.—

Item.	Unit.	Progress up to 1968-69.	Target for Fourth Plan.	Phasing.		
				1969-70.	1970-71.	End of 1973-74.
1	2	3	4	5	6	7
1	MW	Nil	130	Nil	Nil	130
					i.e. 1971-72—65 MW 1973-74—65 MW	

5. Training of technical and managerial personnel.

6. Employment (Man-Years)—

I. Additional Requirements—

1	Fourth Plan (Year by year)							
	1966-67.	1967-68.	1968-69.	1969-70.	1970-71.	1971-72.	1972-73.	1973-74.
2	3	4	5	6	7	8	9	
<i>Skilled—</i>								
(a) Technical	4	..	..	8	6	6	..	..
(b) Non-technical	2	..	..	2	4	4	..	..
<i>Unskilled</i>	15	..	..	15	20	15	..	..

II. Staff required on continuing basis—

	1968-69.	End of Fourth Plan.
<i>Skilled</i>		
(a) Technical	..	24
(b) Non-technical	..	12
<i>Unskilled</i>	..	65

DRAFT FOURTH FIVE YEAR PLAN (1969—74)

STATEMENT IV.

Check-list in respect of Principal Projects costing Rs. 5 crores and above.

1. Name of the project with brief description and location—

*Transmission Schemes :**Lines.***A. Third Plan Schemes (Spill-over)**

Serial no.	Name of the scheme.	No. of Circuit.	Length (K.M.)
1	220 KV Patratu-Chandil	D/C	160
2	220 KV Patratu-Gaya	D/C	136
3	220 KV River Crossing at Dehri	D/C	..
4	132 KV Muzaffarpur-Sugauli	S/C	96
5	132 KV Purnea-Kosi	S/C	107
6	132 KV Gaya-Mokameh	D/C	138

B. Schemes included in the original Fourth Plan (1966—71)

1	220 KV Gaya-Dehri	D/C	80
2	132 KV Dehri-Banjari	S/C	32
3	132 KV Dehri-Dumraon	S/C on D/C Towers	72
4	132 KV Deoghar-Littipara	S/C	100
5	132 KV Mokameh-Sultanganj	S/C	102
6	132 KV Patratu-Latehar	S/C	80
7	132 KV Patratu-Alloy Steel Plant	D/C	16
8	132 KV Adityapur-Rajkharswan	S/C	32
9	132 KV Kendposh-Noamundi	S/C	27

C. Additional schemes to be included in new Fourth Plan (1969—74).

1	132 KV Purnea-Saharsa	S/C	75
2	132 KV Samastipur-Darbhangha	S/C on D/C Towers.	42
3	132 KV Muzaffarpur-Sitamarhi	S/C on D/C Towers.	50
4	132 KV Chapra-Mirganj	S/C	75
5	132 KV Chandil-Telco (Jamshedpur)	S/C	25
6	132 KV Dumraon-Arrah	S/C	48
7	132 KV Dehri-Karamnasa	S/C	96
8	132 KV Sultanganj-Sahebganj	S/C	90

SUB-STATIONS.

A. Third Plan Schemes (Spill over).

Serial no.	Name.	Voltage KV	Capacity MVA
1	Chandil	220/132	3 × 100
2	Gaya	220/132	3 × 50
3	Mokameh	132/33	2 × 12.5
4	Sugauli	132/33	2 × 7.5
5	Capacitor Installation at Barun and Patna .. .. .	..	..

B. Schemes Included in the original Fourth Plan (1966—71).

1	Dehri	220/132	3 × 50
2	Adityapur	132/33	2 × 50
3	Noamundi	132/33	2 × 20
4	Monghyr	132/33	2 × 12.5
5	Littipara	132/33	2 × 7.5
6	Garhwa Road	132/33	2 × 7.5
7	Banjari	132/33	2 × 12.5
8	Dumraon	132/33	2 × 7.5
9	Chapra	132/33	2 × 12.5
10	Addition of bays at Kajkharswan, Deoghar, Patratu, etc. .. .. .	..	..
11	Taking over of D. V. C. system beyond Chandauti .. .. .	..	..
12	Taking over of D. V. C. system beyond Chandil .. .. .	..	..

C. Additional schemes to be included in new Fourth Plan (1969—74).

1	Arrah	132/33	2 × 7.5
2	Jehanabad	132/33	2 × 12.5
3	Latehar	132/33	2 × 7.5
4	Mirganj	132/33	2 × 7.5
5	Saharsa	132/33	2 × 7.5
6	Darbhangha	132/33	2 × 7.5
7	Sitamarhi	132/33	2 × 7.5
8	Sahebganj	133/33	2 × 7.5

2. *Gestation period in years.*—It will run throughout the Plan period as this is a running Scheme.

3. *Cost estimates and outlays* — (P.s. round lakhs.)

(a) Total estimated cost—

(i) Total—38,72

(ii) Foreign Exchange—6,00

(b) Outlay and Expenditure—

Expenditure upto 1968-69.		Outlay proposed, 1969-74.		1969-70, proposed.		1970-71, proposed.		Three years' Total (1971-74).		Balance after 1973-74, if any.	
Total.	F. E.	Total.	F. E.	Total.	F. E.	Total.	F. E.	Total.	F. E.	Total.	F. E.
1	2	3	4	5	6	7	8	9	10	11	12
13,53	3,00.00	25,19	3,00.0	4,96.87	1,00.0	6,00	50	14,22.13	1,50.0	..	..

4. Programme of output/benefits.—

Item.	Unit.	Progress up to 1968-69.	Target for Fourth Plan.	Phasing.					
				1969-70.	1970-71.	End of 1973-74.			
1	2	3	4	5	6	7			
<i>Transmission Line—</i>									
(a) 220 KV	Cir. K. M.	..	592	160	..	160	752
(b) 132 KV	Cir. K M.	..	1,780	1,181	294	206	2,961
<i>Sub-stations—</i>									
(a) 200/132 K V	M. V. A.	..	Nil	602 (3 numbers).	450 (2 numbers).	150 (1 number).	600 (3 numbers)
(b) 132/33 K V	M. V. A.	..	345 (11 numbers).	680 (21 numbers).	248 (7 numbers).	259 (5 numbers).	1,025 (32 numbers).

Training of technical and managerial personnel :

Engineers have been trained in Breaker maintenance at Sweden, West Germany, and Canada.

Employment (Man-years).—

Fourth Plan (year by year).

	1966-67.	1967-68.	1968-69.	1969-70.	1970-71.	1971-72.	1972-73.	1973-74.		
1	2	3	4	5	6	7	8	9		
<i>I. Additional Requirements—</i>										
<i>Skilled—</i>										
(a) Technical	35	35	35	35	46	30	25	25
(b) Non-technical	12	12	12	12	12	10	8	8
<i>Unskilled</i>	40	40	40	40	40	35	30	30

II. Staff required on continuing basis—

						1968-69.	End of Fourth Plan.
<i>Skilled—</i>							
(a) Technical	-	..	..	..	..	300	441
(b) Non-technical	..	..	..	..	..	114	164
<i>Unskilled</i>	..	..	..	..	..	520	695

DRAFT FOURTH FIVE YEAR PLAN (1969-74)

STATEMENT IV.

Check list in respect of Principal Projects costing Rs. 5 crores and above.

1. *Name of the project with brief description and location—Sub-transmission Distribution Scheme.*—It consists of 33 KV lines, 11 KV lines, L. T. lines, Power sub-stations and distribution sub-stations.

2. *Gestation period in years.*—It will run throughout the plan period as this is a running scheme.

3. *Cost estimates and outlays—*

(a) *Total estimated cost (Rs. round lakhs.)—*

(i) Total 25,00.00 (Fourth Plan Scheme).

(ii) Foreign Exchange—50.00

(b) *Outlay and Expenditure.*

Expenditure up to 1968-69.		Outlay proposed 1969-74.		1969-70 proposed.		1970-71 proposed.		Three years' total (1971-74).		Balance after 1973-74, if any.	
Total.	F.E.	Total.	F.E.	Total.	F.E.	Total.	F.E.	Total.	F.E.	Total.	F.E.
1	2	3	4	5	6	7	8	9	10	11	12
47.26	..	25.00	50.0	5.00	..	5.00	50.0	15.00	..	..	..

4. *Programme of output/benefits.*

Item.	Unit.	Progress up to 1968-69.	Target for Fourth Plan.	Phasing.				
				1969-70.	1970-71.	End of 1973-74.		
1	2	3	4	5	6	7		
1. 33 KV lines	CCR., KM	59.10	33.90	7.00	7.00	93.00
2. 11 KV lines	CIR KM	21,890 (including rural).	40.00	8.00	8.00	25,890
3. L. T. lines	CIR., K.M.	23,678 (including rural).	4.000	8.00	8.00	2,76.78
4. 33/11 KV sub-stations	Numbers	142	50	10	10	192
5. Distribution sub-stations	Numbers	86,80 (including rural).	20.00	4.00	4.00	..

5. *Training of technical and managerial personnel.*6. *Employment (man-years):—*

Fourth Plan (year by year).

1966-67. 1967-68. 1968-69.

1969-70 1970-71 1971-72 1972-73 1973-74

	1	2	3	4	5	6	7	8	9
I. Additional requirements—									
<i>Skilled—</i>									
(a) Technical	40	40	40	40	40	56	40	40	40
(b) Non-technical.	100	100	100	100	100	100	100	100	100
<i>Unskilled ..</i>	160	160	160	160	160	160	160	160	160

II. Staff required on continuing basis—

1968-69. End of Fourth Plan.

<i>Skilled—</i>									
(a) Technical	..	..			120			336	
(b) Non-technical	..	..			300			800	
<i>Unskilled ..</i>	..	..			480			1,280	

DRAFT FOURTH FIVE YEAR PLAN (1969--74)

STATEMENT IV.

Check list in respect of principal projects costing Rs. 5 crores and above.

1. Name of the project with brief description and location—Rural electrification.—
It consists of 11 KV lines, L.T. lines and Distribution sub-Stations.

2. Gestation period in years.—It will run throughout the plan period as this is a running scheme.

3. Cost estimates and outlays (Rs. round lakhs)—

(a) Total estimated cost—

(i) Total 20,00.00 (Fourth Plan Scheme).

(ii) Foreign exchange.

(b) Outlay and Expenditure—

Expenditure up to 1968-69.		Outlay proposed, 1969-74.		1969-70, proposed.		1970-71, proposed.		Three years' total, 1971-74.		Balance after 1973-74, if any.	
Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.
1	2	3	4	5	6	7	8	9	10	11	12
2,161	..	2,000	..	200	..	330	..	1,470	..	..	..

4 Programme of output/benefits—

Item.	Unit.	Progress upto 1968-69.	Target for Fourth Plan.	Phasing.		
				1969-70.	1970-71.	End of 1973-74.
1	2	3	4	5	6	7
(a) 11 KV lines	Cir KM	Included in	11,000	1,760	1,936	11,000
(b) L.T. lines	Cir KM	Sub-transmission and Distribution.	16,000	2,560	2,816	16,000
(c) District S/S	Nos.		11,000	1,760	1,936	11,000
(d) Pump sets energised.	Nos.	51,625	1,25,000	15,200	23,250	1,76,625
(e) Villages electrified.	Nos.	7,626	12,500	1,250	2,300	20,126

5. *Training of technical and managerial personnel.*

6. *Employment (man-years).*

Fourth Plan (year by year)

1966-67 1967-68 1968-69 1969-70 1970-71 1971-72 1972-73 1973-74

	1	2	3	4	5	6	7	8	9
I. Additional requirements—									
<i>Skilled—</i>									
(a) Technical	40	40	40	40	40	50	50	50	50
(b) Non-technical.	60	60	60	60	60	75	75	75	75
<i>Unskilled ..</i>	100	100	100	100	100	125	125	125	125

1968-69

End of Fourth Plan.

II. Staff required on continuing basis.

Skilled—

(a) Technical	..	..	120	..	..	350
(b) Non-technical	..	..	180	..	..	525
<i>Unskilled ..</i>	..	..	300	..	..	875

ANNEXURE II
STATEMENT—V
DRAFT FOURTH FIVE YEAR PLAN (1969-74 .
PHYSICAL PROGRAMMES.

Item.	Unit.	Estimated level of Achievement.						
		1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
1	2	3	4	5	6	7	8	9
<i>Area under forests—</i>		I. AGRICULTURE AND FORESTRY.						
(i) Area under work Plans	..	31,427	31,427	31,427	31,427	31,427	31,427	31,427
(ii) Area under quick growing.	..	3,166	2,800	1,510	1,680	1,600	1,600	1,600
(iii) Economic Plantations	..	871	1,200	1,065	1,255	1,255	1,255	1,595
(iv) Area under Fuel Plantations.	..	..	..	..	..	..	..	..
(v) Others	..	7,130	6,800	6,200	8,000	9,600	11,100	11,100
TOTAL—Area under forests	..	31,427	31,427	31,427	31,427	31,427	31,427	31,427
<i>Area under orchards—</i>								
Net cropped area	.. Lakh acres ..	3.57	3.67	3.77	3.87	3.97	4.07	4.17
<i>Gross cropped area—</i>								
<i>Irrigated area—</i>								
By Canals ..	.. (000' acres)	3,261.43	3,594.65	3,987.65	4,501.28	5,109.38	5,798.58	6,580.08
By Government Tube-wells	} (000' acres)	2,327.00	3,637.00	4,168.00	4,665.00	5,221.00	5,782.00	6,365.00
By Private Tube-wells/ Pump-sets.								
By Masonry Wells								
By Bhandaras, Tanks and Bandis.								
TOTAL—Irrigated area ..	(000' acres)	5,598.43	7,231.65	8,155.65	9,166.28	10,330.38	11,580.58	12,945.08
NET	..	..	..	..	..	..	..	..
GROSS	..	..	..	..	..	..	..	..
<i>Area under Food-crops—</i>								
<i>(i) Kharif—</i>								
(a) Paddy Acreage	.. Lakh acres ..	1,21.68	1,25.00	1,28.00	1,30.00	1,32.00	1,32.50	1,33.00
(b) Irrigated Area	.. Lakh acres ..	48.00	50.00	54.5	58.50	64.00	70.00	70.00
(c) Production, etc.	.. Lakh Tons	38.65	44.00	47.00	50.00	54.00	58.00	61.25
<i>(ii) Rabi- Wheat—</i>								
(a) Acreage	.. Lakh Acres ..	26.09	30.00	32.00	34.00	36.00	37.00	38.00
(b) Irrigated area	.. Ditto ..	6.84	8.50	10.00	12.50	19.50	21.50	21.50
(c) Production	.. Ditto ..	8.82	10.50	11.50	14.00	18.00	19.50	21.00

STATEMENT V—contd.

Item.	Unit.	Estimated level of achievement.							
		1967-68.	1968-69.	1969-70.	1970-71.	1971-72.	1972-73.	1973-74.	
1	2	3	4	5	6	7	8	9	
<i>(iii) Others—</i>									
(a) Maize	.. Lakh acres ..	20.85	21.00	21.00	21.50	21.50	21.50	21.50	
(b) Irrigated area	.. Ditto ..	1.00	2.40	4.20	6.40	7.50	8.40	8.40	
(c) Production	.. Lakh Tons ..	9.36	10.00	11.00	11.50	13.00	13.50	14.50	
<i>Barley.</i>									
(a) Acreage	.. Lakh Acres ..	8.91	10.00	10.50	11.00	11.50	11.50	12.00	
(b) Irrigated area	.. Ditto ..	1.25	1.50	2.50	3.00	4.00	4.25	4.25	
(c) Production	.. Lakh Tons ..	2.50	2.80	3.00	3.50	3.88	4.00	4.50	
<i>Gram.</i>									
(a) Acreage	.. Lakh acres	9.07	10.00	10.00	10.00	10.00	10.00	10.00	
(b) Irrigated area	.. Ditto ..	0.75	1.00	1.25	1.50	1.75	2.00	2.00	
(c) Production	.. Lakh Tons ..	2.29	1.92	2.22	2.30	2.50	2.60	2.75	
<i>Others.</i>									
(a) Acreage	.. Lakh acres ..	37.62	47.00	50.50	52.50	53.00	53.50	54.50	
(b) Irrigated area	.. Lakh acres	1.95	4.10	9.05	13.10	18.75	20.35	20.35	
(c) Production	.. Lakh Tons ..	11.41	10.03	10.45	12.89	13.05	13.72	15.14	
AREA UNDER COMMERCIAL CROPS—									
I. JUTE AND MESTA—									
(a) Acreage	.. Lakh acres ..	4.94	5.00	5.00	5.00	5.00	5.00	5.00	
(b) Irrigated area	.. Lakh acres ..	..	1.00	1.35	1.70	2.05	2.40	2.75
(c) Production	.. Lakh Bales ..	10.08	10.65	11.74	12.51	13.28	13.89	14.50	
II. SUGARCANE—									
(a) Acreage	.. Lakh acres ..	2.90	4.25	4.25	4.25	4.25	4.25	4.25	
(b) Irrigated area	.. Lakh acres ..	..	1.00	1.10	1.18	1.46	1.67	2.00
(c) Production	.. Lakh Tons ..	38.39	60.00	62.10	65.10	68.70	72.70	77.00	
III. TOBACCO—									
(a) Acreage	.. '000 acres ..	9.43	0.43	0.43	0.43	0.43	0.43	0.43	
(b) Irrigated area	.. '000 acres ..	Nil	Nil	Nil	Nil	Nil	Nil	Nil	
(c) Production	.. '000 Tons ..	0.18	0.19	0.20	0.21	0.22	0.23	0.24	
OIL-SEEDS—									
(a) Acreage	.. Lakh acres ..	6.46	6.69	7.05	7.25	7.40	7.55	7.69	
(b) Irrigated area	.. Lakh acres ..	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
(c) Production	.. Lakh Tons ..	1.00	1.13	1.33	1.54	1.76	1.96	2.14	

STATEMENT V—*contd.*

Item.	Unit.	Estimated level of achievement.							
		1967-68.	1968-69.	1969-70.	1970-71.	1971-72.	1972-73.	1973-74.	
1	2	3	4	5	6	7	8	9	
AREA UNDER HIGH YIELDING VARIETIES.									
Wheat	Lakh acres ..	4.50	6.00	8.00	11.50	15.00	15.50	16.00	
Paddy	Lakh acres ..	5.73	7.70	10.50	13.50	17.00	18.00	19.00	
Jawar .. ..	.. ..	..	..	..	..	..	..	..
Bajra .. ..	.. ..	..	..	..	..	..	..	..
Maize	Lakh acres ..	1.28	1.61	2.00	3.00	4.00	4.50	5.00	
Oil-seeds ..	.. ..	..	..	..	..	..	..	..
Cotton .. ..	.. ..	..	..	..	..	..	..	..
Jute .. ..	.. ..	..	..	..	..	..	..	..
Others (Specify) ..	.. ..	..	..	..	..	..	..	..
AREA UNDER IMPROVED VARIETIES—									
(i) Paddy	} Lakh acres ..	100.00	118.00	122.00	126.00	130.00	130.00	130.00
(ii) Wheat .. ..	.. ..							
(iii) Maize .. ..	.. ..							
(iv) Others .. ..	.. ..							
HIGH YIELDING VARIETIES SEED DISTRIBUTED—									
(a) Paddy	Tonnes ..	5,460	9,240	12,600	16,200	20,400	21,600	22,800	
(b) Wheat	Tonnes ..	1,986	18,000	25,500	34,500	45,000	46,000	48,000	
(c) Maize	Tonnes ..	21	1,047	1,300	1,950	2,600	2,925	3,250	
TOTAL—OTHERS ..	Tonnes ..	..	28,287	39,400	52,400	68,000	71,025	74,050
IMPROVED VARIETIES SEED DISTRIBUTED—									
(a) Paddy	} Lakh Tonnes	1.34	1.56	1.60	1.65	1.69	1.69	1.69
(b) Wheat .. ..	.. ..							
(c) Maize .. ..	.. ..							
(d) Others .. ..	.. ..							
FERTILISERS DISTRIBUTED—									
Nitrogenous (as N) ..	Lakh tonnes	2.20	2.89	5.74	7.87	9.66	10.73	12.05	
Phosphatic (as P205) ..	Lakh tonnes	0.87	1.73	3.58	4.70	6.10	6.61	7.33	
Potassic (as K) ..	Lakh tonnes	0.05	0.38	0.73	0.94	1.10	1.24	1.30	

STATEMENT V—contd.

Item.	Unit.	Estimated level of achievement.							
		1967-68.	1968-69.	1969-70.	1970-71.	1971-72.	1972-73.	1973-74.	
1	2	3	4	5	6	7	8	9	
AREA UNDER GREEN MANURE.	Lakh acres	10.00	11.00	15.00	15.00	15.00	15.00	15.00	
AREA COVERED BY PLANT PROTECTION—									
(i) Food crops	Lakh acres	28.36	29.00	30.00	43.00	56.00	69.00	82.00	
(ii) Commercial crops	Lakh acres	5.00	6.00	5.00	8.00	11.00	14.00	17.00	
(iii) Horticulture	Lakh acres	4.00	5.00	5.00	7.00	9.00	11.00	13.00	
TOTAL	Lakh acres	37.36	40.00	40.00	58.00	76.00	94.00	112.00	
SOIL CONSERVATION ON AGRICULTURAL LAND.	Lakh acres	0.31	0.41	0.45	0.45	0.45	0.45	0.43	
SOIL CONSERVATION IN CATCHMENT AREA.	..	..	..	..	..	..	..	..
RIVER VALLEY PROJECTS	..	..	..	..	..	..	..	..
AREA CONSOLIDATED	..	..	..	..	..	..	..	..
NO. OF REGULATED MARKETS.	Nos.	60	60	64	73	82	91	100	
STORAGE CAPACITY AVAILABLE—									
(i) For Fertilisers	..	..	..	..	..	..	..	..
(ii) For Foodgrains	..	..	..	..	..	..	..	..
(iii) For others	..	..	..	..	..	..	..	..
TOTAL	..	..	..	..	..	..	..	..
ANIMAL HUSBANDRY—									
Veterinary hospitals/dispensaries.	Establishment of Class I Veterinary dispensaries.	..	..	1	3	3	7	6
Artificial Insemination	..	..	..	..	..	100	..	..
Stockmen Centres (I. C. D. B.)	..	..	..	..	..	..	..	..
Area under fodder crops	Establishment of Key Village Blocks.	Continuation of 4 K. V. Blocks sanctioned during 1966-67.	Ditto (as in Sl. 3)	..	..	..	..	..
Key Village Blocks	Establishment of one exotic breed unit.	..	..	..	..	..	..	..

STATEMENT V—*contd.*

Item.	Unit.	Estimated level of Achievement.							
		1967-68.	1968-69.	1969-70.	1970-71.	1971-72.	1972-73.	1973-74.	
1	2	3	4	5	6	7	8	9	
Cattle Breeding Farms ..	Expenditure of Sheep Breeding Farm, Chatra.	Purchase of 200 sheep and provisions for Irrigated improvement of land buildings, etc.							
SHEEP AND WOOL EXTENSION CENTRES.	..	..	..	..	..	..	..	..
WOOL BREADING AND MARKETING CENTRES.	..	..	..	..	..	..	..	..
PRODUCTION OF ANIMAL PRODUCTS—									
(a) Milk/Milk Products	In lakh Kg. per year.	1,51,71.80	1,55,34.40	1,56,38.55	1,57,42.70	1,58,46.95	1,59,71.67	1,60,96.50	
(b) Meat	In Metric ton per year.	6,31,88.18	6,75,07.27	7,18,26.36	7,61,45.45	8,04,64.54	8,47,83.63	8,91,02.72	
(c) Wool	In lakh Pounds	15.94	16.17	15.39	16.62	16.85	17.07	17.31	
No. of Government Poultry Farms.	Establishment of a 5,000 Layer's Farm at Patratu and Bokaro.	..	..	1 (one at Patratu)	..	..	..	..
No. of Poultry Co-operatives	Establishment of Poultry-Co-operative Societies.	..	..	50	50	..	..	..
No. of Poultry farmers trained—									
(i) Short-term course	Training of Farmers.	1,000	..	1,000	1,000	1,000	1,000	1,000	
(ii) Long-term course— Intensive Egg and Poultry production— Marketing Centres.	(a) Establishment of Centre. (b) Continuation of the centre at Bokaro.	..	1 (One at Bokaro)	1 (One at Patratu)	..	..	..	..
FISHERIES.									
Mechanisation of boats ..	(No.)	2	..	..	..	..	..	..
Cold Storages for storing fish	(No.)	3	..	..	..	..	..	..
Co-operative Marketing ..	(Quantity)	..	..	..	..	..	..	..
Landing and Berthing facilities Provided in harbours.	(No.)	..	..	..	..	..	..	..
Loans advanced to Fishermen's Co-operatives.	(Lakhs)	..	..	..	..	..	..	..
Fingerlings distributed ..	(Crores)	2.58	4.00	6.00	7.00	8.00	9.00	10.00	
No. of fish seed farms ..	(Nos.)	40	50	60	70	80	90	100	
No. of composite fish farms	(Nos.)	9	15	20	30	40	50	60	

STATEMENT V—*contd.*

Item.	Unit.	Estimated level of Achievement.						
		1967-68.	1968-69.	1969-70.	1970-71.	1971-72.	1972-73.	1973-74.
1	2	3	4	5	6	7	8	9
2. CO-OPERATION.								
(i) Primary Co-operative Societies (Agricultural Credit).	No.	16,500	16,500	16,500	16,500	16,500	16,500	16,500
Membership	.. (In lakhs)	19.00	24.00	30.00	35.00	40.00	45.00	50.00
Share capital of members		315.00	418.00	550.00	680.00	800.00	940.00	1,150.00
Deposits of members	..	230.00	300.00	390.00	470.00	560.00	650.00	725.00
<i>(ii) Agricultural Credit—</i>								
(a) Short & Medium Terms	(Rs. crores)	..	..	..	..	..	..	..
(b) Advances during years		15.00	20.00	30.00	40.00	50.00	60.00	70.00
Amount outstanding at the end of the year.		8.50	9.75	12.75	15.00	18.00	20.00	22.00
(c) Long-term	.. (Rs. crores)	..	..	..	..	..	..	..
Advances during the year		2.00	9.00	15.75	17.93	20.74	22.64	23.08
Amount outstanding at the end of the year.		3.39	11.50	26.24	41.17	65.81	82.45	96.53
(iii) Primary Marketing Societies.	(Nos.)	273	278	282	292	304	316	328
Business handled during the year.	(Rs. crores)	520.00	540.00	560.00	600.00	630.00	650.00	700.00
<i>(iv) Processing Societies—</i>								
(a) Rice Mills	.. (No.)	14	15	15	17	19	21	23
Business handled	.. (Rs. in lakhs)	226.80	243.00	243.00	275.40	307.80	339.20	371.60
(b) Sugar factories production.	(No.)	..	..	..	..	..	..	..
(c) Cotton ginning and Pressing.	(No.)	..	..	..	..	..	..	..
Business handled	.. (Rs. lakhs)	..	..	..	..	..	..	..
<i>(d) Others—</i>								
(i) Fruits processing units	(No.) (only four functioning.)	7	8	8	8	8	8	8
Business handled	.. (Rs. in lakhs)	210.00	275.00	330.00	340.00	350.00	360.00	375.00
(ii) Cold storages	.. (No.)	11	12	13	14	16	17	17
Business handled	.. (Rs. in lakhs)	55.00	65.00	70.00	80.00	93.00	100.00	100.00

STATEMENT V—contd.

Item	Unit.	Estimated level of Achievement.						
		1967-68.	1968-69.	1969-70.	1970-71.	1971-72.	1972-73.	1973-74.
1	2	3	4	5	6	7	8	9
3. MAJOR AND MEDIUM IRRIGATION.								
Estimated area under Irrigation—								
(a) Potential	.. '000 acres	3,160.10	4,155.60	4,828.40	5,468.40	6,195.90	6,641.10	7,181.10
(b) Utilisation	.. '000 acres	2,705.43	3,005.65	3,358.65	3,837.28	4,410.38	5,079.58	5,837.08
4. POWER.								
(i) Installed capacity	.. '000 KW.	153	313	565	565	740	905	905
(ii) Electricity generated	.. '000 W.H.	7,15,000	9,90,000	17,65,000	24,00,000	28,00,000	31,00,000	36,00,000
(iii) Electricity sold	.. '000 K.W.H.	12,31,000	13,85,000	21,00,000	26,80,000	30,20,000	34,00,000	37,40,000
(iv) Rural Electrification—								
*(a) Villages Electrified	.. Nos.	6,626	7,626	9,626	11,826	14,326	17,026	20,126
(b) Pump sets energised by electricity.	} Nos.	40,375	51,625	71,625	93,625	1,18,625	1,45,625	1,76,625
(c) Tube-wells energised by electricity.								
TRANSPORT.								
(i) Surfaced Roads	.. ('000 Km.)	11.18	11.98	12.58	13.11	13.57	13.98	14.32
(ii) Unsurfaced Roads	.. ('000 Km.)	2.98	2.94	2.47	2.09	1.78	1.55	1.41
(iii) Villages not connected by roads.	('000 Km.)	..	..	..	..	..	..	..
EDUCATION.								
General Education	.. (Figures in lakhs)	..	..	..	..	..	..	..
Enrollment	.. (Figures in lakhs)	..	..	..	..	..	..	..
(i) Classes I—V	.. Primary							
Total	.. (Figures in lakhs)	42.74	44.44	47.19	50.09	53.09	56.19	59.46 (15.02 Addl. during 1969-74.)
As percentage of the population in this age-group.		56.8	57.4	59.9	62.4	64.8	67.2	69.6 (Addl. 12.2%)
Girls	.. (Figures in lakhs)	10.79	11.34	12.84	14.39	15.99	17.64	19.38
As percentage of population in this age-group.		28.8	29.8	32.9	36.1	39.3	42.4	45.6 (Addl. 16%)
(ii) Classes VI—VIII	.. Middle.							
Total	.. (Figures in lakhs)	7.84	8.21	8.90	9.65	10.48	11.37	12.34
As percentage of population in this age-group.		19.4	19.7	20.8	21.9	23.3	24.8	26.8
Girls	.. (Figures in lakhs)	1.18	1.27	1.40	1.79	1.79	2.06	2.40
As percentage of population in this age-group.		6.00	6.2	6.6	7.2	8.0	9.1	10.5

*Should correspond to census villages.

STATEMENT V—*contd.*

Item.	Unit.	Estimated level of Achievement.							
		1967-68.	1968-69.	1969-70.	1970-71.	1971-72.	1972-73.	1973-74.	
1	2	3	4	5	6	7	8	9	
<i>(iv)</i> Training of nurses—									
Institutes ..	Nos.	..	2	3	3	4	5	5	6
Annual intake ..	Nos.	..	60	110	110	200	250	300	430
Annual outturn ..	Nos.	..	50	90	90	180	210	270	350
<i>(v)</i> Control of diseases—									
T.B. Clinics ..	Nos.	..	25	28	28	36	44	52	60
Leprosy Control ..	Nos.	..	18	19	19	21	23	26	29
V.D. Clinics ..	Nos.	..	9	10	10	12	13	17	19
Filaria Units ..	Nos.	..	8	8	9	10	14	15	17
<i>(vi)</i> Maternity and Child Welfare Centres.	Nos.	..	63	63	63	63	63	63	63
<i>(vii)</i> Medical Education—									
(a) Medical colleges ..	Nos.	..	3	3	4	4	5	6	5
(b) Annual admission ..	Nos.	..	525	610	610	700	800	800	800
(c) Annual outturn ..	Nos.	..	400	400	400	400	400	400	400
8. WATER SUPPLY AND SANITATION.									
<i>(a)</i> Urban—									
Corporation Towns—									
(i) Augmentation of protected water supply.	Million gallons	..	27.20	30.80	35.00	41.20	41.20	41.20	41.20
(ii) Population covered..	Nos.	..	5,78,255	5,83,000	5,93,000	6,03,000	..	6,23,000	6,23,000
Other Towns—									
(i) Towns covered ..	Nos.	..	42	42	52	62	72	82	92
(ii) Population covered ..	Millions	..	1.92	1.92	2.07	2.22	2.37	2.52	2.67
<i>(b)</i> Rural—*									
Piped Water Supply—									
(i) Villages covered nos. ..	Nos.	..	668	668	673	678	683	688	693
(ii) Population covered	Millions	..	0.30	0.30	0.32	0.34	0.36	0.38	0.40
Simple Wells—									
(i) Villages covered ..	Nos.	..	20,000	20,000	21,500	23,000	24,500	26,000	30,000
(ii) Population covered	Millions	..	15.00	15.00	15.20	15.40	15.60	15.80	16.00

(*) Areas with population endemic with cholera in towns and villages may be given separately.

STATEMENT V—concl'd.

Item.	Unit.	Estimated level of Achievement.						
		1967-68.	1968-69.	1969-70.	1970-71.	1971-72.	1972-73.	1973-74.
1	2	3	4	5	6	7	8	9
9. HOUSING.								
(i) Integrated subsidised housing including Industrial.	No. of tenaments	13,301	13,501	13,757	14,385	15,170	16,227	17,643
(ii) Slum clearance	No. of houses	272	428	428	428	728	1,028	1,028
	Acres ..	..	..	..	335	870	1,270	1,672
(iii) Low-Income Group Housing.	No. of houses	4,353	4,365	4,437	4,669	4,965	5,349	6,765
(iv) Village Housing—								
(a) No. of villages ..	..	30	37	40	46	51	59	87
(b) No. of houses completed	..	80	113	146	212	277	360	443
(c) House sites	..	Nil	Depends on land acquisition.	134	266	266	334	334
(v) Land acquisition and development.								
Area developed ..	Acres	..	..	..	..	..	..	..
10. TRAINING OF CRAFTSMEN.								
Institutions—								
(a) Existing ..	Nos.	..	29	1	..	..	..	..
(b) New ..	Nos.	..	..	..	..	..	..	..
Intake ..	Existing	..	6,000	7,700	7,000	7,000	7,000	7,000
Outturn ..	Existing	..	7,000	6,000	6,250	6,250	6,250	6,250
Intake (Outturn) New ..	..	..	..	..	..	..	..	..
11. WELFARE OF BACKWARD CLASSES.								
(i) T. D. Blocks ..	Nos.	..	..	..	..	..	..	..
(ii) Training staff by Categories.	Nos. (Welfare resources.)	100	100	100	100	100	100	100
(iii) Post-matric scholarships—								
(1) General courses—								
(a) Scheduled Tribes ..	..	5,778	N.F.	N.F.	N.F.	N.F.	N.F.	N.F.
(b) Scheduled Caste ..	Nos.	6,352	N.F.	N.F.	N.F.	N.F.	N.F.	N.F.
(2) Technical and Professional Course—								
(a) Scheduled Tribes ..	Nos.	234	N.F.	N.F.	N.F.	N.F.	N.F.	N.F.
(b) Scheduled Caste ..	Nos.	701	N.F.	N.F.	N.F.	N.F.	N.F.	N.F.