

STATE PLAN PROPOSALS

EIGHTH FIVE YEAR PLAN (1990-95)
&
ANNUAL PLAN (1991-92)

VOLUME-I



GOVERNMENT OF WEST BENGAL

5414 Development and Planning Department

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EIGHTH FIVE YEAR PLAN 1990-95

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DOC. No. D-6328
Date: 22/7/91

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FOREWORD

The single most important issue confronting the nation today is the problem of widespread and increasing unemployment. We have to accept at the national level the challenge of making an effective dent on this problem. We have to adopt, therefore, a correct policy-package in this regard. While seeking this policy on employment, it is important to enquire, at the outset, as to why our economy has failed in the past to generate adequate employment. Unless we can locate the root cause, quest for a solution may again be misdirected.

2. The root cause of unemployment, in our opinion, was located in the past economic strategy itself. It was a strategy which started by accepting the unequal distribution of assets, particularly of land in agriculture and capital in industry. Persisting inequality in the ownership of land, for instance, has been admitted in the Mid-Term Appraisal of the Seventh Plan by the Planning Commission itself. It has been noted, to be specific, that according to the available National Sample Survey data, for the country as a whole, only about 29 per cent of land is under the ownership of small and marginal farmers, i.e., 71 per cent of land is owned by the bigger farmers. As a result, given their interests, there has also been a tendency to adopt a technology which is overly capital-biased with inadequate absorption of labour force in production. This has been the basic cause behind inadequate generation of employment in agriculture and in organised industry, and therefore also of inadequate generation of purchasing power of common people. It is important to note that the recent document of the Planning Commission on Employment and Right-to-Work also clearly points out the fact that while the employment content of economic growth has been steadily declining in our economy in recent years, the slow down in the employment growth and employment potential has been particularly rapid in agriculture and in organised industry.

3. Although there has been widespread unemployment (around 3 crores at present according to the estimate in the agenda notes) and inadequate purchasing power of the masses, yet, at the same time, due to adoption of this overly capital-biased technology, there has been a selective increase in employment for specially educated categories related to this technology (the fact of growth of employment in certain educated categories has also been pointed out in the agenda notes) and also a selective increase in incomes of the upper classes. This erosion in purchasing power of the vast majority of common people coupled with selective income increases of the minority of upper income groups have

distorted the entire scenario of industrial growth in the country. On the one hand, there has been a growth in the consumer durables industry to meet the sumptuary aspirations of the upper income groups. On the other hand, there has been a relative stagnation in vast number of mass consumption goods industries due to the fall in purchasing power of the common people. Since the mass consumption goods industries are, relatively speaking, more labour-using, there has been, as a consequence, an alarming increase in unemployment. On the other hand, the consumer durables industry has tended to be capital intensive and not adequately labour-using. As a result, any small employment generation in consumer durables industry has failed to compensate for the massive unemployment resulting from stagnation in mass consumption goods. This unemployment and lack of purchasing power of the masses have then severely restricted the domestic market and, in its turn, acted as a constraint on the overall industrial expansion and therefore also employment generation in the country.

4. Confronted with this situation, we can adopt either of the two alternative approaches to employment policy. In one approach, we can again choose to ignore land reforms, and in effect, accept the unequal landownership distribution (no mention of land reforms can be found in the recent document of the Planning Commission on Employment and Right-to-Work) and expect, through irrigation extension, adoption of labour-intensive lines of production in agriculture and allied sectors, and also expect growth of labour-intensive small-scale industrial sector, albeit in a somewhat isolated manner from the growth of large-scale industrial sector. Along with this expected generation of employment from production growth, an extensive Work Guarantee Programme can be proposed to be launched in rural and urban areas to give some shape to the concept of 'Right to Work'. The local Panchayats or Municipalities may also be proposed to be associated in the implementation of this Work Guarantee Programme.

5. Through these attempts there may be an improvement in the generation of employment as compared to the previous situation. But given the same unequal distribution of land and other production assets, so long the decision-making agents in production continue to be the same entrenched interest groups, there is an inherent limitation of this approach regarding the generation of employment. Similarly, so long the Panchayats and other local bodies continue to be dominated by the same interest groups, it is not clear to what extent common people in rural and urban areas will feel enthused to be involved through such

Panchayats and other local bodies in the implementation of the Work Guarantee Programme.

6. As an alternative, to this approach, we can begin with redistributive land reforms. It should be carefully noted that land reforms are not an exercise in charity. Hard data from several States indicate that the highest record of production yield per hectare as well as the highest record of employment generation per hectare are obtained from the land of smaller farmers. Therefore, if we want to maximise production and employment generation, then for these objectives, we have to begin by redistributing land in favour of smaller working farmers.

7. With modesty, we point out that in West Bengal we have started with land reforms. After implementation of land reforms, a position has now been reached in the State where nearly 60 per cent of the total agricultural land has come to be owned by the small and marginal farmers as against the national figure of 29 per cent as owned by the small and marginal farmers (as already mentioned before). If the land under recorded share-cropper cultivation is added, then the proportion of agricultural land in the State over which the poor working farmers have certain control may exceed 70 per cent. In other words, after land reforms, an objective condition can be created where decision-making in agricultural production can be looked at from the standpoint of the poor working farmers.

8. Since the working farmers are endowed with labour power, objective condition is thus also created for adoption of labour-intensive crops and labour-intensive technology of production. Objective condition is further created for encouraging particular type of technical progress which will improve production by making fuller use of labour power. While providing for the crucial non-land inputs, such as irrigation and other facilities, the adoption of such socially appropriate technology can now have an objective basis. Through this approach, there can be, as the experience of West Bengal suggests, growth in agricultural production accompanied by generation of employment and purchasing power of the common people.

9. When there is progress in agriculture, and at the same time, growth of employment and purchasing power of the people, an immense potentiality is at once created for development of industries in response to this growth of effective demand from the masses. Many of the resulting industries can now objectively be set up in employment-intensive small-scale sector. But, then, growth of small-scale industries

should not be thought of in isolation of large industries. It is often possible, and indeed desirable, to forge linkage between the small-scale and the large-scale industrial sectors which may make the entire industrial matrix more viable and, at the same time, employment-generating. In this context, mention may be made of the steps taken by the State Government in setting up the Haldia Petrochemicals Complex. The 'mother' naphtha cracker plant, a large-scale unit, is being set up in the joint-sector with the State Government as the majority partner. But, the connected downstream units are being planned in a coordinated manner to be set up in the small-scale sector. The cracker plant will generate employment of about 3 thousand people. But, the downstream units will be labour-intensive, generating employment of about 1.5 lakhs. Here, the linkage between the large and small-scale units with some social control has made the entire complex viable and employment-generating. Special emphasis may be placed in establishing such linkages in the entire industrial structure in our economy.

10. In the interest again of employment generation, a separate attention needs to be given at the national level to the problems of closed and sick industrial units. Quite a few of them are potentially viable, with significant investment embodied in terms of capacity already created. With a change in management, which may in some cases take the form of induction of new entrepreneurs or setting up of industrial cooperative of workers and then induction of professional management, and also provision of financial relief, many of these units can be revived with the possibility of ensuring employment to a significant extent. For such revitalisation of sick or closed industrial units, serious attention should be given at the national level, involving the States, where required, regarding the types of reliefs that the financial institutions and the Central Government may like to provide for rehabilitation programme, particularly when the State Governments are granting corresponding reliefs and also providing additional accommodation, say, by permitting sale of surplus land of the concerned sick units.

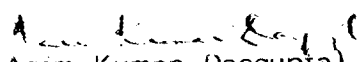
11. When this entire alternative approach is adopted in the context of production structure and employment policy, there is a much greater scope of employment generation from impulses of production. To support these production impulses for employment generation, two types of crucial employment programmes are now organically necessary. One is the Work-Guarantee-Type Programme in both rural and urban areas for generating employment in connection with the construction of production infrastructures such as irrigation facilities in rural areas or road repair

and construction in both rural and urban areas which will have a consequent multiplier effect on production and further generation of employment. All the existing similar schemes may be merged into a single scheme, and then significantly augmented with fund-sharing between the Centre and the States in ratio of 80 : 20. In the alternative, such a comprehensive scheme, applicable as it primarily is to the sphere of State List, may be transferred entirely to the States with corresponding transfer of the Centre's financial share to the States. In the latter case, there may be a provision of concurrent review jointly by the Centre and the States, when considered necessary.

12. While such a Work-Guarantee-Type Programme maybe, in general, meant for unskilled workers in rural as well as urban areas, for purposes of generation of employment generally for the skilled persons and educated youth in rural and urban areas, a comprehensive Self-Employment-Type Programme may be formulated with say, 25% subsidy and 75% bank loan. Training for the formation of required skills may be imparted through vocational education which may now be redesigned as an integral part of school education. All the existing similar schemes may be merged and then augmented into a single scheme. The subsidy part of the scheme may be shared between the Centre and the States in the ratio of 80 : 20, or the entire scheme may be transferred to the States with corresponding transfer of funds for the subsidy part. This Self-Employment-Type Programme may be meant for setting up small-scale units directly as also in linkage with the large industries. The integral character of this linkage has already been noted earlier. In other words, in this integrated approach, Employment Guarantee Programme are not isolated employment-generating exercises but are an integral part of over-all production and employment planning.

13. In West Bengal, we have already begun to take some advanced action for implementing Self-Employment-Type Programme and Work-Guarantee-Type Programme within our participatory decentralised District and Block-level planning set-up, based as it is on the foundation of land reforms. These programmes will be comprehensively coordinated with production activities of all the sectors, so that an effective attempt can be made to generate in each year employment potentialities which can exceed additions to labour supply in that year, thus also making a dent on removal of the backlog of unemployment. In these attempts, as in all other attempts in our State, common people will be directly involved through the local Panchayats and Municipalities in the

formulation as well as implementation of the employment schemes. It is this involvement of people which can play the most crucial role in the entire approach to employment policy.


(Asim Kumar Dasgupta)
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I N T R O D U C T I O N

The 1990-91 Annual Plan proposal was prepared as part of the Eighth Five Year Plan and the proposals broadly indicated the rate of growth, outlay limit, resource mobilisation and plan methodology to be followed in the Eighth Plan. The Chief Minister, West Bengal in his speech delivered at the National Development Council meeting dated June 18 and 19, 1990 outlined the policies which should be pursued at the national level during the Eighth Plan. He also elaborated the Plan methodology which the State of West Bengal has been following now and will continue to follow in the future. The present write-up will place a review of the performance of the State's economy during the Seventh Plan, estimate the growth rate of employment, reiterate the plan methodology from the text of the speech of the Chief Minister, mention the objectives of the Eighth Five Year Plan and present the targets for some of the major sectors of the economy.

SECTION-I

1. Review of the Seventh Plan.

The review begins by noting the demographic feature of the State. An analysis is then made of the trend in the State domestic product. As components of this analysis, performance of the major sectors of the State economy relating to agriculture and allied sectors, industry, power and few important social services is also reviewed.

1.1 Demographic Feature.

1.1.1 The population of West Bengal, according to the 1981 census was 54.6 million and the growth rate of the population in the state in the decade 1971-81 was 23.17 percent. The corresponding population of India was 685 million with a growth rate of 25.0 percent over the same decade. The mid-year estimated vital rates such as the birth rate, death rate and infant mortality rate in West Bengal and India are shown in Table - 1.1.

Table - 1.1

Vital rates in West Bengal & India

(Per thousand)

Y e a r	Birth rate		Death rate		Infant mortality rate	
	India	West Bengal	India	West Bengal	India	West Bengal
1983	33.7	32.0	11.9	10.3	105	84
1984	33.9	30.4	12.6	10.7	104	82
1985	32.7	29.4	11.7	9.6	97	74
1986	32.4	29.5	11.1	8.8	96	71
1987	32.2	30.7	10.9	8.8	95	71
1988 (P)	31.3	28.1	10.9	8.3	94	70

P = Provisional.

Source : Registrar General India,
Sample Registration System,

(2)

1.1.2 West Bengal has already brought down the infant mortality rate below the national target. The successful implementation of immunisation of children programme coupled with general economic progresss and development of awarness through spontaneous participation of Pam--chayats and common people has enabled the State to achieve such result.

1.1.3 It is also evident that the birth rate in the State is lower than that in the country as a whole. The lowering of birth rate is related among other to Family Welfare Programme implemented in the State. Family Welfare Programme in the State is not a mechanical and isolated exercise to reach a pre-determined target but a more comprehensive package of socio-economic programme aiming at an overall improvement of the common people.

1.2 Behaviour of nature during the Seventh Plan Period.

1.2.1 1985-86 i.e. the first year of the Seventh Five Year Plan started under a difficult situation marked by delayed monsoon and erratic distribution of rainfall. Transplantation of Aman was delayed in most districts while in important rice growing areas, the crop was affected by hispa disease. The problem was further compounded by the damage to the standing paddy due to cyclonic storm and heavy flood in the coastal and other districts. In the same year even though Rabi season started off well, the area of crops grown under rainfed condition was reduced as there was no rainfall in the months of December and January.

1.2.2 The year 1986-87 was again marked by serious weather aberration like delayed monsoon, erratic distribution of rainfall, heavy rainfall and flood during September and October and cyclonic storm in the first half of November.

1.2.3 In 1987-88, 12 out of 16 districts were affected by near deluge causing extensive damage of crops and other assets. The damage during this year was so extensive that the State Government had to prepare a Contingency Plan for Rs.250.00 crores for relief and restoration. In 1988-89, heavy rainfall had taken place in the third week of June and before the State could recover itself from such heavy rainfall, it was rocked by tremors on the 21st August causing considerable damage to public and private property in the hill areas of the district of Darjeeling. Worse still was the second half of August, when there was heavy precipitation in North Bengal districts. All the rivers of North Bengal were in spate due to excessive rain, causing overflowing of banks and inundation of large areas. Subsequently, Malda and Murshidabad had to face severe flood on account of breach of portion of left embankment of the Ganges in Malda district. West Bengal being a state in the tail end of the river system has always

Source : Development & Planning Department
Government of West Bengal.

1.2.6 Since the second year of the Seventh Five Year Plan i.e. 1987-88, the Government of West Bengal has been maintaining zero deficit balanced budget without drawing upon overdraft facility even for a single day. At the same time, notwithstanding the natural calamities afflicting the State, the plan expenditure has been 108.117 percent of the Seventh Plan agreed outlay as may be seen from Table 1.3. Out of this plan expenditure only about 30% has been received as Central assistance and the balance 70% has been met from the State's own resources. It is the prudent financial management coupled with sustained effort for maximum mobilisation of internal resources, particularly small savings, which has enabled the State to achieve such a spectacular financial performance during the Seventh Plan period.

1.3 State Domestic Product.

1.3.1 Owing to the satisfactory financing of Plan and decentralisation of authority to people's organisations both for formulation and implementation of Plan, the State domestic product rose from Rs.9726.33 crores (at 1980-81 constant prices) in 1984-85 to Rs.13799.00 crores (at 1980-81 constant prices) in 1989-90 with an average rate of growth of 7.25 percent per annum which is much above the average annual rate of growth of 5 percent (GDP during the same period). The SDP series according to industry of origin at 1980-81 constant prices for the years from 1984-85 to 1989-90 and the corresponding growth rates are presented below :

Table - 1.4

Estimate of State Domestic Product (at 1980-81 constant prices)
according to industry of origin.

Sectors	(in crores of Rs.)					
	1984-85 (P)	1985-86 (P)	1986-87 (P)	1987-88 (Pr)	1988-89 (Pr)	1989-90 (T)
1. Agriculture	2986.95	3145.24	3281.70	3644.70	4034.86	4305.71
2. Forestry	75.47	70.41	46.84	42.48	44.38	47.18
3. Fishery	313.57	325.43	349.17	375.44	388.15	421.82
4. Mining & Quarrying	129.01	126.17	124.44	115.28	117.52	115.17
5. Manufacturing registered.	1128.77	1472.14	1568.64	1557.55	1633.29	1691.53
6. Manufacturing unregistered.	963.56	967.44	1031.07	1045.56	1086.67	1369.37
7. Construction	381.50	366.65	375.75	445.25	512.04	588.85

Sectors	(in crores of Rs.)					
	1984-85 (P)	1985-86 (P)	1986-87 (P)	1987-88 (Pr)	1988-89 (Pr)	1989-90 (T)
8. Electric- gas & water supply.	263.51	267.79	312.78	340.82	350.63	370.87
9. Transport storage & communication.	369.85	395.29	420.10	467.50	499.03	535.08
10. Trade, Hotel & Restaurant.	983.46	1010.74	1039.70	1069.75	1101.26	1211.05
11. Banking & Insurance.	510.75	520.04	544.18	553.98	616.60	659.76
12. Real Estate, Owner -ship of dwe- lling and business services.	655.85	692.18	735.02	779.27	831.32	881.20
13. Public adminis- tration	424.13	469.38	524.20	629.04	754.85	905.82
14. Other services.	539.95	552.07	566.48	580.29	598.27	695.65
Total	9726.33	10380.97	10918.07	11643.51	12568.87	13799.06
Percentage change over previous year		6.73	5.17	6.64	7.93	9.79
Percapita increase (in rupees) at 1980-81 prices.	1627	1704	1759	1842	1953	2108

P = Provisional, Pr. = Preliminary, T = Tentative.

Source : Bureau of Applied Economics & Statistics,
Government of West Bengal.

The SDP has steadily increased from 6.73 percent in 1985-86 to 9.79 percent in 1989-90. It is encouraging to note that all the components of SDP have shown steady rise excepting Forest and Industry. Income from Forest and sharply fallen from Rs.70.41 crores of 1985-86 to Rs.46.84 crores in 1986-87 and thereafter it is recovering very slowly. The checking of felling and conservation of forest resources may be attributed as reasons for such decline. In industry sector also, there has been a very slow pace of growth basically for near zero investment by the Central Government over the last two decades and lack of initiative on the part of the private industrialists to utilise the favourable industrial climate prevailing in the State. Thanks to the States' Land Reforms measure and decentralised planning Agriculture in the State has achieved a remarkable resilience and the total foodgrains production has increased from 91.27 lakh tonnes in 1985-86 to 118 lakh tonnes in 1989-90.

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1.3.2 A component-wise discussion of the State Domestic Product is necessary. The secular increase in agriculture production in the state from 1983-84, in spite of unfavourable weather in most of the years, indicates that such consistent good performance could not have been because of any fortuitous factor like weather but was the result of certain structural and fundamental changes that have taken place in the agricultural sector of the State in recent years. The total food-grains production has increased at a progressive rate from 91.26 lakh tonnes in 1985-86 to 118.56 lakh tonnes in 1989-90. In Jute and Mesta both average area and production have sharply fallen from 7.31 lakh hectares and 73.90 lakh bales respectively in 1985-86 to 4.15 lakh hectares and 45.30 lakh bales respectively in 1988-89. The disastrous fall of price in 1985-86 and the uncertainty in the behaviour of price of jute has caused such shrinkage in jute production. In 1989-90 however, the area and production have again slightly risen to 4.26 lakh hectares and 50.03 lakh bales respectively.

1.3.3 Another area where the State has achieved a near breakthrough is oil seeds production. In 1970-71 total oil seed production was .59 lakh tonnes from which it rose to 2.33 lakh tonnes in 1985-86, it rose to a new height of 5.00 lakh tonnes in 1987-88. This enormous production was due to record production of 'Til'. In 1988-89, however, with normal 'Til' production, the total oil seeds production fell to 4.03 lakh tonnes. In 1989-90, the production maintained a normal upward trend and rose to 4.18 lakh tonnes. This phenomenal growth in oil seed production has not only contributed considerably to state domestic product but has also partially reduced dependence on external sources.

1.3.4 In fishery sector also, the SDP at constant prices increased from Rs.313.51 crores in 1984-85 to Rs.421.82 crores in 1989-90. This increase in SDP from the fishery sector is related to the increase in the production of fish which has reached a new record of 6.01 lakh tonnes in 1989-90, thus fully achieving the target of the 7th Plan.

1.3.5 SDP from manufacturing sector in the state has increased at an average rate of 3.5 percent during the period of Seventh Five Year Plan. Compared to the near stagnation during the Sixth Plan, a kind of dynamism in this sector has been created during the seventh plan mainly through increase in production of jute, tea and coal industries among the major industries in the state, and the growth of a number of new industries like chemical, electronics etc. in recent years. In manufacturing (unregistered), the SDP has grown from Rs.963.56 crores to Rs.1369.37 crores registering an average rate of growth of 7.5 percent. This phenomenal rise has been possible because of the impressive growth of cottage and (tiny) small scale industrial units specially under IRDP. In village and small scale industry sector also

each year about 15000 to 19000) small scale units are set up in the State excluding the units set up in under IRDP. At present West Bengal has the largest number of registered small scale units among the states in India.

1.3.6 The SDP from the construction sector increased from Rs.381.50 crores in 1984-85 to Rs.588.85 crores in 1989-90. This increase is related to the extensive construction activities that have taken place under NREP, RLEGF, JRY and under the District Plan Schemes in rural areas and also to the construction activities in urban and semi-urban areas under housing, urban renewal and other programmes.

1.3.7 The SDP from the electricity, gas and water supply sector increased from Rs.263.51 crores in 1984-85 to Rs.370.87 crores in 1989-90. The increase in SDP from this sector was possible primarily because the total electricity generated by all the power agencies in the State increased from 6766 MU in 1984-85 to 8400 MU in 1989-90. Besides, by the end of 1987-88 financial year all the problem villages in the state have been covered by at least one reliable spot source and thereafter water supply in bigger villages is being augmented by providing additional spot sources and by expansion of piped water supply schemes. West Bengal is a state where number of villages without provision for clean drinking water supply source has fallen to zero.

1.3.8 The increase in SDP from the Transport Sector in general and that from the non-mechanised component, is dependent on activity in the agriculture sector and in the economy in general. The income originating from Transport Sector has increased from Rs.369.85 crores in 1984-85 to Rs.535.08 crores in 1989-90 with an average increase of 7.68 percent per annum. As may be seen from Table 1.4 the SDP from the remaining sectors of the State's economy increased steadily at varying rates from 1984-85 to 1989-90 indicating a sort of buoyancy prevailing in the economy during the period of the Seventh Plan.

1.4 Plan Methodology.

1.4.1 Before entering into sector-wise review of performance in the Seventh Plan, it is essential to explain the plan methodology that has been followed in the State. It is widely known that landlordism provides the structural block to the growth of agriculture and the economy as a whole. Without the increase of purchasing power of the common people, according to the State Govt., no growth in industry is possible. The fundamental basis for that is provided by land reforms. The strategy of channelising resources of the state to small and marginal farmers and beneficiaries of land reforms is necessary to be adopted not only because this segments of the rural population are socially and economically weak but more so because of the hard evidence of superior production performance on their part. On this understanding the State Government has been carrying out land reforms right from late sixties to/-

and has now reached a position where, according to National Sample Survey, nearly 60% of the total land is owned by the small and marginal farmers as against the corresponding national figure of about 29%. The details of land reforms will be given in appropriate place. Another necessary precondition for converting the gains of land reforms into economic gains is to transfer power to grassroot organisations. With this necessity in view, the Panchayat elections were held regularly at the interval of every five years since 1978 and it was found on every occasion that the elected members with an overwhelming majority came from the rural poor. These Panchayats were then involved in the formulation and implementation of the major rural development programmes and through them the poorer sections in the rural area came to participate in the entire process.

1.4.2 After these two conditions were largely fulfilled, the decentralised planning was introduced in the State right from the first year of the 7th Plan. The introduction of decentralised planning has brought radical change in the methodology of plan formulation and implementation in the state. Within the overall priorities, the plan budget of each concerned Deptt. is broken down into state level items and the district level items. Budgetary provision of the different departments for district level items are disaggregated and communicated to the District Planning Committees and significant parts of those provisions are then taken down to Block Planning Committees. Within those budgetary parameters, block plans are formulated by the Block Planning Committee starting the exercise from the level of Gram Panchayats. These block plans are then integrated at the level of District Planning Committee and incorporating the district specific and Municipal specific schemes/projects into it, the District Plan is formulated. District Plan prepared at each district forms an integral part of the State Plan. Through this process of decentralised planning, it has now been possible to devolve nearly 48% of the entire plan budget of the State to the command of the District and Block Plan Committees. The chart below shows the gradual increase in percentage of disaggregated outlay over the year.

Table - 1.5

Name of the District	(Rs. in lakhs)			
	Disaggregated outlay chart			
	1986-87	1987-88	1988-89	1989-90
1. Cooch behar	743.38	1587.31	1913.66	1877.75
2. Jalpaiguri	789.17	2060.81	2476.56	2621.48
3. Darjeeling	608.07	1764.18	1438.40	1974.32
4. West Dinajpur	1194.10	2428.66	3741.47	3634.43
5. Malda	934.36	1573.36	1692.81	1829.69
6. Murshidabad	1453.84	2180.25	2392.60	2752.02
7. Nadia	1024.28	1484.58	1743.09	2246.03
8. 24-Parganas (N)	3079.29	1956.74	2349.93	7837.76
9. 24-Parganas (S)		3053.85	3562.07	
10. Howrah & St	812.79	1106.12	1385.24	2177.05
11. Hooghly	1350.52	1848.19	2211.31	3239.09
12. Midnapore	2901.80	5002.26	6519.39	8292.43
13. Bankura	1032.66	1807.97	2442.41	3121.33

Name of the District	(Rs. in lakhs)			
	Disaggregated outlay chart			
	1986-87	1987-88	1988-89	1989-90
14. Purulia	1122.62	1919.07	2176.51	2939.49
15. Burdwan	1672.18	2832.51	3389.70	4115.86
16. Birbhum	1165.40	1656.53	2060.46	2115.93
Grand Total :	19884.46	34262.39	41495.31	50774.66
Distribution is not shown	-	-	-	2210.00
Approved plan outlay	77600.00	86200.00	95088.90	111500.00
Percentage (%)	25.62	39.74	43.64	47.51

Source : Development & Planning Department,
Government of West Bengal.

1.4.3 In 1990-91, the percentage of disaggregated outlay has gone above 50 percent. Apart from disaggregation of a high percentage of outlay from the budget provision of concerned Departments, a separate budget head has been introduced in the State with effect from 1985-86 namely, "District Plan Schemes Funds" (DPS) and funds from this budget head have been placed at the disposal of the district planning authorities. The Dist. authorities have been advised to utilise these funds to meet the critical gap between their fund requirements (according to the dist.plan) and the available funds from diverse sources. The schemes implemented under this fund range from the provision of minor irrigation and drainage facility, protection of embankments, creation of drinking water sources, construction of crucial rural roads, small bridges and culverts, primary and secondary school buildings, huts for scheduled tribe people etc. In 1988-89, a definite portion of DPS Fund was allotted to the Dist. Planning Authorities to take up NREP type employment projects in urban areas particularly in the municipalities located in rural settling. The Govt. of India has seemingly followed this state by introducing Nehru Rajgar Yojana in municipal areas in 1989-90. However, the allotment and expenditure on account of District Plan Schemes fund is tabulated below.

Year	Table-1.6	
	Outlay	(Rs. in lakhs) Expenditure
1985-86	2000.00	1744.66
1986-87	2400.00	879.13
1987-88	2400.00	2179.33
1988-89	2100.00	3335.50
1989-90	2100.00	6597.72

1.4.4 It will be evident that despite financial constraint the State has made every effort to channelise heavier doses of fund to the District and Block Planning Authorities to enable them to support the plan prepared by them. The plans prepared at the Block and District level following the methodology as explained above necessarily reflect the choice and perception of the local populace. In the process of decentralised planning and disaggregation of outlay, a high percentage of outlay had flowed to the rural areas. Flow of outlay to rural areas is tabulated below :

Table - 1.7

Flow of outlay to rural areas

Y e a r	Approved Plan outlay	(Rs. in lakhs)
		<u>Outlay flowing to rural areas</u>
1985-86	67500.00	35588.35 (52.75 percent)
1986-87	77600.00	41469.15 (53.44 percent)
1987-88	86200.00	43673.45 (50.67 percent)
1988-89	95100.00	49560.55 (52.12 percent)
1989-90	111500.00	56469.72 (51.00 percent)

Source : Development & Planning Department,
Government of West Bengal.

The table above reveals that in West Bengal more than 50 percent of the plan outlay is being spent in the rural areas since the first year of the Seventh Plan. This partly explains the buoyancy of the economy indicated by the SDP series.

1.4.5 The involvement of the local people through the Panchayats/ Planning Committees in the project/programme implementation has ensured efficient utilisation of the funds, generation of maximum employment, flow of goods and services to the most deserving sections of people, monitoring at the grass roots and better co-ordination among the different Departments lessening thereby the duplication of efforts.

1.4.6 Since the terminal year of the Seventh Plan, the State Planning Board has prescribed format for collection of data regarding financial and physical achievement of the past years and on the basis of data collected in the format, the District Planning and Co-ordination Council has been regularly monitoring and evaluating the plan schemes/projects. Apart from monitoring and evaluation by the DPCC, the Chief Minister and the other concerned Ministers frequently visit the districts and attend the meeting of the DPCC. Monitoring at the district level by the highest authorities of the Government indicates the emphasis placed by the State Government on the district plan.

2. Review of main sectors of the Economy.

2.1 Land Reforms

2.1.1 The basic plan approach as has been adopted in the State of West Bengal during the Seventh Five Year Plan consists of "agriculture with redistributive land reforms and industry with emphasis on small scale units with necessary support of certain crucial "mother" industrial complexes. Land Reforms, therefore, occupy the centre piece of the development strategy in the State. It is a package of programme comprising vesting of ceiling surplus land, distribution of vested land among the landless and sub-marginal farmers, providing tenurial security to the share croppers by recording their rights in the village record of right and updating of record of right. The yearwise achievement of the State in Land Reforms during the period of Seventh Five Year Plan is tabulated below :

Table 2.1

Item	<u>Achievement in Land Reforms Programme</u>			Cumulative till 31.3.1990
	1985-88	1988-89	1989-90	
1. Vesting of Ceiling surplus land (acres)	33962	1388	1440	12,60,990
2. Distribution of ceiling surplus land (acres)	38253	19760	32210	8,92,684
3. No. of share croppers recorded	59428	15964	7735	14,06,712
4. No. of Moujas for which records finally published.	5341	2889	1847	22,333

Source : Land and Land Reforms Department,
Government of West Bengal.

2.1.2 Till 31st March, 1990, 12.61 lakh acres of agricultural land have vested in the State. Out of this 12.61 lakh acres, 8.92 lakh acres have been distributed among around 18 lakh beneficiaries 56% of whom belong to Scheduled Caste and Scheduled Tribe as against 27% of the total SC/ST population in the State. It may be stated that the total area vested in the state accounts for 17 percent of the national vesting and total surplus land distributed in the state is not only the highest in the country but also accounts for about 20 percent of the total area of surplus land distributed in all the states taken together.

2.1.3 In providing tenurial security to the share croppers, the state had till 31st March 1990 brought 14.06 lakh share croppers to village records of right. It may be mentioned that as the land reform is being carried out in this state since late sixties, much of the land had vested and most of the share croppers recorded prior to the beginning of the Seventh Five Year Plan. Even then to avoid any slippage, the State has continued its intensive efforts in land reforms and made considerable addition during this plan despite the state having reached a kind of saturation if viewed in the context of the existing law.

2.1.4 Another important plan programme in land-reforms is to provide house sites to the homeless poor belonging to the categories of fishermen, agricultural labourers and rural artisans. Large number of share croppers agricultural labourers and fishermen used to live on the land-owners' land as permissive occupiers. Land owners allow them to live on their land not out of charity but to have the services of such persons at their beck and call. Whenever a share cropper has attempted to record his name or an agricultural worker has demanded higher wage, they have faced the threat of eviction from the homestead plots. This affected their morals adversely and put them to immense difficulty. To overcome this situation, a programme of conferring Title on such permissive possessor upto .08 acres of land is being implemented in the State under the relevant provision of West Bengal Acquisition of Homestead Land (For Fishermen, Rural Artisans & Agricultural Labourers) Act, 1969. The programme was started from the beginning of the Sixth Five Year Plan and by 31.3.90 as many as 3.40 lakh persons mostly belonging to Scheduled Caste and Scheduled Tribe community have been vested with title under the above Act. This programme has now been made complementary to the rural housing scheme which aims at providing house-sites to the poor homeless. The beneficiaries of this Act are provided with financial assistance for construction of houses on the acquired land. Threat of eviction is thus now a thing of the past.

2.2 Rural Development

2.2.1 I.R.D.P. - Plan sector of rural development comprises. Integrated Rural Development Programme and National Rural Employment Programme.

g.s.

As these are poverty alleviation programmes beneficiaries of land reforms, rural artisans and landless agricultural labourers are largely benefitted from them. West Bengal is the first state which right from the sixth five year plan entrusted these programmes to Panchayat Raj Bodies. In the 7th plan period not only the Panchayat Bodies have continued to remain in full charge of the programme but the action plans prepared by them form an integral part of the block plans and district plan formulated by the Block Planning Committee and District Planning Committee respectively in the state's decentralised planning frame.

2.2.2 I.R.D.P. - For the Seventh Plan, the approved allocation (State share) was Rs.1.00 crores and the target 12.5 lakh families. The programme has been running very smoothly and physical targets have been exceeded in all the preceding four years of the Seventh plan. Per capita investment has also improved considerably from Rs.2322 in 1984-85 to Rs.6625.37 in 1989-90. Coverage of Scheduled Caste and Scheduled Tribe has been much more than their percentage to the total population. Coverage of women also indicates a rising trend. Year-wise achievements in I.R.D.P. during the Seventh Five Year Plan are summarised below :

Table - 2.2
I.R.D.P. Performance

I t e m s	1985-86	1986-87	1987-88	1988-89	1989-90
1. Physical Target (Families)	1,90,000	1,89,500	2,39,674	2,33,938	2,39,639
2. Physical Achievement (Families assisted)	2,87,052	2,43,921	2,88,277	2,87,113	2,91,847
3.a) Achievement of S.C./S.T.	95,584	89,459	1,05,480	1,10,636	1,19,784
b) Women Assisted	30,053	35,173	62,592	96,380	1,12,340
4. Sectoral coverage					
a) Primary	34.00%	31.13%	28.62%	26.48%	24.93%
b) Secondary	33.96%	36.65%	36.52%	40.22%	44.49%
c) Tertiary	32.04%	32.22%	34.86%	33.30%	30.58%
5. Funds released (Centre & State) (Rs. in lakhs)	3,246.00	3,574.00	4,563.73	5,515.09	6,799.85
6. Total credit mobilised (Rs. in lakhs)	5,532.00	6,384.00	8,831.00	11,014.35	12,932.59
7. Total investment (All sources) (Rs. in lakhs)	9,432.00	10,269.00	14,258.55	16,906.19	19,316.67
8. per capita investment (in rupees)	3,286.00	4,210.00	4,946.12	5,888.34	6,625.37

2.2.3 The table above indicates that there has been systematic shift in investment from primary sector to secondary sector resulting in rehabilitation of the beneficiaries in manufacturing by lessening their dependence on overburdened agriculture. In primary sector, special emphasis is placed on creation of minor irrigation potential which is undoubtedly the most crucial non-land input in agriculture.

2.2.4 As supporting services to the IRDP, two programmes are operating TRYSEM and DWORA, initially DWORA was being operated in two districts, Bankura and Purulia and from 1986-87, a few more districts have been brought to the fold of this programmes.

Table - 2.3

T. R. Y. S. E. M.

I t e m	1985-86	1986-87	1987-88	1988-89	1989-90
1. Number trained	8,092	4,943	5,472	13,212	12,689
a) SC/ST	2,574	1,419	1,556	3,923	4,297
b) Women	1,698	1,096	1,145	3,105	4,430
2. Number Self-employed	2,988	2,077	3,039	4,897	5,891
3. Number wage-employed	2,211	535	1,077	4,995	2,229

Source : Rural Development Department
Government of West Bengal.

2.3 Rural Employment

2.3.1 The major employment generation programme which was operative in plan sector in the first four years of the Seventh Plan was NREP. In 1989-90 NREP merged with non-plan sector RLEGP and formed the Jahaar Rozgar Yojana. During the first four years of the Seventh Plan, performance under NREP has been largely satisfactory. Alongwith high level of employment generation, there has been greater emphasis on social forestry and creation of durable and productive assets. A wide variety of schemes like social forestry, creation of drinking water sources, construction of village tanks, group housing for rural homeless, minor irrigation works including these relating to flood protection, soil and water conservation including land reclamation, rural roads, school buildings etc. are implemented under this programme. The yearwise performance of the programme is presented below :

Table - 2.4

N.R.E.P./J.R.Y. Performance

I t e m	1985-86	1986-87	1987-88	1988-89	1989-90 J.R.Y.
1. Budgetary release (Rs. in lakhs)	3,598.00	3,608.00	3,832.61	5,676.15	
2. Utilisation of re- sources (including value of food grains (Rs. in lakhs)	2,839.00	4,442.00	4,086.28	4,256.79	6,804.24
3. Employment generation in lakh mandays -					
a) Target	141.00	180.00	153.99	215.70	572.15
b) Achievement	130.95	217.61	161.60	152.00	538.87

3. Agriculture3.1 Agriculture Production

3.1.1 The Seventh Five Year Plan has witnessed a remarkable improvement in State's agricultural production. In 1986-87, the total foodgrains production reached a record of 96.26 lakh tonnes. In 1987-88, despite severe floods, it was possible to reach a new level of 103.05 lakh tonnes. In 1988-89, it jumped to 115.14 lakh tonnes and in 1989-90 all previous records have been surpassed and a new height of 118.56 lakh tonnes has been reached thus already significantly crossing the Seventh Plan target of 105 lakh tonnes. This is a strong demonstration of the resilience attained by the State as in none of these years' weather condition was fully favourable to agriculture in the State. It is primarily on the basis of land reforms and extension of irrigation facilities together with other inputs that it has been possible to achieve such record in agriculture production. Year by year account of the progress of agriculture, during the Seventh Plan is tabulated below :

Table - 3.1
Achievement in major agricultural crops during 7th plan

Crops	(in lakh hec./tonnes)							
	7th Plan target		1985-86		1986-87		1987-88	
	Area	Production	Area	Production	Area	Production	Area	Production
1. Rice	53.50	87.00	50.79	79.90	53.76	84.63	54.75	92.71
2. Wheat	6.00	12.00	3.05	7.39	3.98	6.83	3.74	6.74
3. Pulses	-	4.50	4.21	2.64	3.54	2.00	3.63	2.27
4. Other Cereals	-	1.50	0.97	1.34	1.19	2.66	0.94	1.33
5. Total food grains	-	105.00	59.02	91.27	62.45	96.12	63.06	103.05
6. Oilseed	-	3.00	3.71	2.34	4.23	2.64	5.90	5.06
7. Jute & Mesta	-	50.00	-	76.32	5.32	50.24	36.81	36.81
8. Potato	-	-	1.38	27.58	1.73	35.43	37.87	37.87

Crops	1988-89		1989-90	
	Area	Production	Area	Production
1. Rice	56.22	105.59	54.50	109.24
2. Wheat	3.00	6.25	4.00	5.69
3. Pulses	-	2.08	4.50	2.22
4. Other Cereals	-	1.22	1.50	1.51
5. Total foodgrains	-	115.14	64.50	118.56
6. Oil seed	-	4.04	4.88	4.18
7. Jute & Mesta	-	45.31	4.26	50.03
8. Potato	-	-	2.06	45.32

3.1.2 During the Seventh Plan, the major programme thrusts include special Rice Production programme in the eastern region. The programme aims at reducing the yawning gap between potential and actual yields of rice, in Aman in eastern regions without such reduction no break-through in food-grains production was possible. The programme therefore meant a combination of (1) accelerating the rate of growth of irrigation and (2) increasing the fertiliser consumption per hectare. In the SRPP area steps were taken for better water management, creation of additional irrigation facilities and supply of input packets in form of minikits. While the aspect of irrigation will be discussed later on, the position of distribution of minikits which contain quality seed and necessary doses of NPK is given below :

Table - 3.2

	<u>Year/Number of Minikits</u>				
	<u>(No. in lacs)</u>				
	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
1. General Programme	11.55	14.02	14.99	14.48	
2. Special Programme	2.75	3.00	3.67	4.57	
Total :	<u>14.30</u>	<u>17.02</u>	<u>18.66</u>	<u>19.05</u>	<u>14.52</u>

3.1.3 The table shows that over the years, the distribution of minikits is on the increase. Beside minikits, the Government also extend subsidy on seed and input loan. As already stated the beneficiaries of land reforms and small and marginal farmers are found to have superiority in per acre production performance; consequently, the state follows the policy of supplying the bulk of non-land input to them and it is this policy which has led to the rising agricultural production in the State.

3.1.4 The significant improvement in agriculture production in West Bengal specially from 1983-84 is reflected in the impressive growth of state income from the agriculture sector. According to the Centre for Monitoring Indian Economy, as shown in Table - 3.3 below, taking the average for 1984-85 to 1986-87, West Bengal, in terms of per capita income from agriculture stands third after Punjab and Haryana among the States of India. As table - 3.3 shows the estimation of per capita rural income takes into account rural population, gross cropped area and state income from agriculture.

For West Bengal to be ranked so high on the above basis is no mean achievement, specially for a state which was considered agriculturally backward only a decade back. In fact if one glances down column 3 of the Table 3.3, it will be observed that West Bengal has the third highest state income from agriculture after Bihar and U.P., both of which have significantly higher gross cropped area than West Bengal.

Table 3.3

Per capital (Rural) income (Net value added)
from Agriculture Average of 1984-85 to 1986-87

State	Rural Population	Gross cropped area (lakh ha.)	State income from agriculture (Rs. in Crores)	per capita (Rural) Grossed cropped area (Hectares)	Per hectare average value added $3 \div 2$	Per capita (Rural) income from agriculture (Rs.) 4×5
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Major States

Punjab	121	71.6	3,593	0.59	5,018	2,960
Haryana	101	56.0	2,331	0.55	4,163	2,290
West Bengal	401	79.9	5,735	0.20	7,178	1,436
Karnataka	264	111.5	3,509	0.42	3,147	1,322
Rajasthan	270	181.4	3,540	0.67	1,952	1,308
Orissa	233	92.6	2,968	0.40	3,205	1,282
Maharashtra	408	205.4	5,254	0.50	2,588	1,280
Gujrat	234	96.8	2,888	0.41	2,984	1,223
Andhrapradesh	410	121.0	4,717	0.30	3,898	1,170
Assam	178	37.9	2,035	0.21	5,369	1,127
Kerala	208	28.7	2,183	0.14	7,606	1,065
Madhya Pradesh	416	230.2	4,413	0.55	1,917	1,054
Uttar Pradesh	910	249.8	9,157	0.27	3,665	990
Bihar	612	105.2	5,772	0.17	5,487	933
Tamil Nadu	325	68.2	2,126	0.21	3,117	655

Notes - States are ranked according to the last column

Source : Statistics Relating to Indian Economy, States Vol. II, 1989, Bombay.

∟ Reproduced from Economic Review 1989-90, West Bengal ∟.

3.1.5 The Special Foodgrains production programme coupled with supply of inputs has led to record production of rice and the main factor in the record production of rice, however, has been the remarkable increase in the production of Aman rice; which increased from 61.27 lakh tonnes in 1987-88 to 77.72 lakh tonnes in 1989-90, i.e., an increase of 27 percent. Add what is most significant is that the increase in the production of Aman rice was mainly due to increase in the yield rate from 1506 kg. per hectare in 1987-88 to 1832 kg. per hectare in 1989-90. The past trend suggests that yield rate in Aman has all along been very low in the state. Thus, if the yield rate for Aman rice achieved from 1987-88 onward indicates a trend, it will open up exciting possibilities for the agriculture sector in the state.

3.2 Horticulture

3.2.1 Leaving aside the main agricultural crops, the development of horticulture has not been neglected in the State. In this sector the approach has been to introduce improved varieties as also scientific agro-techniques through field demonstrations, supply of inputs and training.

Demonstrations are conducted for improvement of productivity of existing orchards of major fruit crops like mango, lichi, banana, pineapple etc. In order to popularise fruit cultivation in laterite tract and North Bengal emphasis was given on small demonstration orchards of 0.1 ha. with lemon and guava. The production of major horticultural crops during the period of Seventh Five Year Plan is tabulated below :

Table - 3.4

		Production of major horticultural crops					
		7th Plan target	Achievement				
			1985-86	1986-87	1987-88	1988-89	1989-90
1. Banana	'000 tonnes	167.70	150.00	155.00	149.80	153.60	
2. Oranges	"	22.30	18.60	19.50	18.60	21.80	
3. Mango	"	395.10	390.50	250.00	395.00	175.00	
4. Pineapple	"	243.20	227.50	230.00	177.40	239.00	
Total:		828.30	786.70	654.50	740.80	589.40	

Source : Department of Agriculture, Government of West Bengal.

3.2.2 Apart from normal horticultural activities, the forest Department in its social forestry programme have been raising and distributing sapplings for fruit bearing trees which in course of time will give an appreciable boost to fruit production. The panchayats have also taken up this programme seriously for easy and cheap supply of nutrition in rural areas and mainly among rural poor.

3.3 Dry Land Farming

3.3.1 The State cannot afford to confine its effort to improve package of practices in irrigated area along since only 37% of the net cropped area is covered by effective irrigation. Real break through therefore lies in achieving standard production in dry land centering round the micro-watersheds. The performance is as below :-

Table - 3.5

Target and achievement in micro-watershed development

		7th Plan target	Achievement				
			1985-86	1986-87	1987-88	1988-89	1989-90
1. No. of watershed TAKEN-UP No.		175	117	138	150	155	160
2. Area covered under dryland Rainfed farming in selected watershed	'000 ha.	40	18.0	20.00	20.00	28.00	29.00
3. Area under land Dev.	'000 ha.	3.50	1.370	0.850	2.046	3.00	3.00
4. Construction of water harvesting storage structure - No.		650	80	80	125	N.A.	80
5. Area covered outside the selected watershed - '000 ha.		50	18	40	46	65	50

Source : Department of Agriculture, Government of West Bengal.

3.2.2 In Dry Land farming based on micro watershed development, the performance in the state has not been fully satisfactory. Recently, the State Planning Board in consultation with concerned Departments like Agriculture, Minor Irrigation, Forest, Animal Resources Dev. etc. has drawn up a comprehensive plan for reaching an optimality in utilising the existing resources and maximising production. The Planning Committees in the laterite zone are actively associated with the programme.

3.4 Agricultural inputs

3.4.1 Supply of quality seeds in right quantity and in right time is necessarily very crucial for higher growth in agricultural production. For stepping up supply of improved seeds to the farmers the State Government had set up State Seed Corporation in 1980 and has recently entrusted the West Bengal Comprehensive Area Development Corporation also with the task of increasing seed production in its project areas. The Agricultural farms under the State Government are also trying to maximise production of seeds and the individual farmers equipped with expertise of modern farming are also being encouraged to produce seeds. The production of quality seeds has been significant during the period of the 7th Five Year Plan. Apart from production inside the State, the Government purchase seeds from outside and distribute the same often in form of minikits among the farmers. The production and distribution of seeds are shown in Table-3. below :

Table - 3.6

('000 tonnes)

	7th Plan target	Production and distribution of seeds				
		1985-86	1986-87	1987-88	1988-89	1989-90
1. Production of Seeds						
A. Cereal	25.00	6.06	7.310	7.467	12.100	14.800
B. Pulses	2.00	0.044	0.086	0.096	0.675	0.200
C. Oilseed	3.00	0.316	0.382	0.588	0.890	1.560
D. Jute	1.00	0.017	0.017	0.035	0.800	0.800
E. Total	31.00	6.480	7.795	8.186	14.465	17.360
2. Distribution of Seeds						
A. Cereal	100.00	15.819	19.346	19.036	21.095	24.552
B. Pulses	7.00	0.980	1.068	0.955	0.843	1.800
C. Oilseed	3.00	0.835	0.960	1.308	1.272	.920
D. Jute	2.500	2.065	1.580	1.816	1.650	1.573
E. Total	112.500	19.699	22.954	23.115	24.860	30.00

3.4.2 The table indicates that position of seed production and distribution is not good even though over the years, the State is systematically improving in this regard. The supply still lags far behind the requirement and for revolutionising production in agriculture programme for production of quality seeds will have to be taken up and implemented on war-footing. As a strategy of Agricultural production in 8th Five Year Plan much emphasis will be placed on seed production so as to reduce the gap between requirement and supply to a reasonable level.

3.4.3 The increase in irrigation facilities and distribution of improved seeds have been supplemented by increased fertiliser consumption in the State. The consumption of chemical fertiliser is shown in the table below :

Table - 3.7
Consumption of Chemical fertiliser

Item	(in lakh tonnes)					
	7th plan target	1985-86	1986-87	1987-88	1988-89	1989-90
1. Nitrogen (N)	5.00	2.57	3.04	3.48	3.63	3.82
2. Phosphate (P)	2.00	.92	1.14	1.29	1.57	1.76
3. Potash (K)	1.50	.60	.81	.84	1.08	1.14
(N + P + K)	8.50	4.09	4.99	5.61	6.28	6.72

3.4.4 Besides, on an average 5000 units of Bio-gas plants are being set up per annum during this plan period. Production of green manure like Blue-green algae and azeto bacto is also being emphasised. The ever increasing trend of foodgrains production is partly explained by the increasing trend of fertiliser consumption in the State.

3.5 Irrigation

3.5.1. The expansion of irrigation in the state has been mainly through the construction of minor irrigation projects. In the minor irrigation sector new data have become available after the completion of the Minor Irrigation census 1987-88. It appears from the census that actual minor irrigation potential created in the state uptill 1987-88 was 2359.08 thousand hectares in gross term which exceeds the previous estimate of the Minor Irrigation Department by about 6 lakh hectares. The breakdown of the 2359.08 thousand hectares of minor irrigation potential created is

Ground water = 1236.17 thousand hectares

Surface water = 1122.91 thousand hectares

During the two year 1988-89 and 1989-90 further minor irrigation potential for further 150 thousand hectares were created and thus at the end of the Seventh plan total potential stood at 2509.08 thousand hectares.

3.5.2 Since 1987-88 the IDA assisted West Bengal Minor Irrigation Project has been progressing very fast. The project was delayed because of procedural wrangles with the World Bank. But all the problems were sorted out by the end of 1987-88 and with stepped up budgetary support from the State Government, it is expected that the project will be fully implemented within the fourth year of the 8th Five Year Plan.

3.5.3 The estimate of minor irrigation potential created shown in paragraph 3.5.1 does not adequately include irrigation potential created through different programmes like NREP, RLEGP District Plan Schemes, Special Area Programme etc. This may explain, to a large extent, the difference between the previous estimates of irrigation potential and the census figures mentioned before. Yearwise minor irrigation potential created under these programmes are given below :

1985-86	-	19.00 thousand hectares
1986-87	-	17.50 thousand hectares
1987-88	-	15.66 thousand hectares
1988-89	-	14.48 thousand hectares
1989-90	-	15.21 thousand hectares

While figures upto 1987-88 were included in Minor Irrigation Census data, the potential created in 1988-89 and 1989-90 is an additionality.

3.5.4 Irrigation potential is also created through major and medium irrigation projects in the state. The year-wise potential created through such projects is given below :

1985-86	-	14.75 thousand hectares
1986-87	-	18.50 thousand hectares
1987-88	-	12.94 thousand hectares
1988-89	-	7.76 thousand hectares
1989-90	-	6.43 thousand hectares

Total : 59.38 thousand hectares

The cumulative irrigation potential through major and medium irrigation projects reached 1245.00 thousand hectares at the end of the seventh Five Year Plan. The target for creation of additional irrigation potential under major and medium irrigation was 220.39 thousand

hectares large part of which was due to come from Teesta Barrage Project. But Central assistance for the project as per schedule of work was not forthcoming. However, the project has started supplying irrigation since 1986-87 and when completed it will bring about a bright change in agricultural scenario in the region.

3.6 Agriculture Credit (Short term)

3.6.1 Apart from the seeds and fertilizers, efforts are made by the State Government to persuade the commercial Banks to provide credit to the small and marginal farmers. The credit provided to the farmers by Commercial Banks as well as co-operative institutions is shown in Table 3.8 below

Table - 3.8

Credit disbursed to share croppers,
small and marginal farmers

(Rs. in crores)

	1985-86	1986-87	1987-88	1988-89	1989-90
1. Commercial Banks	52	50.40	80.80	52.00	28.00
2. Co-operative Banks	42.79	51.91	59.55	83.50	60.00

Source : Department of Finance (IF) and
Department of Co-operation,
Government of West Bengal.

3.6.2 It is due to well planned and timely supply of non-land input to beneficiaries of land reforms and small and marginal farmers and ensuring participation of working farmers in formulation and implementation of agricultural planning, through the decentralised planning process, the cropping intensity in the state has consistently increased from 145.21 percent in 1986-87 to 152.02 percent in 1989-90.

3.7 Agriculture Wage

3.7.1 As a result of the pro-poor bias in entire development plan in the state, the agriculture wage in the state has registered consistent rise. This is shown in table 3.9 .

Table- 3.9

Average daily wage rate of agricultural labourers in West Bengal.

District	(in rupees)				
	1984-85	1985-86	1986-87	1987-88	1988-89
1. Darjeeling	9.00	-	18.69	17.43	22.32
2. Jalpaiguri	8.75	-	13.34	13.73	18.37
3. Cooch Behar	7.83	-	10.00	11.36	14.47
4. West Dinajpur	7.45	-	11.18	10.63	11.12
5. M a l d a	N.A.	-	N.A.	14.43	17.57
6. Murshidabad	11.50	-	14.72	14.17	17.85
7. N a d i a	N.A.	-	15.24	14.98	17.98
8. 24-Parganas (North)	9.00	-	13.98	15.78	17.50
9. 24-Parganas (South)	N.A.	-	N.A.	21.42	21.07
10. H o w r a h	N.A.	-	-	-	23.79
11. Hooghly	11.00	-	16.36	18.37	20.04
12. Burdwan	10.50	-	15.40	17.86	17.77
13. Birbhum	N.A.	-	11.62	14.80	15.15
14. Bankura	N.A.	-	12.97	14.82	17.62
15. Purulia	N.A.	-	12.25	14.00	14.00
16. Midnapore (West)	N.A.	-	11.07	13.50	16.52
17. Midnapore (East)	N.A.	-	16.01	19.33	-
State: Average :	9.37	13.04	13.78	15.41	17.69
Percentage :			+ 14.45	+ 11.82	+ 14.79

Source : Socio-Economic Evaluation Branch,
Department of Agriculture, Govt. of West Bengal

Increase of CPI between 1981-82 to 1985-86 is 25.4 percent while money wage rate has increased during the period by 67.7%.

4. Animal Resource Development4.1 Animal Husbandry

4.1.1 Role of livestock in any economy need not be elaborated. Its contribution to State's Domestic product is substantial. The livestock figure in West Bengal as per 1982 census is given below :

Table - 4.1
Number of different Livestock

Type of animal	Total population 1972	Total population, 1982	Percentage increase (annual)	Density per Sq.Km. in 1982
Cattle	11,878,083	15,802,501	3.30	176.4
Buffalo	824,161	984,000	1.94	11.1
Sheep	793,369	1,860,457	7.15	15.4
Goats	5,211,445	10,996,394	11.10	123.00
Pigs	361,822	768,409	1.24	8.7
Horses & Ponies	14,548	21,849	5.02	0.3
Poultry	15,491,905	29,132,191	8.60	323.0

4.1.2 The basis policy in this sector during the 7th Plan period has been qualitative improvement of livestock through better breeding, feeding, management, disease control and market link up. Owing to correct policy planning, there has been steady increase in production of milk, meat, eggs and wool as may be seen in the table below.

Table - 4.2
Production Animal Resource Sector

Item	7th plan target	1985-86 Achievement	1986-87 Achievement	1987-88 Achievement	1988-89 Achievement	1989-90 Achievement
1. Milk (lakh tonnes)	30	24	25.97	26.44	27.01	27.01
2. Eggs (Million Nos.)	2208	1656	2198	2155	2175	2208
3. Wool (lakh Kgs.)	5.96	5.09	5.27	5.49	5.50	5.96

Source : Department of Animal Resource Development,
Government of West Bengal.

In the annual plan 1989-90, a target of reaching 29.00 lakh tonnes in milk production was proposed. Efforts were made to increase the number of cross bred animals and in both extensive and intensive fodder production. Despite all these target in milk production could not be reached. In eggs and wool, the target could be achieved. In the 8th Plan, attempt will be made through involvement of panchayets and common people to achieve higher growth rate in milk production.

4.1.3 Sheep, goats and pigs are mainly reared for meat. Though reliable data are not available, the following table will give a rough idea about supply position of meat in the state.

Table- 4.3
Supply of meat

Year	Goat meat (M.T.)	Mutton (M.T.)	Pork (M.T.)	Total (M.T.)
1985-86	66.389	3.729	24.154	94.272
1986-87	71.029	3.489	25.478	99.996
1987-88	75.980	3.850	26.874	106.704
1988-89	81.283	3.912	28.347	113.542
1989-90	86.957	3.975	29.900	120.83

Source : Department of Animal Resource
Development, Government of West Bengal.

The above indicates that rising trend in supply of meat has been maintained to cope with increased demand in protein food for general development in economy and growth of population at nearly 2 percent per annum.

4.1.5 For improving cattlestock and maintaining the rising trend in milk supply position, continued effort has been made for inducting more indigenous animals under the fold of artificial insemination coverage. Performance in this regard is indicated below :

Table- 4.4
Artificial Insemination cases done

<u>Year</u>	<u>Target</u>	<u>Achievement</u>
1985-86	5.75	5.65
1986-87	6.50	5.92
1987-88	6.65	6.86
1988-89	7.20	6.88
1989-90 (Anticipated)	7.25	7.25

Source: Department of Animal Resources
Development, Government of West Bengal.

4.2 Veterinary Services

4.2.1 Veterinary Services occupy the Centre piece in the entire gamut of Animal Resource Development Activities. Well thought-out programmes were taken up during the Seventh Plan period for ensuring better medical services to the animals. But most of the veterinary service schemes involve time consuming steps like selection of sites, construction of buildings and creation of posts etc. As a result, initially the progress in the programme was somewhat tardy but gradually the work gathered momentum and against certain items the achievement far exceeded the target. To quickly meet the need for primary health coverage which is extremely essential for actual improvement in this sector, a programme was taken up

wherein

wherein Block Veterinary Officials would train up people in batches and encourage them to take to custom services. This programme has shown success and in Eighth Five Year Plan, not only will this programme continue but its implementation will be intensified.

4.3 Fodder Production

4.3.1 For stiff competition between human food and animal feed, the area of pasture land has shrunk to a very negligible level. Commercial production of fodder has also not properly developed for lack of market linkage. Co-ordination among the fodder producing wings like Animal Resource Department, Agriculture Department and Forest Departments was not so firm at least till the beginning of the 7th Five Year Plan. However, the 7th Five Year Plan has witnessed rejuvenated activities in this regard and a development strategy has been evolved for large scale fodder production in laterite zone of the State as also in Sunderbans area. The market linkage of fodder to be produced in the Zone has also been considered. As part of the strategy the West Bengal Dairy and Poultry Development Corporation has started setting up two new feed Milling plants at Salboni in Western Midnapore and Durgapur. Besides, DRDA Birbhum and DRDA Purulia have completed the formalities for setting up one milling plant in each of the districts. As a whole fodder production has received a boost during the Seventh Plan with an augmentation of outlay in ARD's budget.

4.3.2 At present 6.25 lakh hectares are under fodder production. The present requirement of the existing cattle stock comes to around 3,31,64,288 MT out of which only 1,56,84,000 MT are produced and supplied. The huge deficit of 1,74,80,288 MT is made up from 70% of the mono cropped area available for grazing during 8 months in a year, uncultivable land during kharif, road sides, forest orchard areas, homesteads, canal banks, lakes, tanks etc. Also weeds of cultivated crops and vegetable wastes partially meet the need.

In view of mounting deficit in this regard, it should be the endeavour of the State to take up massive programme for augmentation of supply of fodder during the eighth plan.

5. F i s h e r i e s

5.1 General progress

5.1.1 West Bengal is endowed with almost all types of fishery resources. In the foothills of Himalayas, there exists possibility of hill stream fisheries. Open eco-system in inland areas comprising rivers, reservoirs, canals beels (ox-bow lakes) form potential fisheries. Pond fisheries of the state command a special mention. Sewage fed fisheries in the suburbs of Calcutta is latent with immense potential. Brackish water pisciculture potential along the coast line is the largest in the country. Last, but not the least, marine fishery resources of the state

encompass a large variety of commercially important species of fish and prawns. In a nutshell, starting from marine fisheries in the Bay of Bengal, West Bengal is bestowed with wide range of fishery resources right upto the Himalayan foothills.

5.1.2 Fisheries development has made significant progress over the successive five year plans. While the Sixth Five Year Plan was the turning point in the development of the fisheries in the State, the Seventh Five Year Plan has made substantial achievement in consideration of the gains thereof. The fish production has increased from 4.02 lakh tonnes in 1984-85 to 6.01 lakh tonnes in 1989-90, thus exceeding the 7th plan target of 6.00 lakh tonnes. The resource wise account of achievement is given below :

Table - 5.1
Achievement in fish/fishseed production

I t e m	X U n i t X	X 7th plan X target	X 1988-89 X Achievement	X 1989-90 X Target	X Achievement
1. Fish production					
(a) Inland	'000 tonnes	520	458.30	520	512.34
(b) Marine	"	80	65.15	80	88.99
Total ::	-	600	523.45	600	601.33
2. Fishseed production					
(a) Fry	X Million X	7000	7,200	7,250	7,400
(b) Fingerling	X number X				

Source : Fisheries Department,
Government of West Bengal.

5.2 Inland Fishery

5.2.1 Fish production in the State against inland fishery has increased from 4.20 lakh tonnes MT in 1986-87 to 4.58 lakh M.T. in 1988-89. In 1989-90, a target of 5.20 lakh tonnes was set but actual achievement was 5.12 lakh tonnes. The target of marine fish production has however fallen slightly short of target in 1988-89. Against the target of .70 lakh tonnes, the production was .65 lakh tonnes. But in view of increase in supply of trawlers, there has been phenomenal increase in the terminal year i.e. in 1989-90. The steady rise the production in Fishery sector has been possible due to (1) increasing productivity of the water bodies already under pisciculture by successful application of modern technology, (2) bringing semiderelict and hitherto unutilised water areas under pisciculture and (3) by stepping up the flow of assistance to fish farmers through Fish Farmers Development Agency and through Fishermen Co-operative Societies.

5.2.2 The inland Fisheries Project through the agencies of FFDA in all the districts of the State showed substantial progress. In the first four years of the plan, about 67000 ha. area could be brought under IPF coverage and in the terminal year another 3000 ha. were brought under such coverage.

5.3 Fishseed Production

5.3.1 In fishseed production, the state has reached the near maximum level. The production has risen from 5000 million in 1985-86 to 7400 million in 1989-90. The state has thus comfortably exceeded the Seventh Plan target and reached a new height in the beginning of Eighth Plan. It will not be out of place to mention that West Bengal supplies 75% of India's fishseed requirement in the inland sub-sector. For a few successive years, the state has received the highest productivity award in fish seed production.

5.4 Brackish Water Aquaculture

5.4.1 Recently the state has taken steps for increasing the area of brackish water fishery which has a great potential in the coastal region of Midnapore, North 24-Parganas and South 24-Parganas. Within the plan year 1988-89, Brackish Water Fisheries Development Agencies have been formed and tagged with respective FFDA's in the coastal districts. This has given a preliminary boost to brackish water aquaculture. Though the achievements in this area are not as significant as in others, the ground work done will provide a good stepping for vigorous activity in the next plan.

6. F o r e s t

6.1 Area and Production

6.1.1 The coverage of forest in West Bengal is much below, the national norm. The recorded forest area in the State accounts for only 13.4 per cent of the land. Per capita forest area comes to only 0.02 ha. as compared to the national average of 0.12 ha. Owing to competitive demand for land by various development sectors, the scope for expansion of forest area and traditional forestry is rather limited. Consequently, the state has taken the social forestry as also the farm forestry as priority area. At the same time, there has been an optimum emphasis on economic and commercial plantation and fuel wood plantation. The achievement of forest sector during the Seventh plan period is as follows :-

Table - 6.1

('000 ha.)

I t e m	7th Plan target	Achieve-	Achieve-	Target	Achie-	Cumulative
		ment 1985-88	ment 1988-89	1989- 90	vement 1989- 90	Achieveme- nt during 7th plan
1. Soil Conservation area covered under forest	3.700	-	-	0.940	0.940	5.556
2. Plantation of quick growing species	10.00	3.028	1.517	1.240	1.240	
3. Economic & Commercial Plantation	7.00	3.688	1.026	1.234	1.234	
4. Social Forestry	64.300	55.873	25.526	20.865	45.090	
5. Rural fuel wood plantation	5.940	4.380	1.690	1.695	1.298	
6. Decentralised peoples' Nursery	-	11.764	7.735	6.500	-	
7. Production of some selected forest products -						
a) Timber extraction	425.00	208.702	65.00	62.00	37.400	
b) Fuel wood stocks	-	84.410	170.861	159.258	99.713	

In tree plantation the performance of the state is given below :-

<u>Year</u>	<u>Target</u>	<u>Achievement</u> (In lakh number)
1985-86	1100	1115
1986-87	1400	1416
1987-88	1400	1391.08
1988-89	1800	1112
1989-90	1000	1376

6.2 Role of other organisation in Forests

6.2.1 Apart from the area covered by the States' Forest Department, large area is also covered under social Forestry under such programme NREP/JRY and District Plan Schemes Fund. The panchayats in West Bengal have also social forestry programme of their own. The most important achievement of the Government in this sphere of activity has been the creation of awareness among the people about the utility of trees.

7. P o w e r

7.1 Review

7.1.1 The State of West Bengal witnessed large deficit in power supply during the Sixth Plan period. The position continued to remain difficult on the eve of the Seventh Plan. But the performance in respect of execution of power projects in the state started improving considerably. The installed capacity for power generation under agencies of the State aggregated to 2238 M.W. in 1984-85. By the end of the second year of the Seventh Plan the capacity figures reached a total of 2558 M.W.

7.1.2 In view of better performance of the state, the target for capacity addition during the Seventh Plan period was reviewed and revised upward to 1222.5 M.W. by the Planning Commission. But the progress of work of the power projects in the state, however, suffered a serious set back because of the lock-out declared by M/s.ABL who were to supply two out of the four boilers for Kolaghat Thermal Power Project. However, since the early part of 1988-89, M/s.ABL have started functioning, the possibilities of two more units of Kolaghat T.P.P. brightened towards the end of the 7th Plan. In March 1990 boiler of unit No. 5 with 210 M.W. capacity was lighted up and the unit has started generating electricity from September. The synchronisation schedule of other two units is given below.

Unit No. 6 - 210 M.W. - July 1991

Unit No. 4 - 210 M.W. - November 1991

Work of the 2 x 67.5 M.W. Southern Generating Project is progressing satisfactorily as per schedule. The first 67.5 M.W. unit is expected to be synchronised towards the end of 1990 and commissioned in early 1991 and the second unit about six months thereafter. Thus by the first year of the 8th plan, there will be an addition of (210 + 675) M.W. i.e. 277.5 M.W. out of which 210 M.W. at KTPP have already been added.

7.2 Generation

7.2.1 Generation by the State Power Agencies increased remarkably during the first three years of the Seventh Plan and also in the last year, rising from 6766 MU in 1984-85 to 8851 MU in 1987-88 and then fell to 8301 MU in 1988-89. In 1989-90, the generation did not improve much, on account of inferior quality of coal supplied to the power stations, it was maintained at the level of 8367 M.U.

Table - 7.1

Generation of Electricity in West Bengal

Name of Organisation	1984-85		1985-86		1986-87		1987-88		1988-89		1989-90
	T	A (PLF %)	T	A (PLF %)	T	A (PLF %)	T	A (PLF %)	T	A (PLF %)	A (PLF %)
W.B.S.E.B.	4430	3386 (36.5)	4073	3577 (40.0)	3886	3790 (40.5)	3800	3490 (35.0)	3350	3260 (33.0)	3076
Thermal Hydel & Others	135	135	139	133	105	111	-	80	-	101	101
	4565	3521	4212	3810	3991	3901	3800	3570	3350	3361	3177
WBPDCL	275	226	800	945 (50.4)	1139	1156 (31.6)	2000	1930 (52.0)	2000	1813 (49.0)	2128 (57.84%)
Sub-total	4840	3747 (36.5)	5012	4755 (42.2)	5130	5057 (39.8)	5800	5500 (41.0)	5350	5174 (38.0)	5305
D.O.L.		705 (28.7)		677 (26.3)		1030 (30.1)		1053 (31.0)		736 (22.0)	617 (18.1)
C.E.S.C.		2314 (54.0)		2465 (55.3)		2553 (56.5)		2298 (51.0)		2391 (53.0)	2445 (54.9)
		6766 (40.0)		7897 (43.2)		8640 (40.47)		8851 (43.22)		8301 (40.53)	8367 (42.7)

The slight fall in generation in 1988-89 was due to two serious accidents in the Power Station at Santaldih and a serious earth fault in the starter of 110 MW TG sets at D.P.L.

7.3 Rural Electrification

7.3.1 The pace of extension of electricity in the rural areas increased during the Seventh Plan although it fell short of targets set by the Planning Commission. The no. of villages electrified increased from 19,201 in 1984-85 to 26,650 in 1989-90. The number of pumps sets energised increased from 39,431 to 88,832 during the same period registering above 100% increase in one plan period.

Table - 7.2

Target and Achievement of Rural Electrification during 7th plan

I t e m	Base year	1985-86		1986-87		1987-88		1988-89		1989-90	
	as on 31.3.89 (Total)	Tar- get	Achi- ve- ment	Tar- get	Achi- ve- ment	Tar- get	Achi- ve- ment	Tar- get	Achi- ve- ment	Tar- get	Achi- ve- ment
Villages electrified (Nos.)	19,201	2230	1330	2356	1350	2410	1604	1860	1665	1560	1500
Pumps sets energised (Nos.)	39,431	15000	8064	17000	13842	18770	8003	15160	9000	12160	10500

Table - 7.3

Growth of category-wise consumers in W.B.S.E.S. system during the 7th Plan period.

Y e a r	Industrial	Domestic / Commercial	Agriculture	T o t a l
Total as on 31.3.85	40,507	7,62,598	39,492	8,42,597
Increase in 1985-86	2,315	53,776	677	56,718
1986-87	2,501	90,655	2,205	95,361
1987-88	3,000	1,47,000	6,000	1,56,000
1988-89	2,000	1,14,000	8,000	1,24,000
1989-90	3,447	1,03,971	626	1,08,044
Total as on 31.3.90	53,770	12,72,000	57,000	13,82,700
Percentage increase over the consumers as on 31.3.85	32.72	66.80	44.33	64.09

It may be seen from Table above that providing service connection to Agriculture Sector has been raised by 44.33 percent during the Seventh Plan period over the base year (1984-85) agriculture service connection.

8. Industry

8.1. Large and Medium Industry

8.1.1. The growth rate in large industry has been rather low though it was not as grim as it had been during the sixth plan period. The industry (registered) has grown an average rate of 3.5 percent per annum during 1985-90. The overall index number of industrial production in the state with 1980 as base is given in Table - 8.1.

Table - 8.1
Index number of industrial production (1980 base)

Item	1987	1988	1989
Mining & Quarrying	106.15	106.65	106.69
Manufacturing	102.45	108.66	113.16
Electricity	190.59	195.21	213.37
General	108.42	113.70	118.38

Source : Bureau of Applied Economics & Statistics, Govt. of West Bengal. As is evident from the table above, the overall performance of the industry sector in the State turned to be more or less satisfactory towards the middle of the 7th Plan. But a more meaningful understanding of the industrial scene can perhaps be achieved by a disaggregated analysis of some of the major industries in the state as well as the important developments that took place in the industry sector in the state.

8.1.2 The comparatively low rate of growth in the sphere of industry can best be understood by an analysis of the major industries like jute and tea which largely dominate the industrial scene in the State.

8.1.3 The jute industry is primarily dependent on the domestic demand for jute goods. While in the sixties, the industry exported nearly 70 percent of its production, from the early seventies the trend has been reversed with internal consumption accounting for nearly 80 percent of the production of jute industry and exports accounting for the rest. As can be seen from the table below this trend has continued in recent years.

Table - 8.2
Internal consumption and exports of jute goods ('000 MT)

Year	Exports	Internal Consumption
1986-87	276.7	1091.0
1987-88	240.0	990.0
1988-89	223.5	1148.5
1989-90		

8.1.4 However, a disquieting trend over the last two to three years has been the sluggishness of internal demand and it is only in 1988-89,

that the internal demand for jute goods picked up mainly because of the record agricultural production in the country. The sluggishness in internal demand is perhaps related to the poor offtake of jute bags by DGS & D in recent years. While in 1986, DGS&D ordered for 6.14 lakh bales, in 1987, the order was for only 3.02 lakh bales and in 1988, it was for 3.18 lakh bales. Further the Central Government directive to the sugar, cement and fertilizer industries to use jute bags has been bogged down in legal wrangles; the refusal of the Central Government to discourage the growth of the synthetic bag markets has also affected adversely the demand for jute products.

8.1.5 It is this sluggishness in demand resulting from lack of perspective of the Central Government which has led to the stagnation in the jute industry. The situation has been further compounded by the oligopositic ownership pattern in the jute industry. The lack of competition and the slow growth of market have led to the total neglect of the modernisation by the Mill Owners. The progress of modernisation under the Jute Modernisation Fund Scheme has not been very impressive. The total number of applications under the scheme has been 36, out of which the number of sanctioned cases has been 14. The jute industry will have to make a realistic assessment of the ground conditions and modernise quickly if it is to survive and grow. The need for modernisation has become all the more urgent with the signs of revival of the Jute exports markets because of the developed countries switching over to jute packaging on ecological grounds. The modernisation may also help the industry to diversify its products to unconventional items like jute board, jute fibre for manufacturing wrappers and wearing apparatus etc. for which there seems to be a good market. However, given its past performance, it is doubtful whether jute industry under the present ownership pattern can cope with the emerging challenges facing the jute industry.

8.2 Tea Industry

8.2.1 Production of tea in the state suffered slight fluctuation during the period of the Seventh Plan. Production figures are tabulated below :-

Table - 8.3
Production of Tea (in Million Kgs.)

	1984	1985	1986	1987	1988	1989
T e a	133.18	157.5	141.27	152.22	150.93	

A recent development in tea industry has been the unprecedented rise in tea prices. The table above shows that increase in production per annum has not been steady while domestic demand increases by 15 million Kgs. per annum. Unless production of tea increases at a rate sufficient to cater to the export and domestic market, the rise in tea prices will continue.

8.2.2 The basic problem of the tea industry in the state has been the utter neglect by the Private tea garden owners in reinvesting their projects in the tea gardens, so that replantation of tea gardens, which is essential for increasing the productivity of tea gardens has not been at the required level. The result has been that tea bushes over 50 years covered 57.97 percent of the total area under tea bushes in 1987. This is shown in Table 8.4. In 1986, 52.84 percent of the area was under tea bushes over 50 years old, that is in one year the percentage has increased by 5 percentage points.

Table - 8.4
Age structure of the tea bushes in West Bengal.

	Below 5 years	5 to 10 years	11 to 20 years	21 to 30 years	31 to 40 years	41 to 50 years	over 50 years	Total
Hectare	5063	6549	8309	11605	5766	6197	48715	92204
Percentage	5.49	7.10	9.01	12.59	6.25	6.72	52.84	100

Source : Tea Board.

8.2.3 This lack of perspective of private tea garden owners has made a large number of tea garden in the state sick. The West Bengal Tea Development Corporation Ltd. (WBTD), a state Government undertaking has taken over the ownership of four such gardens covering an area of 686.50 hectares and manages three others which have an area of 573 hec. The WBTD has drawn up a programme for revival of these units and will in future also take over/purchase other tea gardens which can be made viable.

8.3 Cotton Industry

8.3.1 In cotton textile also there is a stagnancy in production with production fluctuating around a secular level.

Table - 8.5
Production of cotton textiles in West Bengal.

	1985	1986	1987	1988	1989
Yarn(Lakh Kg.)	661.40	637.31	610.80	505.54	
Cloth(Lakh Mtr.)	1333.18	1298.68	953.30	711.12	

Source : Bureau of Applied Economics & Statistics,
Government of West Bengal.

The production of both the cotton yarn and cotton cloth registered a sharp decline over the years.

8.3.2 Apart from the structural imbalance which afflicts the cotton textile industry in the country, with total capacity of looms in three sectors, organised, decentralised and co-operative, being about 23,400 million metres of cloth and total cloth requirement being in the region of 14,000 million meters and in spinning the total installed

spindlage being far excess of the actual requirement, the mills in the eastern region have another debilitating factor with respect to Railway freight rate. They have to bear the high cost of freight rate on raw cotton which has to be imported from Punjab and Gujrat. This is a direct consequence of the unfortunate policy of Central Government on selective freight equalisation for certain important inputs but without any such policy for other raw materials such as cotton. Such a biased policy of selective freight equalisation has particularly destroyed the previous natural locational advantage of industries in West Bengal. The freight rate on raw cotton, as may be seen from the table below has been progressively increasing for the distance slabs relevant to the State (i.e. 1500 K.M) thus further eroding the viability of Mills in eastern region.

Table - 8.6
Railway freight rates on raw cotton

Distance (K. M)	Freight rate (Rs. per tonnes)			
	1982	1987 Jan.	1988 June	1989 June
100	43.30	53.87	54.90	60.40
200	65.30	89.25	90.60	100.00
300	85.40	124.95	126.10	140.00
500	123.10	198.56	200.90	222.50
750	200.40	278.62	283.90	334.60
1000	251.00	385.04	389.10	435.50
1500	343.90	548.94	554.70	615.10
2000	423.40	673.16	680.10	754.30
2500	485.60	769.13	777.00	861.90

Source : Economic Review, 1989-90, Govt. of West Bengal.

The existence of the cotton textile industry in the State is threatened unless urgent measures are taken to lower the burden of freight on raw cotton and assistance is provided to appropriately modernise the Mills in the State.

8.4 Investment

8.4.1 The investment climate in West Bengal has significantly improved in recent years. Compared to 706 projects approved during the five years of the sixth plan (1980-84) envisaging an investment of Rs.562.65 crores, 916 industrial approvals involving an investment of Rs.2166.60 crores were received during the five years of the Seventh plan (1985-90), recording an increase of 129.74 percent in terms of number and 385 percent in terms of investment. Yearwise details of industrial approvals from 1983 to 1989 are given below :-

Table - 8.7
Industrial approvals and investment involved

	1983	1984	1985	1986	1987	1988	1989 (P)
1. Approval in Number.	166	158	246	206	198	175	91
2. Investment in Crores of Rupees.	121.39	75.07	362.64	598.11	454.36	12.27	439.22

Source : A review of the Industrial Scene in West Bengal, Annual Report 1989-90, Commerce & Industry Department, Govt. of West Bengal.
P = Provisional.

8.4.2 This encouraging trend in industrial investment is perhaps not unrelated to efforts made by the State Government to improve industrial infrastructure (like power, industrial estates, roads, water supply etc.) in the state as also to the investment made by the State Government in setting up new units in such high growth potential industries like chemicals, drugs, electronics etc. The West Bengal Industrial Infrastructure Development Corporation is the prime agency for setting up industrial Estates in the State. The WBIIDC are setting up industrial Estates in various districts including the five "No industry districts" i.e. Bankura, Cooch Behar, Malda, Jalpaiguri and Darjeeling. These industrial estates known as Growth Centres are located at Raninagar and Debgram (Jalpaiguri), Bishnupur (Bankura), Malda (Malda), Cooch Behar (Cooch Behar), Falta (South 24-Parganas), Uluberia (Howrah), Kalyani Phase-II (Nadia) & Haldia Phase-II (Medinipur), Khanyan (Hooghly), and Bagdogra (Darjeeling).

8.5. Electronics Industry

8.5.1 Considering that electronics has great potentiality, the West Bengal Electronics Industry Development Corporation was set up. It is the agency engaged in the development of electronics industry in the State. Sixteen companies under WBEIDC are in operation producing wide range of electronic items.

8.5.2 The WBEIDC is setting up jointly with Department of Electronics, Government of India one of the four National R & D Centres in Salt Lake Electronics Complex. The WBEIDC is also setting up industrial estates. Taratalla Electronic Complex has already been completed. A major industrial estate for electronic units have been set up in Salt Lake. The Salt Lake Complex covering 40 acres (Phase-I) and 93 acres (Phase-II) is complete. In both the complexes large number of electronic units have already come up.

8.6 Promotion of Industries in the Joint Sector.

8.6.1 Right from the beginning of Seventh Five Year Plan, the State Government has adopted a policy of promoting industries in the Joint Sector. In the 7th Plan period 5 such projects have been completed and 7 projects are ongoing.

8.7 Incentives to Promote Private Investment

8.7.1 Apart from directly setting up industrial units, whether on its own or in the Joint Sector, the State Government provides through West Bengal Industrial Development Corporation incentives to promote private investment in the industry sector in the State. WBIDC provides a wide ranging assistance to industrial units. These include the provision of loans, direct participation in share capital and provision of incentives ranging from refund of sales tax, power subsidy, capital investment subsidy, employment subsidy etc. During the five year period of the 7th plan, the WBIDC has disbursed Rs. crores as incentive on various accounts. The disbursement of assistance in terms of loans & share participation by the WBIDC is tabulated below :

Table - 8.8
Disbursement of Assistance & Share Participation by WBIDC.
(Rs. in lakhs)

Years	Loans	Share participation	Total
1984-85	1563.91	105.93	1669.30
1985-86	1243.25	173.43	1416.63
1986-87	1416.33	211.61	1627.94
1987-88	1795.00	120.00	1915.00
1988-89	1829.53	260.15	2089.68
1989-90	869.52	782.57	1652.00

Source : Commerce & Industries Department, Government of West Bengal.
Investment catalysed through individual units assisted by WBIDC is shown in table 8.9.

Table - 8.9
New Investment made by Industrial Units assisted by WBIDC.

	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90
1. No. of Units	30	27	24	29	34	40
2. Estimated capital Investment (Rs./lakhs)	6820	5158	4434	6150	18942	23778
3. Estimated no. employment.	3578	1973	1659	1298	2363	2320

Source : Commerce & Industries Department, Government of West Bengal.

8.8 Revival of Closed and Sick Industries.

8.8.1 While on the one hand setting up of new industries is progressing slowly and at the rate much below the requirement, on the other hand, a large number of existing industries have joined the club of closed and sick industries. Revival of closed and sick industries is primarily the responsibility of the Central Government but in view of the inconsiderate attitude of the Central Government, the State Government has taken upon itself a major responsibility of reviving and assisting closed and sick units in the State. The State Govt. has taken over the managerial and ownership control over 13 sick units, 5 Govt. companies and one Departmental undertaking, involving total employment of 13000 persons. Further, the State Govt. had participated in the reconstruction of 52 units

involving employment of about 52000 workers by declaring them as Relief undertakings. The financial burden of assisting sick units by the State Govt. has been enormous. During the period of 7th plan (1985-90), the State has already spent around Rs. 80.00 crores for the purpose.

The State Government is also exploring ways to re-open or revive a number of units like Bengal Potteries (which has been closed down by the Central Government), India Paper Pulp, Titagarh Mills, Bengal Paper Mills etc.

8.9 Inflow of financial assistance.

8.9.1 The financial assistance received from all financial institutions comprising of IDBI, IFCI, ICICI, UTT, GIC, IRBI, SFCS and SIDCs is tabulated below :

Table - 8.10
All Financial Institutions - State-wise disbursement

(All India & Major States)	Disbursed				Cumulative upto the end of March 1989.
	1985-86	1986-87	1987-88	1988-89	
{ All India	4239.20	4879.93	5935.36	7865.49	40,550.67(100.0)
{ Gujrat	532.18	695.96	746.87	1088.38	5,219.34(12.87)
{ U. P.	418.57	570.46	814.17	858.63	4,035.31(9.95)
{ Maharashtra	723.87	810.20	1115.93	1408.94	7,532.97(18.57)
{ Tamilnadu	425.08	445.68	572.80	697.18	3,983.00(9.82)
{ West Bengal	194.95	268.73	248.43	424.50	2,163.21(5.33)

N.B. Figures in brackets indicate the percentage share of the respective States.

Source : A review of Industrial Scene in West Bengal, Annual Report, 1989-90.

8.10 Flow of Institutional Finance

8.10.1 The requirement of financial credit for even moderate growth of large and medium industry is enormous. But the flow of Institutional finance as may be seen from Table 8.9 is the lowest in West Bengal. Effort has been made to partially supplement the flow of institutional finance by raising the share capital of the West Bengal Financial Corporation. The share capital participation of the Government of West Bengal to the WBFC is as below :

Table - 8.11
Share Capital participation by the Govt. of West Bengal to West Bengal Financial Corporation.

	1985-86	1986-87	1987-88	1988-89	1989-90	Total
{ Share Capital (Rs. in lakhs)	82	95	155	325	325	982
{ Employment generated by WBFC investment (Number)	-	-	-	-	18,339	50,802

Source : Finance Department (I.F), Government of West Bengal.

8.10.2 The WBFC gets resources from (1) Refinance from BDBI (2) Issue of Bonds (3) Recovery of principal (plough back) and (4) Revenue surplus (Profit after tax). The authorised share capital of WBFC is being augmented from the existing limit of Rs. 25.00 crores to Rs. 50.00 crores.

8.10.3 This, it will appear that the State Government is making wideranging efforts to come out of the grim industrial situation of the State and these efforts have gone a long way is not only halting the industrial decay in the State but also in initiating a process of industrial recovery.

8.11 Cottage and Small Scale Industry

8.11.1 The basic policy of the Government of West Bengal during the period of 7th Five Year Plan has been to set up as many industrial units as possible by optimum utilisation of the growth achieved in primary sector as well the development of rural infrastructure. This also provides very substantial employment to the unemployed youths. The degree of success in this endeavour may be gauged from the table below :

Table - 8.12
Small Scale Units set up and employment generated

	1985-86	1986-87	1987-88	1988-89	1989-90	(Cumulative upto 31.3.90.)
1. New units set up excluding IRDP & SESRU (Number)	13471	14794	19413	15667	7861	3,16,166
2. Institutional Finance to SSI Units (excluding SEP Funding) (Cum Rs. in lakhs)	6878.68	4085.20	12352.17	8212.94	-	247800.00
3. Employment generated (Cum '88 No.)						919

Source : Department of Cottage & Small Scale Industries.

8.11.2 Apart from margin money loan to the SSI Units, the State Govt. provides incentive for fixed capital in backward areas as also for varied other items like electricity, captive power, generating sets, bank interest, octroi duty etc. Over and above providing incentives, the State Govt. also helps the units in getting institutional finance under IRDP. The table 8.12 shows flow of institutional finance to IRDP units in the 3 years of the Seventh Plan.

Table - 8.13
Flow of institutional finance to SSI Units in West Bengal under IRDP

	1987-88	1988-89	1989-90
Flow of institutional Finance to IRDP Units - (Rs. in lakhs)			
1. Sanctioned cases	83.371	1.18.108	1.80.693

8.11.3 For self employment of the registered unemployed youths, the Govt. of West Bengal introduced Self-employment Scheme for Registered unemployed (SESRU) from the first year of the Seventh Plan. Some details of the progress made under this scheme is presented in Table 8.13.

Table - 8.14
Progress under SESRU schemes

	1985-86	1986-87	1987-88	1988-89
1.No. of projects for self-employment submitted to Bank.	6584	21975	42999	52794
2.No. of projects sanctioned by Banks.	6669	13333	23650	22751
3.No. of projects utilising bank loans.	3031 (Rs. 495.23 lakhs)	10876 (Rs. 1669.77 lakh)	19361 (Rs. 2870.81 lakh)	23077 (Rs. 4260.50 lakh)

Source : Directorate of National Employment Service,
Department of Labour, Government of West Bengal.

(Bracketted figures show the money value of the projects)

In this programme, the state provides upto 25 percent of the project cost as margin money and the remaining part of the cost is financed as loans by the Commercial Banks. Projects ranging from manufacturing, assemblage, trade, transport etc. are financed under this scheme.

8.12 H a n d l o o m

8.12.1 Increase in foodgrains production and other agricultural output and choice of labour using technology in production process has resulted in upward rise in average wage rate of agricultural workers from Rs.5.60 in 1986-87 to Rs. 17.69 in 1989-90. Consequent increase in the purchasing power of the common people in rural areas has immediately shown itself in terms of increase in the demand for mass consumption goods such as handloom products. On production side, the Government pursues the policy of encouraging the growth of viable co-operative societies and wiping out non-viable societies dominated by the vested interest. Figures in this regard are shown in Table 8.14.

Table 8.15
Production of handloom cloth and no. of co-operative Societies.

	1985-86	1986-87	1987-88	1988-89	1989-90
1.Total production of hand-loom fabrics (Million Mtrs.)	372.4	383	390	399	413.50
2.Total no. of hand-loom weavers' co-operative societies.	1416	1420	1510	1623	1722
3.No. of viable societies.		290	290	316	329

Source : Directorate of Handloom and Textile, Cottage & Small Scale Industries Deptt., Government of West Bengal.

8.12.2 Insufficiency of raw materials supply in handloom, sector particularly because of selective freight equalisation has become a chronic problem for the state. With a view to partially tackling the problem, the Government has taken steps to supply yarn through Central Marketing Organisation.

8.13 Sericulture

8.13.1 Sericulture is a very old and important agrobased economic activity in West Bengal. For whatever reason, it did not receive necessary attention of the state until the Sixth Five Year Plan. Right from the Sixth Plan, the State of West Bengal has laid stress on this sector for the reason that this is an activity where a farmer can get the highest return from his land and a large number of people can get employment. Required assistance is now provided to marginal farmers and also assignees of vested land. The assistance provided includes arrangement for irrigation, supply of cuttings, provision of land and access to improved rearing facilities at the collective rearing centre. The achievement in this sub-sector is shown in Table 8.16.

Table - 8.16
Progress of Sericulture

	1985-86	1986-87	1987-88	1988-89	1989-90
1. Total average (cun-in-acres) (Mulberry)	31,845	34,140	35,903	38,028	40,370
2. Production of raw (Mulberry) Silk (Lakh Kgs.)	7.48	7.92	7.60	8.70	9.26
3. Employment (in thousand)	225	273	287	304	322

Source : Sericulture Directorate, Cottage & Small Scale
Industries Department, Government of West Bengal.

9. Social Services9.1 Education :

9.1.1 The basic objective of the education policy of the State Government during the 7th Five Year Plan was one of reaching the common man; in as wide a manner, as possible, with an education to help him understand the production structure and the socio-economic environment surrounding it. Given this objective, emphasis was placed on universalisation of elementary education, content of education, spread of non-formal and adult education. Along with this focus on elementary education, the aspect of qualitative improvement of higher education has been emphasised.

9.1.2. There has been progress towards the universalisation of elementary education in the state, so that the enrolment in primary schools as percentage of the relevant age group has reached the 100% mark in 1988-89. The extent of universalisation of primary education in the state is further reflected in the fact that in 97 percent of the villages, there is now a primary school within a radius of 2 kilometers. The increase in enrolment at the Secondary level has also been significant as may be seen from Table 9.1.

Table : 9.1

Enrolment and other related figures

7th Plan target	1985-88 (Achieved)	1988-89 (Achieved)	1989-90 (Achieved)
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1. Primary stage				
a. (Class 1 to V)				
i. Enrolment as ('000)	88.20	8698	8702	88.20
ii. Enrolment as % of age group (6.10)	101.05	90.00	100.00	101.05
iii. No. of Schools (Cum)				51,942 as on 31.3.90
iv. No. of teachers (Cum)				2,26,694 as on 31.3.90
2. Secondary stage (Class Vi to Viii)				
i. Enrolment ('000)	3767	3297	3697	37.67
ii. Enrolment in Vi to Viii as % of age group (11-13)	70.04	68.74	-	70.04

Table : 9.1
Enrolment and other related figures (contd.)

	7th Plan target	1985-88 (Achieved)	1988-89 (Achieved)	1989-90 (Achieved)
3. Adult Education				
i. No. of participants (15-35) (in '000)	2860	1477	530	650
ii. No. of Centres opened	1,41,200	50,947	17522	19,387

9.1.3. To universalise Primary education the Government has undertaken number of incentive schemes also. These include abolition of tuition fee, distribution of free text books, distribution of school dresses for 50% students and rural girls etc. In the programme of providing mid-day meals to the students to prevent drop outs which may also serve to improve the health of School going children, 28 lakhs of children are covered every year. The formal education system in the state has been supplemented by Non-formal and Adult education as may be seen from Table 9.1. For intensive drive in this programme, a new Department styled Mass Education Extension Department was created in 1987-88. That the State considers these two programmes (1) Non-formal and (2) Adult Education as priority areas is well reflected in the fact that the outlay for the Programmes has increased from around Rs.150.00 lakhs of 1988-89 to Rs. 700.00 lakhs in 1989-90. In the first year of the 8th Plan, i.e. 1990-91 the outlay has further been increased to Rs, 820.00 lakhs.

9.1.4 A move has also been made to make reading material easily available to the common men by opening Government sponsored and Government libraries specially in the rural areas. The growth of different types of libraries in the State is shown in Table 9.2.

Table : 9.2.

No. of Government sponsored and Government libraries in the State.

	<u>Upto 1979-90</u>	<u>Upto 1989-90</u>
1. Dist. libraries (Nos.)		23
2. Sub-Divisional/Town libraries (Nos)		234
3. Rural/Primary Unit/ Area library(Nos.)		2262

9.1.5 Along side school education, attempts have been made to expand the scope of college education in the state by setting up of a number of new colleges and expanding facilities in the existing ones. A new Engineering college in Salt Lake under Jadavpur University has already been set up and classes have started from the current session. The programme for strengthening and expansion of higher education at the university level has also been pursued. Recently U G C has given recognition to the Vidyasagar University.

9.2 Health

9.2.1 In health sector, the approach of the 7th Plan was to raise the activities to a required level so as to reach the goal of "Health For All by 2000 A.D." As a result the provision of health care facilities for rural areas keeping in view the population projection has the thrust area. The highest priority was however placed on Immunisation of children with a view to effectively bringing down the under-five mortality rate (U5MR). In this programme, the strategy was to utilise the full range of societies organised resources particularly, the Panchyat Raj bodies. In family welfare programme also effort has been made for effective control of population. The achievement on these two items are shown in table 9.3.

Table : 9.3

Achievement in Immunisation of children & Family Welfare

	<u>Programme</u>				
	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>
1. Immunisation of children (DPT, Polio, BCG) (lakh Nos.)	3.93	5.78	7.12	9.35	8.19
2. Sterilisation (lakh number)	2.89	3.01	3.25	3.30	3.15

Source : Department of Health, Family Welfare Government of West Bengal.

9.2.2 Over the last few years, a large number of persons have come forward to accept different types of population control measure. The years acceptors figure of other population control measure is given below :

1986-87	:	5,56,885
1987-88	:	4,81,372
1988-89	:	3,94,000
1989-90	:	5,01,000

The above mentioned activities have yielded good results in respect of reduction in both birth rate and infant mortality rate as was seen in the analysis on demography.

9.2.3 Special effort has been made in the state to take institutional health care services even to the gram panchayat level. There are 41,732 number of trained Health Guides Operating at the village level who provide guidance to people in health care and prevention of disease. The improvement in health service facilities has been brought about also by reducing the imbalance in the ratio between the doctors and the nurses. In 1986, there was one nurse for one doctor but in 1988, this figure went up to 1.11 nurse per doctor.

9.3 Water Supply

9.3.1 Provision for supply of clean drinking water constitutes a fundamental health care measure. The policy of the state has been to ensure supply of clean drinking water in every village. The 1987-88 plan year began with 1707 number of villages uncovered with any spot source for drinking water. But during the year 4118 nos. of spot sources were created. Thus since the beginning of 1988-89, there was no problem in village as such in the state. Since then, the policy has been to augment the drinking water availability by creation of additional spot sources in big villages. During 1988-89 and 1989-90, 2403 and 2224 spot sources were respectively created. It is also mentioned that most of the urban/semi-urban areas are being covered with piped water supply.

9.4 Nutrition

9.4.1 In order to supply nutritious food to children and expectant mothers of the poor rural households, two nutrition programmes are being carried out in the state. The Relief and Welfare(Welfare) Department and the Department of School Education are implementing the programmes. The Relief and Welfare(Welfare) Department provide nutrition food to on an average 10 lakhs of persons per annum and the school education Department covers 26 lakhs of primary school children per annum under its Mid-day meal programme. The Mid-day meal programme run by school education department has been quite helpful in partly checking the drop-out in the primary school.

9.4.2 The State Government believes that to sustain the nutrition programme, the State economy in general and economic position of the poorest section in particular must grow at a desired rate. The redistributive land reforms, and steady supply of non-land input to the category of vested land assignees and share co-operators have led to enormous increase of food grains production and cropping intensity in the State. This together with huge volume of rural development work and growth of cottage and small scale industry is gradually raising the nutrition level of the poorer rural people.

9.5 Rural Roads

9.5.1 It has been mentioned in the review on Agriculture and allied sectors that there has been a phenomenal increase in production of foodgrains, vegetables, milk and eggs. For proper and timely marketing of produce to avoid distress sale main link roads and net-work of rural roads are of prime importance. Besides the systematic improvement of socio-economic life in rural area needs steady growth in communication system. With this end in view, rural communication was emphasised in the Seventh Plan. The year-wise physical achievement in this regard is tabulated below.

Table :: 9.4

Physical achievement in Rural Roads and Culverts

I t e m	1985-86	1986-87	1987-88	1988-89	1989-90
1. Rural Roads under P.W.(Roads) K.Ms. upto Block top.	31	60	55	34	41
2. Rural Roads(K.M) under N.R.E.P. , R.L.E.G.&JRY	16834.98	11142.40	13278.13	10604.30	10716.00
3. Culverts(Number) under NREP, RLEGP &JRY	2193	664	1127	642	757

Source : Department of Rural Development and Department of Public Works (Roads).

9.5.2 Rural Road, Culverts and Small bridges are constructed by the District and Block Planning Committees with the untied fund placed with them under the nomenclature of District Plan Schemes Fund. Such fund is used to meet the critical gap and diverse types of schemes are implemented with this fund. Depending upon the decision and priority at the district level, a substantial part of fund is spent for construction of crucial rural roads, bridges and culverts. During the period of the Seventh Plan more than 1000 K.M. or rural roads were improved upto Jhama consolidation i.e. 'B' stag stage. Besides, good number of small bridges were also constructed during the period.

10. Externally Aided Projects

10.1 Part of State Plan

10.1.1 Externally Aided Projects from and internal part of the State Plan one of the projects viz CUIP-III was completed in the middle of the 7th Five year Plan and the position of the other projects is tabulated below :

(4/)

T A B L E - 101
Externally aided Project

(Rs. in lakhs)				
Sl. No.	Name of the Project	Source	7th Five year plan outlay	Expenditure during 1985-90
1.	Agriculture Development of North Bengal	Dutch Assisted	673.00	733.20
2.	Inland Fishery Project 963 In	IDA	1130.00	913.98
3.	Sundarban Development Project 49 In	IFAD	2500.00	3521.58
4.	Minor Irrigation Project 1619 IN	IDA	9150	5137.42
5.	Teesta canal Feasibility Study HE-Prof-ID-P-40	DECF		1175.00
6.	Purulia Pumping Store ID-P-44	DECF		346.00
7.	Urban Basic Service	UNICEF, GOI, W.R.G.	50.00	28.72
8.	CUDP-III-1369-IN	IDA	15100.00	-
9.	IPP-IV-1623 IN	IDA	-	10200.00
10.	W.B. Social Forestry Project 1178-IN	IDA	3060.00	3150.14
11.	Agro-sericulture and Agro-Pisciculture Project	SIDA	247.00	161.80
12.	Pilot Project for afforestation and Soil conservation in the river catchment of West Bengal-NA/81-13/CI	EEC	138.00	171.47

10.1.2 The Sundarban (IFAD assisted) project has been completed and proposal has been mooted for a Second phase. Social Forestry Project has also been completed and negotiation is going on for another World Bank Project in forestry sector during the 8th Plan. FRG has reportedly agreed to consider the sundarban project for financing.

10.1.3 The main thrust of the world Bank Tube-well Project being implemented by the minor irrigation Department is sinking of tube-wells and construction of field channels in CAD area. The initial wrangle over procurement guideline overcome, the project is progressing steadily and it is expected that the entire outlay against the project will be utilised by 1993-94. A few more externally projects may be taken up during the 8th Five Year Plan which are all at the stage of finalisation.

SECTION - IIEstimate of growth of employment during the 8th Five Year Plan

2.0 Unemployment is one of the most pressing economic problems of our time. Besides, the dimension of the problem, which has been progressively increasing over time due to failure of the economy to absorb increasing additions to labour force, ^{the problem} is structurally different in the rural and urban areas of the country. While in the rural areas it manifests itself in the form of under-employment and seasonal unemployment, its most visible and vocal form in the urban sector is the lack of jobs among the educated and technically qualified persons. In this small chapter an attempt has been made to delineate the status of unemployment at the beginning of the 8th Plan i.e. on March '90 in West Bengal and project its magnitude in the foreseeable future, knowing fully well limitations of furnishing a such single dimensional magnitude of unemployment at different points of time. Yet usual status of unemployment figures in the commencing and terminal year of the 8th Plan undeniably help us in understanding the problem in broad terms. This provides the requisite rationale for this exercise. Needless to say that such an exercise involves consideration of variables like population, labour force, work force, unemployment etc. These have been discussed seriatim in the paragraphs below:

2.1 Population : According to Census '81, there were 545.81 lakh people in West Bengal in the year 1981. Before another Census results are made available, it is possible to make different projections of population in West Bengal in the intervening years on the basis of different assumptions. The Indian Institute of Management, Calcutta made three sets of such projections high, low and medium as early as 1979, the grade of projections being dependent on their assumptions about the behaviour of fertility over time. Subsequently it was revealed that their low projections for 1981 closely approximated figure of the Census '81. Accordingly the estimated population of West Bengal based on low projections at three different points of time viz. 1981, 1986 and 1991 have been reproduced below. Since 1990 will be commencing year of the 8th Plan in the State, figures for the year 1990 have been interpolated on the basis of the estimate.

Table - I.
Estimated Population in West Bengal

(in lakhs)

Year	Total Population	Estimated Population of age 5 years and above	Remarks
1981	545.81	468.56	Census
1986	595.93	518.87	Quinquennial Growth Rate 9.73
1990	634.67	560.33	
1991	645.06	570.75	Quinquennial Growth Rate 8.24

2.2. Labour Force : Estimates of Labour Force in West Bengal have been derived through application of L.F.P. rates of different rounds of the NSS to the estimated population of age group 5 years and above. Results of this exercise have been presented below :-

Table - 2
Estimated Labour Force in West Bengal

(in lakhs)

Year	Estimated Population of age 5 years and above	Estimated Labour Force
1981	468.56	202.93
1986	518.87	224.72
1990	560.33	242.68
1991	570.75	247.19

Thus it appears that the Labour Force in West Bengal has been estimated to grow from 202.93 lakhs to 247.72 lakhs during the ten-year period from 1981 to 1991. Per annum additions to Labour Force roughly works out to 4.50 lakhs. Actual additions to the Labour Force however may be slightly less than the anticipated one as one can reasonably expect LFPR to slowly diminish over time due to delayed entry into the employment market of a fraction of the eligibles. [The NSS rates however do not reveal any significant change between two successive rounds].

2.3. Unemployment : On March, 1990, there were 43.42 lakhs persons on the live register of Employment Exchanges in West Bengal. Using live register data as an index of the employment without adjustment is fraught with grave risks of error which arise out of i) non-registration of the unemployed and (ii) registration of already employed. According to the information collected in the 38th Round of the NSS in 1983, only 25.57 p.c. of the applicants on the live registers were unemployed and only 28.64 p.c. of the unemployed got themselves registered. Using

these two correction factors to the exchange data we got an adjusted figure which comes to 38.76 lakhs. So it may be said that West Bengal has started with a backlog of 38.76 lakhs unemployed in the commencing year of the 8th Plan. Since per annum additions to labour force as already mentioned will be of the order of 4.50 lakhs, so in a 5 year period, 22.50 lakhs persons are likely to enter into the labour market. In other words, the economy of West Bengal will have to create work opportunities for 61.26 lakhs persons in order to reach the goal of full employment by the end of 8th Plan. This postulates an employment growth at a compound rate of 5 p.c. per annum.

2.4. Work Force : Census 1981 enumerated 164.65 lakhs workers for West Bengal in 1981 of which 154.25 lakhs and 10.40 lakhs were main and marginal workers respectively. This work force has been estimated to rise to 203.92 lakhs in 1990 registering thereby a compound rate of growth of 2.4 p.c. per annum. The estimated work force for the year 1990 has been arrived at by subtracting adjusted NES data from the estimated labour force for the year 1990. It is interesting to note from the table annexed that S.D.P. in West Bengal during that time grew at a compound rate of 4.8 p.c. per annum. The long term elasticity of employment indicating the ratio between the p.c. rise in employment to the p.c. increase in S.D.P. works out to 0.5 which is slightly lower than the All India figure of 0.6. This is presumably because of the sluggishness in the growth of employment in the organised sector. If one examines the figures on organised sector employment one may come across that per annum addition to employment over a long time frame comes to 0.25 lakhs only. Further whatever little employment was generated during the last ten years this took place in the public sector. The private sector employment exhibits on the other hand a declining trend when their employment data are smoothed to iron out short run fluctuations. Private sector's shift to greater intensity of capital use is another disconcerting feature of the current trend. Very low rate of growth in Central investment over the last two decades should also find mention here.

2.5. The Government of West Bengal has however, greatly responded to the gravity of the situation. To compensate for the sluggish growth of organised sector employment, it is putting increasing emphasis on greater use of labour in the rural sector schemes as would be evident from the promising trend of employment and outlay figures under a host of labour intensive schemes. Recently it has ^{been} decided to press Self-Employment Programme into the economy on an escalated scale.

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Its land redistributive measures have already started yielding tangible result.

2.6. Thus though GDP in West Bengal grew at the rate of 4.8 p.c. per annum if a longer time frame of ten years is considered, it grew actually at a compound rate of 6 p.c. per annum in the last 5 years from 1984-85 to 1988-89 with a clearly discernible upward trend which was visibly lacking in the first 5 years of the 80s. This sustained rise became possible due to agricultural sector income rise at the rate of 10 p.c. per annum. So assuming the current trend in income rise to continue in the foreseeable future and even with given elasticity of employment as 0.5 it will not be unrealistic to presume employment in West Bengal to rise at the compound rate of 3 p.c. per annum in the coming 5 years. Net additions to employment during the 5 years plan period may be of the order of 32.48 lakhs which means that an addition to neutralising the net additions of 22.50 lakhs to labour force during the 8th Plan, the economy shall be able to siphon off 10 lakh persons from the reserve army of unemployment. As a result backlog of unemployment will come down from 38.76 lakhs in the commencing year to 28.76 lakhs in the concluding year of the 8th Plan. Needless to say that the estimate is a conservative one because it assumes that past efforts at agri-development specially through land redistribution and Minor irrigation have started yielding results after a time lag and Government's efforts in the agriculture sector will continue in the coming 5 years on an unabated scale.

2.7 Since the beginning of the Seventh Plan, much emphasis has been placed on using labour intensive technique in production process both in agriculture and also in Cottage & Small Scale Industry. As has been mentioned in paragraph 1.5 above, the Self-Employment Programmes are being stepped up at escalated scale. Besides, the Haldia Petro-Chemical Complex with its series of down-stream Units will take off during Eighth Five Year Plan. Innumerable other industries both in private sector and also in joint sector with the Government have already been set up and many such industries are likely to come up during the 8th Plan. The Central Government has also started to increase its investment through modernisation of steel industry in the State which will necessarily boost up ancillary activities in the Durgapur - Asansol belt. Taking into account this expected break through in the industry during the current plan period, the elasticity of employment can safely be presumed to rise to 0.6 and with

6 percent rate of growth in S.D.P. which is now a reality as a long term trend, the employment will grow at 3.6 percent per annum. At this rate, the estimated employment in West Bengal during 1990-95 will be as shown in Table-7. It will appear from the table that there will be a net addition of 39.54 lakhs of employment at this alternative calculation thus absorbing 17.95 lakhs from the reserve force of unemployment leaving a backlog of 20.81 lakhs for tackling in the subsequent plan.

Table - 3
State Domestic Product in West Bengal

<u>Y e a r</u>	<u>SDP at Constant Price</u>	<u>SDP from Agriculture at Constant Price</u>	<u>R e m a r k s</u>
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
1980-81	8706.34		
1981-82	8858.90	2280.22	
1982-83	8859.43	2221.46	
1983-84	9796.54	2926.53	
1984-85	9726.33	2986.95	
1985-86	10380.97	3145.24	
1986-87	10918.07	3281.70	
1987-88	11643.51	3641.70	
1988-89	12564.87	4034.86	
1989-90	13799.06	4305.71	

Table - 4
Employment in Organised Sector in West Bengal

<u>Y e a r</u>	<u>Private Sector</u>	<u>Public Sector</u>	<u>T o t a l</u>
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
1981	10.57	15.85	26.42
1982	10.44	16.61	27.05
1983	9.95	16.68	26.63
1984	9.41	16.93	26.34
1985	9.38	17.21	26.59
1986	9.32	16.94	26.26
1987	9.30	16.99	26.29
1988	9.03	16.90	25.93

(53)

Table - 5

No. of persons on the Live Register of
Employment Exchange in West Bengal.

(In lakhs)

Year	No. of persons on the Live Register
At the end of 1981	30.65
1982	34.97
1983	39.05
1984	41.07
1985	39.52
1986	42.48
1987	45.77
1988	42.65
from January to 1989	43.71
June 1989	43.25

Table - 6

Estimated Employment in West Bengal during 1990-95

(in hundred)

Year	Estimated Employment*	Net Additions to Employ- ment during the 8th Plan
1	2	3
1990	2,03,920	
1991	2,10,038	32479
1992	2,16,339	
1993	2,22,829	
1994	2,29,514	
1995	2,36,399	

* Calculated on the basis of compound growth rate of 3%

Table - 7

Estimated Employment in West Bengal during 1990-95
(At 3.6% compound growth rate)

(in hundred)

Year	Estimated Employment	Net addition to Employment during the 8th Plan
1	2	3
1990	203920	
1991	211261	39445
1992	218865	
1993	226745	
1994	234908	
1995	243365	

Section - IIIStrategy for the Eighth Five Year PlanGeneral

3.1 The major thrust in Indian Planning during the period of Eighth Five Year Plan as has been indicated in the Approach paper is upholding of employment, generation. This thrust is also accompanied by the objective of a growth process which would be a means of the provision of reasonable minimum living standard and essential social amenities to the common people. In the interest of employment generation, emphasis has also been placed on labour intensive small scale industries. In addition the entire process of planning has been proposed to be decentralised by involving common people through the panchayats.

3.2 The state of West Bengal has been seriously pursuing, over the last thirteen years or so, some of the major issues such as decentralisation in planning, emphasis on labour intensive small scale industries etc. The state has gone further in re-ordering the ownership structure of the productive asset by vigorously carrying out the land reforms since late sixties. With the implementation of land reforms, a position has now reached where, according to the National Sample Survey data, nearly 60 percent of the total agricultural land has come to be owned by the small and marginal farmers. If the land under share croppers cultivation is now added, then the proportion of agricultural land over which the poor working farmers have certain control may exceed 70 percent. This re-ordering of productive assets in favour of poorer peasants along with supply of other non-land inputs to them is bound to - lessen in equality and, at the same time, release the forces of development. Thus, the basis plan approach that has been adopted in the state consists of agriculture with redistributive land reforms and industries with due emphasis on small scale and cottage industries with necessary support of certain crucial "mother" industrial complex. In the Eighth Plan also, this approach will continue to be followed as this is an approach in the right direction and is found to have re-oriented the plan in the state largely in favour of the common people.

3.3 In paragraphs 1.4.1 to 1.4.3 of the Review section, the plan methodology which is being followed in the state has been explained. In the eighth plan this exercise of participatory decentralised planning is now being extended in the following direction :

In the first place, along with formulation of Block Plan and the District Plan, attempts are being made to integrate these plans with the credit plans of the Banks for the Blocks and the Districts. Secondly, it is also being felt that decentralisation exercise should

be taken down further below, from the level of a block to a village under each block. Then the direct participation of the common people becomes easier and more meaningful. This extension has been initiated in one of the biggest districts of the state. Thirdly, the process of urban planning should be similarly further decentralised within each municipal or Corporation areas by taking the either process down to the level of each ward. Fourthly, it is also under consideration whether in addition to the plan expenditure, some of the non-plan expenditure of the departments (such as those relating to maintenance and repair) can also be made a part of this decentralised planning exercise. Finally, decentralisation is possible not only for expenditure but also for resource mobilisation. That a process of decentralisation carried out with the involvement of the Panchayats and the Municipalities can yield good results in raising of resources has been illustrated amply by the experience with the small savings programme in the state in 1988-89. The target for small savings collection were specified for each block and urban areas in the district and the Panchayats and the Municipalities were involved in the process with the built in incentive that if collection exceeds the target, then 50 percent of the resources related to this additional collection will be returned to the area for the purpose of development expenditure. As a result, the total collection of small savings in the state has nearly doubled in 1988-89 in comparison with the previous year. It has, therefore, been decided that for taxes (such as Cess or Amusement Tax) which are collected primarily by the district administration, the Panchayats and Municipalities will again be involved. Targets will be fixed areawise with built-in incentive similar to the case of small savings. It is expected that this will again lead to an increase in the collection of relevant taxes.

3.4 The ultimate accountability of this decentralised planning exercise is to the people. There is first of all a regular arrangement for auditing of all expenditure incurred by the Panchayats. But, in addition, there is a direct mandatory procedure of accountability to the people. To this end, at least two public meetings are mandatory on the part of each Gram Panchayat - one to discuss with the general people the selection of schemes and the other for presentation of expenditure. It is insisted that these accounts should be shown in a public place. In addition to this display of written accounts, verbal direct communication to the common people in an open meeting is also considered essential. These are the ultimate democratic checks on the entire system and such checks will be intensified in future.

Objective in certain major sector

3.5 In Agriculture, as in the Seventh Plan, in Eighth Plan also effort will continue, within the limitation of the State Government,
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to assist the target group of poorer farmers, consisting of the landless, the marginal and the small farmers and share croppers, through the provision of land (in terms of distribution of ceiling surplus land and recording of share croppers) as well as non-land inputs and marketing facilities. It has already been mentioned that in the matter of vesting of ceiling surplus land, the state has already reached a kind of saturation and possibility of any large vesting in the context of the existing law is not very high. However, the West Bengal Land Reform Act has been amended changing the definition of land and bringing lands of all description within the term 'land'. The West Bengal Land Reform (3rd Amendment) Act, implementation of which will start in full swing from the coming year, is likely to bring a sizeable quantum of land to the ownership of the state. This additional ceiling surplus land will be distributed among the landless peasants thus further achieving the goal of more egalitarian distribution of productive asset. In the matter of recording share croppers also, the state has already recorded 14 lakh of share croppers in the village record of rights. In the 8th Plan, this process will continue so that not a single bargadar is left outside record. The present policy of the co-ordination of the programmes of land reforms on the one hand and the programmes of the agriculture and allied sectors and also the target group oriented programmes, such as District Plan Schemes, IRDP, JRY etc. on the other hand will continue.

3.6 In this context it will be worthwhile to mention that this emphasis on land reforms is not any exercise in charity, but is essential for higher growth in agriculture. From the well known evidence of the farms management studies it is clear that the record of production performance (taking into account cropping intensity and per acre yield of crops) is the highest for poorer farmers. The Socio-economic Research Institute, Calcutta conducted survey in two spells, one short survey in 1980-81 and another detailed survey in 1985-87 to examine if land reforms in the State have led to the growth in agricultural output in the farms of the land reforms beneficiaries. It was observed in the first report that "symptoms of improvement in cultivation and hopes for betterment have been reported both by the bargadars and vested land assignees" or in the other words an encouraging trend was found to have started operating. In the second report the finding was that despite lack of necessary capital, with honest and hard labour backed by institutional finance and other non-land inputs supplied from the Government, they have been able to attain yield which in some cases was "higher than the district average". Thus, the Farm Management studies and also the independent survey conducted by the Socio-economic Research Institute, Calcutta conclusively explain the reason for phenomenal growth in agricultural output during the Seventh Plan period. In the Eighth Plan period also the State Government will continue to support the land

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reforms measures with provision of non-land inputs such as irrigation, seeds, implements, manures and fertilisers and infrastructural facilities particularly those relating to marketing. In the provision of all these non-land inputs, there is a question of choice of technology. The working farmers are endowed with labour power and there is in rural areas often a relative abundance of local resources. In the Eighth Plan objectives, the socially appropriate choice of technology regarding all these non-land inputs should therefore be one which is improved and modern, and at the same time can make fuller use of labour and local resources. Such a choice of technology will not only provide greater employment but will also create more purchasing power for the common people as has been evident in the Seventh Plan period in the state. Research activities in this sphere are being encouraged towards new ideas with this orientation.

3.7 In industry sector, the policy of the state Government has been to set up small scale industries with necessary support from crucial "mother" industrial complex. During the period of the Seventh Plan around 15,000 small scale industrial units have come up every year excluding the units set up under IKDP and Self-employment scheme for Registered unemployed (SESRU). But in absence of any "mother" industrial complex proper linkage between the two sub-sectors could not be effected. It will be the endeavour of the state government during the period of 8th plan to establish link between the small scale and the large scale industries. In the absence of this linkage, the small scale and the large scale units will be functioning in mutually exclusive spheres, implying a dualism or dichotomy which is undesirable in the interest of long term growth of the entire industry sector. In this connection mention may be made of the steps already taken by the State Government in setting up the Haldia Petro-Chemical Complex. The "mother" naphtha cracker plan, a large scale unit, is being set up in the joint sector with the State Government as the majority partner. But, the connected down-stream units are being planned in a co-ordinated manner to be set up in the small scale sector. The cracker plant will generate employment of about three thousand people. But the down-stream units will be labour intensive, generating employment of about 1.5 lakhs. Here, the linkage between the large and the small scale units with some social control has made the entire complex viable and employment generating. Thus, a special emphasis will be placed during the 8th plan in establishing such linkages in the entire industrial structure.

3.8 In the interest again of employment generation, separate attention will be given to the problems of closed and sick industrial units. For this purpose the State Government invites action at the national level. For instance, timely signals may be communicated by

the financial institution before a unit becomes sick, so that preventive actions may be taken. Similarly, for revitalisation of potentially viable units, discussion at national level is required regarding the types of relief that the financial institutions and the Central Government may like to provide for rehabilitation programme, particularly when the State Government is granting corresponding relief and also providing additional accommodation, say, through sale of surplus land of the concerned sick units.

3.9 With emphasis on growth in agriculture and industry with choice of technology which is labour intensive and with due emphasis on the small scale sector, and also revival of the closed and sick units, significant dent is likely to be made on the problem of unemployment. But at the same time, it is important, in order to reinforce this employment generation process, to adopt two comprehensive special employment programme - one related to construction of social infrastructure and the other oriented towards self-employment. Both these programmes may be adopted for rural as well as urban areas. Funds for these programmes should be transferred to the States with broad guidelines after interaction with the states and after allowing for special features of each State. The employment programme related to the construction of social infrastructure may be in the pattern of FFW/NREP. Similarly, the self-employment programme may be in the pattern of IRDP but extended also to urban areas.

3.10 In the field of social services, a few general comments may be worth-while regarding the policy objectives relating to such important sectors as education, health and housing. The basic objective of the education policy of the State Government has been, and will be, one of reaching the common man, in as wide a manner as possible, with an education to help him understand and participate better in the production structure. Given this objective, emphasis will continue on universalisation of elementary education, improving its content, spread of non-formal and adult education and widening of access to higher levels of education. Along with this, steps will be taken to keep strict attention to maintain and improve academic norms and quality at every stage. In order to bring education closer to the production process, so that the students get a prior exposure and training, which may later keep them in self-employment or in organised production, a new and re-oriented vocational education programme will be introduced as a part of general syllabus at the level of secondary schools. Furthermore, to prevent incidence of drop-out, a comprehensive programme of Mid-day meal will be adopted in the State. The State Government, within its limited resources, has already stepped up allocation for the programme from

Rs.400 lakhs in the terminal year of the Seventh Plan (1989-90) to Rs.2200.00 lakhs in the first year of the 8th Plan (1990-91). Considering the significance, special funds should be transferred from the Centre to the States for implementation of these programmes on vocational education and provision of mid-day meal. In the first year of the 8th plan the Government expect to eliminate illiteracy from Midnapur District with the help of the Planning Committee and the Panchayat Raj bodies through the method of non-formal education. The Midnapur experiment will be applied in a few other districts also during the period of 8th Five Year Plan.

3.11 Since a significant percentage of incidence of diseases is related to malnutrition, the programme of mid-day meal will also mean an important step forward in the sphere of public health. Emphasis will also be placed more on the preventive aspect of health care (including the provision of safe drinking water etc.) and then co-ordinating that with curative aspect, with more decentralisation of institutional facilities depending upon the nature of diseases.

3.12 In the sphere of housing, attention will be given to the group housing construction for the lower and middle income x groups in urban areas. Such construction may be funded on the basis of institutional finance and to lower the unit cost, construction may take place on the vested land available in urban areas and then use may be made of appropriate low-cost x technology. In rural areas, programme will continue for provision of building materials for construction of houses for the rural poor.

3.13 In all these spheres of activities, including the basic production sphere, special attention will continue to be given to the problems of scheduled castes and scheduled tribes as well as those of women. The women's Development Corporation will be made fully activated during 8th Plan. Besides, the State Planning Board will monitor the progress of the programmes related to the development of women.

3.14 In energy, the state Government expects to make substantial addition to installed capacity. 4 units of Kolaghat (4x210 M.W.) 3 units of Bakreswar (3x210 M.W.) 2 units of Southern Generating Station of CESC (2x 67.5 M.W.), 4 Units of Ramman Hydel Power Station - Stage -II (4x19.75 M.W.) and Teesta Canal Fall 3x3.75 M.W.) are likely to be synchronised during the period of the 8th Five Year Plan. Along with the projected capacity augmentation, increase in efficiency in generation and reduction in transmission and distribution loss should receive high priority. Integrated Rural Energy Programme and the programme of New and Renewable Sources of Energy will also be assigned high priority.

3.15 It may be noted that there are special pre-existing problems as recognised by the Correa Commission, relating to the three larger metropolitan cities - Calcutta, Bombay and Madras. These cities are of national importance and the State Government urges upon the centre to make special provisions while formulating Eighth Plan.

3.16 In order to effectively implement the above strategy, it is strongly held that a total plan outlay of Rs.784900.00 lakhs will be required over the five year period of the Eighth Plan including Rs.132822.00 lakhs already approved for the first year 1990-91 and an outlay of Rs.148583.00 lakhs will be required for the Annual Plan 1991-92. The basic argument for this essential stepping up can be better appreciated, not in aggregate terms, but in terms of the emphasis that each major sector should receive over the period of Eighth Plan.

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SECTION IV :: SECTORAL PROGRAMMESI. AGRICULTURE AND ALLIED ACTIVITIESCROP HUSBANDRYI. Programme of the Agriculture DepartmentIntroduction ::

West Bengal is located between 21^o31' and 27^o41' North Latitude and 85^o91' and 89^o93' East Longitude. The tropic of cancer runs across the middle of the State passing through the districts of Nadia, Burdwan, Bankura and Purulia.

West Bengal has a high concentration of population with scarce land resources. In all 54.58 million people (1981 Census) inhabit in an area of 88.75 lakh hectares.

Net cultivated area in the State is about 5.4 million hectares and as such per capita availability of net sown area comes to less than 0.1 hectare.

Cultivated land area in West Bengal is undergoing gradual division and fragmentation and thereby creating a condition which is not very conducive to healthy growth and development in the agricultural sector.

West Bengal agriculture is dominated by small and marginal farmers. Eighty-nine per cent small and marginal farmers operate a little over 50% of the net cultivated area in the State. Corresponding figure for 1985-86 (Provisional) are 90% and 63% respectively.

Agro-climatic Region ::

For the first time the country has been divided into a number of Agro-climatic Regions by the Planning Commission for formulation of need-based Agricultural Plans for scientific management of regional resources to meet the food, fibre, fodder and fuel wood without adversely affecting national resources and environment. West Bengal has, accordingly been divided into three Zones and each of the Zone has been included in three well defined agro-climatic regions. Districts included in each of the three agro-climatic regions are mentioned below :

Agro-climatic Region	Number of region as given by the Planning Commission.	Name of district in each Region.
Eastern Himalayan Region.	Zone - II	Darjeeling, Jalpaiguri and Cooch Behar.
Lower Gangetic Plain Region.	Zone - III	West Dinajpur, Malda, Murshidabad, Nadia, Hooghly, Burdwan, North 24-Parganas, South 24-Parganas, Howrah, Birbhum, Bankura, Midnapore (East) and Midnapore (West).
Eastern Plateaus and Hills Regions.	Zone - VII	Purulia.

Each of the above mentioned Region has further been sub-divided into a number of Sub-zones on the basis of soil, topography, climate and cropping pattern characteristics.

Districts included in each Sub-Region are given below :

Agro-climatic Region.	Sub-Zones	Name of district in each Region/Sub-Region.
Eastern Himalayan Region.	a) Hills b) Terai	Darjeeling, Jalpaiguri & Cooch Behar.
Lower Gangetic Plain Region	a) Old Alluvium b) New Alluvium c) Coastal Saline d) Lateritic	West Dinajpur & Malda. Murshidabad, Nadia, Hooghly, Burdwan & North 24-Parganas. South 24-Parganas, Howrah & Midnapore (East). Birbhum, Bankura and Midnapore (West)
Eastern Plateau and Hill Region	-	Purulia.

Soil and climate :

Each region had a predominant type of soil. Region-wise soil and climatic condition is indicated below :

I) Eastern Himalayan Region : (Zone I I)

Eastern Himalayan Region (Zone-II) comprising of hill sub-zone and Terai sub-zone.

i) Hill sub-zone : Soil of Hill sub-zones are mainly brown forest soil, sandy loams in texture, porous, shallow in depth and having highly undecomposed organic matter. Water holding capacity is low. Soil is acidic in nature, PH varies from 3.5 - 5.0 Available phosphate and available potash content is medium low to medium. The base content is also low due to excessive run off and leaching.

Annual normal rainfall is high, varies from 2500 mm to 3500 mm temperature, high humidity and low sunshine hours limit the crop production.

ii) Terai sub-zone : The soil of Terai sub-zones are mostly sandy to sandy loam in texture, porous, low in base content due to leaching and are poor in available plant nutrients, soils are highly acidic PH varies from 4.2 to 6.2 Rainfall ranges from 2000 mm to 3500 mm. Poor soil, high humidity and low sunshine hours limit the crop production.

II) Lower Gangetic Plain Region: (Zone - III)

The lower gangetic plain region comprising of 1) Old alluvium, 2) New alluvium, 3) Coastal saline, 4) Laterite and Lateritic sub-zone.

i) Old alluvium : Soils of the old alluvium zone are lighter in higher situation and generally heavier in texture in the lower situation. Soil reaction is acidic to neutral (pH 5.0 to 7.0). The soils of this region are medium to low in organic matter, medium in available phosphate and low to high in available potash. A considerable area is subject to floods annually

caused by impeded drainage and river-over flow during the rainy season. Most of the soils of this zone are fairly fertile. The average annual rainfall ranges from 1500 mm to 2000 mm.

ii) New alluvium Sub-region : This is the most fertile tract of the state. Soil is deep and mostly neutral in reaction. Organic matter content is low to medium. Available phosphate is medium and available potash is medium to high. Soil is rich in calcium. The considerable are is subject to imundation due to river overflow and impeded drainage.

Annual average rainfall ranges from 1350 mm to 1630 mm.

iii) Coastal saline : Soils are heavy clay, rich in sodium, magnesium, calcium, potassium and organic matter in different stages of decomposition. Soil pH range from 6.5 to 7.5 with electrical conductivity varying from 3.0 to 18.0 mmhos. The annual rainfall varies from 1600 mm to 1800 mm.

iv) Latetic : Coarse textured but well drained soils with honey-comb type ferrogenous concentrations at a depth of 15 to 30 cm. Soils are moderate to strongly acidic in reaction pH ranges from 4.5 to 6.5 and poor in organic matter, lime, nitrogen and low to medium in available phosphate and available potach. Phosphate fixation capacity is high. Rainfall ranges from 1100 mm to 1400 mm.

Eastern plateau and Hill region (Zone VII) :

Soils are shallow, undulated gravelly, coarse textured, well drained and low water holding capacity. Organic matter content is very low. Upland soils are highly susceptible to erosion hazards. Soils are acidic in reaction the PH varies from 5.5 to 6.2. The annual rainfall varies from 1100 to 1400 mm and is spread over only three months from mid-Juno to mid September.

Estimated target of production and per capita net availability of cereals per day during the 8th Plan are given in Table - 1.1.

While considering the total requirement of cereals per capita per day, requirement @ 454 g. have been taken into consideration for the population of a particular year. Since 10 per cent of the total production is generally required for use as seed and possible wastage during storage, total estimated gross requirement includes net requirement plus 10 per cent for seed and wastage. For an estimated population of 72.15 million during 1994 total requirement of cereals would be 13.15 million tonnes in the terminal year of 8th Plan (1994-95). Data given in Table 1.1 would indicate that there was considerable variation in per capita net availability of cereals in West Bengal and also at the national level during different years.

Table - 1.1 Per capita net availability of Cereals(g/day)

Year	India*	West Bengal
1978	422.5	
1981	416.2(P)	286
1984	480.1(P)	375
1985	415.6(P)	360
1986	434.2(P)	373
1987	429.3(P)	391
1988	-	439(E)

*Agricultural Statistics at a glance, 1988.

(P) = Provisional (E) = Estimated

Net availability in the State of West Bengal has been estimated on the basis of production within the State. It should, however, be kept in mind that availability of cereals or foodgrains or any other agricultural commodity in a particular region at any instant period can not be predicted precisely for certain reasons viz., i) absence of restriction on inter-State and Inter-state movement of foodgrains, ii) geographical location of the region, iii) price of the commodity both within and outside the country; and iv) changing food habit of people. West Bengal having a long border with three neighbouring countries and two neighbouring States, is frequently subjected to unauthorised trans/border trade of agricultural commodities. It has been estimated that food habit of people generally undergoes changes with economic improvement. Traditional consumers of Maize and Millet are changing to Wheat and traditional Wheat eaters are changing to Rice with improvement of their respective economic conditions. As a result, consumption of Rice in India is increasing at a faster rate than production during the last one or two decades.

Taking into consideration of various constraints in Rice and Wheat production and also annual growth rate in productivity and production during the last decade it may not be advisable to plan for a production target which is difficult to achieve. In West Bengal annual average compound growth rate (per cent per annum) in production during the 7th plan period has been + 6.16, + 4.75, + 12.23 and -6.87 in Autumn Rice, Winter Rice, Summer Rice and Wheat respectively. Hence, a target of Cereal production for the State of West Bengal at an annual average compound growth rate of 4.86 per cent has been fixed for total cereals and accordingly, production target of different cereals during the Eighth Five Year Plan is fixed and indicated in Table-1.2.

Table - 1.2
Production target of cereals during Eighth Plan

Crop	Item	Base (Mean of 7th Plan.)	Year		Average annual compound growth rate of production over Base year (in %)
			1991-92	1994-95	
Autumn Rice.	A	614.706	700.00	700.00	
	Y	1258	1350	1600	
	P	773.544	945.00	1120.00	7.68
Winter Rice	A	4126.346	4100.00	4100.00	
	Y	1607	1750	2000	
	P	6630.758	7175.00	8200.00	4.34
Summer Rice	A	692.250	710.00	750.00	
	Y	2943	3100	3400	
	P	2037.522	2201.00	2550.00	4.59
Total Rice	A	5433.305	5510.00	5550.00	
	Y	1738	1873	2139	
	P	9441.824	10321.00	11870.00	4.68
Wheat	A	340.754	360.00	400.00	
	Y	1931	2275	2400	
	P	657.851	819.00	960.00	7.85
Other Cereals	A	99.126	100.00	100.00	
	Y	1626	1670	1800	
	P	161.176	167.00	180.00	2.23
Total Cereals	A	5873.185	5970.00	6050.00	
	Y	1747	1894	2150	
	P	10260.851	11307.00	13010.00	4.86

Based on the estimated production target of different Cereals during 8th Plan, as mentioned above, per capita per day net availability of total Cereals during the Plan are given in Table - 1.3.

Table - 1.3
Estimated net availability of Cereals per capita per day.

Year	Target of Production ('000 tonnes).	Estimated population (in Million)	*Estimated net availability per capita per day (in gm)
1991-92	11307.00	67.61 (1991)	412
1994-95	13010.00	72.15 (1994)	445

*While calculating net availability 10 per cent production have been excluded for seeds and possible wastage.

Pulses :

A declining trend in pulse crops area and production in the State is discernible during 70's and 80's. Both area and production of Pulses declined by over 50 per cent during Seventh Plan compared to that of 60's. Allocation of marginal and sub-marginal lands by farmers for growing of Pulses, Socio-Economic condition of pulse growers, increasing tendency on the part of farmers to allocate comparatively more fertile and irrigated lands to other profitable crops like Summer Rice, Potato, Vegetables, Rape and Mustard and absence of high yielding varieties of pulses are some of the reason behind rapid decline of area and production of pulses in the State. Considering the fact that these factors are likely to continue in near future till effective corrective steps are undertaken not much improvement in the production scenario of Pulse crops during the Eighth Plan can be envisaged. Hence, a modest growth rate of about 3.5 per cent over the average production of total Pulses (base figure) during Seventh Plan has been fixed and the target of production is indicated in Table - 1.4.

Table - 1.4.
Target of production of Pulses during 1991-92 and Eighth Plan (1994-95).

Item	Base average of 7th Plan.	1991-92	1994-95	Average annual compound growth rate of production. (per cent)
Area in '000 hectare.	357.029	345.00	350.00	
Yield rate in Kg/hectares.	623	695	729	
Production in '000 tonnes.	222.319	240.00	255.00	3.50

Foodgrains :

Cereal crops, particularly Rice and Wheat, are the major contributors to the total foodgrain production, it is now evident, from the production target envisaged in respect of Cereals and Pulses, as stated above target of foodgrain production during Eighth Plan would be as follows (Table - 1.5).

Table - 1.5
Target of production of Foodgrains during Eighth Plan.

Year	Target of production (gross) (in '000 tonnes).	Per capita net availability (gm. per day)
Base (Average of 7th Plan)	10483.17	
1991-92	11547.00	421
1994-95	13265.00	453

While calculating net availability 10 per cent of gross production has been excluded for seeds and possible wastage.

Oilseed :

Historically West Bengal is a deficit State in Oilseed production. The people have got a strong preference for Mustard Oil as cooking medium, a large part of which has necessarily to be imported from North-Western, Northern and some Western States.

Out of the nine (9) major Oilseeds (edible) Rape and Mustard command the largest area followed by Sesamum. Data given below in Table would indicate per capita availability of oil during 80's from internal production.

Table - 1.6
*Per Capita availability of Oil during 80's

Year	*Per Capita availability (Kg. per annum).
1980-81	1.2
1984-85	1.7
1989-90	2.6

*80% of population has been calculated as adult equivalent.

Considering the fact that a substantial percentage of population at the national level is below the poverty line with low purchasing power, a demand-oriented average requirement has been fixed at 6 Kg. per annum per adult equivalent (80% population). As against this net availability from internal production during 1989-90 has been 2.6 Kg. per head per annum.

Due to a large gap in demand and supply of Oil at the national level an unusual spurt in the price of Oil was noticed during the 7th Plan. After careful consideration of all factors the Government of India has laid special emphasis for increasing production and productivity of Oilseeds in the country during 70's and 80's through a variety of action programme including development measures on Oilseeds like the '20-Point Programme' during late 70's and special programmes like NODP, OPTP & NOVODB and establishment of a technology mission on Oilseeds in Mid 80's. In West Bengal, a satisfactory growth rate could be achieved in respect of area and production of Rape and Mustard. During the 7th Plan period a highly satisfactory growth rate in production of 12.11 per cent for total Oilseeds could be achieved. A substantial part of this increased production of Oilseeds was attained from increased area, particularly in Rape and Mustard.

However, one is to be careful in fixing up production target for Oilseeds crops during Eighth Plan. Large scale diversion of area to Rape & Mustard from other Rabi crops in recent years due to price advantage of Oilseeds in comparison to the price of alternative crops like Pulses, Wheat had been the prima reason for abrupt increase in area of Rape and Mustard. Since there is a limit to area expansion without jeopardising production of other alternative crops during the particular season and since the price advantage enjoyed by Oilseeds at present may not continue during 90's, a 11.34 per cent annual growth rate in total Oilseed production (over the Seventh Plan average) during Eighth Plan is envisaged. Target of production of Oilseeds during Eighth Plan is indicated in Table - 1.7.

Table - 1.7

Target of production of Oilseeds during 1991-92 and during 8th Plan (1994-95).

Crop	Item	Base (average of 7th Plan).	Year		Average annual compound growth rate of production over base (Per cent)
			1991-92	1994-95	
Rape & Mustard	A	329,572	390.00	460.00	
	Y	805	931	1011	
	P	265,226	363.00	465.00	11.88
Sesamum	A	96,778	105.00	120.00	
	Y	719	819	875	
	P	69,539	86.00	105.00	8.59
Other Oilseeds	A	46,716	50.00	60.00	
	Y	646	850	917	
	P	30,166	42.50	55.00	12.76
Total Oilseeds	A	473,066	545.00	640.00	
	Y	771	902	977	
	P	364,931	491.50	625.00	11.36

A = Area in '000 hectare. Y = Yield rate Kg./Hectare.

P = Production in '000 tonnes.

Estimated production and per capita (adult equivalent) net availability of oil from internal production are given in the following Table - 1.8.

Table - 1.8

Production of Oilseeds and net availability of Oil (Per capita per annum) from internal production.

Year	Estimated population (in Million)	Adult equivalent of estimated population (in Million)	Net production in term of oil (in tonnes.)	Estimated per capita (adult equivalent) per annum (in Kg.)	Deficit in requirement in terms of Oil (%)
1989-90	64.81	51.85	135719	2.6	59.0
1991-92	67.65	54.12	161857	2.8	50.2
1994-95	72.15	57.72	206010	3.5	40.5

* Population refers to the year 1989, 1991 and 1994 respectively. While calculating net availability for seeds and possible wastage. Percentage of Oil of Rape and Mustard, Til, Ground Nut, Linseed, Sunflower and Other Oilseeds have been taken as 33, 40, 45, 35 & 33 percent respectively.

Eithy percent of projected population has been taken as adult equivalent.

It is evident from the figures in the above mentioned table that during 1988-89 only 41.0 per cent of Oil requirement could be met from internal production. Corresponding figure during 1994-95 is 49.5 percent. Hence, even if it is possible to achieve an ambitious production target of Oilseeds the State would continue to a deficit one at the end of Eighth Plan.

Jute :

Jute is the most important fibre crop grown in the State. Around 55 per cent of raw jute fibre production in the country is produced in West Bengal. Though there has been a phenomenal increase in Jute area after independence, wide fluctuation in Jute in different years is noticeable due to a variety of reasons. It has, however, seldom gone below 4 lakh hectares during the last three decades. A real break-through in productivity of this crop, however, is yet to be achieved. Absence of high yielding technology is primarily responsible behind this low productivity. Because of increasing preference of Jute farmers for growing other profitable crops like high yielding varieties of Autumn and Winter rice and also because of crop substitution with Summer Rice (Boro), Summer Til and Rabi Groundnut, fluctuation in prices of raw Jute fibre in each year the area under this crop has remained more or less static around 4 lakh hectares in recent years.

Hence, Jute area during 1994-95 is targetted to bring down to 4.0 lakh Hectare from the base figure of 4.46 lakh hectare (the average of last 4 years of the 7th Plan) and to keep the production target at 50 lakh bales per year during the entire period of 8th Plan. The main thrust will be on increasing the productivity. A modest average annual compound growth rate of 4.23 per cent on productivity has been assumed to achieve the goal.

The target of Jute fibre production during 8th Plan period is indicated in Table 1.9.

Table - 1.9

Target of production of Jute fibre during Eighth Plan.

I t e m	*Base average of the 7th Plan	Year		Average annual growth rate of productivity (in per cent)
		1991-92	1994-95	
Area in '000 ha	445.768	435.00	400.00	
Productivity in Bales/Ha.	10.16	11.45	12.5	4.23 +
Production in '000 Bales	4530.52	5000.00	5000.00	

* In working out the base figures, the unusually high figures achieved during 1985-86 have not been taken into consideration. The average of last 4 years of the 7th Plan has been considered only for assuming at the base figure of Jute.

+ Productivity growth rate has been considered instead of growth rate of production in fixing the target of Jute.

Potato :

Potato is the most important commercial crop in West Bengal during Rabi season. Existence of a suitable Agro-Climatic condition for growing Potato has made West Bengal farmers' conversant with the modern technique of its cultivation in recent years.

At present about 28% of the total production of India is produced in the State. A sizeable quantity is being supplied to the neighbouring States after meeting the internal requirement. For storing Potato there are 242 Nos. of Cold Storage in the State, although those Nos. are not adequate in comparison to the requirement. Considering all these facts an average annual production growth rate of 4.33 per cent per annum has been envisaged and the target for the 8th Plan is indicated in Table 1.10

Table - 1.10

Target of production of Potato during Eighth Plan.

	Base(average of 7th Plan)	1991-92	1994-95	Average annual compound growth rate of production (per cent)
Area(in '000 ha)	177.273	180.00	180.00	
Productivity in kg/ha.	21399	23145	26055	
Production(in '000 tonnes)	3793.39	4166.10	4690.00	4.33

Sugarcane :

Present crop scenario in the State depicts a picture where long duration crops are gradually giving way to short duration ones. Sugarcane being an annual crop occupying lands for at least nine months to one year, percentage share of land under this crop is gradually on the wane. Of course, absence of remunerative price of sugarcane, preference of rural people for 'Khandsari' and 'Gur' over while sugar are some of the reasons behind low availability of cane to Sugar Mills(3 number from existing production. Considering these facts a modest target of Cane production of 12.20 lakh tonnes during the terminal year of the Eighth Plan has been fixed. This would require a production growth rate of about 6.49 per cent per annum. Target of production of Cane is indicated in Table 1.11.

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Table - 1.11

Target of Cane production during 1991-92 and terminal year of Eighth Plan(1994-95).

	Base(Average of 7th Plan)	Year		Annual average compound growth rate of production (per cent)
		1991-92	1994-95	
Area(in '000 ha)	13.561	14.00	15.50	
Productivity (in kg/ha)	65694	72143	78710	
Production (in '000 tonnes)	890.878	1010.00	1220.00	6.49

FRUITS AND VEGETABLES

The productions of fruits and vegetables excluding potato are estimated to be 10.88 lakh tonnes and 41.15 lakh tonnes respectively at the terminal year of the Seventh Plan i.e. in the year 1989-90. The quantity will enable the State to provide for 41.4 gm. fruits and 135 gm. vegetables per head per day, considering 10% post harvest loss in fruits and 20% in vegetables, for a population of 64.81 million from internal production. However, the minimum requirements are 60 gm. fruits and 300 gm. vegetables including Potato. For a population of 72.15 million, projected at the terminal year of the Eighth Plan, the requirement according to above standards will stand at 17.38 lakh tonnes of fruits and 86.90 lakh tonnes of vegetables (inclusive of Potato).

In order to raise the availability of fruits and vegetables emphasis will be laid in the Eighth Plan on expansion of area, improvement of production from existing orchards, introduction of improved varieties including hybrids, control of pest and diseases and popularisation of improved agrotechniques and training of farmers etc.

Strategy will be, setting up of demonstration centres on Orchards in farmers field, fertiliser demonstrations, organising plant protection, production and distribution of quality planting materials, seeds, plant protection equipments and training of farmers and extension workers on modern techniques of fruits and vegetables production.

Thrust areas :

The thrust areas under major fruit crops will be increasing production of major fruits viz. Mango, Pineapple, Banana, Mandarin Orange, Lime, Guava in the present production belt by introduction of varieties and new agrotechniques. Vegetables

like Cabbage, Cauliflower, Tomato, Brinjal, Cucurbits, growing of early and late varieties as well as hybrid Vegetables crops will be promoted in the areas suitable for commercial production.

The target for area and production of fruits and Vegetables at the terminal year of Seventh Plan and Eighth Plan is indicated below :-

Table - 1:12

Target of area and production of fruits and vegetables during 8th Plan.

C r o p	Area(in '00 hectare)			Production (in '000 tonnes)		Average	
	1989-90	1994-95	Increased area	1989-90	1994-95	ased	Annua- l prodn. com- pound growth rate of prodn.
Fruits ex- cluding + Coconut & Cashewnuts	109.03	116.44	7.41	1087.97	1270.75	182.78	3.15
Vegetables excluding Potatoes	408.91	500.00	91.10	4115.00	5300.00	1185.00	5.19

The increased production of fruits and vegetables will keep the availability of fruits at 43.4 gm. and that of vegetables(excluding potato) at 161 gm. per head per day. The increased production will mostly come from improvement of productivity of existing orchards.

The above mentioned production programme of fruits and vegetables will mainly be concentrated in the present production belts i.e. Mandarin Orange and Temperate fruits in the Hill Sub Region, Pineapple in the Tarai Sub-Region, Mango in the Central Alluvium Sub-Region, Guava and Lime in the Eastern Himalayan Region and in the Eastern Plateau Region. Vegetable development programme will be taken up in all the districts with special emphasis on areas near cities and towns. For production of quality planting materials nurseries will be strengthened, inclusive for new nurseries and registration of nurseries will be attempted.

The target of other important items are given in table 1.13.

Table - 1.13

1. Fertiliser(Quantity in tonnes)

Fertiliser in terms of nutrients	Base(Terminal year of 7th Plan, 1989-90)	Y e a r 1991-92	Terminal year of 8th Plan, 1994-95
N -	381.62	503.30	674.45
P -	175.76	202.00	270.64
K -	113.71	144.00	193.03
Total -	671.09	849.30	1138.12

2. Pesticides

(a) Pesticides Technical grades in '000 tonnes		6.0	7.0
(b) Area coverage (in '000 ha)		6921.00	7500.00

3. Quality Seeds

	Achievement during 1989-90		
(a) Production(in '000 tonnes)			
i) Cereals -	13.80	16.25	17.00
ii) Pulses -	0.82	1.00	1.50
iii) Oilseeds -	1.40	1.75	2.00
iv) Jute -	0.800	0.03	0.03
Total -	16.82	19.03	20.53
(b) Distribution (in '000 tonnes)			
i) Cereals	24.55	26.00	29.00
ii) Pulses	0.92	1.33	1.80
iii) Oilseeds	1.57	1.84	2.50
iv) Jute	1.80	2.85	2.80
Total -	28.84	32.02	36.10

4. High yielding variety programme

	Base 1989-90		1991-92		1994-95	
	Total area in '000 ha	Area under HYV in '000 ha	Total area (in '000ha)	Area un-der HYV in '000ha	Total Area(in '000 ha)	Area under HYV(in '000 ha)
A) Rice	5614.340	2969.56	5510.00	3014.00	5550.00	3390.00
B) Wheat	326.667	326.667	360.00	360.00	400.00	400.00
Rice + What	5941.007	3296.227	4870.00	3374.00	5950.00	3790.00

2. Programme of the Cottage & Small Industries Department

Lac :

(a) Brood Lac Farms :

Under the scheme, supplementary assistance is provided to maintain/increase the actage of the Brood Lac Farms located in the Districts of Purulia, Bankura, Malda, Murshidabad & Midnapore, which supply Brood Lac to the poor growers of the Districts concerned. During the Seventh Plan period two farms have been closed down and shifted to new site at Jhargram (Midnapore) and Chhatna(Bankura) where plantation of Lac hosts (Ber) have been raised in 1988. In the coming years also more farms will be taken up by raising plantation of different types of host trees on vested lands. Ten farms in D.P.A.P. Areas of Purulia and Bankura have been provided to the irrigation facilities during 1988-89. Ten farms produced 29901 kgs. of Brood Lac while the production of other 14 recorded to be 22292 kgs. Proposed outlay are intended to utilized for area's job under the scheme.

(b) Price Support Scheme for Lac growers :

The scheme aimed at solving marketing problems of lac grower and to assist in implementation of Price Support and buffer stock operation being operated by S.T.C. during 75-76 to '77-78. But the said scheme being inactive due to increase of price of stick lac from the approved minimum price(Rs.2.25 per kg) and for other reasons, desired work could not be done in this respect though the staff were utilized in different promotional activities i.e. training and demonstration to Lac Cultivators, organisation of Lac growers and collecting of orders for Lac Societies. In view of Shiva Raman Committee formed by Govt. of India on Price Support Policy intensive field works will be required to assist the growers by providing loans, seeds etc. so the proposed outlay for 8th Plan and Annual Plan (91-92) are kept in view.

3. Programme of the Public Undertaking Department

West Bengal Agro-Industries Corporation Ltd.

The Corporation has proposed to undertake a programme for expansion of the existing capacity of its Taratola Factory and addition of new facilities for manufacture of Pump Sets and Agriculture implements at a total estimated cost of Rs.50.00 lakhs. The programme is proposed to be implemented in phases and is scheduled to be completed by 1994-95.

A total outlay of Rs.50.00 lakhs is proposed for 1990-95 for investment in the Company with a view to strengthening its equity base so that it may implement the above programme. An outlay of Rs.10.00 lakhs is proposed for 1991-92 for the programme.

SOIL & WATER CONSERVATION

4. Programme of the State Land Use Board.

The State Government has set up the State Land Use Board to study different factors relating to Land Use Soil and Water Conservation and flood control and to advise the Govt. The matter of Land Use Planning to ensure optimum conservation of soil fertility and moisture, reduction of flood hazards and sustainable utilisation of natural resources like forest and grazing land etc. The Board functions as a co-ordinating agency between various relevant Departments. The Board meets periodically to discuss all these issues. Government of India has sponsored a central sector scheme for strengthening of Land Use Board for which central assistance is available on 50% grant and 50% loan basis for conducting studies, developing infrastructure and for meeting cost of salary of officer and staff up to certain limit.

The Board has already conducted studies in two Blocks (one in drought-prone laterite belt and other water surplus area of North 24-Parganas) to examine present land use pattern is central assistance. The Board is also considering scientific study and preparation of model action plan for ecological reserrection of Ranigunge Coal Field, Scientific study on management of water and integrate terrain development is also being considered by the Board. In order to carry out this programme and to strengthen the State Land Use Board a provision of Rs.25 lakhs has been proposed for 8th Plan outlay. Accordingly outlay for 90-91 has been fixed at Rs.4.25 lakhs and the proposed outlay for 91-92 is Rs.4.46 lakhs(5% increase) or Rs.4.68 lakhs(10% increase).

ANIMAL HUSBANDRY
Programme of the Animal Resources Deptt.

Approach to Eighth plan in formulating the Programme.

The Eighth Plan Programme would venture to sum up the gains made so far in the Past Plans and will project such Programmes which aim increasing the unit production of much animals, draft power, enhancing productivity of Sheep, Goat, Pigs, Poultry and other Livestock to ensure be availability of milk, meat, egg, wool etc. and will open up avenues for masses of West Bengal, ample productive employment to women & other disadvantaged groups in particular. The plan proposals which has been drawn on Animal Resources Development activities ensure the interest of backward class of community i.e. Schedule Caste and Schedule Tribes to a recommend extent.

Due safeguard - provision has also been made to check the environmental pollution in formulating the Schemes/Project.

Considering the above points to extend the Animal Husbandry activity with a particular reference to rural base programmes, like A.I. facilities, production of quality Layer and Broiler Chicks in Poultry, Feed and Fodder Development Activities, Sheep and Goat Developmental Projects have been drawn up.

Some new Programmes/Projects have also been inducted in the Eighth Plan Programme which were not included in the Seventh Plan Programme in a bid to fortify the developmental activities as a whole.

The Programmes with the targets and provisional fund allocation are listed below. This has been shown in two phases, Annual Plan for 1991-92 and remaining period of the plan period i.e. 1992 to 1995.

Physical Targets:-

I. Milk Production

It may be observed the Milk Production is expected to rise from 22.10 lakh M.T. in 1984-85 to 30 lakh M.T. by the end of Seventh plan period thus recording a simple annual growth of 7.15 per year. The target of growth in milk production during the Eighth Plan period will be 42 lakh M.T. by the end of the plan.

II. Egg & Broiler Production

At the end of the Seventh Plan, the production of egg was estimated to 2250 million. The target of production is proposed for 3150 million. In Poultry it has been observed that during the Seventh Plan period the targeted figure of production has passed. The target of production of eggs at the end of the Eighth Plan has been estimated to attain 3158 million mark.

The Broiler Production is expected to go 200 lakh per year for the Eighth Plan period. Thus the annual growth is proposed to 20%.

III. Meat Production

There has been an annual growth of 6% in case of Goat, 1.3% mutton and 4% in case of Pork. The increase in most production during the Eighth Plan is liked to be 6% and 5% respectively for goat meat and mutton.

IV. Wool Production

The production of wool is a subsidiary item in the State. Since no importance was given, earlier the target of wool production is likely to be 5.96 lakh kg. at the end of the Eighth Plan period.

Direction and Administration

To take the increased load of new Schemes, enhanced financial outlay, effective implementation & monitoring, importance of a well equipped and strong H.Q. machineries is absolutely necessary. The Directorate would like to strengthen its Planning Cell, Accounts & Audit Cell, Budget and Purchase Cell and Cell for Personal Management.

Veterinary Education & Training

In order to keep the Technical Officers and staff abreast with the latest technological break throughs as well as to update their knowledge. In Service Training of the Personnel within and outside the State will receive more importance than earlier plans. At the same time, Farmers' Education and Training Programme will also be fortified. Side by side Programmes to motivate farmers about adoption of improved husbandry practices, effective health cover the Directorate will take up massive publication of literature, Posters, Feature Film, Video-Films etc. as tools of group discussion.

Investigation and Statistics

A Statistical Cell has been created at the Directorate for conducting regular surveys for production of milk, meat, eggs and wool. Additional Programme for survey on Fodder Production and acreage of production is continuing but newer areas like surveys on slaughter houses, food manufacturing units, marketing system require to be included in the study.

Cattle & Buffalo Development

Artificial Insemination Programme will get priority. (a) Introduction of progeny testing, (b) Conversion of Liquid Semen Unit into Frozen Semen, (c) Engagement of Custom Service Personnels for A.I. Operations at Panchayet level will be part of strengthening of Artificial Insemination Service Programme.

Due importance has also been given to introduce buffalo as milch animal for their studies on important economic traits.

Poultry & Duck Development

Under this Programme some more State Poultry Farms will be converted into Hatcheries in phases from where quality Commercial Layer and Broiler Chicks will be supplied to meet the tremendous demand for such chicks.

Provision for assistance for formation of Poultry Federation/ Corporation has been aimed at Setting up of Quail Breeding has also been included to popularise the Quail Farming. Side by side to intensify the Duck Farming a provision has been made for setting up an exclusive Duck Breeding Farm.

Goat, Sheep, Wool & Rabbit Development

The policy of State with regard to Goat Development is to have both selective as well as cross breeding. Since demand for goat meat is increasing as such it has been felt necessary to provide attractive terms for establishment of Goat Units as family based programmes. Goat & Sheep are very popular among the S.C. & S.T. Community, for additional family income. A new Programme for Rabbit Farming for meat and pelt production has been taken as a Pilot Project.

Feeds & Fodder Development Programmes

The Development of Feed and Fodder has been given great importance in the Eighth Plan. As such provision has been made to fortify as well as establishment more Fodder Extension Centres, and setting up of a Fodder Bank etc. joint ventures with Forest Department for development of Silvi-Pasture is an important venture of this Government.

To popularise the improved fodder among the Cattle Keepers arrangement has been made to distribute Fodder Seeds, Cuttings, Minikits through Panchayets.

Piggery Development Programmes

Piggery plays an important role in rural economy particularly for Schedule Caste and Schedule Tribes. Fork & Fork Products are on demand now a days. Fortification of Meat Plant is going on. Provision has been made to develop private big farms by distributing required breeding pigs.

Other Livestock Development

1) A new Programme for Equine Development has been taken up. The main object of the Programme is to supply stallions through Panchayets to improve the local stock of horses.

2) 22% and 6% out of total budget fund has been earmarked for the development S.C. & S.T. Community by developing family based programme and by creating infrastructure programme for Training under TRYSEM.

Besides the Annual State Plan there are noted below Schemes which assisted by the Centre (Provisional).

I. Centrally Sponsored Scheme

- 1) Assistance to State Poultry Corporation/Federation.
- 2) Marketing of Poultry on selected Poultry districts by State Corporation/N.E.C.C.
- 3) Capital Investment for Cold Storage for Poultry Products.
- 4) Modernisation of State Poultry into Commercial Hatcheries.

II. Central Sector Scheme

A continuing Scheme on Backyard Poultry for women.

VETERINARY SERVICES AND ANIMAL HEALTH.

A. Main object of the Animal Health Directorate for development of the animal and poultry industry and improvement of the economic status of the rural people by keeping profitable animals and poultry. To bring more number of animals and poultry population under direct supervision of the Animal Health Directorate more number of field units are required.

B. Natural calamities like drought, flood and cyclone.

To cope up these types emergent situations quick and efficient supply of medicine and surgical requisites are absolutely necessary. For this purpose fund has been kept for purchase of lifesaving drugs.

Under Prani Sampad Bikash Abhijan Camps, Seminars, meeting etc. will be organised at the Gram Panchayat level as a routine programme. Arrangement will also be made for extension of animal health care programme in the form of mass vaccination, mass de-worming, infertility treatment along with curative treatment of the diseased animal.

Quick diagnosis of the animal disease is essential for the quick and efficient control of the disease. Keeping in view re-organisation of the Veterinary Investigation Laboratories with the opening of new centres have been proposed. Under the systematic control of livestock disease of National Importance, including disease free Zones, funds have been provided under Centrally Sponsored Scheme. Strengthening of the production of vaccine, including cell culture Rinderpest Vaccine will continue at the State Biological Production Centre.

C. Cattle & Buffalo Development.

This Directorate is contemplating to boost up the Artificial Insemination with Frozen Semen Technology in a gigantic manner which is a ready in vogue. The scheme will be implemented in the rural areas of West Bengal through Panchayat, Co-operatives, Municipalities and voluntary organisations. Along with this Directorate is taking all the preliminary measures for opening of three regional Frozen Semen Banks, production of liquid nitrogen and production of Frozen Semen in the State.

D. Extension of Training.

It is absolutely necessary to keep the Veterinarians and other staff apprise about the advance knowledge of the science. To channelise the knowledge upto the grass level, this training and extension programme will be adopted.

E. Tribal Area Sub- Plan.

Under this programme additional infrastructures in the form of Veterinary Units will be opened in the areas having high concentration of tribal people.

F. Schedule Caste Component.

Under this Programme fund conveying about 21.78% of the total outlay has been kept for implementation of the different schemes in the areas where Scheduled Caste Population is high.

G. Hill Areas Supply.

With the formation of Gorkha Hill Council and handing over some of the Field Units of this Directorate in their hand it is presumed in at this Directorate will have to provide a fund for the smooth running of the units already handed over along with the implementation of the different schemes in the Hill Sub-Divisions of Darjeeling District.

H. Agricultural Research and Education.

All India Co-ordinated Research Project on Epidemiological Studies on Foot & Mouth Disease - various typing etc. will be continued during Eighth Plan. Along with this a new scheme for establishment of a Nutritional Laboratory has been considered as essential so as to keep the livestock at its optimum level by maintaining optimum level nutrition.

I. Improvement/Modernisation of Slaughter House.

Fund will be provided for the improvement and modernisation of Slaughter Houses in the cities and municipal towns in this State with a view to supply whole some meat.

In the directorate of Animal Health the field units are mostly located in rural areas in the development blocks. Through these units regular employment will be around 1800 during the 8th Plan period. During 7th plan period 43,007 person days could be generated in the construction phase. In the 8th Plan period it has been estimated that 1,03,600 (One lakh three thousand six hundred) person days will be generated.

In the districts Pilot Projects on Frozen Semen technology are being implemented with the help of DRDA which envisages to organise custom service with the unemployed youth. This programme will create rural employment. In each block integrated training programme on Animal Resources Development are being organised drawing trainees from each Gram Panchayat and other organisations. In all these programmes women are participating. Training Programmes are being regularly held in certain blocks under TRYSEM with DRDA assistance in which rural women are specially trained to take up duck poultry keeping as an evocation.

DAIRY DEVELOPMENT

1) DIRECTORATION AND ADMINISTRATION :

i) Dairy Development Staff :-

The scheme is meant for maintaining a set-up of Staff and Officers for implementation of Dairy Development Projects

ii) Scheme for utilisation of Surplus/Sub-Standard Milk at Haringhata:

The scheme is meant for comprehensive economic utilisation of Sub-Standard Milk of Greater Calcutta Milk Supply Scheme. For this, some new machinery are to be procured for manufacture of Caseins, Biscuits and other product from sub-standard milk and marketing the products in the urban areas.

iii) Survey & Statistics :-

The purpose of the scheme is to undertake survey work in the Rural Areas for diary extension work and collection of data to find out the exact areas of availability of marketable surplus milk.

2) EDUCATION AND TRAINING:Manpower Development and In-Service Training for Technical Personnel :

The scheme aims at providing training facilities to the Technical Personnel of this Directorate with a view to equip them with the modern method of milk production and management.

3) DAIRY DEVELOPMENT PROJECTS:i) Rural Dairy Extension :-

In order to feed the different dairies in the districts and to avoid dependence on huge quantity of Butter Oil and S.M.P. and also to provide marketing facilities to the Rural Milk Producers, the existing Milk Collection-cum-Chilling Plants established in different Districts are required to be renovated/shifted from one place to another of more milk potentiality. The scheme also envisages establishment of three new milk collection-cum-chilling plants in the district of Birbhum, Burdwan and Hooghly with provision for immediate packaging of chilled milk for local sale. The exact location of the chilling plants will be decided in consultation with the Sabhadipaties of the respective districts. In some areas of Sunderbans in the districts of South 24-Pgs. there is marketable surplus milk and this milk may be available to the Dairy Factories under G.C.M.S.S. if mobile chilling plants collect milk from that areas. The mobile milk chilling plants will have a floating boat with necessary chilling equipments including diesel generator and heating equipments by Solar System, so that surplus milk from different pockets like Gosaba, Basanti areas can be tapped, collected and brought to Central Dairy, Belgachia for processing, packaging and distribution in Greater Calcutta areas.

For quick testing of milk and also to create confidence in the mind of Milk Producers/Suppliers who will be supplying milk at chilling plants, we have already procured thirteen nos. of Electronic Milk Testers. We want to procure another 20 nos. of Electronic Milk Testers during this plan period so as to make provision of one tester for each of the chilling plant.

ii) Long Distance Transport :

The scheme is meant for procurement of vehicles for collection of milk from Rural Milk Shed areas as well as purchase of new small Road Milk Tankers for collection of raw milk from chilling plants to the main dairy and replacement of condemned milk vans used at the Dairies of Greater Calcutta Milk Supply Scheme.

iii) Product factory at Salt Lake :

The target of the scheme is to establish a Milk Product Factory with a handling capacity of 5,000 ltrs. of Ice-Cream per day alongwith sterilised milk, cheese, and other milk products. Land for the factory has been acquired. Detailed scheme with financial implication has been submitted to the Govt. for administrative approval and sanction. We have already placed Rs.20,00 lakhs to the concerned Ex-Engineer to start preliminary works of civil construction. The work is held up due to non-availability of Govt. approval.

4) MILK SUPPLY SCHEMES:i) Modernisation of existing dairies under G.C.M.S.S. :

a) The two dairies one at Haringhata Factory, Nadia and the other at Central Dairy, Selgachia, Calcutta were set up under the Greater Calcutta Milk Supply Scheme which started functioning since 1948 and 1962 respectively. At the initial stage Haringhata Dairy could only handle a meagre quantity of milk which was produced by the Govt. herd. During the first five year plan period the Dairy at Haringhata was established to handle 50,000 ltrs. of milk per day. No major expansion work was taken up during the subsequent plan periods except renovation of one of the bottling plant and replacement of one of the compressor unit of the Refrigeration Plants. In the 8th five year plan it is proposed to procure one Pasteurisation Plant of 10,000 ltrs. capacity per hour in place of the old unit of 4,000 ltrs. capacity per hour.

b) Packaging of milk in bottles will be replaced in phases by Satchet Filling Machine.

c) Renovation of existing cold storages at Haringhata will be under taken.

d) Renovation of the existing Refrigeration Unit will be undertaken.

e) Establishment of an Effluent Treatment Plant in compliance with the provision of Water Pollution Act. 1974 and Air Pollution Act. 1981 will be taken up at Haringhata Dairy.

ii) At Central Dairy, Calcutta following works are to be taken up :

a) Six Satchet Filling Machines have already been procured and two more are proposed to be procured in the current financial year. In order to replace the existing packaging system of bottling to the tune of 75% of the existing capacity another

4 nos. of Satchet Fillers with accessories will be procured during the above plan period. The renovation of two high-speed bottling lines will be undertaken to ensure dependable service of these bottling plants.

- b) Existing Refrigeration Plant will have to be renovated.
- c) Procurement of two new recombination plants for recombination of S.M.P. and Butter Oil.
- d) Construction of Godown for storing store materials is necessary.
- e) Establishment of an Effluent Treatment Plant as per Water Pollution Act, 1974 and Air Pollution Act, 1981 will be taken up.
- f) for instantaneous Testing of Milk, Milk Scanners will be installed at the Quality Control Laboratory of Central Dairy, Calcutta and Haringhata Dairy, Nadia.
- g) Construction of 4 nos. Deep Tube-wells at Haringhata and 2 Nos. Deep Tube-wells at Central Dairy will be installed during the above plan period.

iii) Dairy at Durgapur :

The Dairy at Durgapur was commissioned during October, 1972. The existing milk packaging system at Durgapur Dairy is by bottles and polypack. In order to change over completely from bottling to polypack four more satchet fillers is proposed to be installed at the Dairy.

Construction of an Effluent Treatment Plant as per provision of Water Pollution Act, 1974 and Air pollution Act, 1981 will be taken up.

iv) Dairy Factory at Burdwan :

The Dairy at Burdwan was commissioned in November, 1982. For Eighth Five Year plan the following works are proposed to be taken up:-

- a) We have already two Satchet Filling Machines at Burdwan Dairy. Two more Satchet Filling Machines are required to be installed in the Dairy.
- b) Electronic Milk Scanner will be installed at the Dairy for instanteneous of milk.
- c) For augmentation of steady supply of water at Burdwan Dairy installation of a Deep Tubewell is required.
- d) For storing store materials of godown is required as existing stores is not adequate to accomodate store articles.
- e) One four storied building having eighth residential flat is proposed to be constructed for accomodating the staff who are required to attend duty at odd hours.
- f) Construction of room one the first floor of the existing administrative building to increase space for our office accomoda-tion is required.

v) Dairy at Krishnagar :

The Dairy at Krishnagar in the district of Nadia was commissioned in January, 1987 Spillover expenses for the construction of the Effluent Treatment Plant at Krishnagar Dairy at an estimated cost of Rs.15.18 lakhs has been undertaken during the seventh plan period and spillover expenses will be made in the 8th five year plan. Spillover expenses for the construction of Staff Quarters will be made during the Eighth Five Year Plan.

Since Nadia District is a milk potential area and more milk is collected from the rural areas through a net work of milk chilling plants a pasteuriser of 10,000 ltrs. capacity per hour is proposed in addition to the existing one to increase the life of milk.

One Milk Scanner is required to be installed in this Dairy for instantaneous testing of milk.

vi) Construction of New Dairy :

It is expected that Dairy Development work under Technology Mission will start operating in the Eighth Five Year Plan period. The Development work will be undertaken in the twelve districts of West Bengal covered by OPERATION FLOOR Programme. In the programme of work, stress is being given for the development of Animal Resource in the Rural Areas with special emphasis towards the backward community and underdeveloped villages.

The whole work will be undertaken by the State Level Milk Federation and State Government. With such development in Animal Husbandry & Animal Health Programmes more milk will be procured for which marketing facilities have to be created.

It is with this idea in view, the 8th. five year plan has been formulated with more emphasis on rural dairy extension where a net work of milk chilling plants in the milk potential districts will be established.

Provision of two new dairies has therefore been kept in this plan period to provide processing and packaging facilities.

5) ASSISTANCE TO CO-OPERATIVES & OTHER BODIES :

i) Loans under expansion of G.C.M.S.S. :

The scheme is meant for providing loans to owners of cattle who keep their animals in the Milk Colony at Haringhata to supply the entire quantity of milk produced to the Dairy Factory. The purpose of providing loans is to help the owners to replenish their herd and to take proper care towards improved method of breeding, feeding, and management thereby increasing the milk production to maintain a steady flow of milk to the Dairy Factory.

With the introduction of Cattle Resettlement Scheme of un-authorized Khatal in the city it is expected that there will be rush of cattle from un-authorized Khatal owners towards the re-settlement colony.

WFP - 618

Project Office for WFP-618 operates 2 Major Heads - 2403 - Cattle & Buffalo Development and 2404 - Dairy Development (Operation Flood). The outlines are given below :-

1. 2403 - Cattle & Buffalo Development (Re-settlement of city kept animals) - Under this scheme 4 Cattle Resettlement Projects were taken up by the Project Office, namely, Ganganagar, Garden Reach, East Calcutta and Howrah. The Ganganagar Cattle Resettlement Project has already been commissioned and its resettlement operation is continuing. The Calcutta Metropolitan Development Authority is the constructing agency for all the 4 Projects, who have undertaken construction of these Projects as job on turnkey basis. The CMDA have handed over Howrah C.R.S. Project to Howrah Municipal Corporation, who have been operating this project for cattle resettlement purpose. The East Calcutta C.R.S. Project is not being utilised for the cattle resettlement purpose in view of a Govt. decision, and there, a Cottage & Small Scale Complex and a Metropolitan Dev. Complex are being located. The Garden Reach C.R.S. Project is in process of completion, which is going to be utilised for purpose of cattle resettlement. The manpower for running of Garden Reach C.R.S. Project will be drafted from amongst the existing employees under A.R.D. Dept. Also within the project period, implementation of West Bengal Cattle Licensing Act has been taken up, which is associated with the resettlement of cattle and this work in progress.

2. 2404 - Dairy Development (Operation Flood) - Operation Flood is being implemented in West Bengal in 11 districts through a 3-Tier Co-operative Organisation, and the apex society is West Bengal Co-operative Milk Producers' Federation Ltd. Seven (7) Co-operative Milk Unions have been formed with 1279 (663 functional) Primary Co-operative Societies, but of which 6 Co-operative Milk Unions have been registered. There are about 68000 Farmer Members, who are supplying about 66000 litres of milk per day through their societies and Milk Unions. Mother Dairy in Dankuni is also under operation within the schemes of Operation Flood, which is distributing about 4.00 lakh litres of milk in the Greater Calcutta Area. In the districts, two (2) Dairy Plants and twelve (12) Chilling plants are in operation, besides, two (2) Cattle Feed plants and a stud farm with a Semen Freezing Laboratory are functioning. Extensive A.I. net work has also been set up through 190 A.I. Units carrying out A.I. with frozen semen.

F I S H E R I E SProgramme of the Fisheries Department

In the development of the rural economy of the state, Fisheries sector has been playing a vital role since a decade by greatly stepping up in fish/seed production both in inland and marine and also generating substantial employment income and savings for investment particularly in rural areas.

This has been possible and by successfully implementing various need based schemes with increase plan allocation year to year along with active involvement and co-operation of Panchayats, Planning Committees and other Departments.

As regards fish production a total production of 8 lakh M.T. has been targetted for Eighth Plan. In 1991-92, the target in inland and marine fisheries is 6.5 lakh M.T and 1 lakh M.T. respectively.

To achieve the above targets, all the production oriented schemes taken up in the Seventh Plan period will be continued during 8th Plan with major thrust on (a) using Elevators under newly proposed centrally proposed schemes (b) increasing activable new areas in Brackish Water sector (c) introducing high powered mechanised Boats through NCDC assistance (d) constructing fishing harbour at Fraserganj and creating sharebased infrastructural facilities for the fishing fleets and (e) developing present system of handling and marketing of fish.

Apart from continuing the programme for the production of fish seeds in the state owned seed firms, encouragement will be continued to be given to fish farmers by providing bank loans and subsidy for nursery and rearing centres, setting up of different types of hatcheries and transferring this technologies to the remote corners. The target of fish production during the Seventh Plan was 7000 million. This target was achieved by middle of the Seventh Plan. In view of this grand success, the target for 8th Plan has been fixed at 8000 million and that of 1991-92 has been at the level of 7450 million.

Other activities aiming at improvement of fish production in inland sector include (a) adoption of social fishery (b) practical of integrated fish farming (c) expansion of swage fed fisheries with financial assistance from the Central Government (d) development of Reservoir fisheries Projects and its implementation through large

number of groups and co-operatives (e) development of jhora fisheries in hill areas and (f) riverine fisheries by providing various subsidies and Bank loans.

For tapping brackish water fisheries potential, the following programmes will continue.

- (a) Development of Brackish Water fishery through FFDA.
- (b) Continuation of development of Nayachar island in Midnapore and rehabilitation of poor fishermen after creation of necessary infrastructural facilities.
- (c) Setting up of fresh water prawn seed hatchery in collaboration with MPEDA at canning.
- (d) Encouraging private entrepreneurs for establishment of prawn hatchery.

In the Marine fisheries sector stress will be continued to pursue on mechanised bigger size country crafts for off-shore fishing under NCDC assistance project in addition to small sized crafts so long been supplied will financial assistance from Banks and subsidies from Fisheries and other Departments.

Training & Research :

Dissemination of improved method of fish culture at the grass root level in order to augment fish production from per unit of water area will continue during the 8th plan period. The farmers in the private sector will be trained to adopt the technology of carp culture with aerator and supplementary feeding in order to boost up the present level of production by at least 3 fold a technology that has been standardised through repeated trials in two departmental farms.

Similar improved technologies on integrated fish farming, Duck-cum-fish culture and scampi-cum-crap culture will also be disseminated at the grass root level to boost up fish production.

A number of research programme have been taken up and the result of such programme will be transferred from K Lab to land after standardisation during the plan period. Such programmes include production of quality seed of fresh water, brackish water prawn and magur.

Technology for mono and poly culture of brackish water prawn both at extensive scale and semi intensive scale with supplementary feeding and aeration are being observed for standardisation.

Co-operation :

Along with increase in production and productivity which has

already been considerably received, a major thrust area in need of attention is marketing arrangements. To improve the marketing arrangements, the Department proposes to introduce Terminal Marketing Scheme through the Co-operative network under the aegis of WBSR Co-operative Federation with the EEC/NCDC assistance.

Welfare activities :

For the benefit of the poor fishermen infrastructural facilities like link roads, tube-wells, community halls and housing will be continued to be provided both in inland and marine fishing village under National Welfare Fund. Scheme for active fishermen will also be continued. Old age pension scheme for the fishermen living below the poverty line has been introduced in the first year of the 8th plan and will be continued during the entire plan period.

Special Component Plan for SC :

The Fisheries Department has been gradually stepping up its outlay for SCP/TSP; much more than their percentage of population. The fund to be allocated is proposed to be utilised through 26 - different plan schemes which envisage uplift of socio-economic condition of fishermen and also fish farmers of the SC Communities living below the poverty line.

Tribal Sub-plan :

For the uplift of the poor tribal people of the State, Fisheries Department has made remarkable achievement during the last two plan periods by involving these people in various types of piscicultural activities. To keep up pace in this endeavour Fisheries Department will continue to extend this programme to more and more tribal people in 8th plan.

Centrally sponsored and Central sector schemes :

Development of seawater fed fisheries, construction of minor fishing harbour at Frcsergunj, Group Insurance Scheme for active fishermen etc. will be the main activities under these Schemes.

FORESTRY AND WILD LIFE

Programme of the Forestry Department

Introduction :

Forest area in West Bengal only accounts for 13.4% of the geographical area of the State. Per capita forest area works out to be only 0.02 ha. whereas the national average is 0.12 ha. The average population density of the State is 615 sq.km. against the national average 216 per sq.km. Out of the forest area of 11879 sq.km., the mangrove areas in Sunderbans - large tract of which has been declared as Project Tiger (2877 km.) is 4263 sq.km. The

proportion of forest area is particularly low in South - Western part of the State (lateritic tract) where per capita productive forest works out to be only 0.01 ha. The forest area of this State can be classified into following three broad categories :-

- (i) Montane wet temperate forest in the hills, and tropical moist deciduous forest in Doars and Tarai region in North Bengal.
- (ii) Dry deciduous sal coppice forest in the lateritic tract of South-Western Bengal.
- (iii) Coastal/Estuarine mangrove forest of Sunderbans.

National Forest Policy of 1988 envisages major thrust on the following aspects :

- 1) Maintenance of environmental stability through preservation and restoration of ecological balances.
- 2) Conserving the national heritage through preservation of flora and fauna as genepool.
- 3) Checking desertification and establishing sandunes along the coastal tracts.
- 4) Increasing tree cover on denuded/degraded and unproductive land through afforestation.
- 5) Meeting the requirement of fuel, fodder, MFP and small timber of rural population.
- 6) Increasing productivity of forest to meet the essential national needs.
- 7) Encourage efficient utilisation of forest produce and maximising wood substitution.
- 8) Creating a massive people's movement.

In order to achieve the above objectives a multifaceted forestry development programme is mooted for a durable eco-system with judicious use of forest resources for economic stability of fringe dwelling population.

The resource Crisis, Degradation and the Needs :

Growing stocks in the plains forest of North Bengal is estimated to be around 150-200 cu.m. per ha. whereas in South West Bengal it is only 35-40 cu.m. It is further reduced to the extent of 10-15 cu.m. per ha. in mangrove forest. The forest in South Western Bengal are heavily degraded due to multiple biotic factors. It is estimated that at least about 60% of such areas have already become degraded. Primary reason for this degradation is due to fact that majority of fringe population do not have any ostensible means of livelihood to sustain themselves all the year round. There is scarcity of fuel in the villages and semi urban areas situated close to these forests. Such collection of firewood and selling them to tp/-

the nearby market areas have become main profession of local poor people. This factor is essentially accounting for this degradation of forest in South Western Bengal. Unless proper schemes are taken up for bridging this gap between demand and supply of the timber and firewood, and economic rehabilitation of fringe people is done, pilferage will continue. This is making heavy in-road in the productive forest of the State.

The Problem of Soil Erosion :

It has been estimated that about 1.7 million ha. are subjected to various forms of land degradation. The nature and extent of problem varies in different regions of the State.

Very high rainfall and weak rock formations lead to frequent landslips, soil wash, gully formation in the mountains. This situation is sometime aggravated due to deforestation outside the forest areas and defective agricultural practices in steep terrains of high altitude zones. Improper water disposal system also aggravates this damage. In lateritic tract mainly sheet erosion takes place and deep gully is formed. This situation becomes acute due to uncontrolled grazing and illicit hacking and felling of trees in manmade plantations. Another major factor is non-utilisation of the non-agricultural lands. The rivers get silted up. As a result bank erosion takes place and when water discharge is very high flash flood takes place damaging good agricultural lands. All this factors accelerate the soil erosion problem and productivity suffers ultimately affecting the ecology and economy of the place. In coastal areas the movement of sand through formation and sand dunes damages the coastal plantations. Ultimately the saline water advances easily to the better productive areas along the coast.

The Conservation of Ecological Fragile Zone :

It is being increasingly appreciated that unless the environment and eco-conservation is given its due priority no development activity can sustain in the long run. Keeping the above aspect in view the strategy for conservation of ecologically fragile zones have been made. Sunderbans Biosphere Reserve has been formed as a part of ecorestoration measure. Scientific management of wet land is also engaging attention.

Wild Conservation :

It is needless to point out that the need for conservation and preservation of flora and fauna are of utmost importance in the context of eco-conservation. Some effective schemes taken up during the last plan has definitely improved the status of flora and fauna. However, still much work is needed to be done in this

It is felt that coming decade is going to be crucial for forestry as it is accepted that this is the most effective means for improvement of environment which in the past has suffered to a great extent even endangering in many ways the human existence.

The needs are briefly as follows :

1. The need for protection and conservation of forest resources including wildlife with emphasis on preservation of ecologically sensitive and aesthetically important areas.
2. The need for checking denudation and erosion to moderate the effects of flood and drought, to regulate the water supply, to protect the life of dams and reservoirs and to stabilise the lands particularly in mountains regions, river catchments and in coastal tracts.
3. The need for wastelands development by accelerating the pace of afforestation and recycling of resources.
4. The need for maximising productivity of forest with a view to meeting the yawning gap of industrial raw material for forest - based industries through intensification of management.
5. The need for providing fuel, fodder, small timber and other minor forest produce to the growing population.
6. The need for reducing pressure on forests through development substitute and to evolve measures for energy economy and feasibility for substitution of timber.
7. The need for promoting the role of forestry in anti-poverty programmes through generation of employment, using forestry as a tool for rural economy and development.
8. The need for creating people's movement for achieving objective by bringing the forest and the forestry practices close to people especially to those living in forest fringe areas.
9. The fulfilment of above support, the need to strengthen the Research Organisation in the State and the need for a strong data base to fall upon for planning, formulation and continuous appraisal of forestry programmes and policies and for microplanning.

Thrust Areas :

Pursuant to foregoing discussions, the major thrust areas for Forestry Sector Plan ought to be :-

1. Afforestation on available Government and private lands through the joint efforts of Forest Department and the people.
2. Promotion of participatory management in forestry with active involvement of the people.
3. Wasteland Development all over the State with special emphasis in the priority districts - especially South - Western districts.
4. Restoration and resuscitation of degraded forests.
5. Conservation of eco-system and environmental and ecological restoration.
6. Judicious harvest of resources through departmental operation compatible with ecological and environmental considerations.

7. Wildlife conservation and habitat improvement.
8. Soil and water conservation.
9. Development of alternate energy sources.
10. Result-oriented research, development, training and education.
11. Location of suitable substitutes of forest products.
12. Socio-economic development of forest fringe areas, maintaining the harmony between the ~~xxx~~ forests and tribal heritage.
13. Conservation and development of minor forest produce.

Having spelt out the need and the thrust ~~reas~~ as the strategies for formulation of 8th Five Year Plan is described below :

1. Wasteland Development :

Wasteland in West Bengal predominately occur in the districts of Purulia, Bankura, Midnapore, Birbhum and Burdwan. These areas are characterised by barren and unfertile soil and often situated in rugged terrain. These areas are frequently drought affected also. Percentage of Scheduled Castes and Scheduled Tribes and economically disadvantaged people is much more than in other districts of the State. Therefore, the main thrust for wasteland afforestation is given in these districts. Not only Forest Department is concentrating on wasteland afforestation on the lands belonging to Forest Department but even the lands unfit for agriculture in private lands are also sought to be covered under this programme. A massive Social Forestry Programme was started in the year 1981 and it will continue till about first half of 1991-92. After this another project called Integrated Forestry Development Project has been mooted which has received the approval of Development and Planning Department. This project has been forwarded to Government of India for taking up as IDA assisted programme during the Eighth Plan period. Other plantation scheme that of quick growing species is also being operated in this area. All these schemes are highly labour intensive accounting for more than 80% in labour component alone. In North Bengal another plantation scheme that economically productive species is being taken up in forest areas which are commercially exploited.

Works on participatory management in forest areas for re-afforestating degraded forests have already been started in South Western districts. At present about 2 lakh ha. have been brought under this programme. This has generated a tremendous enthussism among people and already about 1600 protection committees have been formed. This programme will continue in the newly proposed Integrated Forestry Development Project.

2. Conservation cum Production Forestry :

In North Bengal clear felling of natural forests has been stopped. The older plantations are being felled in a planned manner to meet the demands of firewood, timber etc. The regeneration technique of valuable species like sal, teak are known. The areas are immediately planted up with suitable species.

This type of management is compatible in socio-economic and ecological context. Thus a judicious mix of environmental-cum-conservation forestry with vigorous production forestry is proposed to be practised during the 8th Five Plan period.

3. Conservation of Eco-system and Wildlife Preservation :

More than 32% of the total forest areas have already been put under total conservation measures for preservation of ecological diversity. Sunderban Biosphere Reserve has been formed as a part of eco-restoration measures. Special schemes on mangrove, wet land development, marine national park at Sunderban, Senchal Wildlife Sanctuary, Darjeeling and Elephant Project have been proposed in the 8th Plan Period. Side by side for protection of the valuable forest and wildlife, a forest protection force have been formed as a part of intensification of the management. Schemes have been formulated to improve the communication network augmenting facilities like vehicles, R.T. sets etc. as a part of protection efforts.

It is felt necessary to educate the rural and urban population to enlist their support for various conservation measures adopted. With a view to above schemes for publicity and extension have been framed in the field of nature education and interpretation. Side by side arrangement for training for the forestry staff in various wildlife and rural development institutions are being done so that they can be better equipped to tackle the problem they may face in future years.

4. Soil and Water Conservation :

Watershed approach in general is being followed for executing the scheme under this programme. Several site specific schemes are being undertaken to achieve this target. Centrally sponsored scheme on Soil and Water Conservation is being continued. It is being supplemented by State Plan Scheme like protective afforestation and eco-conservation of sensitive zone.

5. Economic Development of Forest Fringe Population :

This aspect has been taken care of in the 8th Plan proposal. It is seen by and large that forests get damaged gradually from the fringe. Development programmes for the forest fringe people are rarely taken up by other departments. Due to economic backwardness
tp/-

forest becomes an easy tool for earning livelihood. In order to enlist the help of fringe people forest protections, schemes are being taken up to improve their living condition and to arrange for some employment by opening up new schemes in adjoining forest areas.

6. Harvesting of Forest Produce through Tribals and Forest Dwellers :

In the past forests used to be auctioned on standing basis. Under this contractor system people employed in one hand used to be deprived of fair wages and on the other hand risk of pilferage used to be more. Timber operation scheme was started to combat the two factors mentioned above. The labourers are now receiving wages under minimum wage act of the Forest Department and at the same time chance of pilferage is greatly reduced. This scheme is directly employing a very large number of tribal people. In South Bengal the scheme has been extended which is being implemented through LAMP.

7. Substitution of Timber :

To encourage the substitution of indigenous timber West Bengal Forest Development Corporation have entered into marketing of sawn timber manufactured from imported wood to meet the bonafide need of the consumers of the State.

8. Urban Forestry and Improvement of Parks & Gardens :

The need for taking care of the aesthetic aspect in urban and semi urban areas where forests do not practically exist has prompted formulation of this programme. With growing industrialisation there is practically no open area for the people to breathe fresh air and enjoy the bounties of nature. This aspect is kept in view in the current programme.

9. Data Base Management :

For successful management of any resource a comprehensive and informative data base is necessary. With this end in view the scheme on management information system has been introduced.

10. Forest Vegetation Map :

The conventional method for preparation of working plan after forest survey are found to be time consuming. This can not keep pace with the very fast changing scenario in forest development. A programme is being taken up for comprehensive mapping of the forest vegetation at regular interval to identify the progress of afforestation/available wastelands by using latest available technique of remote sensing through I.R.S. satellite system.

11. Research :

To ensure maximum benefits and quick results, basic and

applied research and transfer of technology are essential. Research programmes proposed are need based aimed at improvement of quality of working in forest areas.

Conclusion :

In the final analysis it may be given that out of Rs.20.90 crores proposed for 1991-92 (with 10% step up from the level of 1990-91) Rs.14.4 crores have been earmarked for afforestation schemes alone. These constitutes about 70% of total outlay. These schemes are labour intensive schemes with more than 80% of labour component built in them. The allocation of soil conservation under the State Sector although is only about 5% but another Rs.3.62 crores is likely to be received under different centrally sponsored schemes from Government of India. The balance 25% constitutes other schemes such as Timber Operation, Building, Communication, Research etc. It will not be out of place mention that forestry and Timber operation has come under minimum wages Act from the 1st October, 1987. Every year in October a step up in the wages to the extent of about 10% is done. On 1st October, 1989 the wage was Rs.23.11 per day. This is likely to cross Rs.25.00 mark from 1st October, 1990. It may be seen that increase of 10% will be offset by this increase only. No increase in the physical target can be made. This increase is apart from other increases in the prices of materials etc. Unless a minimum increase of 10% is allowed it will not be possible to hold on to the physical target of 1990-91.

From the year 1991-92 another IDA assisted project namely "Integrated Forestry Development Project" is likely to be sanctioned. This is already approved by the Planning Department of Government of West Bengal and now awaiting approval of Government of India. An outlay of Rs.86.60 crores over 5 years have been kept in the above project. As such any curtailment in the size of the plan for the year 1991-92 will upset the appropriation of fund among different schemes. If only 5% increase is allowed it will not be possible to hold on to the physical target of 1990-91.

All the Forestry Schemes are aimed at improvement of environment by preservation / afforestation of the forest areas. In all schemes of the Forest Department generally people living inside the forest area or in forest fringes get employment. They normally do not have any other viable employment. In the context of growing concern for environmental degradation increase in outlay in forestry sector is very much necessary. This aspect may kindly be looked into.

PLANTATIONProgramme of the Commerce & Industries Department:1.0. West Bengal Tea Development Corporation(WBTDC)

The Corporation runs seven gardens - five in Darjeeling District and two in Jalpaiguri District. Of these, five gardens are owned by the Corporation while other two are managed ones. Total area of these seven gardens is 2,872 hecets, out of which 1,373 hect is under tea plantation.

1.1. In 1989-90, 3.80 lakhs kg of made tea(price realisation of Rs.219.53 lakhs) and 11.46 lakhs kg of green leaf(price realisation of Rs.52.00 lakhs) were produced in the gardens of the Corporation. The yearly target of production for 1990-91 and 1991-92 are as follows :-

1990-91 : 4.21 lakhs kgs. of made tea in five hill gardens and 12.5 lakhs kgs. of green leaf in the two Dooars Gardens;

1991-92 : 4.65 kgs. of Darjeeling tea and 3.5 lakhs kgs. of made tea at the two Dooars Gardens.

1.2. During the Seventh Plan period the Corporation under its cultivation programme achieved :-

- | | |
|---|--------------------------|
| a) New plantation at Mohua Tea Estate - | 30 Hectrs. |
| b) Infilling of vacancies - | 5.5 lakhs plants |
| c) Plant protection and Nutrition - | 1373 Hectrs.
per year |
| d) Raising of Nurseries - | 6 lakhs plants |

Further, under Labour Welfare Programme, 121 labour houses were constructed and 2317 nos. of labour houses were repaired.

1.3. During the Eighth Plan the corporation is continuing its yearly programmes for maintenance and protection of tea plants by application of fertiliser and manure, replantation and infilling of vacancies, raising of nurseries, labour welfare activities by construction of labour houses etc. replacement of machineries and renovation of existing tea processing factories etc. During 1990-91, the Corporation has taken up a scheme for construction of a tea processing factory at Hilla Tea Estate at an estimated cost of Rs.100.00 lakhs. Further, the Corporation has taken up new plantation programme over 90 hecets. of land at Mohua Tea Estate and extention plantation programme in 60 hect of Hilla Tea Estate. The Corporation has also taken up programme for afforestation in all the tea gardens. The total requirement of fund for the critical ongoing projects and the 1990-91 sanctioned committed schemes of the corporation for the Eighth Plan has been estimated at Rs.765.00 lakhs. During

1991-92, Rs.160.00 lakhs will be required for such schemes against Rs.190 lakhs in 1990-91.

During the Eighth Plan, the Corporation will take-up new schemes for irrigation, drainage and water supply at Mohua Tea Estate and will also set up a tea processing factory at Mohua. The total project cost of these two new schemes has been estimated at Rs.235.00 lakhs and Rs.50.00 lakhs is estimated to be required during 1991-92 for such schemes.

2. Schemes of the Directorate of Cinchona & Other Medicinal Plants.

2.1. The Directorate of Cinchona and Other Medicinal Plants is engaged in the development of cultivation of Cinchona and Other medicinal plants in the district of Darjeeling creating employment opportunities for a large number of people. It has also set up factories for production of medicines like quinine, diosgenin etc. by extraction of medicinal plants.

2.2. During the Seventh Plan the Corporation carried out maintenance works(including manuring and rejuvenation) for Cinchona blocks measuring 1606 acres developed under Cinchona Cultivation Phase-I and Phase-II programmes. The Diosgenin factory was commissioned and production maintained. The Emetine factory was also completed and production of emetine hydrochloride started. Phase-I work for modernisation of Government Quinine factory was completed and production of crude quinine sulphate was vastly improved with the commissioning of 10 MT extraction unit.

2.3. During the Eighth Plan, interalia, the following schemes viz. cultivation of Dioscorea, expansion of Ipecac cultivation, project for production of steroids and quinidine, second phase works for Emetine factory, Diosgenin factory and Government Quinine factory etc. which were taken up during the 7th Plan, will be continued. 42 acres of Dioscorea cultivation was completed in 7th Plan and programmes for extension of such cultivation by 15 acres per year and also harvesting of 15 acres per year will be continued during the 8th Plan. The 16 DPA plant of the Steroid project is ready for commissioning and steps for production of other hormones envisaged in its project will be taken in the 8th Plan. Project report for quinidine factory has been proposed. The construction of the factory and commissioning of the project will be completed in the 8th Plan. Phase-II works of Emetine factory, Diosgenin factory and Government Quinine factory will also be completed. The estimated costs for such critical on-going schemes of the Directorate are Rs.675 lakhs during the 8th Plan Rs.120 lakhs in 1990-91 and Rs.180 lakhs during 1991-92.

2.4. Some new schemes like (i) Cultivation of medicinal and aromatic plants at village level, (ii) utilisation of raw materials from wild plant sources through phytochemical screening of such plants, (iii) detailed studies on improvement of alkaloid yields from medicinal plants, (iv) afforestation, (v) construction of staff quarters etc. A provision of Rs.225 lakhs for the 8th Plan, a provision of Rs.40 lakhs for 1990-91 and Rs.40 lakhs have been suggested for such new schemes.

FOOD STORAGE & WARE HOUSINGProgramme of the Public Undertaking Deptt.

The Programmes below are "District Sector Programmes".

1. West Bengal State Warehousing Corporation :

In order to keep pace with the increasing demand for Storage Capacity, the Corporation proposes to undertake a programme for construction of further 61550 MT storage capacity in different Districts of West Bengal at a total estimated cost of Rs. 428.00 lakhs during the Eighth Plan Period. The programme is proposed to be financed in the following manner :-

Central Warehousing Corporation	--	Rs. 150 lakhs.
Govt. of West Bengal	--	Rs. 150 "
West Bengal State Warehousing Corpn.	--	Rs. 128. "
		<u>Rs. 428 lakhs</u>

During the 1st year of Eighth Plan i.e. 1990-91 the Corporation has proposed to undertake construction of 12850 MT storage Capacity.

A total outlay of Rs. 150.00 lakhs is proposed for the programme for 1990-95, out of which an outlay of Rs. 16.00 lakhs is proposed for 1991-92.

2. West Bengal Agro-Industries Corporation Ltd.

The Company has proposed to undertake a programme for expansion of the existing capacity of its Taratola Factory and addition of new facilities for manufacture of Pump Sets and Agriculture implements at a total estimated cost of Rs. 50.00 lakhs. The programme is proposed to be implemented in phases and is scheduled to be completed by 1991-95.

A total outlay of Rs. 50.00 lakhs is proposed for 1990-95 for investment in the company with a view to strengthening its equity base so that it may implement the above programme. An outlay of Rs. 10.00 lakhs is made for 1990-91 and a provision of Rs. 10.00 lakhs is proposed for 1991-92 for the programme.

AGRICULTURAL FINANCIAL INSTITUTION.Programme of the Finance (Institutional Finance) Deptt.Rural Banks in West Bengal.

1. The scheme for setting up of Regional Rural Banks was introduced in 1976 under the provisions of the Regional Rural Banks Act, 1976. The issued capital of each Regional Rural Bank is 25.00 lakhs, 15% of which is subscribed by the State Government whose contribution

is thus Rs. 3.75 lakhs in the share capital of each such bank. An outlay of Rs. 50.00 lakhs had been envisaged for the purpose for the entire 7th Five-Year Plan period (1985-90). During the year 1986-87 five RRBs, in 1988-89 one RRB 1989-90 two RRBs and 1990-91 three RRBs increased their paid up share capital by 25 lakhs each and the State Govt. had to contribute at the rate of Rs. 3.75 lakhs per RRB as its share of 15%. In expectation of increasing share capital of three RRBs and setting up of a new RRB an amount of Rs. 15 lakhs has been proposed for the financial year 1991-92.

2. Till date 9 (nine) Regional Rural Banks have been established in West Bengal. These are (i) Gour Gramin Bank (Covering Malda, West Dinajpur and part of Murshidabad districts), (ii) Mallebhum Gramin Bank (Covering Bankura, Purulia & Midnapore districts), (iii) Mayurakshi Gramin Bank (Covering Birbhum district), (iv) Uttarbanga Kshetriya Gramin Bank (Covering Cooch-Behar, Jalpaiguri & Darjeeling districts), (v) Sagar Gramin Bank (Covering 24-Parganas (N&S) district) (vi) Nadia Gramin Bank (Covering Nadia district) (vii) Howrah Gramin Bank (Covering Howrah and Hooghly districts), (viii) Bardhaman Gramin Bank (Covering Burdwan and part of Hooghly districts) and (ix) Murshidabad Gramin Bank (Covering Murshidabad district).

3. With a view to augmenting the flow of institutional credit to the poorer section of the rural population, the State Government is in favour of setting up one Regional Rural Bank for each district in West Bengal. Therefore, a proposed outlay of Rs. 90 lakhs may be made for the 8th plan period (1990-95) keeping in view the scope of opening new RRB as well as augmenting the share capital of existing RRBs. Similarly in expectation of increasing share capital of three RRB and setting up of a one new RRB an amount of Rs. 15 lakhs may be proposed for the year 1991-92.

CO-OPERATION

Programme of the Co-operation Deptt.

In spite of the low growth of the cooperatives compared to the 7th plan projections, some basic achievements have been secured, which will go a considerable way in helping the 8th plan realise higher annual growth rate than the actual of 1989-90 i.e. the terminal year of the 7th plan.

The concepts of "Total Credit" through reorganised and strengthened rural credit institutions, investment credit in non-farm sector and linking of processing cooperatives with marketing have been triggered off in the field of agricultural credit, marketing and consumers sector of the Cooperatives Movement during the 7th Plan period. With the increased financial support as envisaged in

the outlays below, these activities are expected to execute the central thrust of the 8th plan. Almost all the schemes to be implemented in various sectors of the cooperative movement during the 8th Five Year Plan period are Employment Oriented, as they multiply economic activities in the field. Special emphasis has also been given in spreading cooperative education amongst women so that they can actively participate in the functioning of cooperatives in larger numbers and derive economic benefits from them. The 8th Plan outlay will be of Rs. 75.6 crores compared to Rs. 42.00 crores of the 7th Plan, which will be 80% higher in nominal terms over the 7th plan outlay. The sector-wise outlays proposed are given at the end of this write-up. The 8th Plan has been prepared on the basis of the district plan following the bottom-up strategy adopted in the planning process.

1. Agricultural Credit Sector.

The short term credit sector and the long term credit sector will greatly benefit from the Debt Relief Scheme in as much as their overdues will be sizeably liquidated with the flow of fund from the Govt. As such, there will be a spurt in investment in eligible schemes in the farm sector as well as non-farm sector. The projections of short-term credit flow and long-term credit flow of Rs. 800 crores and as 104.80 crores respectively during the plan period will be achieved in comparison to the actuals of the 7th plan at Rs. 307.32 crores and Rs. 57.43 crores. The membership coverage is expected to reach 36 lacs at the end of the 8th plan period which will be 20% higher than that at the end of 7th plan. The functional integration of the short-term credit with long-term credit at the village level through the PACS's which, is recommended by various committees set up at the national level, can be given a fair trial once the concerned organisations are free from resource constraints.

The long-term credit sector has been expected to invest in diversified activities in gradually higher proportions. Besides financing rural and small-scale industries, the Land Development Banks are expected to invest in Rural Housing Scheme with refinance support available from the National Housing Bank. The working of the Land Development Banks will be regulated on a realistic and compact area approach basis which has become more relevant in view of the introduction of the Service Area Approach Principles by the R.B.I. and the NABARD. The rehabilitation of non-willful defaulters and Rehabilitation Programme of the weak Land Development Banks will continue to be operative in the 8th plan period in terms of the NABARD's 10-Point Action Programme. The Rehabilitation Scheme in the short-term credit sector is in operation in 8 (eight) District Central Cooperative Banks on the line of the NABARD's 12-Point Programme. 9% other weak

Central Coop. Banks will also get adequate support for rehabilitation during the 8th plan period. A total amount of Rs. 42.53 crores has been proposed for the 8th Plan period for the Agricultural Sector, of which Rs. 675.49 lacs (has been proposed in the Annual Plan of 1991-92 assuming 10% growth over the outlay for 1990-91.

2. Consumers Sector.

The much professed idea of organising some production units in cooperative sector to ensure availability of consumer goods to the cooperative distribution network like Consumers cooperatives, PAMS and PACS in the right time and at reasonable prices, could not be effectively achieved during the 7th plan, because of resource constraints. It has been proposed to establish small and medium-sized production units at the level of Confed, Wholesale Consumers Cooperatives or even PAMS's to make a modest beginning, although in regard to mustard oil, spices etc. a beginning has already been made. The level of participation of the consumers cooperatives, PAMS's and PACS's in Govt. sponsored Public Distribution System is noticeably high. In the 8th plan the same will be strengthened through execution of a number of Centrally Sponsored and State Plan Schemes.

3. Marketing and Processing Sector.

With the support of the NCDC in various schemes sponsored by them the PACS's, PAMS'S, cold storages, rice mills and some processing cooperatives will continue to stride ahead with distribution of agricultural inputs, marketing of agricultural producers, and processing them wherever possible, during the 8th plan period. A large number of the new schemes of the marketing and processing sector could not be executed in 7th plan, which are particularly related to the processing of agricultural commodities, for resource constraints. During the 8th plan the programme of organising more processing cooperatives and linking them with the marketing channel in the cooperative sector will be attempted more effectively. This will ensure higher remunerative process of the agricultural commodities to the growers and make some essential consumer goods available to the people at reasonable rates.

Social Services.

Since the cooperative organisations are developed amongst the people basically for serving their own interests, it has been proposed to organise larger number of Housing Cooperatives and Labour cooperatives so that weaker sections of the society derive direct benefit from them through joint endeavour. During the plan period the Cooperative Housing Federation of the State will organise Primary Housing Cooperatives and construct houses for them at reasonable prices.

Strategies of the 8th Five Year Plan.

We have discussed above the main strategies of the 8th Plan in various sectors. The elaboration is given in the sector-wise discussions below. However, the major strategies are recapitulated for the sake of recognising them at a glance.

i) In view of the limited success in implementation of some developmental programmes during the 7th plan period for various reasons it has been proposed to reintroduce and/or reinvigorate those vital schemes during the 8th plan period in a more realistic way.

ii) Emphasis has been laid on Labour Intensive Schemes where larger number of women and people of the lower income groups and small and marginal farmers can participate.

iii) The PAC's and PAM's have been given greater share of financial support so that they can emerge as growth centres in the rural economy.

iv) Arrangements have been made for extension of investment credit to non-farm sectors like cottage and small scale industries.

v) The chain of cooperative institutions which ensure timely supply of agricultural inputs like fertilisers, seeds, pesticides etc. and also which fetch remunerative prices of agricultural produces for the farmers have been sought to be strengthened and growers' participation in procurement programmes has been aimed at while making financial allocations for the marketing and processing sectors of the coop. movement.

vi) The grower-consumer tie-up has been proposed to be strengthened through installation of production units in the coop. sector and liberal financial support to the cooperatives engaged in distribution of consumer goods in rural as well as urban areas.

viii) An essential manpower development programme has been proposed for the Cooperation Directorate which will ensure substantial growth in the cooperative activities during the 8th plan period.

viii) Integrated approach to the Agricultural & rural development and employment generating programmes by effecting functional coordination between the cooperatives and the Panchayats has also been professed.

II. RURAL DEVELOPMENT

1. Programme of the Rural Development Department.
 - Special Programme for Rural Development.
 - Integrated Rural Development Programme (IRDP).

The Rural Development Department is concerned with implementation of the major rural development programmes - NREP/RLEGP/Jawahar Rozgar Yojana in the field of rural employment and IRDP for economic rehabilitation of rural poor families.

Under IRDP, for the Seventh Plan period (1985-90), the approved outlay was Rs.100 crore which was subsequently revised to Rs.125.64 crore and the target for assisting poor families was set at 10.93 lakh families. As against this, during the years 1985-90, the State was actually able to spend Rs.121.42 crore (as State share) and assisted 13.90 lakh families. This represented achievement of 127.95% of the over all Seventh Plan period. Of the families assisted, 37.28% were SC/ST families and performance on this score was consistently above the stipulated 30%. Women coverage for the Seventh Plan as a whole was 24.35% but this represented a steady rise from a level of 10.47% in 1985-86 to 38.49% in 1989-90. In 1988-89 and 1989-90, the State has been able to exceed the stipulated level of women coverage of 30%. Efforts to increase the per capita investment has also borne fruit as the per capita investment has gone up from Rs.3206 in 1985-86 a level of Rs.6625 in 1989-90 which was consistently above the all-India average. For 1990-91, the approved outlay on account of IRDP (State share) is Rs.34.85 crore and the target for assisting families is 195,663. Till September, 1990, we expect to reach about 40% of the target and we confidently expect to exceed both the financial and physical targets for the year. Targets and financial allocations for 1991-92 and for the Eight Plan as a whole have been proposed keeping in view the directions of 80% step up in outlay for the Eight Plan period as a whole and the increasing trend of per capita investment.

ALLIED PROGRAMMES OF IRDP :

1. Under TRYSEM, necessary number of rural youths are being trained. The performance during 1989-90 was that 33.86% of the persons trained belonged to the Scheduled Castes/Scheduled Tribes and 34.91% were women. It may be worthwhile to mention here that 64% of the youths trained during the year were actually employed subsequently. Similarly 76.05% of the women trained were subsequently employed.

2. The programme of D.W.C.R.A. which is a sub-scheme of I.R.D.P. is being implemented in six districts of this State namely, Bankura Purulia, Jalpaiguri, South 24-Parganas, North 24-Parganas and Hooghly. It is expected that the districts would arrive at the expected saturation point of target at the end of the current financial year.

2. Programme of the Development & Planning Department.

I.R.E.P. (Integrated Rural Energy Programme) in 8th Plan :

The IREP Programme started in the state during 7th Plan. Development & Planning Department is the nodal department for this programme which encompasses implementation of both conventional energy inputs and non-conventional energy system in identified blocks to evolve and integrate energy environment. In the 7th Plan and programme was initiated in seven selected blocks. The minimum target for the 8th Plan is one block in each district i.e. 16 blocks. The main components of the programme in the 8th Plan will be as under :

- 1) Developing institutional mechanism.
- 2) Training and demonstration.
- 3) Project preparation for the new blocks to be covered and finalisation of the projects where preliminary survey has already been taken up.
- 4) Provisional financial incentives for installation of energy devices with special emphasis on energy conservation and environment protection.

Stress is to be laid for devising a suitable mechanism at the State-level, District-level and the Block-level to ensure people's participation for implementing IREP programme. Priority is to be accorded to income generating activities in order to improve the quality of life of the rural people. Devices based on commercial and conventional sources of energy will have to be promoted apart from the non-conventional inputs like photovoltaic systems, solar energy Thermal Devices etc., in order to achieve an integrated energy rich pattern in the selected blocks which would serve as models for the other blocks in the State which will have to be covered gradually.

A provision of 100 lakhs has been proposed in the 8th Plan outlay for IREP Programme of Development & Planning Department. In the event programme picks up fast more than one Block in each of the 16 Districts may also be incorporated in later stage during 8th Plan period.

3. Programme of the Cottage & Small Scale Industries Department.

(a) I.R.E.P.

The Scheme is intended to provide additional support to the popularisation of Bio-gas Plants & Solar Cooker and Solar Thermal Devices towards the use of non-conventional energy. Six blocks have been covered and one more block will be taken during Eighth Five Year Plan. During 1985-86, 175 nos. of Bio-gas Plants and 547 nos. of other Solar Devices were set up and during 1988-89, 150 nos. of Bio-gas and 540 nos. of other Solar Devices have been set up. The target for 1989-90 towards Bio-gas Plants and other Solar Devices are 300 nos. and 5740 nos. respectively.

The proposed outlays for 8th Five Year Plan will be utilised for setting up of 1800 nos. Bio-gas Plants, 3000 nos. of other Solar Devices and 350 nos. of Bio-gas Plants, 600 nos. of other Solar Devices respectively. In 1991-92 the target will be fixed later on.

(b) Jhargram Programme :

This is a new scheme to be taken up during 8th Five Year Plan, as per guideline of Govt. of India. 29 villages are to be covered under this Scheme of Government of India.

Additional subsidy on Bio-gas, Solar Cooker, on other Solar Thermal Devices are to be borne under the State Plan Scheme titled as 'Urjagram'.

The proposed outlays for 8th Five Year Plan are to meet up the cost of additional subsidy on the above items. The proposed target for 8th Five Year Plan and Annual Plan 1991-92 are respectively as 2800 Bio-gas Plants, 3000 other Solar Devices and 400 Bio-gas Plants, 500 other Solar Devices.

RURAL EMPLOYMENT

National Programme.

Programme of the Rural Development Deptt.

J.R.Y.

For the Seventh Plan period the approved plan outlay for NREP (State share) was Rs.100 crore. In fact, the Programmes of NREP and RLEGP were terminated at the end of 1988-89 and the new Programme of Jawahar Rozgar Yojana (JRY) was launched in 1989-90 with Central and State shares in the ratio 80:20. Over the period 1985-89, actual plan expenditure on account of NREP (State share) was Rs.82.62 crore and, on utilization of this and the matching Central share, total employment generation stood at 662.16 lakh mandays. In addition, over this period, an additional 604.01 lakh mandays were created on account of RLEGP. This was, of course, a Central sector programme fully centrally funded and expenditure on this account was outside the plan. The target for 1989-90

the total allocation (State share) on account of JRY was Rs.43.22 crore and actual plan expenditure amounted to Rs.43.14 crore. With utilisation of this amount, employment generation to the tune of 551.81 lakh mandays could be achieved. The over-all employment generation during the Seventh Plan on account of NREP and JRY taken together was 1220.97 lakh mandays which was 96.68% of the over all revised Seventh Plan target. For 1990-91, the approved plan outlay (State share) for JRY is Rs.41.24 crore and the current year's employment generation target is 652.07 lakh mandays which is expected to be achieved. Proposed outlay for 1991.92 and the target of employment generation have been proposed keeping in view instructions of the Development and Planning Department regarding step up of the outlay. However, for the Eighth Plan proposal as a whole, necessary step ups on the present level of allocation can not be accommodated within the ceiling of 80% step up over the Seventh Plan period and, hence, a slightly higher outlay of Rs.251.77 crore have been proposed for the Eighth Plan.

LAND REFORMS

Programmes of the Land & Land Reforms Department.

1. (a) Integrated Scheme on Land Reforms Administration.
- (b) Plan Schemes on Public Works and other construction works.
- (c) Setting up of a State Level Analysis, Research and Training Institute under Directorate of Land Records and Surveys.
- (d) Introduction of Three year Diploma Course in Survey Engineering in Bandel Survey Institute.
- (e) Setting up of Land Tribunals.
- (f) Constitution of State Land Corporation.
- (g) Preparation and Distribution of Krishak Pass Book.
- 1.1 Under Integrated Scheme on Land Reforms we have -
 - (i) Preparation & Division of Record of Rights.
 - (ii) Imposition of ceiling on holding of land including imposition of ceiling on Urban Property.
 - (iii) Acquisition of land for various purposes. Acquisition of Homestead land.
 - (iv) Preparation of compensation Rolls and other allied works thereto.
 - (v) Settlement or utilisation by the state of any land vested in it or acquired by it for proper distribution and use.
 - (vi) Protection of rights and interests of bargadars in land.
 - (vii) Protection of rights and interests of scheduled Tribes on their lands.
 - (viii) Regulation in the matter of use of land according to its classification.

1.2 Under Land Reforms Administration -

We have set up a 'Four-tier' machinery in each district of the State in the following manner :-

(i) At each district level the office of the District Land and Land Reforms Officer has been set up by integrating the District Settlement Office and the Land Management Wing of the Collectorate. Number of such offices is 17.

(ii) At each sub-division level the office of the Sub-divisional land and Land Reforms Officer, has been set-up by Amalgamating the settlement chare office and the office of the sub-divisional Land Reforms Officer. Number of such offices is 51.

(iii) At each Block level the office of the Block land and Land Reforms Officer has been set up by integrating the Land Reforms Circle Office, centralised Halka Camp, Settlement Circle Camp and Settlement B and C Camp. Number of such offices is 336.

(iv) At 3305 Gram Panchayats, 3305 offices of Revenue Inspectors have been set up. The offices have newly been set up under integrated scheme and by way of setting up of those offices the benefits of land reforms Administration have been extended to the door-steps of the rural masses.

2. Land Reforms-Progress made in the State :

(A) REVISION OF RECORD-OF-RIGHTS :

State of Work.	Unit.	Total Programme.	Work done upto 30.6.90.
i) Khanapuri Bhujarath.	Mouja	41758	38480
ii) Attestation.	Khatian	4,56,30,628	2,42,94,394
iii) Draft Publication.	Mouja	41758	31609
iv) Final Publication.	Mouja	41758	22752

(B) DETECTION AND VESTING OF CEILING SURPLUS LAND :

(a) Total Land vested upto 30.6.90 out of which.	28,77,962.57 acres
(i) Agricultural Land	12,60,810.82 acres
(ii) Non-agricultural land	5,84,103.52 acres
(iii) Forest Land	10,05,058.31 acres
(iv) O t h e r s	27,989.92 acres
(b) Area of vested agricultural land taken possession upto 30.6.90.	11,43,222.26 acres
(c) Area of agricultural land distributed upto 30.6.90.	8,99,184.22 acres

(d) Number of beneficiaries of vested agricultural land upto 30.6.90 out of which	18,91,027 acres
(i) Persons belonging to Scheduled Caste	6,99,680 acres
(ii) Persons belonging to Scheduled Tribe	3,59,295 acres
(iii) Other castes	8,31,896 acres
(iv) Institutions/Societies/Others	156 acres

In the 8th Plan, a target of resting 1000 hectares of land has been set up. If the implementation of the West Bengal (3rd amendment) Act can take off soon. The target is likely to be comfortably exceeded.

(C) IDENTIFICATION AND REGISTRATION OF SHARE CROPPERS :

Names of share-croppers recorded in the Record-of-Rights upto 30.6.90 of which -	14,23,450
(i) Number of persons belonging to Scheduled castes.	4,22,945
(ii) Number of persons belonging to Scheduled Tribes.	1,70,326
(iii) O t h e r s .	8,30,179

(D) PROVIDING HOUSE SITES FOR LANDLESS AGRICULTURAL LABOURERS ETC. :

Persons provided with House sites upto 30.6.90 of which -	2,50,816
(i) Number of persons belonging to Scheduled caste.	1,06,276
(ii) Number of persons belonging to Scheduled Tribes.	47,876
(iii) O t h e r s .	96,664

3. Plan Schemes on Public Works and Other Construction Works :

(a) Construction of new circuit houses and renovation of a few old ones.

(b) With introduction of Integrated set up of Revenue Administration it has become necessary to set up 17 district level, 51 Sub-division level 336 Block level and 3305 Panchayat level offices. Out of these, it has been estimated that 10 district level, 20 sub-division level 105 Block level and nearly 2000 RI Office Buildings are to constructed in a phased Manner. With ever increasing cost of construction material, these schemes constitute the bulks of the construction programme.

4. Setting up of a State Level Analysis Research & Training Institute.

The aim for setting up of the Institute will be as follows -

- (i) Analysis of data on Land Records and Surveys.
- (ii) Collection of information from other states of the country and also from other countries on Surveying and issues relating to Land Reforms.
- (iii) Research on -
 - (a) New methods of Survey.
 - (b) Speedy up-dating of maps and Land Records.
 - (c) Methodology of preservation of maps and records.
 - (d) Computerisation of Land Records & Surveys data.
- (iv) Study on the history of land system and Survey.
- (v) Training of field staff on modern techniques of Surveying.
- (vi) Training of personnel on preparation of Land Records.
- (vii) Re-orientation training of Govt. Employees and Members & Public Bodies on Land Reforms.
- (viii) Study of the Socio-economic impact of different Land Reforms measures.
- (ix) Organising seminars on Surveying & Land Reforms.
- (x) Publication of papers on various issues on Surveying & Land Reforms.

5. Introduction of Three year Diploma Course in Survey Engineering in Bandel Survey Institute.

6. Setting up of Land Tribunals :

The Land Reforms programmes launched by the State Government is being badly delayed due to intervention of courts. Due to interim orders issued by the various courts, Govt. is not in a position to distribute nearly 1.8 lakh acres of vested land amongst the land-less and land-poor cultivators.

To enable the Government to tide over these difficulties, it has been decided to set up a Special Land Reforms tribunal at the State Level and Regional Land Reforms Tribunals at the district level under Article 323B of the Constitution of India. This will help in quick adjudication of cases arising out of Land Reforms and ceiling of Urban Properties and all matters ancillary thereto.

7. Constitution of State Land Corporation or Regional Land Corporation. Due to existence of "Bargadars" it is not generally possible for a raiyat to sale his land in the open market in the hour of his need. Provisions have been made under section 21C of the West Bengal Land Reforms Act to solve the problem by way of Constituting State Land Corporation or Regional Land Corporation. The corporation shall have the power to acquire, hold and dispose of property, to advance funds, to enter into contracts, to institute and defend suits, cases and all other legal proceedings and

to do all things necessary for the purpose of carrying on its object.

The main object of the corporation will be to give necessary finance as advance to recorded bargadars holding not more than one standard hectare of land to purchase the land from the land owner who being in distress, wants to sale the land but cannot do so due to existence of recorded bargadar in his land. This will not only enable small land owners to sale their land in distress at a reasonable price, but also enable the bargadar of such to be its owner in course of time.

8. Preparation and Distribution of Krishak Pass Book :

Revisional Settlement Operations under Land Reforms Act are going on in all the districts of this State. Under Section 51(5) of WBLR Act a separate Khatian is being prepared for each raiyat in respect of all his lands situated in a particular Mouja. But to have a proper idea about the total land that is being possessed by a land owner on the basis of this updated records, it is essential to prepare 'Krishak Pass Book' where details of all the lands possessed by the raiyat are to be recorded. Like Bank Pass Book it will be continually up-dated whenever a land is inherited, mortgaged, transferred etc. It will not only make the revenue administration prompt and methodical, but in one hand help detection of ceiling surplus land and in other hand make it easier for a raiyat to get ban loan etc., in the hour of his need.

OTHER RURAL DEVELOPMENT PROGRAMME

Community Development.

Programmes of the Rural Development Department (C.D.Branch):

This sector consists of 3 component namely (a) Strengthening of Block Organisation including providing vehicles to the Block, (b) State Institute for Rural Development, & (c) Strengthening and promotion of Mahila Mondals.

a(i) Strengthening of Block Organisation :

Staff support : It will be necessary during the 8th Plan period to create a Monitoring Cell for the Blocks so that they can cope with the work of monitoring of implementation of various department schemes. This has become essential as the Block office are facing difficulties in monitoring the development work in the rural areas which is progressively increasing.

a(ii) Providing vehicles to the Block Development Offices :

Out of 341 Blocks in the State, 109 Blocks are yet to be provided with a vehicle. Owing to paucity of fund, it will not be possible to provide vehicle to all the 109 Blocks. They will be provided vehicles in a phased manner.

b. State Institute for Rural Development :

The orientation and study centre at Kalyani has been upgraded as State Institute of Rural Development for imparting training in rural development on sharing of expenditure of 50:50 between the State Government and the Government of India. But the Government of India has since discontinued the sharing of expenditure. It is urged upon the Central Government to share the expenditure in such vital items like training.

c. Strengthening and promotion of Mahila Mondals (Samitis) :

The scheme envisages establishment of Mahila Samitis in each Gram Panchayat area @ Rs.1410/- per Samity and revitalisation of the existing Mahila Samitis.

d. Administrative Buildings in C.D. Blocks :

So far Administrative Buildings have been completed in 203 Blocks and funds have been allotted for construction of Administrative Buildings in another 32 Blocks. In the remaining 106 Blocks Administrative Buildings are yet to be constructed. The work is proposed to be done in phased manner. Many of the already completed buildings are yet to be electrified and this work is also proposed to be done in phased manner. Priority will be given to Blocks located in inaccessible areas.

Panchayati Raj.

Programme of Panchayat Department :

A. Under 'State Plan' the following schemes are proposed.

- i) Construction of buildings for Panchayati Raj Training Centres.
- ii) Training of Panchayat Functionaries.
- iii) Grants-in-Aid to Panchayati Raj Bodies for augmentation of resources incentive grant.
- iv) Programme/Schemes of visit, visualisation, exhibition and evaluation of the working Panchayats.

B. District Plan :

i) Strengthening of implementation machineries for Panchayats. The scheme are to provide vehicles to Panchayat Samitis and Zilla Parishads and the construct quarters for officers and staff.

ii) Grant for construction for Panchayat Ghars (Office Buildings of Gram Panchayats).

iii) Construction/expansion of Panchayat Samity and Zilla Parishad office buildings.

C. Monitoring and Reporting System.

III. SPECIAL AREA PROGRAMME

Hill Areas

Programme of the Development & Planning Department

a) Accelerated Development of Hill Areas

With a view to accelerating the all-round development of the backward hill areas of Darjeeling district, the programme for Accelerated Development of Hill Areas of this State has been effectively been in operation from the beginning of Fifth Plan period. Of late, after promulgation of Darjeeling Gorkha Hill Council Act, 13 new mouzas of Siliguri Sub-division of the district have also been included within the above area.

The programme is implemented on the basis of a sub-plan which is funded both from the Special Central Assistance and the State Plan budget. In the State Plan budget, apart from the flow of fund on other departments, and additive assistance is provided by the Development & Planning Department for bridging the critical gaps and providing linkages between different hill development schemes taken up from State Plan outlay of other departments and the Central Assistance additive.

During the 7th Plan period, the agreed outlay of this additive assistance provided by the Development & Planning Department was Rs. 500.00 lakhs, but the actual expenditure on the basis of annual plans amounted to Rs. 409.45 lakhs upto 1988-89. The provision for 1989-90 on this account is Rs. 123.00 lakhs. The agreed outlay of Central assistance from the 7th Plan period was Rs. 4455.00 lakhs against which the actual allocation was Rs. 4129.95 lakhs upto 1988-89. The approved outlay of Central Assistance for 1989-90 is Rs. 1875.00 lakhs. The approved outlay of central Assistance for 1990-91 is yet to be finalised.

According to the provision of Darjeeling Gorkha Hill Council Act, the Council, which is now in office, is responsible for formulation of the Integrated Development Plan in respect of the Hill Area. Pending formulation of the detailed proposals for the Annual Plan 1990-91 by the Darjeeling Gorkha Hill Council, the quantum of additive assistance to be provided by the Development & Planning Department for the accelerated Development of Hill Areas is proposed to be Rs. 135.00 lakhs. In 1991-92, Hill additive flow will be to the tune of Rs. 142.00 lakhs.

Other Hill Areas

Programme of the Development & Planning (Town & Country Planning) Department

The Department has set up Mirik Planning Authority in the district of Darjeeling and Jaigaon Planning Authority in the district of Jalpaiguri in North Bengal. Preparation of existing land-use-plan and register and their publication is nearing completion. Works of preparation of outline development Plan for each of the two areas viz. Mirik and Jaigaon has also made much progress. A number of development schemes like improvement of roads, water supply and drainage, construction of hospitals, community centres, parks etc. have been completed.

OTHER SPECIAL AREA PROGRAMMEBackward Areas

1. Programme of the Development & Planning Department
 - a) Development of North Bengal

In addition to sectoral programmes undertaken by the various Depts special provision is being made in the Annual Plans of the State since 1973-74 for taking up schemes relating to the improvement of roads, bridges drainage and other infrastructural facilities, especially in the rural area of the five backward districts of North Bengal. In Darjeeling district, only the area outside the Hill Areas of the district is taken into consideration as hill areas are already covered by the accelerated Hill Areas Development Programme. The outlay under North Bengal Development Programme is generally distributed among the five districts of North Bengal on population basis.

It is proposed to continue this programme in the rural areas of the backward districts during the Eight Plan.

Development of Jhargram Region.

The Jhargram-Sub-division is decidedly one of the most backward areas in West Bengal. This sub-division of Midnapore district comprises eight blocks covering an area of 1185.29 sq. miles with a population of 7,45,118 (according to 1981 census) of which 29.4% are tribals and 14.1% belong to Scheduled Castes.

2. Special budget provision is being made by the State Government from year to year for integrated and accelerated development of the specially backward Jhargram Sub-division by filling in the critical gaps in the sectoral allotments by other Departments. Such activities are formulated and implemented through the Jhargram Development Board which is headed by the Minister of State of Jhargram Affairs. Its objective is the all-round socio-economic development of this especially backward area.

3. The schemes that are being implemented with the funds provided by the Government under this programme include Minor Irrigation Schemes like River Lift Irrigation, Construction of Bundh, Jore Bundh, Field Channel, Excavation of Canals, Improvement and construction of Roads, Bridges and Culverts, Repair, Reconstruction and Renovation of School Buildings, Promotion of village and Small Scale Industries and also promotion of different types of socio-economic and cultural activities in the sub-division. These schemes are designed for better utilisation of natural resources as well as providing scope of employment for the local people. During the Seventh Five Year Plan (1985-90) the agreed outlay for this programme was Rs. 400.00 lakhs and the actual expenditure was Rs. 443.80 lakhs.

4. In the year 1990-91, there is a plan outlay of Rs. 125.90 lakhs for the programme and it is proposed to utilise this amount in the following sectors according to allocation indicated against each :

<u>Sectors</u>	<u>Amount (Rs. in lakhs)</u>
1. Minor Irrigation	56.00
2. Roads	50.90
3. Education	9.00
4. Industry	10.00
	<u>125.90</u>

5. Jhargram has multifarious problems. All these problems cannot be comprehensively tackled with the limited resources placed at the disposal of the Jhargram Development Board from year to year. However, in conformity with the objective and keeping the constraint of resources in view a total Plan outlay of Rs. 720.00 lakhs on the Development of Jhargram Region is proposed for the Eighth Five Year Plan (1990-95), out of which an amount Rs. 132.20 lakhs (on the basis of 5% increase over the current year's outlay) may be provided for the Annual Plan 1991-92.

6. In the matter of Implementation of Development Schemes in Jhargram Region during the 8th Plan period, the following objectives in accordance with the guidelines issued by the Planning Commission will be kept in view :-

a) The entire outlay on this programme will be spent in the rural areas.

b) As Jhargram Sub-division has considerable number of tribal population (29.4%), 50% of the plan outlay will be utilised for schemes benefiting these people. Another 20% of outlay is also proposed for utilisation on schemes benefiting scheduled caste population (14.1%).

c) As the major thrust of the 8th Plan will be on employment generation, labour-intensive schemes in preference to capital-intensive schemes will be taken up. Care will also be taken to ensure greater participation by women and other disadvantaged groups of people in such employment-oriented schemes.

d) With the introduction of decentralised planning in this state during the 7th Plan period, the preparation of the Development Plan of Jhargram Area as well as its implementation is being routed through the Block Planning Committees to ensure greater participation of the local people. This approach will also be followed during the 8th Plan Period.

e) The environment aspect, particularly maintenance of ecological balance will also be kept in view at the time of preparation and implementation of development schemes in Jhargram Region.

Development of Sundarban

The Plan proposal of Sundarban Development Board has been prepared keeping in view of the proposed Phase - II project profile of Sundarban Development Project.

The activities undertaken by Sundarban Development Board mainly deal with Area Development Programme.

The area of operation of the Board is confined in only 19 Sundarban Blocks-6 Blocks of North 24-Parganas and 13 Blocks of South 24-Parganas. The schemes of the Board are as selected that the maximum benefits of the schemes flow to weaker sections, specially Schedule Caste.

Till December 1989 the Board executed the time bound IFAD-Assisted Sundarban Development Project in which the activities of Sundarban Development Board have so far been restricted in (i) creation of sweet water reservoir through excavation and re-excavation of derelict channels/pond and closures, (ii) improvement of drainage system through construction of H.P. Sluices, Sluices, Maindrain etc. (iii) in improving village transport system through construction of B.P.Road, Culverts (iv) creation of brackish water fish culture, Social Forestry and agricultural support service during dry season.

For the Annual Plan 1990-91 onwards and 8th Five Year Plan, new programme elements have been included and these are Rural Water Supply, Crop husbandry, Animal Husbandry and Veterinary Services, Tourism Cottage and Small Scale Industries. The Schemes will be selected giving the weightage for weaker section mainly schedule caste people.

The Phase-II Project profile of Sundarban Development Project is under active consideration of Government of India for external assistance. The Phase-II of the project may be financed by FRG for which considerable progress has been made.

Programme of the West Bengal Comprehensive Area Development Corporation.

1. The wide-ranging activities of the WBCADC include Minor Irrigation facilities, agricultural supply of agricultural input credit, storage and marketing facilities, services centres, consumer stores, pisciculture, animal husbandry, rural industry, adult and non-formal education, child and woman care, health and sanitation programmes - specially economic programmes for the poor women etc. For carrying out these activities WBCADC incurred an expenditure of Rs. 1518.16 lakhs during the 7th plan period (1985-90).

2. The Review Committee set up to redefine the thrust areas of WBCADC activities has given recommendations which are in keeping with the objectives of the 8th Plan (1990-95) as circulated by the Planning Commission; these thrust areas during the 8th Plan period will be in the following fields :

(i) Water Management :- This will increase the irrigated command area, leading to higher agricultural productivity and production, higher cropping intensity, generation of employment (mainly to agricultural labourers), harnessing water resources and introduction of environment-friendly cropping patterns;

(ii) Seed Multiplication Programme :- In conjunction with the water Management Programme, this will enable production of quality certified seeds to meet the deficit in the State, particularly in respect of pulses, oilseeds, vegetables and jute, thus again leading to higher productivity, ensuring the returns from such production to the rural areas of the State which is quite in keeping with the objectives for the 8th Five Year Plan;

(iii) Pilot Project on Coffee Cultivation :- This integrated scheme, comprising cultivation of Coffee, spices and other crops in the Terai Region of West Bengal, would serve the following objectives - generation of employment and income to small and marginal farmers, mainly of the SC & ST community utilisation of marginal and fallow lands and prevention of soil erosion, spices cultivation, in the long run, also has tremendous export potential which, if properly harnessed in the coming years, can augment the country's scarce foreign exchange resources.

3. Applications of research and development in agriculture and allied activities and maximising such application through farmers' training and extension services would also form a significant proportion of CADC activities during the 8th Plan.

4. In addition to these programmes, other types of development programmes including basic needs programme, farmers' service societies, small scale industries, upgradation of livestock and women's economic development programme will also be taken up during the 8th Plan period with the aim of development of rural areas as well as generation of rural employment in these areas.

5. Apart from C.A.D.C's own outlay it is also expected that CADC will receive about Rs. 10 crores over the 8th Plan period to implement allied programmes in its project areas, especially now that CADC is intimately involved in the Planning process at the District and Sub-district levels.

IV. IRRIGATION & FLOOD CONTROL

MAJOR AND MEDIUM IRRIGATION

Programme of the Irrigation & Waterways Department.

On the basis of the tentative outlay of Rs.99 crores as fixed by State Development and Planning Department for the Annual Plan of 1991-'92 the Irrigation sector is proposed to have an allocation of Rs.59.00 crores, along with seeking Central Assistance of Rs.16.00 Crores for Teesta Barrage Project. Also in respect of Eighth Five Year Plan a provisional outlay of 540 crores has been fixed by State Development and Planning Department out of which share for Irrigation sector is proposed at Rs.330.00 crores along with Central Assistance to be sought for Teesta Barrage Project to the tune of Rs.90.00 crores.

Top most priority about allotment of fund has been accorded to complete the major Project viz. Kangsabati Reservoir Project within the VIII Plan as well as most of on-going medium Irrigation Schemes. The order of priority for new Schemes come next.

Among the on-going Major Projects, Teesta Barrage Project Sub-stage-I, having international water implications, is a scheme of National importance and warrants speedy completion. The financial resources of the State being inadequate to meet this essential requirement, it has been proposed to lay special stress on the speedy completion of this Project with special Central Assistance to the tune of Rs.16.00 crores for 1991-92 and Rs.100.00 crores during VIII Plan period from Government of India as outright grant. Assistance of the Central Government is also sought for on the issue of getting early possession of forest lands needed for speedy execution of the Project. As per Inter-state Agreement Bihar will share apportioned cost for getting irrigation water from Mahananda Barrage of Teesta Barrage Project.

Subarnarekha Barrage Project, a new Major Irrigation Project included in Eighth Five Year Plan for implementation at an estimated cost of Rs.227.00 crores is designed to cater an ultimate irrigation potential of 130 thousand hectares in the district of Midnapore. Clearance from the Ministry of Environment, Government of India, which is yet to be obtained is required to be expedited by the same since the Annual Plan provision to the tune of Rs.8.00 crores and Rs.10.00 crores for 1990-91 and 1991-92 respectively are being made for this Project. No headway is possible without obtaining environmental clearance from the Government of India. The provision of fund is inclusive of apportionment of cost to be given to Bihar in connection with Chandil dam.

Aimed at maximizing benefits from the existing Major Projects, the Scheme on Modernisation of Kangsabati Project estimated to cost Rs.311.00 crores is in an advanced stage of approval and most likely to be funded by World Bank. The formulation of Modernisation Schemes for other existing Major Irrigation Projects in the State are underway.

There are other important new Major projects likely to be taken up within the Eighth Plan period such as Darakeswar-Gandheswari Project, Ajoy Reservoir Project and Upper Kangsabati Project.

The existing Major Irrigation Projects based on 40 hectares block water management unit has to be revamped by lowering, the block into 5-8 hectares block for better utilisation of Irrigation water, so fund provision is made under "Improved Water Management (including National Water Management)" for this purpose.

Besides, there are 18 on-going medium irrigation Projects in the Western part of the state which will be completed during 8th Five Year Plan.

Target of Irrigation Potential in 1991-92 vis-a-vis Eighth Five Year Plan (1990-95)

	<u>All figures in '000 ha.</u>	
	<u>Potential Created</u>	<u>Potential Utilised</u>
Upto the end of VII Five Year Plan.	1245	1133
Target for VIII Five Year Plan.	220	252
Anticipated achievement (1990-91)	20	22
Target for 1991-'92	26	37

MINOR IRRIGATION

Programme of the Minor Irrigation Department.

1. Progress of 7th Plan :

The 7th Five Year Plan envisaged a financial outlay of Rs.14500.00 lakhs against a physical target of 425.00 thousand ha. The potential created upto 6th plan was 1577.85 thousand ha. out of which 621.47 thousand ha. came from ground water and 956.38 thousand ha. from surface water. An outlay of Rs.34608.00 lakhs and physical target of 450 thousand ha are proposed for 8th Five Year Plan. The physical and financial targets and

and achievements are given below :

Physical ('000 ha.)

Upto 6th Five Year Plan (1980-85) Achievements	7th Five Year Plan (1985-90) Targets.	Actual Achievement 7th Plan	1990-91 Targets	8th Five Year Plan (1990-95) Target proposed	1991-92 targets proposed	
Ground Water	621.47	350.00	727.85	75.00	320.00	75.00
Surface Water	956.38	75.00	190.75	25.00	130.00	25.00
	<u>1577.85</u>	<u>425.00</u>	<u>918.60</u>	<u>100.00</u>	<u>450.00</u>	<u>100.00</u>

Financial (Rs. in lakhs)

7th Five Year Plan Approved outlay	Actual Expenditure 7th Plan	Anticipated Expenditure 1990-91	8th Five Year Plan 1990-95 proposed	Annual Plan 1991-92 proposed
14500.00	11156.77	5562.00	34608.00	6200.00

2. Programme for 8th Five Year Plan

The 8th Plan outlay fixed for different programmes under minor irrigation are shown below :

	7th Plan Approved outlay (Rs. in lakhs)	8th Plan (1990-95) proposed outlay (Rs. in lakhs)	Annual Plan 1991-92
i) Minor Irrigation Programme under Crop Husbandry Sector	1500.00	2931.00	586.00
ii) Minor Irrigation Programme	12100.00	30527.00	5439.00
iii) Command Area Development	900.00	1150.00	175.00
	<u>14500.00</u>	<u>34608.00</u>	<u>6200.00</u>

The programme are detailed below :-

(1) Crop Husbandry :

Under the Centrally Sponsored Scheme for assisting small and marginal farmers for increasing agricultural production, an outlay of Rs.2931.00 lakhs for 8th Five Year Plan and Rs.586.00 lakhs for Annual Plan 1991-92 are proposed as State share.

During the 7th Plan as per Government of India norms, fund was provided @ Rs.3.50 lakhs per Block for the 335 Blocks of the State. From 1988-89, S.F.P.P. was launched and additional fund was provided for 7 districts initially (188 Blocks) and later extended to 12 districts covering 220 Blocks. However, during 8th Five Year Plan normal fund of Rs.3.50 lakhs per Block has been considered. During 1989-90 expenditure amounting to Rs.627.49 lakhs was

incurred and 24700 nos. of shallow tubewells/dugwells were installed. During 1991-92 the no. of shallow tubewells/dug wells proposed to be installed is 20,000. It is mentioned that the programme is implemented through District Rural Development Agency.

(ii) Minor Irrigation Programme

The total outlay during 8th Plan for Minor Irrigation Programme is 30527.00 lakhs including both Normal Programme and West Bengal Minor Irrigation Project. The details are shown below :

1. Normal Programme :

- A) Surface Water : An outlay of Rs.4795.10 lakhs for 8th Plan and Rs.694.60 lakhs for Annual Plan 1991-92 are proposed for the development of surface water. The provision has been made for -
- a) execution of the water transmission arrangements of RLI schemes and conversion of diesel operated RLI schemes into electrically operated ones,
 - b) completion of the on-going surface flow irrigation and drainage schemes and taking up new ones, and
 - c) Boro Bundhs.

The progress and programme in respect of surface lift irrigation and surface flow irrigation and drainage schemes are mentioned hereunder :

a) R.L.I. : The total number of RLI schemes installed upto 1989-90 are 3016 out of which work of 902 nos. of schemes have been completed in all respects. The water transmission arrangements to remain incomplete at the end of the 7th Plan will be about 700 nos. During 8th Plan 200 no. will be taken up under West Bengal Minor Irrigation Project and balance 500 will be taken up under normal programme. About 1750 RLIs will remain without energisation at the end of 7th Plan. During 8th Plan 200 no. will be energised under West Bengal Minor Irrigation Project and 1150 no. under normal programme. During 1991-92, 70 WTA and 100 energisation in RLI installations will be taken up under normal programme.

b) Surface Flow Irrigation & Drainage Schemes :

164 no. of surface flow and drainage schemes have been completed in all respects upto 1989-90. It is expected to complete 8 no. out of 14 no. on-going schemes during 1990-91. The spill over cost for the remaining 6 no. schemes will be approx. Rs.30.00 lakhs. An outlay of Rs.500.00 lakhs for 8th Plan and Rs.80.00 lakhs for Annual Plan 1991-92 are proposed. About 30 no. of new schemes are proposed to be taken up during 8th Plan specially in the districts of Purulia, Bankura and Midnapore and also Jhora Irrigation Schemes in the hills of Darjeeling District. The surface flow of a number of rivers in Purulia and Bankura districts dry up during lean months. As a result RLIs

installed on those rivers cannot irrigate during dry season. It is proposed to construct a few sub-surface dams on those rivers during 8th Plan.

(c) Boro Bundhs : In some low-laying areas of Hooghly and Howrah districts no cultivation is possible during the rainy season. But the cultivators traditionally raise both Rabi and Boro Crops in a big way by constructing Boro Bundhs across the rivers. An outlay of Rs.325.00 lakhs for 8th Plan and Rs.60.00 lakhs for Annual Plan 1991-92 are proposed.

(B) Ground Water :

(a) Water Investigation : A provision of Rs.300.00 lakhs has been proposed for survey and investigation, machinery and equipment for State Water Investigation Directorate for 8th Plan and Rs.50.00 lakhs for Annual Plan 1991-92. The S.W.I.D. has completed the Minor Irrigation Census during 1988-89. The use of ground water under State Sector and also credit-linked installation under Private Sector is being made with the approval of SWID. During 8th Plan, it is proposed to carry out micro-level survey and water balance study, basinwise as well as sub-basinwise so as to meet the anticipated rise in demand for more water.

(b) Investigation and Planning of Surface Flow Irrigation Schemes :

An outlay of Rs.20.00 lakhs for 8th Plan and Rs.3.00 lakhs for Annual Plan 1991-92 is proposed for the investigation and Planning of Surface flow irrigation and drainage schemes. About 30 no. of schemes are proposed to be undertaken for planning and investigation during 8th Plan.

(c) Implementation of Ground Water Schemes :

An outlay of Rs.104.90 lakhs for 8th Plan and Rs.14.40 lakhs for Annual Plan 1991-92 is proposed. During 1991-92 fund will be required for the residual work of 200 D.T.W. Programme, residual of D.T.W.-conversion, re-drilling of defunct D.T.W.s and revitalisation of some State-owned Shallow Tubewells.

(C) General :

An outlay of Rs.496.00 lakhs for 8th Plan and Rs.50.00 lakhs for Annual Plan 1991-92 is proposed for Direction and Administration, Optimisation, construction of stores, buildings and rest houses and use of non-conventional energy by installing hydrams, windmills and solar pumps etc.

II. West Bengal Minor Irrigation Project with IDA assistance (Credit No.1619-IN) :

West Bengal Minor Irrigation Project envisaged installation of 1200 Heavy Duty Tubewells (H.D.T.W.), 400 Medium Duty Tubewells (M.D.T.W.), 5400 Shallow Tubewells (S.T.W.), 1800 Low Capacity Deep Tubewells (L.D.T.W.), 10,000 Dug Wells and modernisation of 200 River Lift Irrigation Schemes at a total cost of Rs.15600.00 lakhs approximately. Project agreement was

signed on 27th September, 1985 and became effective from 20th December, 1985. The terminal date for the project as per the Agreement was March, 1991.

Due to several reasons the work could not be started properly during the first two years of the project. The work has, however, started in full swing since February, 1988. A World Bank Mission visited the State for mid term review of the project during 17/7/89 to 20/7/89. Project estimate has increased considerably due to change in S.D.R./Rupee Exchange rate from Rs.11.00 per S.D.R. to Rs.20.5 per S.D.R. From Rs.19600.00 lakhs, it has gone upto Rs.29320.00 lakhs. Consequently, there has to be change in magnitude of existing project components and additional works are to be taken up to absorb the full credit amount. A tentative revised implementation schedule has been drawn up during the discussion with the World Bank Team considering that the project period will be extended for another 3 years and the terminal date would now be March, 1994. The formal approval of the World Bank, is, however, yet to be received.

The revised project size includes installation of additional 100 Medium Duty Deep Tubewells, 1140 Low Capacity Deep Tubewells, drilling of 1140 tubewells in place of 100 defunct deep tubewells and modernisation of additional R.L.I. schemes. Out of total of Rs.29320.00 lakhs, Rs.26645.44 lakhs will be plan expenditure and the balance Rs.2674.76 lakhs will be the proportionate cost of Engineering Administration of the Directorate of Agricultural Engineering. The requirement of Rs.26645.44 lakhs includes Rs.6403.40 lakhs for energisation to be paid to the West Bengal State Electricity Board.

Against the total requirement of Rs.26645.44 lakhs under Plan fund, the expenditure upto the end of 7th Plan is Rs.4314.44 lakhs and the balance of Rs.22331.00 lakhs will be needed during the 8th Plan.

During 1990-91, the proposed outlay is Rs.3491.00 lakhs, out of which Rs.345.00 lakhs will be for energisation to be paid to the West Bengal State Electricity Board. During 1991-92 the proposed outlay is Rs.4210.00 lakhs.

Expenditure : Upto the end of 1989-90, the expenditure was Rs.4314.44 lakhs.

Reimbursement Claim :

Claims for reimbursement amounting to Rs.1863.00 lakhs have been sent to the Government of India upto March, 1990. It is anticipated that claims to the tune of about Rs.2400.00 lakhs will be preferred during 1990-91 and during 1991-92 the amount is estimated to be Rs.3600.00 lakhs.

Progress and programme of work against Revised Implementation
Schedule - West Bengal Minor Irrigation Project (Credit No. 1619-IN)

Item of Work.	Achievement upto '86-87	Achievement upto '87-88	Achievement upto '88-89	Achievement upto '89-90	Target upto March '91 as per revised Implementation Schedule.	8th Five Year Plan (1990-95) Target proposed.	Annual Plan (1991-92) Target proposed.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<u>H.D.T.W. :</u>							
i) Drilling & Development	8	31	191	366	640	834	310
ii) Pumphouse	-	-	6	134	375	1066	365
iii) Energisation	-	-	2	4	225	1196	295
iv) Pipe line	-	-	-	2	205	1198	295
<u>M.D.T.W. :</u>							
i) Drilling & Development	-	-	17	82	210	418	140
ii) Pumphouse	-	-	1	20	125	480	135
iii) Energisation	-	-	-	-	75	500	105
iv) Pipe line	-	-	-	-	70	500	105
<u>L.D.T.W. :</u>							
i) Drilling & Development	-	-	284	537	1310	2403	880
ii) Pumphouse	-	-	-	174	860	2766	810
iii) Energisation	-	-	-	12	533	2928	655
<u>S.T.W. :</u>							
i) Drilling & Development	-	25	397	1256	2690	4144	1620
ii) Pumphouse	-	-	6	523	1640	4877	1690
iii) Energisation	-	-	-	-	965	5400	1345
<u>R.L.I. :</u>							
i) Pumphouse	-	-	11	32	130	168	70
ii) Energisation	-	-	-	5	90	195	70
iii) Pipe line	-	-	-	1	50	199	80
<u>Open Dug Well :</u>	<u>300</u>	<u>1029</u>	<u>1705</u>	<u>2436</u>	<u>6000</u>	<u>7564</u>	<u>3000</u>

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III. Assistance to public sector and other undertakings :

West Bengal Minor Irrigation Corporation Ltd.

The State of West Bengal has fixed on uniform water rate of Rs.500/- per ha.m for supply of irrigation water from minor irrigation installations including those under Minor Irrigation Corporation. The Corporation thus can realise a higher rate as required under commercial compulsions. As such, there is no other alternative but to against the Corporation towards repayment of commercial borrowings. An outlay of Rs.2500.00 lakhs for 8th Plan and Rs.420 lakhs for Annual Plan 1991-92 is proposed for contribution to share capital and grants-in-aid. The Corporation has also undertaken the community RLI and D.T.Ws under the programme of assistance to small and marginal farmers.

COMMAND AREA DEVELOPMENT

Command Area Development Programme in the three major irrigation commands of Kangsabati, Damodar Valley and Mayurakshi will continue. An outlay of Rs.1150.00 lakhs (State share) for 8th Plan and Rs.175.00 lakhs (State share) for annual Plan 1991-92 is proposed.

The 8th Plan proposes construction of field channels covering 54.00 thousand ha. of command area and 16.00 thousand ha. during 1991-92. There are certain regions in the command areas where irrigation water does not reach and cannot be covered by flow irrigation with the construction of canals and channels. In order to cover these areas, deep tubewells, shallow tubewells and shallow tubewells with hand pumps are being installed with the subsidy available under the scheme. Such subsidy has been granted to individual small and marginal farmers and West Bengal State Minor Irrigation Corporation Ltd. These activities will continue during 8th Plan also.

The progress of the scheme in West Bengal, has, however, been restricted due to various constraints. The area covered by field channels during 7th Plan was 39.15 thousand ha. Some of the problems like small holdings are difficult to sort out. However, good services of Panchayats are being utilised and the Department is entrusting the work to Panchayats in preference to contractors as far as practicable. By and large, Panchayats are showing encouraging results in the matter of motivating the farmers and securing their co-operation.

3. S.C.P. and T.S.P.

Rs.8653.00 lakhs being 25.00% and Rs.2076.00 lakhs being 6.00% of the total outlay proposed are earmarked for Special Component Plan and Tribal plan respectively during 8th Plan.

Rs.1569.00 lakhs being 25.31% and Rs.382.50 lakhs being 6.17% of the total outlay proposed are earmarked for S.C.P. and T.S.P. respectively during Annual Plan 1991-92.

4. Monitoring :

The Plan performance is reviewed quarterly, half-yearly and annually by Directorate and Secretariat. There is a provision of Rs.7.00 lakhs for 8th Plan and Rs.1.00 lakh for Annual Plan 1991-92 for execution of a monitoring cell at State Headquarters of the Directorate of Agricultural Engineering.

5. Office Buildings :

Minor Irrigation Department has no office building or residential quarters for the officials. As volume of work has increased, offices have been established even at Block levels, but in rental houses only. This is causing inconvenience and litigations. So, it has been proposed to construct a few office buildings in the districts and residential quarters for Assistant Engineers at Block levels.

Similarly, Minor Irrigation Department has to store huge quantities of pumps and engines and spares, but these are stored in rental houses. It is necessary that some storerooms alongwith buildings are constructed. An outlay of Rs.200.00 lakhs for 8th Plan and Rs.5.00 lakhs for Annual Plan 1991-92 is proposed.

6. Institutional Finance :

During 8th Five Year Plan, minor irrigation potential of 200.00 thousand ha. will be created by institutional finance. Considering the cost of development @ Rs.10000.00 per ha., the likely institutional finance is Rs.13330.00 lakhs considering that on an average two-thirds will be loan component.

7. Energisation of Irrigation Pumpsets :

During 7th Plan all new ground water structures in the State sector were energised. The same procedure will be continued in 8th Plan. In the private sector also all attempts are being made to energise ground water structures as far as possible. A considerable number of diesel-run RLIs are proposed to be energised during 8th Plan.

8. Use of Non-Conventional Energy in Minor Irrigation :

Energy saving irrigation devices like hydrams, wind mills and solar pumps have been installed on pilot basis. Areas have also been identified for the installation of sprinklers and drip irrigation. An outlay of Rs.27.00 lakhs for 8th Plan and Rs.5.00 lakhs for Annual Plan 1991-92 is proposed.

9. Cell for Minor Irrigation Statistics :

The State Government has established a separate Cell for maintaining minor irrigation statistics in the State in its totality.

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FLOOD CONTROL AND DRAINAGEProgramme of the Irrigation and Waterways Department.

Except for the Himalayan foot-hills in the north, Chhota Nagpur plateau on the western fringe, the State of West Bengal is a flat plain criss-crossed with rivers and intercepted with many saucer-shaped depressions or basins subjected to flood-spill and water-logging during the monsoon period. The arterial system of river net work is served by the rivers Teesta, Jaldhaka, Torsha, Raidak and Sankosh in the north covering Darjeeling, Jalpaiguri and Coochbehar districts which is commonly known as Brahmaputra Basin. All other rivers serving the Ganga-Bhagirathi basin are almost covering the rest of West Bengal. The Ganga basin in the north is served by the Mahananda with its tributories Balason, Machi covering Malda and West Dinajpur districts. The districts Malda and Murshidabad lying each on either bank of the Ganga are severely affected by erosion and flood-spill by the river Ganga. The river Bhagirathi, an offshore of the river Ganga from its right bank is served by many tributories outfalling into it viz. Pagla, Bansloi, the Mayurakshi-system of rivers, the Ajoy, Jalangi, Churni within its non-tidal reach, serving the districts Murshidabad, Birbhum, Burdwan and Nadia. The tidal reach of the Bhagirathi in the outfall zone named as the Hooghly river is served by river Damodar, the Rupnarayan and the Haldi river. The Damodar in turn before its outfall into the Hooghly river is branched off by the Mundeswari and the Amta channel while the Rupnarayan is served by the rivers Silabati, Darakes and the old Cossye. The river Haldi is served by the Kaliaghye and the New Cossye. The Hooghly river system covers the districts Nadia (Partly), Hooghly, Howrah and Midnapore. The Subarnarekha basin constituted by the Subarnarekha river serve the western part of Midnapore district bordering the State of Orissa.

Almost every year, the State is ravaged by destructive floods bringing widespread disaster to the people inhabiting its flood prone areas, various problems like congestion of drainage, bank erosion complicate the flood situations. Flood problems in North Bengal, comprising the districts of Coochbehar, Jalpaiguri and Darjeeling are due to heavy precipitation leading to severe bank erosion, land-slides in the hills, bank spillings and change in river course. Flood problems of Central Bengal in the districts of Malda, West Dinajpur and Murshidabad, are due to inadequacy of drainage facilities. Bank spilling occurs along the Mahananda, Ganga, Bhagirathi and also severe bank erosions take place there along. Problems of South Bengal originate from acute drainage congestion in the low lying areas due to heavy rainfall and the terrain being very flat. Tidal ingress and drainage lockage are responsible for widespread inundation of agricultural lands. The problems are further intensified by cyclonic storms and coastal erosion.

Flood prone areas of West Bengal are estimated to be 3.766 millions hectares. Out of this, about 1.935 million hectares have been provided with reasonable protection from floods and drainage congestion upto the end of Seventh Plan. Drainage channels and embankments constructed upto the end of Seventh Plan 6893 Km. and 16150 Km. respectively. It was possible to bring about 2750 Sq.Km. under protection from flood and drainage congestion during the Seventh Plan period. The works involved were execution of flood control and drainage Schemes, bank protective works, anti-sea erosion schemes etc.

A few comprehensive Master Plans to tackle location specific (flood control-cum-drainage) problems have already been prepared by the Department some of the more important ones of which are :-

- i) Ghatal Master Plan ;
- ii) Tamruk Master Plan ;
- iii) Kandi Area integrated Flood Control cum Drainage Scheme ;
- iv) Sunderban Delta Project ;
- v) Improvement of Lower Damodar Area.

All these Master Plans involve implementation of drainage cum flood control works capable of rendering immediate benefits through augmentation of agricultural production. Therefore, these Master Plans deserve top-most priority, but these cannot be commenced in right earnest without the availability of adequate funds. The flood control schemes are to be given special funds as recommended by the S.R. Sen Committee in the interest of optimising agricultural production of the eastern regional states.

Apart from these Master Plans a list of some other important Flood Control (including drainage and Anti-Erosion) Schemes included in the Annual Plan is furnished below :

A. Drainage Schemes :

- 1) Urgent Development of Sunderbans ;
- 2) Ghea-Kunti Basin Drainage Scheme ;
- 3) Karatia-Nagartala Basin Drainage Scheme in 24-Paragana ;
- 4) Improvement of Bagjola Drainage Khal ;
- 5) Re-excavation of River Baramashia for improvement of drainage congestion for Harishchandrapur etc.
- 6) Haragong-Kultigong Basin Drainage Schemes
and
- 7) Bhagwanpur Nandigram Drainage Scheme (Phase I).

Anti-Erosion Schemes

- 1) A group of Ganga Anti-Erosion schemes both up-stream and down-stream of Farakka Barrage in the Districts of Malda & Murshidabad ;
- 2) North Bengal Flood Control Schemes ;
- 3) Protection of both banks of river Bhagirathi in District of Murshidabad

and

- 4) Anti-Sea-Erosion Schemes including protection to estuarine rivers.

A total provision of Rs.40.00 crores has been made on various schemes in the Annual Plan for 1991-92 and a total provision of Rs.210.00 crores has been made for the entire Eighth Plan (1990-95) period. Out of this a provision of Rs.44.00 lakhs has been made for Darjeeling Gorkha Hill Council in the Flood Control Sector only in the Annual Plan 1991-92.

Fund under N R E P and R L E G P etc.

Funds forthcoming under the NREP, RLEGP/JRY/DPS etc. are utilised to meet expenditure of labour oriented schemes both in the flood control and irrigation sectors.

Requirement of Central Assistance for Anti-Sea-Erosion Schemes and Ganga Anti-Erosion Scheme under Flood Control Sectors.

Anti-Sea-Erosion Schemes

The State of West Bengal has a coastal line of about 350 Kms. with a total length of embankments along the sea and the estuarine rivers of about 4000 Kms. There are mostly earthen embankments and do not have adequate section to withstand the devastating effects of wave actions during cyclonic storms which is almost a regular annual feature in the Southern West Bengal. Moreover the erosive action of the sea is engulfing substantial portions of the main land areas in the coastal fringe of the State. Due to inadequate flow through the river Hooghly much below 40,000 cusecs, shoals and cher land formed in the river for want of necessary flushing. In some places like Uluberia, Diamond Harbour etc. the sea-going vessels pass very close to these townships as per guideline of the Calcutta Port Commissioners. In the year 1988, severe damages took place in the Uluberia and Diamond Harbour township due to the serious destructive wave actions caused by the passing of these sea-going vessels. Adequate protective measures are required to be taken in this regard. The embankments on the sea side of vulnerable places like Digha, Sunderbans and other estuarine rivers are to be thoroughly improved and renovated with necessary protective works as anti-sea erosion works covering protection of area on the bank of estuarine rivers is essentially the protection of Geographical Boundary of India. In view of this gravity of the problem Central Assistance to the tune of Rs.5.00 crores for 1991-92 and 25.00 crores during Eighth Five Year Plan has

has been sought for as out right grants as the financial incapability of our State does not permit the entire cost of these schemes to be met from the State Plan.

Ganga Anti Erosion Schemes

The Farakka Barrage was constructed and commissioned in 1975 to divert the flow of the Ganga to the Bhagirathi Hooghly river system to save the Port of Calcutta, the survival of which was matter of utmost importance to the economic upliftment of the millions of people living in its vast hinterland. Like any river control structure, the Farakka Barrage also had its impact on the regime or condition of the river. Devastating erosion of the bank line on the Ganga, especially along the downstream of the barrage in Murshidabad Districts has been observed after its constructions. The accentuation of the erosion in many reaches of the 94.00 Kms. long right bank on the downstream of Farakka Barrage in District of Murshidabad has become a matter of serious concern.

The Ganga acts as the international boundary beyond Nimita in the District of Murshidabad. As a natural process, the river, which is continuing erosion on the right bank, is forming extensive char lands on the opposite bank mostly on the other side of the boundary. Thus the lands eroded by the Ganga are being permanently lost to the country as the char land cannot be used by the people who have been and are being rendered landless due to the erosion.

To prevent effectively this loss of national territory due to the severe erosive action of the Ganga, it appears imperative to undertake systematic bank protection works both up-stream and down-stream of Farakka Barrage, the cost of which is far beyond the limited financial capability of our State to bear. This, therefore, is a case which deserves provision of Central Assistance as out-right grant to the tune of Rs.10.00 crores for 1991-92 and Rs.40.00 crores during VIII Plan period.

V. E N E R G YP O W E RProgramme of the Power Department1. WEST BENGAL STATE ELECTRICITY BOARD

We are now at the end of 7th Five Year Plan and going to step in the 8th Five Year Plan in next few months. There has been addition of several 210 MW Thermal Units in the Eastern Region, but due to inadequate Hydro Thermal mix, the region is facing shortfall in peak hours while surplus during lean hours. As a result, the optimal operation of the power system in the State has become practically impossible. The only plausible solution to this problem is the installation of a Pumped Storage Plant. Much emphasis have been given in the 8th Five Year Plan for the completion of Purulia Pumped Storage Scheme of capacity (5+1) x 175 MW. For preparation of Detailed Project Report of Purulia Pumped Storage Scheme, WAPCOS in association with CEA & CWC has already been appointed as local Consultant. It has also be decided to appoint a foreign Consultant (Japanese) for the preparation of DPR of this Project. Contract agreement with the Japanese Consultant is now in the final stage. Programme is to take up the actual work during 8th Five Year Plan so as to bring the 1st Unit by the beginning of 9th Five Year Plan.

According to demand projection the peak demand and energy requirement of the State excluding DVC Valley area will be increased by 800 MW and 4900 MU respectively at the end of 8th Five Year Plan. To meet the increased demand during 8th Plan period, emphasis have been given to complete the first 3 x 210 MW Units of Bakreswar Thermal Power Project by WBPDCL and Gouripore (2 x 60 MW). Programme have also been made to complete Rammam H.E. Project Stage-II (4 x 12.75 MW), Teesta Canal Falls H.E. Project (3 x 3 x 7.5 MW) by eighth plan period.

R & M work of existing Thermal Power Stations for increased generation have also been included in 8th Plan programme.

In the field of transmission and distribution systems, the greatest concern is with the energy losses and poor voltage condition in the distribution system. Compared to transmission system, the Distribution system of the state has been extended to a great extent resulting in high line losses and voltage drop in the distribution system. Much emphasis have been given in the 8th Five Year Plan for expansion of sub-transmission and EHV transmission system for giving adequate support to the distribution system as well as for evacuation of power from the new Power Stations to be commissioned during 8th Five Year Plan. Emphasis have also been given for the installation of Capacitors and taking up system improvement work during eighth plan period to reduce the system losses.

The state has 28% mouzas (11,000 mouzas, still remaining unelectrified. Emphasis have been given to electrify 50% of that unelectrified mouzas during eighth plan period.

Hydel generation

- (1) For maximisation of benefit from the existing capacity programme for Augmentation of Rinehington H.E. Project will be taken up.
- (2) Augmentation of Kursuog H.E. Project Stage-II (Fazi) (1x1.2 M).
- (3) Ramman H.E. Project Stage-II (4 x 12.75 M.W.).
- (4) Toasta Canal Fall H.E. Project Fall No. I, II, III & IV (3 x 3 x 7.5 MW).

Few New schemes under Hydel power sector will also be taken up.

- (1) Micro Hydel,
- (2) Mangpoo H.E. Project (5 MW).
- (3) Purulia Pumped storage phase-I (5 x 175 MW).
- (4) Ramman H.E. Project Stage - III & IV (90 MW).

Thermal General

The two old Generation Station will be renovated.

- (1) Renovation of Santaldihi TPS Unit No. 1 to 4.
- (2) Renovation of Bandel TPS Unit No. 1 to 4.
- (3) Gouripur TPS (2 x 60 MW).

Transmission & Distribution

In transmission and distribution the WBS&B has taken up two types of programme (1) Augmentation of the capacity of existing sub-station and construction of new sub-station and (2) replacement of work outlines and drawing up of new lines. In Eighth Five Year Plan, three more units of KTOP will be synchronised and for evacuation of power to be generated necessary arrangement for transmission will have to be made. During the period of 8th Five Year lines 15 400 KV/220 KV/132 KV will be completed. Besides, 20 sub-station of varying capacity will also be taken up.

Rural Electrification

The pace of extension of electricity in the rural areas increased during the Seventh plan although it fall short of targets set by the Planning Commission. The no. of villages electrified increased from 19,201 in 1984-85 to 26,650 in 1989-90. The number of pumpsets energised increased from 39,43 to 88,832 during the same period. In the 8th plan apart from electrification of new mouzas, augmentation of power to the already electrified mouzas will continue in stepped up scale. The Lokdeep and Kutirjyoti scheme will also continue to benefit the disadvantaged group of population. Supply of more power to agriculture sector will be the key policy during the period of 8th plan.

West Bengal Power Development Corporation Ltd.I) K.T.P.P. Stage-I :

KTPP Stage-I (3 x 210 MW) was sanctioned in June, 1973 at an estimated cost of Rs. 11559.0 lacs which was last revised to Rs. 41808 lacs in the year 1989. 2 (two) Units (Unit No. 3 & 2) commissioned in July, 1984 and December, 1985 respectively and both the Units achieved full commercial load satisfactorily. The last Unit (Unit No. 1) was lit-up on 30th March, 1990 and synchronised on 13th August, 1990. Now the Unit is running at 50% load with 3 Pulverizers in operation. The balance 3 Pulverizers will be made ready by December, 1990 and the Unit-I will generate at full capacity (210 MW) from January, 1991. The cumulative expenditure for the 3 Units upto March, 1990 is about Rs. 40700.00 lacs.

II) K.T.P.P. Stage-II :

KTPP Stage-II was sanctioned in February, 1991 at an estimated cost of Rs. 28673.00 lacs which was last revised to Rs. 99723.00 lacs including interest charges on loan. The project has already spent an amount of Rs. 62355.00 lacs upto March, 1990.

BHEL is executing the entire work of KTPP Stage-II on turnkey basis except Boiler No. 4 which is being executed by M/s. ABL. The commissioning programme of the Units of Stage-II as agreed in the JCM meeting with participation of CEA in July are given below :

Major Milestone	Unit-V	Unit-VI	Unit- IV
I. Boiler hydraulic test	20.7.90	9/90	4/91
II. Boiler light up	10.7.90	6/91	9/91
III. Steam blowing	10/90	9/91	12/91
IV. T-G. Box up	25.6.90	7/91	9/91
V. T-G. Barring gear	10/90	9/91	11/91
VI. Synchronisation	11/90	10/91	12/91

Boiler erection of Units V & VI are progressing as per schedule. But the Boiler erection of Unit No. IV by M/s. ABL is not satisfactory. M/s. ABL has been persuaded to improve their erection progress so that commissioning schedule of Unit No. IV can be adhere to.

III. KTPP 400 KV Sub-Station :

Erection work of 400 KV S/S. is more or less complete. At present load testing of the structures of 400 KV S/S. are being carried out and it is expected that the priority sector of the S/S. for Unit No. V is expected to be ready by November, 1990.

IV. Renovation and Modernisation Scheme of K TPP (Unit No. 2 & 3) :

A proposal was sent to CEA for renovation and modernisation of K TPP Units No. 2 & 3 in the month of October, 1989. M/s. CEA accorded techno-economic approval for renovation and modernisation of K TPP (Units- 2 & 3) at a total cost of Rs. 9.26 crores. M/s. P.F.C. has been approached for financing of the Project.

V. K TPP Fly Ash Utilisation Project :

Govt. of India and OECF have approved the engineering services for the Fly Ash Utilisation Project at a total cost of Rs. 200 lacs. Out of which 171 Millian Yen will be available from the Govt. of Japan on loan. Draft T.O.R. for invitation of global tender for the engineering services of the Project was placed to the Deptt. of Ministry of Environmental Development, Govt. of India and OECF for their approval.

VI. Bakreswar Thermal Power Project

1. The Government of West Bengal have decided to set up a pulverised Coal Fired Power Station having an ultimate capacity of five units of 210 MW each at Mathuberia in the district of Birbhum near Suri. The first phase of the Project is to accommodate three units of 210 MW each.

2. The Project was approved in December, 1986 at an estimated cost of Rs. 682.58 crores with a commissioning schedule of first unit during 1991-92 and the remaining two units during 1992-93.

3. The project cost was last revised in 1988 when it was estimated to be Rs. 983.93 crores excluding interest charges. At that time the commissioning schedule was also modified whereby Unit I was due to be commissioned in June 1993, Unit II in December 1993 and Unit III in June 1994.

4. The Project is being executed as a State Sector project by WBPDCL land required for the Project has been acquired and soil investigation has been completed. The design activity connected with the Power Station was started in second quarter of 1988 and the work at site was started in December, 1988. The order for the boilers was placed on ABL in June 1989 and for TG sets on BHEL in August, 1989.

5. The following civil works have been started/continuing :-

- (a) Site grading and levelling,
- (b) Construction of roads and drains,
- (c) Raw Water Reservoirs,
- (d) Construction of stores sheds,
- (e) Water system for construction purposes,
- (f) Mini Township phase I & II,
- (g) Construction power system.

6. Design Intent Memoranda and specification and drawings for most of the activities have been completed. Tendering status for procurement of equipment and auxiliaries for most of the equipment is in the advanced stages of issue/evaluation. Procurement of steel and cement have largely been done. The expenditure till August 1990 85.5 crores, Rs. 5.8 crores (including Bank Interest) have been received as Public Donation for the Project till 23.8.90.

7. The Government of India vide Notification dated 4 July, 90 decided in principle to pass on the Soviet assistance available under the Agreement between Governments of India and USSR on economic and technical cooperation dated November 24, 1987 for the Bakreswar Thermal Power Project.

8. Task Force has since submitted its report on 19th June, 1990. In the meantime, two rounds of discussion were held with Soviet experts on 23 & 24 May in New Delhi and 5 & 6 June at Bakreswar and Calcutta.

A delegation consisting of representatives of G.O.I. & WBPDCCL went to Moscow on 23 June 1990 for discussion with the Soviet authorities, and a Technical Protocol was signed there on 3 July, 1990.

9. Further developments which have taken place since the signing of the protocol are as follows :-

(a) BHEL have been informed in regard to cancellation of the Order on TG sets and auxiliaries as was placed on them.

(b) Order for civil foundation work for boilers and TGs have been placed on 16.7.1990 and 20.8.1990 respectively.

Durgapur Projects Ltd.

The Project Estimate for the proposed 7th Unit (1 x 110 MW) has been submitted to the Central Electricity Authority. Clearance for the height of the chimney has been obtained from the Airport Authority. Clearance from the Pollution Board is still awaited.

The proposed 7th Unit installation at D.P.L. shall have several advantages over any other site. Land is already available both for the plant as well as Coal Yard, both being extensions of the existing installations. The township with all civil amenities like Schools, Hospital etc. are already there. Railway transport facilities for Power plant coal are being revamped and augmented. Huge ash ponds are already built for ash disposal. Both technical and supporting organisations can easily be organised in a short time as the 6th Unit (1 x 110 MW) has recently been commissioned. Transmission system at 132 KV and 220 KV already exists for evacuation of power. Many infrastructural facilities and technical help from neighbouring industries like A.B.L., M.A.M.C., C.M.E.R.I. and D.S.P. etc. are easily available locally. Lastly, to

cater to the future needs of Durgapur-Asansol Industrial belt, the location will be almost at the load centre, thus, utilisation will be with minimum transmission loss. For the 1990-91, we propose an outlay of Rs. 100 lacs for taking up of preliminary work of the project.

EMPLOYMENT : Nearly 90 workers are likely to be employed daily for 273 working days and thus, 25,000 mandays will be generated during '91-92 for which, Rs. 7.50 lacs will be spent.

R & M Programme :

i) On going Programmes (Phase I)

The Renovation and Modernisation Programme of the DPL was taken up for implementation in April '85 with a view to vitalisation of the Power Units which have been deteriorated due to ageing and the maintenance of the vital areas having fallen into arrears. A substantial input had been found to be necessary to revive the position from a dire situation as the generation went down in the level of 90 MW as against 200 MW in mid-seventies. That may help achieving a PLF around 43%.

The CEA and Ministry of Energy, Govt. of India actively supported and co-operated us in this regard and the latest sanction of 63 activities in the Central Sector and 6 activities in the State Sector are accorded to Rs. 2166.00 lakhs and Rs. 1386.00 lakhs respectively. We have already implemented 44 activities out of 63 in the Central Sector and 2 activities out of 6 in the State Sector so far. Another 16 activities and one activity are under execution in the Central & State Sector respectively.

Three activities namely Ash handling and disposal system units 3, 4 & 5 under Central Sector and three activities such as ESPs for units 3, 4 & 5 are yet to be taken up. In the former cases we will be able to take up job shortly and in the later case the work under could not be placed as we could not locate funds so far.

On the basis of out flow of funds the percentage progress are as under :

a) For Central Sector activities	...	69.4%
b) For State Sector activities	...	11.6%

ii) 8th Plan Programmes (Phase II)

Now at the end of the 7th Plan, it is felt that some more areas need to be covered in the 8th Plan to achieve at least 46.8% PLF and to bring down the cost of generation. Mainly air handling system, pressure parts, I.D. & F.D. fans wind boxes etc. of the Boiler have been considered. Some modification of Bunkers devices to get rid of coal jamming stracking along with proper fixing in Coal Handling plant have been thought of. As

the Generator and turbine are all as old as 25 years their parts and auxiliaries were felt to be procured. Some of the electrical installation were also given due importance.

Keeping all these points in view out of proposed estimated cost of Rs. 2558 lakhs, the Tech. Economic Appraisal Committee of CEA has cleared an amount of Rs. 2412 lakhs in Central sector and in the State Sector, we had computed a fresh programme of Rs. 1602 lakhs, over and above the spill over amount of Rs. 663 lakhs approx. and Rs. 607 lakhs approx. in the Central & State Sectors respectively.

Modification of Railway Exchange Yard

The Railway Exchange Yard for DPL was constructed in the year 1958-59 with 75 lbs/yd B S rails and 70 lbs/yd bull headed rails to cater to the transportation needs of DPL when coal/coke used to be carried by 22 ton capacity K.C. Wagons. With the introduction of 55 tonne capacity Box Wagons in the subsequent years and at a still later stage with the introduction of BOX N^o Wagons the old tracks need to be replaced with 52 Kg/M rails. Also because of ageing of the track and non-availability of spares for old tracks, the Railways have asked for complete replacement immediately to maintain the traffic movement through the Exchange Yard. The DPL has splitted the work in two phases, the 1st phase consisting of 4 lines at a cost of Rs. 212 lakhs and the Railways have been asked for undertaking the job and to complete the same by 1990-91. The Board of Directors, DPL approved the Scheme in its meeting held on 6.7.88. But due to financial stringency the work is now expected to be completed by 1992-93.

Modification and augmentation of Railway lines for Power Plant :

DPL constructed a Railway Yard for transportation of Power House Coal in the year 1961-62. In the year 1965, DPL installed one Wagon Trippler at the Power Plant Coal Yard but subsequently due to some restriction imposed, DPL switched over to road transport for its Power House Coal. As extreme difficulties are being faced for transporting coal by road as also with the installation of 6th Unit, the requirement of power house coal has considerably increased. DPL appointed M/s. Rail India Technical and Economic Services Ltd. (A Govt. of India Undertaking) to study and recommend suitable infra-structural facilities required for DPL to switch over to rail movement of coal for Power House again. They advised implementation of their recommendations in two phases. The first phase for transportation of coal upto 330 tonnes per day required for existing 1 - 6th Unit of DPL Power Station. The railways were asked for implementation of the first phase recommendation for transportation of power house coal by rail. The cost of the scheme as per Railways estimation comes to Rs. 354 lakhs including purchase of one high capacity diesel locomotive. The work will be completed during 8th Plan.

Calcutta Electric Supply Corporation Ltd.,

In 1981 CESC Ltd., submitted to the Govt. of India a proposal for replacement of their aging plants (2 x 60 MW) in the Southern Generating Station. The State Govt. considered the proposal a viable one, besides being indispensable for augmentation of Power Supply in the Southern Region of CESC Ltd., with the help of their existing transmission and distribution net work.

The total project cost was originally estimated at Rs.210.75 crores and the cost of the project would be met by the Company as follows :-

<u>Financing bodies</u>	<u>(Rs. in Crores)</u> <u>Amount of Contribution</u>
i. Govt. of West Bengal	Rs. 32.81
ii. Loans from Financial Institution	Rs.135.79
iii. CESC's Contribution	Rs. 42.15
Total ..	<u>Rs.210.75</u>

CEA and Planning Commission had given their concurrence to the proposal.

The State Govt. agreed to provide a loan of Rs.29.00 crores to the CESC Ltd., during the 7th Five year plan and Rs.3.81 crores in 1990-91 in a phased manner as indicated below :-

<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>	<u>1990-91</u>
7.00 Crores	11.00 Crores	11.00 Crores	3.81.00 Crores

However, the actual provisions, in the State budget were made as follows :-

<u>1987-88</u>	<u>1988-89</u>	<u>1989-90(BE)</u>	<u>1989-90(RE)</u>	<u>1985-90</u>
7.00 Crores	8.00 Crores	5.00 Crores	11.00 Crores	26.00 Crores.

Later, CESC Ltd., informed that there has been a cost over run of the project to the extent of about 20% over the original estimate mainly due to the delay that occurred between the time when the estimate was prepared in end 1984 and when the project was sanctioned by the Govt. of India towards the end of 1986.

A summarised position regarding the revised cost over run for Southern Generating Station replacement project and Financing pattern thereof is given below :-

<u>Financing bodies</u>	<u>Original sharing</u>	<u>Over run sharing.</u>	<u>Revised sharing</u>
i) Govt. of West Bengal	32.81	6.79	39.60
ii) Loans from Financial Inst.	135.79	28.06	163.85
iii) CESC's Contribution	42.15	8.73	50.88
Total Cost :	210.75	43.58	254.33

The Proposal for according formal approval to the sanctioning a further states shares of contribution as loan amounting to Rs.6.79 crores by the State Govt. to the CESC Ltd., towards over run cost for Southern Generating Station Replacement project was taken up with the Finance Deptt. agreed to the proposal.

Accordingly, against Rs. (32.81 + 6.79) i.e. Rs.39.60 crores funds to the extent of Rs.36.00 crores release during 87-88/88-89/89-90 and proposed for 90-91 (BE) towards the replacement project. It is therefore proposed that the balance amount of Rs.3.60 crores may be provided in the Annual Plan (91 - 92).

CESC LTD.

Draft Annual Plan 1991-92

Outlay of Expenditure

	VIIIth Plan (1990-95) Proposed Outlay.	90 - 91 BE	Proposed outlay 91 - 92
Replacement of Southern Generating Station CESC	13.60	10.00	3.60

NON-CONVENTIONAL SOURCES OF ENERGY

1. Programme of the Science & Technology Department

As the Country is going towards more and more industrialization, the need and use of energy also increased correspondingly to improve the quality of life of its people. In India, over 75 percent of the population lives in more than half a million of villages. The energy plays an important role in overall rural development programme. While the demand for energy is increasing sharply the conventional energy sources are depleting. Obviously we should be very careful in using our energy resources like fossil fuel, coal etc. Moreover the use of fossil fuel, coal etc. contribute to the Environmental pollution to a great extent. There is no single solution to the problem of energy supply and both conventional and Non-conventional Energy sources may be expected to play their part in satisfying the worlds future needs of energy. The potential Non-Conventional Energy Sources like Solar, Wind or Bio-mass were not exploited properly so far. It is a good sign that the energy crisis and Environmental pollution have attracted the attention of planners, administrators and Scientists to look for alternative energy sources as well as to

to conserve and use the existing energy sources more efficiently.

2. Past activities in the State

In West Bengal activities related to Non-Conventional Energy started during 7th Plan period. Significant achievements were made in the areas of Bio-Gas Programme, Smokeless Chulha programme and Solar Thermal Programme. Some Progress was also made on Solar Photovoltaic programme. There was a fund provision of Rs.90 lakhs during 7th plan under Non-Conventional Energy Programme and the entire amount was spent. In addition the State also received a substantial fund from DNES to implement various National level programmes on Non-Conventional Energy Sources.

The up to date physical achievement on various programmes of Non-Conventional Energy Sources are indicated as below.

Sl. No.	Item	Achievement
1.	Family Size Bio-gas plant.	37,000 Numbers Latrine Link -
2.	Community Bio-gas plant	-
3.	Smokeless Chulha	1,20,000 Numbers
4.	Solar PV Street Lights.	600 Numbers
5.	Solar Hot Water System installed.	50,000 LPD Composite capacity
6.	Solar Still	125 Numbers
7.	Solar Drier (Crop/Fish)	11 Numbers.
8.	Urja gram	2(two) Numbers
9.	Community Lighting with Solar PV	10(ten) Numbers
10.	Wind Generator	3(three) under installation
11.	Wind mapping project	Under progress

3. 8th Plan Proposals

(A) Bio Gas Programme :- Bio Gas is a boon to village women as it is a clean, cheap and convenient cooking fuel. Rural people have started recognising the multiple benefits generated by bio-gas units and the programme is becoming popular in rural areas. There are many social benefits from bio-gas plants. Eye and lung diseases caused by smoke in the kitchen are eliminated. Sanitation around households improves, toilets can be linked with bio-gas plants to improve public health and hygiene and also to conserve human wastes for manure purpose.

In West Bengal Bio-gas plants are becoming popular day by day. Most of the plants in the State are fixed dome (Janata Type). Some Dinbandhu and KVIC type Bio-gas plants also exists in the State. In addition to the NFPD Programme it is proposed to take up the following programmes in the State under

this head during 8th Five Year Plan.

(1) Family Size Bio-Gas Plant	..	10,000 Numbers
(2) Latrine Link Bio-Gas Plant	..	5,000 Numbers
(3) Additional Subsidy towards National Project on Bio-gas Programme.	..	10,000 Numbers
(4) Awareness and Field publicity programme for Bio-gas Development		-
(5) Capital Maintenance of plant already installed upto 7th Plan		10,000 Numbers
(6) Setting up of Block level Service Centre	..	50 Numbers
(7) Masons and users training	..	50 Numbers
(8) Setting up of Institutional Bio-gas plant.	..	10 Numbers

(B). Improved Chulha Programme :-

(i) Energy is basic need for cooking operations. The traditional less efficient and smoke emitting chulhas are still being used in most part of the West Bengal. The Improved chulha programme aim at accomplishing the following objectives.

(i) Energy/fuel wood/forest conservation

(ii) Elimination/reduction of smoke drudgery and health hazards particularly to women and children.

The improved chulha programme envisages implementation of fixed and portable models of chulhas. The fixed models of chulhas are constructed in kitchen of different households by using local clay, chimney, pottery, Ceramic liner etc. the portable chulhas are manufactured by small scale manufacturers. In West Bengal both types of chulhas are being put to use. It is proposed to install 20,000 fixed model chulhas of different types during the 8th Five Year Plan and it is also proposed to subsidise 5000 portable chulhas during 8th five year plan. Out of 25,000 number of chulhas 5000 numbers are proposed to be installed in the weaker section families where 75% subsidy is proposed to be given.

(ii) Training Programme on Smokeless Chulha Construction:-

A total number of 10 training programme are proposed to be undertaken during 8th Five Year Plan in the State of West Bengal. Accordingly a sum of Rs.4.0 lakhs has been proposed under this head.

C. Solar Thermal Energy Programme

(i) Solar Hot Water (Low temperature) :- It is proposed to install 50,000 LPD Solar hot water system in the State in addition to the programme of DNES. The system would be installed in Government Guest Houses, Hospitals, Hotels etc. Accordingly an amount of Rs.60.0 lakhs has been proposed under this head. This

includes installation of few Evacuated tabular collectors also.

(ii) Solar Drier :- The Solar Drier programme is becoming popular in the State. The programme is attractive for drying of fish, agricultural products etc. It is proposed to install 50 Solar dryers of various capacity during the 8th Five Year Plan

(iii) Solar Still/Desalination System : The Solar Still/Desalination system are very effective in Coastal areas of West Bengal for different purpose including drinking. The Solar still could be utilised in large numbers for making water free of salt and subsequent utilisation. It is proposed to install 3000 numbers of Solar Still of 3LPD capacity per day during the 8th Five Year Plan.

(iv) Solar Cookes programme :- The programme is becoming popular in some sunny districts of West Bengal. It is proposed to subsidise 2000 Solar Cookers during 8th Plan period under State Plan programmes.

C. Solar Photovoltaic Programme

Solar photovoltaic technology is a promising way to generate electricity cleanly, reliably and directly from Sunlight. Solar PV power systems are simple, flexible modular and adaptable for various applications in any size, and have simple operation free from noise and pollution.

Various programmes are proposed to be taken up during 8th Five Year Plan under this head in the State of West Bengal..

(a) Solar Photovoltaic Pumping :-

It is proposed to install 10(ten) deep well Solar FV pumps mainly for drinking Water supply during 8th Five Year Plan. It is also proposed to install 100 (one hundred) number of Shallow well pumps during 8th Five year plan in West Bengal mainly for micro irrigation purpose. For deep well 1.2 KW submersible pumps would be utilised and for shallow well 360 Watt standard mono block D.C. Motor pumps would be utilised.

(b) Solar FV Community Lighting Systems :- The Solar Photovoltaics are ideal for providing small powers in remote areas particularly in community Centres. A FV system of capacity 150 Watt or so can very easily supply power to lights and small portable TV sets. 100 such package system which would comprise of H.F. Lights, FV modules, Controls, Portable TV are proposed to be installed during 8th Five Year Plan in the State.

(c) Village Electrification Programme :- There are at least 1000 number of villages in the State where it would be very difficult to extend grid line. Even if the grid line is

extended the supply of power can not be ensured due to long transmission and distribution Lines and other reasons. Under this programme a survey will be conducted and at the first phase some small villages located at a distance of 5 to 10 K.M. from the grid line would be provided with Solar TV charging stations of capacity ranging from 1 KW to 5 KW. During 8th Plan 50 such charging centres are proposed to be set up with a composite power capacity of 100 KW.

(d) Wind Energy Programme :- Wind Energy has a good potential in West Bengal particularly in view of long coastal areas. It is proposed to take up the following programmes on Wind Energy in the State of West Bengal during 8th Five Year Plan.

(i) Wind mapping Project

(ii) Wind Pumping Units :-

The wind pumping unit technology has been upgraded in the Country to cover the deepwell wind pumping applications. It is proposed to install 15(fifteen) deep well wind pumping units and 25 ordinary wind pumps mainly for drinking water supply during 8th Five Year Plan.

(iii) Small wind generators for Battery Charging :-

It is proposed to install 15(fifteen) such wind generators during 8th Five Year Plan mostly in the Coastal belt of West Bengal.

(iv) Wind Farm Project at Sagar Island and Digha :-

In West Bengal there is a long Coastal belt. Preliminary studies on wind speed indicate that wind Farm Project is viable at Sagar Island and Digha. Dialogues has been initiated in this respect with Government of India. It is proposed to take up two Wind Farm project of capacity 550 KW each at Sagar and Digha during 8th Five Year Plan. The project will be a joint venture of the State Government and DNES.

(f) Bio-mass Programme :-

(i) Energy Plantation Programme :-

The main objectives of the programme are to produce fuelwood for meeting needs of the domestic sector; conserve diesel through wood based gassifiers system for energisation of pump sets; to bring about awareness regarding fast growing species appropriate for wasteland and generate employment potential in the rural sector. It is proposed to take up the energy plantation programme in 100 hectares area during 8th Plan programme.

(ii) Biomass Gassification :-

The Biomass gassification programme was taken up in the State of West Bengal during 1989. So far only one gassifier plant has been installed on demonstration basis. It is proposed to install 25 Biomass gassifier based on different raw materials during the 8th Plan period.

(g) Urjagram Project :-

In West Bengal 19 villages have so far been covered under Urjagram programme. Major components of the programme are financed by DNES, Govt. of India. However there is also a state share. It is proposed to take up Urgagram programme in 25 more villages during 8th Five year plan.

(h) Micro/Mini Hydel Development :

The survey work indicates there is a gross micro hydel potential of 27 MW in the State. It is proposed to install 3 MW micro hydel stations on composite capacity basis with the assistance of DNES during 8th Five Year Plan.

(I) Other Non Conventional Energy Programme :- Continuous R & D activities are required in all the spheres of Non-Conventional Energy Activities. The R & D activities will be mainly aimed at field development study, Evaluation,, Demonstration etc. Under this head the following programmes are proposed. The R & D work will also be done in tandem with other departments.

2. Programme of the Cottage & Small Scale Industries Departmenta) Integrated Rural Energy Programme.

The scheme is intended to provide additional support to the popularisation of Bio Gas Plants & Solar Cooker and Solar Thermal Devices towards the use of non-conventional energy. Six blocks have been covered and one more block will be taken during Eighth five year Plan. During 1985-86, 175 nos. of Bio-Gas Plants and 547 nos. of Solar Devices were set up and during 1988-89, 150 nos. of Bio-Gas and 540 nos. of other Solar Devices have been set up. The target for 1989-90 towards Bio-Gas Plants and other Solar Devices are 300 nos. and 5740 nos. respectively.

b) Urjagram Programme

This is a new scheme to be taken up during 8th Five Year Plan, as per guideline of Govt. of India. 29 villages are to be covered under this scheme of Govt. of India.

Additional subsidy on Bio-Gas, Solar Cooker, on other Solar Thermal Devices are to be borne under the State Plan Scheme titled as 'Urjagram'.

VI. INDUSTRY & MINERALS

VILLAGE & SMALL SCALE INDUSTRIES

Programme of the Cottage & Small Scale Industries Department.

Small Scale Industries

Objectives :

- i) Promotion of decentralised Cottage & Small Scale Industrial units for generation of viable additional employment (Self employment/wage employment)
- ii) Creation of gainful employment to the artisans' Sector by way of inputs like skill development and financial assistance and widening the base of rural occupational structure.
- iii) Increase in productivity and effective utilization of idle capacity through awareness and modernisation packages in C & S.S.I.

B. Strategy

- i) Formulation of integrated and inter-related schemes/programmes, which will be viable and have wider coverage.
- ii) Emphasis in favour of potential regions/industry groups by way of project Approach.
- iii) Strengthening the Directorate of C & S.S.I and its District level/Sub-divisional set up to be created and the existing block set up and the promotional Agencies/institutions in various Sub-sectors of W & S.I. to act as cover Organisations.
- iv) Develop the effective linkages with D.I.Cs and the promotional/institutional agencies.
- v) Promotion of entrepreneurship for small Scale and tiny units by way of setting up the E.D.I. institutions in particular reference to Agri-inputs.
- vi) Modernisation of SSI and upgrading of technology for Small Scale and rural industrialisation-involvement of R & D institutions/agencies of State & Central Laboratories.
- vii) Organisation of effective marketing net work.
- viii) Care to be taken for increase flow of funds for different Sub-Sectors from financing institutions against specific allocations within the priority Sector and mobilisation of assistances under (IRDP(ISB), SESRU, SEEVY and SC/ST Special Component programmes).

Approved 7th Plan outlay and Annual Plan outlay for 1990-91 of this Department are Rs.85 crores and 30 crores respectively. So as per norms 8th Plan outlay has been Rs. 153 crores and Annual Plan outlay for 1991-92 Rs.33.00 crores. Considering the importance of this Deptt. particularly in the matter of generating employment opportunities of this State it has been proposed by this Deptt. that 8th Plan outlay will be fixed by allowing 10% annual growth rate taking outlay for 1990-91 as

base. Accordingly 8th Plan outlay has been fixed at Rs. 194 crores.

The above outlays proposed by this Deptt. are minimum requirement. The outlay of Rs. 33.20 crores proposed for 1991-92 by allowing 10% increase over the current year's outlay will not be adequate in view of meeting demands particularly in respect of State Incentive Schemes under C & S.S.I. Sector and Market Development Assistance scheme under Handloom sector. Moreover, additional fund will be required under Sericulture sector for implementing the World Bank Project i.e. National Sericulture Project involving a total sum of Rs. 65 crores for five years. Out of Rs. 65 crores State Govt.'s contribution will be around Rs. 34 crores.

In respect of State Incentive Scheme upto date total demand is Rs. 14 crores approx. There is a provision of Rs. 5.32 crores in the current year. As such there will be shortfall of about Rs. 9 crores. In the next year i.e. 1991-92, a sum of Rs. 6.32 crores has been proposed as against demand of Rs. 12.5 crores. As such during 1991-92 there will also be shortfall of Rs. 6 crores. Unless the plan outlay is enhanced considerably, it will not be possible to meet up the actual demand of State Incentive Scheme and as a result expansion of SSI units in the State will be hampered greatly.

For introduction of pension scheme at the rate of Rs. 100/- per month to village artisans like handloom weavers, handicraft artisans etc., a substantial amount will be required.

A Central Footwear Training Centre is being set up at Kalipur Budge Budge-I with a view to imparting training in leather industry in modern technique of shoe and other leather products. For this purpose necessary land has already been acquired and construction of administrative building, workshop, hostel building etc. has already been started.

Sub D.I.Cs have been proposed to be set up at Haldia, Durgapur, South 24-Parganas, North 24-Parganas and Siliguri. Sub D.I.Cs at Siliguri and Durgapur have been functioning. In view of setting up of Haldia Petrochemicals, a sub-DIC at Haldia is necessary. For development of Sunderban, a sub-DIC at Sunderban is also necessary. For setting up of all these Sub DICs, additional fund will be required.

To develop agro-based industries some schemes have been proposed to be taken up. These schemes are extraction of oil from Sunflower and food powder from potato.

While the growth in small scale sector in West Bengal during the last few years has been quite appreciable, we have been feeling the need for development of certain infrastructure to help the existing units as well as to boost promotion of new units. With this end in view, an Entrepreneurship Dev. Institute will be set up at Salt Lake with U.N.D.P. assistance.

As General Engineering Industries and Foundries which form an old group of industries in West Bengal, are suffering from technological obsolescence and have thus become incompetent in regard to economic scale of operation and cost of production, and as such they need modernisation. It has, therefore, been proposed to set up one Process cum Product Development Centre for foundry and general engineering industries at Howrah. It has also been proposed to set up one Process cum Product Development Centre for transformers and switch gears at Barasat near Calcutta.

Certain new groups of industries have been identified and additional funds will be required for each such group of industries. These industries include plastic and Polymer, Bio-technology, Fruit/vegetable processing, Pharmaceutical and basic drug, leather and footwear.

A large number of small scale engineering units have been set up in the Durgapur-Asansol region. A Mini Tool Room at Durgapur is necessary for overall industrial development of Asansol Durgapur Region through expansion, diversification, modernisation and technology upgradation.

For implementing the Fly Ash Bricks Project at Bardel, the total estimated cost of the project stands at Rs. 9.55 crores of which State Govt.'s contribution will be around Rs. 4.72 crores and the balance amount will be available from National Housing Bank and HUDCO. But HUDCO and National Housing Bank are insisting on the formal sanction of the State Govt. before sanctioning their fund. So this Deptt. requires necessary fund of Rs. 4.72 crores for successful implementation of the said project.

Handloom Industries

In the Handloom sector, actual requirement of fund under Market Dev. Assistance Scheme during 1991-92 is Rs. 350 lakhs which exceeds 10% of outlay for 1990-91 (Rs. 251 Lkhs).

The Rebate Scheme will have to be continued during 1991-92 in order to meet the pending claims of rebate on sale of handloom products at National Handloom Expo, 1990. A sum of Rs. 155 lakhs will be required for the above purpose.

Powerloom Industries

Marketing of the products of the powerloom, hosiery and readymade garments has been found to be a problem. A State Textile Cooperative Federation has been proposed to be organised to shoulder the responsibility of marketing of the products of the powerloom, hosiery and readymade garments cooperatives. Equity has been proposed to be provided to the Society to attract bank finance for its working and giving support to the powerloom, hosiery and readymade garments sectors.

Sericulture Industries

In respect of National Sericulture Project, last year a sum of Rs. 50 lakhs was spent and during the current year a sum of Rs. 2 crores has since been sanctioned. The physical progress under the scheme

achieved during 1989-90 is as follows :-

Items	Target for 1989-90	Achievement
1. Mulberry Plantation	1000 ha	936 ha
- - Replantation	200 ha	200 ha
2. Construction of Rearing Houses.	2500 nos.	1646 nos.
3. Installation of Irrigation system.	675 nos.	298 nos.
4. Setting up of Grainages	3	Construction will start soon.
5. Training of farmers	-	3600

For carrying on the activities of this Deptt. smoothly and for expansion of SSI units in this State, a mere 10% increase for this Deptt. will not suffice. Incidentally, it may be mentioned that last year as against total outlay of Rs. 19 crores, a sum of Rs. 22 crores approx. was spent by providing additional fund of Rs. 3 crores. During the current year it is expected that the entire fund of Rs. 30 crores will be utilised, and if additional fund of Rs. 9 crores for State Incentive Scheme is available the said sum will also be spent during the current year.

INDUSTRIES (OTHER THAN V & S.I)

1. Programme of Commerce & Industries Department.

1. State Industrial Development Corporation.

The West Bengal Industrial Development Corporation was set up in 1967 with the object of securing the assistance in the quick and orderly establishment growth and development of industries in the State.

During the 7th Five Year Plan an outlay of Rs. 5650 Lakhs was approved for the Corporation but the actual expenditure amounted to nearly Rs. 8000 Lakhs.

1. The WBIDC has implemented 4 projects in the joint sector and the projects are performing well. 7 more projects are also being implemented most of which are expected to be completed in a year or two. Of the units assisted by the Corporation during the 7th Plan, 60 units have already been commissioned, 13 of them are located in North Bengal.

Encouraged by the improved industrial climate and investment trend in the State the Corporation proposes to increase its activities during the 8th Plan. The Corporation has already received Letters of Intent for a few projects and few new schemes are also being drawn up. Further, the Corporation is a partner of the Haldia Petro Chemical Complex. The 8th Plan outlay and also the outlay for the annual plan for the Corporation has been fixed as below :

a) Investment	...	Rs. 7050.00 lakhs
b) Marketing borrowing	...	Rs. 1100.00 lakhs
c) Incentive Scheme	...	Rs. 6850.00 lakhs

Outlay for Annual Plan, 1991-92 is as follows :-

a) Investment	...	Rs. 2450.00 lakhs
b) Marketing borrowing	...	Rs. 220.00 lakhs
c) Incentive Scheme	...	Rs. 1330.00 lakhs

2. West Bengal Electronics Industry Development Corporation

Of the 16 Weble Companies 15 have gone into production. The 16th company is being re-structured as a weble-DDE-MOI-UNDP National Centre for too-room facility for electronics. DDE has already completed preliminary rounds of discussions with UNDP. Some of the companies, have already become leaders in their respective field of activities.

About 85% of available land at Salt Lake has already been allotted to large scale projects, minimum scheme ventures and smaller units. It has been possible to attract investment from outside the State and a few NRI investment are in the pipe-line. Four major Central Government Projects are coming up alongwith constructive activities like DDE-WEBLE R & D Centre Asic design facilities to ITI.

One of the major break-through achieved is the location of International Gate-way facility of Vidush Sanchar Nigam through which it would be possible to have base-lines for data communication - a vital requirement for Softwater export. The Standard Design Factory Building which is nearing completion has been welcomed by the entrepreneurs. The Corporation is also re-vitalising some of the weaker units. Considering the importance of the Corporations and its extending activities the following outlay has been proposed for the Corporation.

	8th Plan	1991-92
a) Investment	5000.00	850.00
b) Loan	2000.00	450.00
c) R & D	1000.00	300.00

3. West Bengal Pharmaceutical & Phyto-Chemical Development Corporation.

During the 8th Plan the Corporation proposes besides completing 5 continuing schemes most of which are in advanced stage of implementation, to take up a few more new schemes in the context of the general growth and development of Pharmaceutical Phyto-Chemical and allied industries in the country.

Approved outlay for WBPPDC for the 7th Plan was Rs.500 lakhs against which the expenditure was around Rs. 235 lakhs.

For implementation of the programme proposed by the WBPPDC an outlay of Rs. 700 lakhs has been proposed during the 8th Plan and Rs.95 lakhs for the Annual Plan, 1991-92.

4. West Bengal Sugar Industries Development Corporation.

The Corporation has so far failed to utilise its full capacity of 600 TCD mainly because of un-satisfactory conditions of the Plant & Machinery and shortage of Milling Cane. Financial constraint stood in the way of replacement of the old and wornout machineries which continued to gradually lose their productivity with the passage of time.

During the 7th Plan period against a target of crushing 225000 M.T of sugar cane to produce 19,1,25 M.T. of Sugar the Corporation could crush 152665 MT of sugar cane to produce 11240 MT sugar. The expenditure during the 7th Plan was around Rs. 680 lakhs. To come out of impasse an outlay of Rs.1000 lakhs has been proposed during the 7th Plan and Rs.200 lakhs during 1991-92 Annual Plan. The old machineries will gradually be replaced to make the unit viable.

Haldia Petro-Chemical Complex.

Work has been progressing quite steadily and it is expected that the Mother Naptha Cracker Project along with a few down-stream units will come up during the period of 8th Five Year Plan. An outlay of Rs.177 has been proposed for the 8th Plan and the proposal for 1991-92 Annual Plan amounts to Rs. 56 crores.

5. Greater Calcutta Gas Supply Corporation Ltd.

Gas distribution net-work project for Calcutta Metropolitan district was taken up by the State Government for distribution of gas to be obtained from Dankuni L.T.C. and Durgapur Project Ltd. This is a 100% Govt. owned company and was incorporated in December, 1987, the total project cost was estimated at Rs. 5435 lakhs. During the 7th Plan an outlay of Rs. 1300 lakhs has been proposed for the Corporation and for 1991-92 Annual Plan Rs. 300 lakhs have been proposed.

At present the Corporation has been running pipe-line of 150 K.M. in length which was taken over from the Oriental Gas Company.

6. West Bengal Industrial Infrastructural Development Corporation
(WBIIDC)

The Corporation was set up in 1974 with the objective of creating infrastructural facilities in all the districts of the State with the ultimate aim of promoting accelerated and balanced industrial growth throughout the State including the industrially backward regions.

During the 7th Plan the Corporation completed the growth Centres at Debgram and Raninagar in Jalpaiguri, Uluberia in Howrah and at Falta in South 24-Parganas. Work on the second phase of the Kalyani growth Centre is also in progress. Besides, preliminary work of acquisition and Development of land in a number of growth centres in 'No Industry

districts' of Cooch Behar, Malda and Bankura is also in progress. The Corporation is in dialogue with the Government of India for setting up of three mega growth centre with the assistance of the Government of India. For 8th Five Year Plan an outlay of Rs. 2500 lakhs has been proposed for funding the activities of the Corporation. In Annual Plan, 91-92 Rs. 55 lakhs have been proposed.

7. Falta Export Processing Zone.

The State Government is developing 180 acres of land around Falta Export Processing Zone for creation of social infrastructure facilities out side the Zone. The growth Centre is basically divided into two sectors viz. (i) Industrial Sector and (ii) Housing Sector. In the Industrial Sector, the land/20 units of industrial sheds are now ready for allotment. In the Housing Sector infrastructural work together with the construction of 12 No. of HIG, 24 No. of MIG and 32 Nos. of LIG flats nearing completion and expected to be completed in all respects by the end of the Seventh Plan.

In the meeting of the State Level Committee on Export Processing Zone at Falta held recently, it was decided to take up some infrastructural works relating to the Falta Export Processing Zone and including improvement of Falta-Dakshin Roypur Road, Improvement of Calcutta Diamond Harbour Road, Extension of E.M. Bye-Pass upto Calcutta-Diamond Harbour Road etc.

An outlay of Rs. 8000.00 lakhs is suggested for 8th plan and for 1991-92 an amount of Rs. 290 lakhs has been proposed.

Apart from the above Corporations the Directorate of Industries has certain schemes like a) Re-organisation of the Directorate of Industries (b) Setting up of Monitoring Cell in the Directorate of Industries (c) Re-organisation of the Industrial Research Laboratory (d) Setting up of a Statistical Cell in the Directorate of Industries (e) Modernisation and Rehabilitation of Sick Jute and Textile Units in the State and f) Modernisation and Rehabilitation Scheme for Mayurakhi Cotton Mills Ltd.

2. Programme of the Public Undertaking Deptt.

1) Durgapur Chemicals Ltd.

The Company has proposed only one project viz. expansion/modification/ rectification of the existing plants and diversification of product range for inclusion in Eighth Plan 1990-95 and the Annual Plan 1991-92. The project has been continuing from the Sixth Plan period. Due to price hike and the programme being extended from time to time, the total project cost has increased considerably and is assessed at present to be around Rs. 5000.00 lakhs. The programme is being implemented in phases against yearly allocations made in the State Plan Budget.

Some progress in implementation of the programme has been achieved in Caustic Chlorine Plant, Phthalic Anhydride Plant, Monochloro Benzene Plant and utilities, Safety measures and rectification jobs are being executed in phases. Upto 1989-90 a total sum of Rs. 737.88 lakhs was released from the State Plan Budget for the project. An expenditure of Rs. 375.00 lakhs on the project is anticipated during 1990-91.

The specific areas where, in course of the Eighth Five Year Plan, actions will be taken are :

- A. Completion of modification of (a) Caustic-Chlorine Plant, (b) Monochlorobenzene Plant and (c) Pentachlorophenol Plant.
- B. Completion of modification and expansion of capacity for Phthalic Anhydride Plant, the expansion in capacity being from 3300 MT to 7000 MT.
- C. Participating in a joint sector venture for PNCB/ONCB factory.

In view of the position stated above a heavy dose of outlay will be required during the 8th plan. The commitment of the Government in this regard is however, open ended.

2. Kalyani Spinning Mills Ltd.

A rehabilitation-cum-modernisation package for Kalyani Spinning Mills Limited was included in the Annual Plan for 1988-89. The programme was scheduled to be completed by 31st March, 1990 but due to defement of the actual start of implementation of the programme it spills over in the Eighth Plan period. A permission of Rs. 25.00 lakhs has been made for 8th Plan.

3. West Dinajpur Spinning Mills Ltd.

The Spinning Mills at Raiganj with the projected capacity of 25088 spindles has been fully commissioned and engaged in commercial production. The Mills are yet to achieve viability. So it is contemplating to expand its activities and diversify its product range in order to better the chances of its viability. The proposed programme for expansion and diversification will, as per preliminary assessment, involve an expenditure to the tune of Rs. 90.00 lakhs.

Accordingly an outlay of Rs. 90.00 lakhs is proposed for the Eighth Plan period 1990-95 for the programme, out of which a provision of Rs. 15.00 lakhs is for 1991-92.

4. Electro-Medical & Allied Industries Ltd.

The Company started its operation in 1961 in collaboration with M/s. Picker's X-ray Corporation of U.S.A. Since then technology of such X-ray equipment has considerably improved throughout the world and hence, the company is required to upgrade its technology and to improve the quality of the X-ray equipment manufactured by it so that it can compete in the market with other manufacturers. Besides, most of the plants and machinery of the company installed about two decades back, have out-lived their normal lives and require immediate replacement. An outlay of Rs. 2 crore is proposed for the entire Eighth Plan period 1990-95 of which an outlay of Rs. 20.00 lakhs is made for 1990-91 and an equivalent amount is to be earmarked for 1991-92.

5. Westinghouse Saxby Farmer Limited.

The company was incorporated in 1923. Most of the Plants and Machinery are old, out-lived their normal life, have become obsolete and require replacement for deduction of cost and improvement of production. The company has accordingly been working out a detailed rehabilitation-cum-modernisation package through acquisition of new plants and machinery for implementation in phases, in the light of the recommendations made by RITES. The estimated cost of the implementation of the programme will be around Rs. 250.00 lakhs.

Pending finalisation of the programme, an outlay of Rs.250.00 lakhs is therefore, proposed for the programme for the entire Eighth Plan Period 1990-95, out of which an outlay of Rs. 30.00 lakhs is made for 1990-91 and an equivalent amount is proposed to be earmarked for 1991-92 for the programme.

6. Sundarban Sugarbeet Processing Co. Ltd.

The Company has undertaken during the Seventh Plan Period the project for production of Industrial Alcohol and other chemical derivatives from Sugarbeet. The remaining facilities are proposed to be undertaken during the Eighth Plan period in phase. The project stipulation cultivation of sugarbeet in some selected areas of Sundarbans and processing them to industrial alcohol.

7. West Bengal Agro-Textile Corporation Ltd.

The Company has proposed for inclusion in the Eighth Plan two projects- one on-going viz. production of fibres from agro-wastes and other a new one viz. production of Caplon Blanket. The on-going project could not make much headway during the Seventh Plan. In fact, the project is still at experimental stage. However, for the present a token provision of Rs. 4.50 lakhs proposed for the project for 1990-95 of which a sum of Rs. 0.50 lakhs is for 1991-92.

The total project cost of the new scheme viz. production of Caplon Blanket is estimated to be Rs. 49.20 lakhs, out of which only Rs. 16.50 lakhs is to be provided from the State Plan budget and the balance requirement is proposed to be met by term loans from IDBI and Bank loans. An outlay of Rs. 16.50 lakhs is therefore proposed for the project for the eighth Plan period, of which an outlay of Rs. 14.50 lakhs is made for 1990-91 and a provision of Rs. 2.00 lakhs is proposed for 1991-92.

3. Programme of the Industrial Reconstruction Department

The Plan proposals of Industrial Reconstruction Deptt. seek for an outlay of Rs.57.63 crores, for the five-year period commencing on April 1,1990.

Allocation for the 7th Plan was Rs.25 crores upto the end of September,1989, the actual expenditure came to nearly Rs.25 crores.

The objective in the 7th Plan was to provide funds for sick units and improve their conditions by way of nursing as far as possible. In other words, what was expected was that the units under the administrative control of the Department of Industrial Reconstruction would minimise cash losses and reduce their dependence on the State exchequer for non-plan assistance.

The objective was fulfilled only partially. At least three units, namely (a) Britannia Engineering Products and Services, (b) Shalimar Works and (c) Eastern Distilleries have started earning a marginal cash profit. Cluconate India, West Bengal Chemical Industries, India Belting & Cotton Mills have also registered a downward trend in their cash losses. The rest of the lot have however, boomed all our expectations. Even then, if we consider the situation as a whole, the performance of the Department during the 7th Plan has not been all that bad.

In this background, we have prepared our plan proposals for the five year period to come.

Objectives : Nursing of sick industrial units, both in the public and the private sector will continue to be the principal business of the Department. This time, however, we have sought to be a little more ambitious. Judging by the experience of the 7th Plan, we have divided the units under our control into three groups :-

- (i) The first category of industrial units includes those companies who have reached a near viable position. They will be given the highest priority so that they can be placed on a firm footing.
- (ii) the second group consists of the Companies for whom one can be hopeful. On the basis of exercises undertaken with the help of the Standing Advisory Committee on Government Corporations and Consulting firms like the WEBCON together with the in-house studies, a programme has been chalked out to make these units viable. Here, we have indulged in a departure from the previous plan, and attempted to

- (iii) For the third group, we have still some reservations. Studies by the expert bodies are not yet complete. The idea for these Companies is to find a way out, and till such time, to give them some support in replacing out dated machinery and procuring some balancing equipments.

For the private sector, we shall continue to lend our support in terms of the policy prescriptions of the Government of West Bengal. The experiment with Workers' Co-operatives will continue, this time on a larger scale. In all liquidation proceedings, when no settlement can be made in the forum of BIFR, we shall try to assist the intending buyers who are willing to run the units.

Provisions have also been made to cover pre-take-over dues and also for nationalisation of the three Companies already taken over under the Industries(Development & Regulation) Act.

In the statements, we have translated these ideas into quantitative terms. The Department hopes to end up with a much better performance at around the same time five years hence, although one will have still miles to go.

4. Programme of the Power Department(Industry Component).

In the 1990-91 Annual Plan proposals, details were given about the plan proposals of industrial component of the DPL. The major schemes which will continue to be implemented both in the 8th Plan period and also in 1991-92 Annual Plan are (1) Construction of Coke oven Battery No.5 (2) Modernisation and Rebuilding of Coke oven Battery Nos.1 and 2, (3) Renovation of Coal/Coke handling plant DPL, (4) Renovation of By-product plant, DPL and a new water works for augmenting the water supply position to meet the increased demand in the area. The total outlay for DPL (I) for the 8th Five Year Plan is open ended. For 1991-92, however, an outlay of Rs.2300.00 lakhs has been proposed.

MINING

Programme of the Commerce & Industries Department.

Non-Ferrous Mining and Metallurgical Industries -
Regulation and Development of Mines :

1.0 The Directorate of Mines and Minerals, West Bengal plays an important role in identification and development of the State's rich mineral resources. During the Seventh Plan period, the Directorate has carried out prospecting work in Kharidua of Purulia district for China Clay, Dolomite and other base metals; investigation for base metal along Purulia-Bankura shear zone; prospecting for clay at Dangara and Monipur of Bankura district; prospecting for coal and base metal in Darjeeling district; Evaluation of clay resource, for setting up new ceramic and refractory industries in Birbhum district and evaluation of gravel and clay in Burdwan district. Besides, the Directorate processed, in its Mining Estate Branches, mining lease applications and made assessment of royalties.

1.1 The Seventh Plan outlay for the schemes of the Directorate of Mines and Minerals was Rs.73.00 lakhs including that for "Training in Mining". Against this outlay, the estimated expenditure during the Seventh Plan period would be of the order of Rs.62.00 lakhs.

2.0 Emphasis is to be given to the Mining sector during the Eighth plan and the Directorate has drawn up a detailed programme for this. The scheme for setting up a 'Petrological, Geological, Geochemical and Ore-dressing Laboratory at Purulia', has already received the clearance of the State Planning Board. The proposed laboratory at Purulia will help to carry out mineral exploration, on the basis of State's priority. The Directorate also proposes to construct staff quarters at Purulia at an estimated cost of Rs.37.28 lakhs and this scheme also has been cleared by the State Planning Board. In addition, the Directorate would also construct staff quarters for the Institute of Mining, Raniganj at an estimated cost of Rs.57.55 lakhs, construction of Hostel for the students of the said Institute and Godown and office building at Geological Prospecting Branch. During the Eighth Plan, the Directorate would implement the Phase-II programme of the 'Decentralisation of Mining Estate Branch' and also a scheme for phased replacement of the old drilling machines and accessories.

2.1 For proper implementation of the programme of the Directorate of Mines and Minerals, an outlay of Rs.1100.00 lakhs is proposed for the 8th Plan and Rs.245.00 lakhs for the year 1991-92.

Mining Corporation.West Bengal Mineral Development and Trading Corporation Limited (WBMDTC) :

1.0 The Corporation has been engaged in the development, exploration and trading of industrial minerals in the State. Encouraged by the availability of raw materials, the Corporation initially began its activities in the districts of Purulia and Birbhum, gradually extending the sphere of activities in Bankura and also in North Bengal where a coal mining project is under consideration.

1.1 Production of stone materials and mining and grinding of Rock Phosphate, required for phosphatic fertiliser, happen to be the principal field of activities of the Corporation.

1.2 During the 8th Plan the Corporation Proposes to expand the existing stone mining and other mining projects and also to take up a few new projects. The programme is to gradually raise the annual production of stone materials to reach a target of 0.3 million cu.m. by 1997.98. Similarly, the annual production of rock phosphate is proposed to be raised to 25,000 tonnes during the 8th Plan. In addition, the Corporation proposes to take up the new projects like (1) Production of Dimension Stone in Birbhum and Purulia (2) Evaluation of Tungston deposit and exploratory mining in Bankura District (3) Rock Phosphate partial beneficiation and improvement of Water solubility etc. in Purulia District and (4) Magnesium metal extraction unit (semi commercial pilot plant) in Jalpaiguri. For these projects survey and procurement of land, development of infrastructure facilities, procurement of mining machinery, production of samples and market development are proposed to be undertaken.

Programme of the Finance (IF) Department.1. West Bengal Financial Corporation :

The West Bengal Financial Corporation is a premier lending institution in the State. The paid-up capital of the West Bengal Financial Corporation mainly consists of the contribution from the Government of West Bengal and the Industrial Development Bank of India. The authorised capital of West Bengal Financial Corporation has been enhanced from Rs.15.00 crores to Rs.25.00 crores.

2. The WBFC is the only term lending institution for the Small and Medium Scale Industrial units. The WBFC gets the resources from (i) Refinance by IDBI, (2) Issue of Bonds (3) Recovery of Principal (Ploughback) and (4) Revenue Surplus (Profit after Tax). Generally 55% of the disbursements in a year comes from I.D.B.I. as refinance and 30% from market borrowing by issue of bonds. The recovery rate being more or less static at 38% due to

various factors the resource availability from own generation is too limited. The dependence on additional share capital therefore gradually increased. The estimated gap between requirement and availability of resources is of the order of Rs.800 lakhs during 89-90 and this amount has to be provided by IDBI and State Government in the form of share capital on 50:50 matching basis. A Plan outlay of Rs.484 lakhs is therefore requested for the financial year 1991-92.

3. During the 7th plan period an amount of Rs.82 lakhs was spent for share capital in WBFC in 85-86, Rs.95 lakhs in 86-87 and Rs.155 lakhs in 87-88, Rs.325 lakhs for 88-89 and 325 lakhs for 89-90. Till the end of the 7th plan period an amount of Rs.982 lakhs have been utilised. The approved outlay in the budget of 1990-91 on this account is Rs.440 lakhs.

4. Increasing the plan outlay at the rate of 10% per year an amount of Rs.2750 lakhs may be proposed for the 8th plan period (1990-95) out of which Rs.440 lakhs was proposed for the first year (1990-91) of the 8th plan period. As the cost of equity is high, Rs.375.00 lakhs have been sanctioned in favour of WBFC as loan in lieu of share capital under the head "6885-Loans for other Industries and Minerals (Excluding Public undertakings)-01-Loans to Industrial Financial Institution - Loans to Public Sector and other undertakings -- State Plan (Annual Plan) in the current year's budget (1990-91) by reappropriation of equivalent amount from the provisions under share capital assistance. An amount of Rs.25 lakhs has also been sanctioned during the current financial year to the WBFC as special share capital. In consideration of the above, we may propose Rs.484 lakhs for WBFC for the next financial year (1991-92).

2. Banking Company in West Bengal :

In view of the disappointing performance of the Commercial Banks functioning in West Bengal, Government of West Bengal proposed to float a Company with an authorised capital of Rs.5 crores for the purpose of carrying on banking business under the Banking Regulations Act, 1949 and requested for the grant of a licence by the Reserve Bank of India under Section 22 of the aforesaid Act.

Since the Reserve Bank of India has not yet granted the required licence for the proposed Banking Company no provision has been made for the year 1991-92 for the purpose in question. However, a proposed outlay of Rs.1 lakh may be made for the 8th plan period (1990-95).

3. Grants to West Bengal Financial Corporation for Running Entrepreneur's Assistance Cell:

As directed by the Government of West Bengal, the West Bengal Financial Corporation constituted a Special Cell viz., "Entrepreneurs Assistance Cell (EAC)" at Calcutta for providing guidance to the new as well as the existing entrepreneurs and also for assisting them with all necessary information/assistance for establishment and running their industrial ventures. Finance (Institutional Finance) Department agreed to provide assistance to the WBFC for running its Entrepreneurs Assistance Cell. Another office at Siliguri has been opened in the Financial year 1988-89. But no fund could be sanctioned under this scheme during 1988-89. Rs.1,875 lakhs was sanctioned during the year 1989-90. There is a provision in the current year's budget of Rs.3.75 lakhs. No fund has yet been sanctioned for the current financial year (1990-91) till date.

2. There was an agreed outlay of Rs.25 lakhs during the 7th plan period. A proposed outlay of Rs.45 lakhs, therefore, may be made during the 8th plan period (1990-95), out of which Rs.3.75 lakhs may likely be spent for the 1st year in 1990-91 and we may propose Rs.4.125 lakhs for the year 1991-92.

VII : TRANSPORTCIVIL AVIATIONProgramme of the Transport DepartmentOther Aeronautical Services - Behala Flying Training Institute

Substantial development or upgradation of Behala Airport is necessary both for flying training and for its use commercially, as a second Airport for Calcutta. The runway has to be made concrete. This will enable the training to be imparted during the rainy season - at present there is practically no flying during five months, due (inter alia) to water logging on the runway. The air strip has to be extended by about 300 metres, to permit its use by sophisticated aircraft like AVROS, FOKKER FRIENDSHIP or Kingair. Electrical installations are necessary, including runway lighting. The road between the hanger and air strip has to be made black top. Arrangement has to be made for area drainage. An estimate for the above work has been prepared by a firm much experienced in the construction of Airports, amounting to Rs.3 crores.

Hence the total estimated requirement for development of F.T.I. in the 8th Five Year Plan period would be Rs.467.88 lakhs. The proposed outlay for 1991-92 is Rs.30.25 lakhs.

ROADS & BRIDGES1. Programme of the Public Works Department & Public Works (Roads) DepartmentIntroduction :-

Road construction in West Bengal under the Plan Programme started in the year 1952 with the launching of the 1st Five Year Plan. West Bengal inherited a peculiar situation with the partition of Bengal, thereby lacking in coherent communication system. During the early years of the Plans, the concept of road construction was to extend the road network as quickly as possible. As a result the roads that were constructed and improved, remained deficient in standard width and crust thickness. On the otherhand, the mid-sixties ushered in the Green Revolution in the country and saw hectic activities in agricultural production, marketing in the rural areas. The mid-seventies brought in tremendous impact on transportation system in the country with the introduction of heavy axle load, articulated trucks and container services. Moreover, the growing population started putting pressure on passenger movement by road. There has been a phenomenal growth of freight movement and passenger traffic movement by road in the last 10 years and this is likely to grow @ 8 to 10% annually. The road sector presently appears to bear about 60% of freight movement and 80% of passenger movement.

A review of the Plan Programme will indicate that plan allocation for road sector in this State was appropriately about 19% of the total plan outlay during the 1st Five Year Plan. In the 2nd Five Year Plan period it was reduced to 9.39% and in the subsequent Five Year Plans, the plan allocation dwindled and came down to as low as 1.8% upto the 6th Five Year Plan period. This did not however improve in the 7th Five Year Plan too. As a result the roads which were constructed earlier on a war-footing basis could neither be improved and strengthened further commensurating with the rise of traffic, nor there had been any appreciable addition to the target of road network. In fact, during the last three Five Year Plans, the work is being continued on spill over ongoing road projects and backlog works of earlier plans.

Strategy of plan :-

Roads in this State in conformity with the National strategy are classified in 4 (four) categories, namely, National Highway (NH), State Highways (SH), Major District Roads (DR) and Rural Roads (RR) comprising of other district roads and village roads.

Comparative figures of achievement of surfaced road during the middle of the 7th Five Year Plan period, i.e., as on 31.3.87, are as follows :-

Category	Target as per all India average (1960-81) Kms.	Achievement as on 31.3.87 (Kms.)	Remarks
S.H.	2121	3230	Almost all roads are of single lane having width of 2.4 mtrs. to 3.6 mtrs.
D.R.	6850	3240	
R.R. (ODR & VR)	19832	9840	
	<u>28803 (Kms.)</u>	<u>16310 (Kms.)</u>	

Rural Roads have been given special emphasis from the 5th Five Year Plan period and now are under M.N.P. including Tribal Area Sub Plan and Special Component Plan. As per recommendations of the Planning Commission, Govt of India, for rural development all villages with population of 1500 and above and 50% of villages in plain areas and for hill areas all villages with population of 500 and above, are to be connected with all weather roads within 1990. However, assessment made at the end of the 7th Plan Five Year Plan period indicates that out of 38074 villages in this State, 21,118 villages have been left unconnected and an additional 21,500 Kms. of roads are required to be constructed to achieve the target of rural roads. Of this, only about 3000 Kms. of roads are under construction as ongoing project under the Rural Road Plan Programme since the 5th Five Year Plan period.

Road Administration in West Bengal is looked after by P.W. Department and P.W.(Roads) Department. Categorywise roads under P.W. Department and P.W.(Roads) Department are as follows :

<u>Department</u>	<u>Category of roads (in Kms.)</u>			<u>Total</u>
	<u>S.H.</u>	<u>D.R.</u>	<u>R.R.</u>	
P.W. Department	2213	1998	1442	5653
P.W. (Roads) Department	1069	1502	8213	10784

As already stated, the existing State Highways and District Roads are of single lane having width varying from 2.4 mtrs. to 3.6 mtrs. Few stretches of roads have been widened or provided with hard shoulder on either side of the black top through periodical maintenance and repair works. And insignificant stretches of different State Highways have been widened to 5.5 mtrs. width under upgradation Scheme of the 7th Five Year Plan period. The inadequate width and road crust thickness force vehicles to constantly ride on the flank to give way to those coming from the opposite direction and this leads to severe damage to the earthen shoulders as also to accidents and dislocation of traffic. The carrying capacity on a single lane road is also limited. The present day traffic in most of the stretches of State Highway and District Roads is too high to be catered on single lane road and the average speed of the vehicle is also limited to 20 to 30 kms. per hour. Low speed and congestion of traffic increase fuel consumption as well as the running cost thereon including maintenance and repairs of the vehicles. As substantial economy in fuel and reduction in maintenance cost of vehicles could be made if the riding surface of the roads is kept in proper condition and also the width of the road is made adequate to cater to the intensity of traffic.

Plan Proposal :-

In the present plan proposal, as such, priority has been given to removing the existing deficiencies in the roads to meet up the growing intensity of traffic. Selected stretches of State Highways and District Roads have been proposed to be widened to minimum of 5.5 metres width (SSL) and also the crust thickness to be strengthened to make it suitable for traffic intensity of 1500 to 2000 commercial vehicles per day. Further there is necessity of replacing existing weak bridges with RCC constructions to suit the loading standard of the traffic. There is also the necessity of building bridges on important State Highways particularly to cross the river Damodar at Mejhia in the district of Bankura, Ajoy at Natunhat (Mangalkot) in the district of Bundwan, Siltorsā on abandoned N.H-31

alignment in the district of Coochbehar, Dwarka on Bolpur-Rajagram Road in the district of Birbhum, Mahananda at Siliguri and Amodar at Jairambati in Bankura etc. There is also the necessity of providing Road over Bridge at Bondel Gate and Lake Gardens in Calcutta and at Liluah in Howrah and also at Birati in 24-Parganas (North). Besides these, provisions has been made also for completion of the ongoing projects, i.e., spill over works of the earlier plans particularly in the Rural Roads Sector.

The estimated amount of Rs.50 crores comprises of the Plan proposals of P.W.D. and P.W. (Roads) Department for improvement, strengthening, widening of the existing State Highways and District Roads, including provision for bridging critical gaps in the alignment of State Highways over major rivers like Damodar, Ajoy, Mahananda, Torsa, Siltors_a etc. The Financial proposal has been kept at the bare minimum to resuscitate the life of the existing emaciating condition of the road crust and to meet the rapidly growing traffic both in intensity and increased axle load in the coming years.

In the 8th Plan the Department will actually require around Rs.800 crores for proper upgradation and completion of spill over projects. But in view of resource problem, funds from other sources like Rural Development Department and District Plan schemes Fund are being dovetailed to meet the gap as far as possible. From DPS fund alone around Rs.1500-00 lakhs are being provided annually.

2. Programme of the Metropolitan Development Department SECOND HOOGHLY RIVER BRIDGE PROJECT

Provision for the project under State Plan consists of agency charges, establishment cost and rehabilitation cost. For these items of works, no central assistance either in the form of loan or grant is available although the Government of India is financing the project on loan basis. For these items, Rs.1516.00 lakhs were spent during the period 1985-89. It is expected that Rs.379.50 lakhs will be spent during 1989-90 against which Rs.200.00 lakhs has already been spent. The balance amount of Rs.179.50 lakhs will be spent during the remaining period of the year 1989-90. The provision for the 8th Five Year Plan period for these items has been shown as 2099.21 lakhs against which Rs.391 lakhs will be required by 1991-92.

ROAD TRANSPORTProgrammes of the Transport Department1. Calcutta State Transport Corporation .

Proposed outlay for 1991-92 Rs.900 lacs proposed outlay for the Eighth Five Year Plan Rs.5750 lacs.

The main thrust of the Corporation's plan programme would be on replacement of aged vehicles from the fleet to make it more efficient. It is estimated that a total no. of 786 vehicles would require replacement at the end of the eighth five year plan. With the investment proposed it may be possible to replace about 550 buses at a total cost of Rs.32.24 crores.

For purchase of float units a provision will be made @ 10% on the cost of newly acquired vehicles each year, which will ensure minimisation of downtime of vehicles under repair as well as maximisation of capacity utilisation of the unit exchange shop. Provision will also be made for undertaking renovation of old houses in order to have better service and effective utilisation.

During the plan period CSTC will also undertake various Civil Construction works including the Territibazar complex and Telinipara Depot.

2. North Bengal State Transport Corporation :

Proposed outlay during 1990-91 Rs.600 lacs proposed outlay during Eighth Five Year Plan Rs.3700 lacs.

The proposed outlay of Rs.700 lacs represents an increase of 72% over the Seventh Plan investment of Rs.2150 lacs. During the Eighth Five Year plan period, stress would be given on consolidation of the gains already made. Towards that goal the Corporation will be required to incur substantial expenditure on account of (a) Purchase of Plan & Machinery for Central Workshop. (b) - Construction of Central Bus Terminal at Cooch Behar and construction of Central Workshop at Cooch Behar. The Corporation also proposes to acquire 270 bus chassis during the period @ 54 chassis per year. About 230 buses will be renovated during the period to make them more road worthy and to have effective utilisation. It is also proposed to set up modern depots with maximum facilities for the travelling public.

3. South Bengal State Transport Corporation :

Proposed outlay during 1991-92 Rupees 300 lacs

Proposed outlay during the entire 8th Five Year Plan Rs.2975 lacs.

The proposed Eighth Five Year Plan outlay of Rs.2975 lacs reflects an increase of 188.21% over the Seventh Plan investment of Rs.1032.20 lacs made for this Corporation.

With the avowed objective of providing adequate and economic transport specially in the hitherto undeveloped and remote areas of the State considerable expansion in the operation of SBSTC has been contemplated during the eighth five year plan. The Corporation at present, besides providing services in the Industrial Complex of Durgapur and thirteen districts of West Bengal also operates inter state routes connecting Durgapur with Jamshedpur and Dumka in Bihar.

The Corporation also plans to acquire 387 new buses during the plan period for augmenting its fleet.

With the expansion of its services it will be necessary to develop central workshop and other facilities for which the investment is estimated at Rs.148.25 lacs will be provided. Adequate fund will also be provided for plant, Machinery and Tools and equipments to facilitate maintenance and repairing.

4. The Calcutta Tramways Co. (1978) Ltd.

Short notes on the plan schemes proposed to be taken during the 8th Five Year plan period - (1990-93).

I. Proposed outlay during the 8th Five Year Plan	period	...	Rs.6,200.00 lacs
II. Proposed outlay during 1990-91		...	Rs.1,000.00 lacs.

Break-up of plan schemes proposed to be undertaken during 1990-91 as well as during the entire 8th Five Year Plan period

The following will be the major items of expenditure which are proposed to be taken up under Plan outlay during the 8th Five Year Plan period :

(a) Acquisition of Rolling Stock :

The present fleet strength of CTC after taking into account the new purchase of 45 tramcars is 402 as on 1st September, 1990. An age analysis of the existing tramcars reveals that there are as many as 138 tramcars of more than 50 years of age as on 1st April, 1989. If we intend to keep the fleet strength steady, major maintenance/renovation work will have to be undertaken in respect of large number of cars. The present pattern of normal renovation is @ 10 cars per month on the average. The total outlay on normal renovation work during the 8th Five year Plan period will be Rs.10.00 crores.

The present day cost of a new tramcar after using the BHEL electricals will be around Rs.35.00 lacs per tramcars. If we intend to procure 14 number of tramcars during the entire 8th Five Year Plan period, the total cost involvement will be around Rs.5.00 cro

after taking into account the cost escalation, etc. We also intend to introduce electronic trolley buses. So the major heads towards acquisition of rolling stock will be :

For normal renovation	...	Rs.10.00 crores
For acquisition of new fleet (includes Rs.50 lakhs for old liabilities)	...	Rs. 5.50 crores
For acquisition of electronic Trolley Buses	...	Rs.12.00 crores (approx)

(b) Maintenance of track :

The normal period of renewal/replacement of track is 15 years. Out of the total track length of 71 kms. (double track), 9 kms. are new tracks. About 20 kms. of the track was renewed under COTP, another 20 kms. of track length has been renewed out of plan funds. It is essential that at least 30 kms of the track is renewed during the entire 8th Five Year Plan period. The total cost of such track renewal/replacement will be around Rs.12.00 crores at the current prices.

C) Introduction of Pantograph/G T O Chopper system

The proposal for replacement of the existing current collection system by way of introducing pantograph is under active consideration. This will be the first step towards upgradation of technology. It is proposed to spend a sum of Rs.5.00 crores on this head during the 8th Five Year Plan period.

D) Civil construction :

It is proposed to earmark at least Rs.3.00 crores under this head.

E) Purchase of Rolled Steel Tyres, Compressor Motor and other important Components of tram cars, plants and equipments for Workshop, replacement of Overhead and cable equipments

It is proposed to earmark an amount of Rs.14.50 crores under these heads.

Setting up of new State Transport Corporations and Annual Plan Loan contribution to such new S.T.C.s

New State Transport Corporations may have to be constituted for some exclusive area during the 8th Five Year Plan.

6. Public Vehicles Department :

Proposed outlay for the 8th Five Year Plan - Rs.197.00 lacs.

Public Vehicles Department is mainly responsible for the transport administration through M.V. Act, Tax Act and Rules made thereunder. This department also administers the drivers and look after safety aspects of the vehicles and their safe operation. It is also the main agency for revenue collection from M.V. Tax in Calcutta. With the phenomenal increase in the Motor Vehicles population of the State, the existing location of the P.V.D. office in South Calcutta has proved completely inadequate to deal with its multifarious responsibilities. It has also not been possible to maintain data Scientifically, which is of prime importance both in the matter of vehicle administration and revenue collection.

With this end in view it has been proposed to construct a new-PVD building at Salt Lake. According to the estimates proposed by M/s. Mackintosh Burn Ltd., a Govt. undertaking, the first phase of the construction which aims at shifting of the functions of the PVD office to the new premises will cost about 340 lacs.

7. Creation of Transport Directorate and Additional Border Checkpost

A proposal for creation of two Border Checkposts and a Transport Directorate alongwith two regional offices and also for strengthening the enforcement machinery has been taken up with the Finance Department. The total expenditure to be incurred for the purpose during the 8th Five Year Plan will be Rs.273 lakh. The initial expenditure during 1991-92 will be Rupees 30 lakhs.

8. Road Safety Programme :

The Road Safety Programme will basically aim at reducing the chances of happening of accidents, to make available necessary services when accidents occur and to take post-accident measures so as to reduce the hardship. Preventive measures relating to road accidents will require actions among others in the following areas particularly :

(i) Traffic Administration :

This will be concerned with physical checking of drivers, vehicles and other users on road such as drunken driving, traffic rule violations etc.

(ii) Enforcement and regulation relating to use of road and other facilities.

(iii) Adoption of traffic engineering measures to reduce accident potentials of the accident-prone areas.

(iv) Public education to arise social consciousness regarding the traffic accidents and the use of the pedestrian walkways and Zebra Crossings.

Traffic Safety Division, that has been proposed, will be working for all these items. After an accident occurs it will be necessary to provide services and this has to be brought under a comprehensive accident surveillance system. This will consist of immediate detection of the accident, communication to necessary service agencies and removal of victims and vehicles that will be involved. A total plan for this surveillance will require to be prepared. Within this frame work the following items are suggested :

I t e m	Suggested outlay Rs. in (Lakhs)	
	1991-92	Proposal for Eighth Five Year Plan
1. Setting up of traffic division with necessary manpower and equipments	10.00	60.00
2. Implementation of low cost engineering and other measures to reduce/prevent accidents (includes erection of guard rails, marking improving visibility etc.)	20.00	70.00
3. Traffic Safety education		20.00
4. Preparation and implementation of accident surveillance system		27.00
		<u>177.00</u>

9. Reorganisation and strengthening of Pool Car Infrastructure

The Pool Car under the Transport Department is responsible for the maintenance of the following Vehicles and deployment of drivers thereon.

(1) Ambassador Car	-	150	(approximate)
(2) Fiat Car	-	2	"
(3) Other Vehicles	-	5	"

No capital investments could be made during the last few years towards purchase of Plant & Machineries, erection of new shed etc. in the Pool Car Office. As a result, the maintenance work has suffered considerably. It has been proposed to allocate a total amount of Rupees 3500 lakhs during the 8th Five Year Plan period towards purchase of Plant & Machineries, Erection of new sheds, Ramps, purchase of Wrecker etc. in the Pool Car Office. The investment proposed during 1990-92 under this head is Rupees 5 Lakhs.

10. Flyovers Improvement Schemes and Second Hooghly Bridge

Under the above head the following outlay has been proposed during the Eighth Five Year Plan Period :-

1990-91	50 Lakhs
1991-92	99.70 "
1992-93	2464.17 "
1993-94	249 "
1994-95	250 "

A Committee was earlier constituted by the State Government to consider the issue of traffic circulation planning for the approaches and inter-changes on both sides of the Second River Hooghly Bridge and to prepare a comprehensive plan for traffic circulation in the area. It is expected that the Second Hooghly River Bridge will be commissioned by December, 1992. The said Committee has already submitted its report.

The Transport Department will have to execute a number of schemes for improvement of primary and secondary inter-section including traffic engineering treatment and traffic control devices on Calcutta side and improvement of inter-sections on Howrah side. The details of these schemes are being identified by Chief Traffic & Transportation Planner. It is expected that the entire amount of Rs.8.94 crores proposed under this head to be spent during the Eighth Five Year Plan would be exhausted in implementing these schemes.

12. Setting up of Transfer and Transit Depots in Calcutta and District Headquarters.

Altogether 20 Schemes for construction of bus stands were undertaken during the 7th Plan period out of which 8 (eight) schemes have been completed during the period and on an average 60% construction of each of the remaining 12 schemes for bus stands has been completed.

Three new schemes for construction of Bus stands at Ra_hunathpur (Purulia), Uluberia (Howrah) and Bankura have been taken in hand during the first year of the Eighth Five Year Plan.

Construction of Bus stands at Cooch Behar, Gangarampur, Jhargram, Bolpur (Phase-III), Malda, Nabadwip (Extension Scheme) has been progressing satisfactorily.

13. Transportation Operation Improvement Programme :

In the face of ever increasing traffic, both vehicular and pedestrian, it becomes imperative that the existing transport infrastructure should be put to such use so as to derive maximum capacity out of them. With this objective in view Transportation Operation Improvement Programme was adopted during seventh Five Year Plan in Calcutta. The plan profile consists of actions related to the physical improvements where necessary and feasible, addition and alteration of physical facilities improvement and installation of traffic management system on the existing transport infrastructure. In plain terms projects will include improvement of intersections, channelisation of road system, local widening of road, erection of guard rails, dividers, bus bays and other physical forms improvement. Traffic management system will include installation of simple automanual traffic signals, purchase and use of traffic management aids like ones, removable barriers, public address system etc. Effective illumination will be one of the important items of work. Transportation operation Improvement programmes that were implemented in Calcutta during Seventh Five Year Plan yielded significant benefits. For example, upgradation of B.T. Road through this programme using traffic engineering techniques, increased the traffic flow, almost eliminated the chances of clogging of roads by vehicles due to haphazard movements and reduced traffic accident fatalities on an average from 12/10 to 2 annually. Similar benefits were also noted by improving the intersection of Gariahat Road - Hazra Road complex. Therefore, it is proposed that strong emphasis should be laid on Transportation Operation Improvement Programme in the Eighth Five Year Plan. The details of the programme are in the process of making.

I t e m	<u>Suggested outlay (Rs. in lakhs)</u>	
	1990-91	Total for Eighth Five Year Plan
Transportation Operation Improvement Plan	290.40	1575.84

14. Expansion and Strengthening of the Transportation Planning and Traffic Engineering Directorate

The project is necessary for better management. An outlay of Rs.88.21 lakhs has been proposed for 8th Plan and Rs.15.73 lakhs proposed for 1991-92.

B. INLAND WATER TRANSPORT :

Development of West Bengal Inland Water Transport Corporation

To promote and protect the growth and development of Inland water Transport, for transportation, carriage of passengers and cargo including ferry service and setting up of infrastructure, terminal facilities and public convenience, the Government set up the West Bengal Inland Water Transport Corporation in February 1989. The Corporation has been made responsible for implementing the Plan schemes under the I.W.T. Sector.

While formulating detailed schemes for the 8th Five Year Plan, the basic objective of providing maximum benefit to the rural people and generation of maximum employment potential has been kept in view. The schemes proposed to be implemented during the 8th Five Year Plan are as follows :

- (1) Augmentation and improvement of the existing ferry service across and along the river Hooghly.
- (2) Construction of Jetties with terminal facilities.
- (3) Acquisition of passenger ferry vessels.
- (4) Providing Cargo cum Passenger ferry service between Shalimar yard and Posts.
- (5) Construction of jetties and providing ferry service in Sundarban area.
- (6) Setting up Dockyard with workshop facilities for vessel repair and construction.
- (7) Connecting Ferry service with Surface transport specially in the remote and hitherto unconnected areas.
- (8) Dredging and desilting operation and other river safety measures.
- (9) Feasibility studies.

It is proposed to allot 3372.53 lakhs under the I.W.T. Sector during the 8th Five Year Plan, the component for the Annual Plan 1991-92 being 384.92 lakhs.

IX : SCIENCE, TECHNOLOGY & ENVIRONMENTOTHER SCIENTIFIC RESEARCH1. Programme of the Science & Technology Department.

A. Introduction :- The Department of Science and Technology set up in 1988, has been concerned with various facts of promoting Science and Technology in the State of West Bengal. In this process, it has evolved policy statements and guidelines on Science and Technology provided mechanism of co-ordination of areas of Science and Technology for which a number of Institutions and Departments have interests and capabilities, supported grants-in-aid scientific research institutes and professional bodies involved in promoting science and Technology in State of West Bengal.

2. In order to demonstrate the various technologies at field level, several experimental projects have been taken up by the Department through various field groups, voluntary agencies etc. Such projects demonstrate the changes that can be brought about in improving the living conditions of the rural population.

3. During the five year plan the Department has also promoted activities connected with Science communication and popularisation and also a programme of Entrepreneurship Development.

Keeping in view these broad activities of the Department in the past, the programmes for the 8th five year plan has been proposed.

B. Approach for 8th Plan proposal.

The approach will be to use existing infrastructure for implementation of need based Science and Technology Scheme. Attempts will be made to generate employment opportunities through application of Science and Technology. While formulating the plan emphasis has been laid on society related Science and Technology Programmes covering research and development, training of people, technology demonstration projects relevant to specific target groups, Natural Resource Management, Employment opportunities through Science and Technology based Entrepreneurship Development, Specific Programmes for weaker sections, Scheduled Castes and Tribes and for rural women.

The 35 point Action Plan announcement by the Government States.

"The Science and Technology programmes will be reviewed to provide emphasis on the needs of rural society, especially in the areas of poverty alleviation, water management and land use". The entire Science and Technology plan has been drawn up keeping in view the above objectives.

C. A brief description of the past activities.

The Department mainly deals with following Science and Technology activities.

(a) Science

- a) Science and Technology Promotion.
- b) Science popularisation.
- c) Entrepreneurship Development for Science & Technology persons.
- d) Science and society related Schemes.
- e) Remote Sensing.

(a) Science and Technology promotion :- During the 7th five year Plan, one of the important activities of the Department of Science and Technology has been to identify and promote priority areas of Research and Development relevant to the State of West Bengal. This has been achieved and a number of Research and Development projects have been supported by the Department in various field of Science & Technology. Some of the identified priority areas where research programmes have been launched are :

- i) Energy
- ii) Environment and Ecology
- iii) Forestry
- iv) Geology
- v) Health
- vi) Agriculture.

(b) Science Popularisation Programme :- In order to inculcate the scientific spirit and develop scientific temper among the population this programme has been undertaken in the State since 7th plan period on a fairly large scale with the active participation of a number of institutions including voluntary organisations. The programme comprises publication of magazines, organisation of seminars/workshops, production and exhibition of science films, organising science exhibitions, organising Health Education programme etc.

In addition the Department celebrates National Science Day every year in a benefitting manner.

(c) Entrepreneurship Development for Science and Technology persons :-

It is intended by this programme to create "Job Generators" rather than 'Job Seekers' from among the science and technology spectrum of the community.

The various activities under this head are.:

- a) Entrepreneurship Awareness Camps(EACs)
- b) Entrepreneurship Development Programmes(EDPs)
- c) Science and Technology Entrepreneurship parks.

All the activities related to Science and Technology Entrepreneurship Development Programmes were launched in the State during the 7th five year plan. 20 persons with Science and Technology background have set up their units in the State during 7th five year plan. Total numbers of Eacs and EDPs conducted in the State are 10 & 5 numbers respectively, during the 7th Five Year Plan.

In addition to conducting of EACs and EDPs the department has sponsored a programme to set up a Science and Technology Park at I.I.T., Kharagpur. This will bring about a closer university industry interaction and also stimulate action oriented research in educational Institutions culminating in transfer. The preliminary works related to the STEP were taken up during 7th plan period and it is likely the Park will be completed during 8th plan period.

(d) Science and Society Related Schemes :

- (a) Low cost rural housing.
- (b) Development and promotion of appropriate rural technology.
- (c) Training of artisan on various new technologies.

These have demonstrated their relevant for improving the living conditions.

(e) Remote Sensing Programmes :- Remote Sensing Technology has become an invaluable tool for survey and mapping of natural resources. Realising the capabilities of remote sensing the State Government initiated a programme to set up State Remote Sensing Centre during the last part of 7th five year plan.

A State Remote Sensing Centre with the partial financial assistance of Department of Space is being set up in Calcutta. The Centre is now ready for commissioning.

D. FINANCIAL OUTLAY :

E. PROGRAMMES FOR THE 8TH FIVE YEAR PLAN :

(1) Science and Technology Promotion :- Based on the experience of the 7th Five Year Plan, it is proposed to continue the application oriented Research and Development programmes during the 8th Five Year Plan particularly in the following areas.

- (i) Agriculture.
- (ii) Health and Hygiene.
- (iii) Forestry.
- (iv) Energy.
- (v) Environment and Ecology.
- (vi) Cryogenic.
- (vii) Electronics.

While carrying out the research programme capabilities of the existing Universities and Institutions in West Bengal will be fully utilised. Attempts will be also made to transfer the results of the Research and Development projects to the field by way of small pilot plant and develop process and acceptable technology. A sum of Rs.310.00 lakhs have been proposed during the 8th Five Year Plan to undertake Research and Development programmes in various

field of Science and Technology in the State of West Bengal. A sum of Rs.14.00 lakhs have also been proposed under this head during 8th Five Year Plan-to support various seminars/workshops and symposium of National and International character to be undertaken by various Universities and Institutions.

(2) Science and Technology Communication and Popularisation Programmes :-

This is also a continuing programme. Government of India set up a National Council for Science and Technology Communication (NCSTC) with broad objectives of popularisation of Science and Technology and stimulation of scientific and technological temper among people.

The State P.S.T. with the assistance of NCSTC propose to launch a major programme in the following areas under this head during the 8th Five Year Plan.

- (a) Field projects on Science popularisation.
- (b) Setting up of two District Science Museum.
- (c) Setting up of three mobile Planetaria.
- (d) Training/Demonstration programmes on low cost S & T toys/kits.
- (e) Preparation of films based on specific scientific themes.
- (f) Celebration of National Science Day.
- (g) School Science Project.

(a) Field Projects on Science Popularisation :- This comprises various field level Science Communication programmes like Rural Science Exhibition, Training of Science and Technology Communicators, Seminar, Quiz Contest etc. on popular Science, slide show, popular lectures, street plays etc.

(b) Setting up of two District Science Centres :- Setting up of District Science Centres is a programme of National Council of Science Museum on 50 : 50 sharing basis with the State Government. During 8th Five Year Plan the Department propose to set up two District Science Centres in collaboration with National Council for Science Museum, one at Darjeeling District and the other at Burdwan District. In addition the Department has a proposal to initiate activities related to two more Science Museums during the 8th Five Year Plan.

(c) Setting up of mobile Planetaria :- The mobile planetarias are cheap and attractive device for the children to know about sky. It is proposed to partly finance setting up of a District Planetarium at Burdwan.

(d) Training/Demonstration Programme on low cost toys/kit :-

Development of low cost toys/kits is an important task. A separate programme on development of low cost toys/kits is proposed to be taken up during 8th Five Year Plan. Assistance will be given to Science Clubs for such development.

(e) Preparation of film :-

(f) Celebration of National Science Day :- This is a continuing programme. Every year the Day is celebrated in a befitting manner by organising various programmes on Science popularisation.

(g) School Science Project :- This includes two schemes

(i) Setting up of School Science Centre.

(ii) Implementation of Scientific projects like village level resource survey, scientific study etc. through school children.

The programme is a continuing project and proposed to be constituted during the 8th plan

(h) Library cum Documentation Centre :- A Library cum documentation Centre is proposed to be set up during 8th Five Year Plan.

(i) Setting up of Astronomical observatory at Calcutta and Burdwan University.

A consortium has been formed and dialogue is on with relevant department of Govt. of India to set up a regional radio-astronomical observatory under the administrative control of Calcutta University. There is also a proposal to set up an optical observatory under Burdwan University.

(3) Science and Technology Entrepreneurship Development Activities :-

This is a continuing programme. The programme is proposed to be continued during the 8th Five Year Plan.

(a) Entrepreneurship Awareness Camps (EACs):

This programme is organised with a view to creating awareness about entrepreneurship being a possible vocation among college students studying any one of the Science and Technology subjects. Entrepreneurship Awareness Camps (EACs) are being conducted in different educational Institutions. These Camps last for a period of about 2-3 days. Basically, local bank officers, officials of district industry centres practising entrepreneurs etc. are all brought to these camps to apprise the participants about various facts of entrepreneurship.

(b) Entrepreneurship Development Programme (EDPs) :

In order to provide specific inputs in a more indepth manner, Entrepreneurship Development Programme (EDPs) are sponsored by Government of India on 50 : 50 fund sharing basis with the State Government. Subjects like incentives offered by banks, preparation of a project report, identification of specific products, marketing managing Workers etc. are covered in these programmes.

(c) S & T Entrepreneurship Park (STEPs) :

The STEP at I.I.T., Kharagpur is likely to be completed during 8th Five Year Plan. In addition two more STEP's one at Jadavpur and other at Durgam are also proposed to be set up during 8th Five Year Plan. This will be a joint venture of the State Government, Central Government, Universities and financial Institutions.

MECSAT :- Mass Employment Generation Programme through skill development will be taken up in all districts of the State. Attempts will be made to generate 2,500 sustainable job during the 8th Five Year Plan through this programme.

(4) S & T PROGRAMMES FOR SOCIO-ECONOMIC DEVELOPMENT :

(a) Housing :- Housing is a basic need of the people. During 7th Five Year Plan a number of technologies in low cost housing have been developed. In West Bengal a standard low cost rural house with an plinth area of 350 Sq.ft. and a low cost sanitary latrine costs approximately Rs.10,000/-. The house has different technical specification for different climatic zone. Few demonstrative low cost houses have been constructed in a few districts of West Bengal. It is proposed to demonstrate such low cost houses in all the districts during 8th Five Year Plan.

(b) Building Centre :- Although a number of low cost building technologies have been developed by building research institutions and professional organisations working in the field only few have achieved widespread acceptance. There are many reasons behind it but two major reasons are non-availability of skilled artisan at village level accustomed with low cost housing technology and non availability of low cost housing materials in nearby areas. Sporadic efforts at extending improved low cost technologies through pilot and demonstration projects and artisan training programmes cannot create the desired impact. Such efforts need to be institutionalised by setting up training cum production Building Centres. In Building Centres local artisans will be imparted training in improved low cost building technologies and the building components then fabricated would be sold to builders. During 8th Plan five Building Centres are proposed to be set up in five districts of West Bengal. The programme will be a joint venture of State S & T Department, Zilla Parishad and HULCO.

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(c) Pilot Plant for Hides and other Animal Wastes :- The State of West Bengal has a large cattle population mainly cows, buffaloes, goats and sheep yielding a huge quantity hides. There are other animal resources also which are required to be utilised. The Central Leather Research Institute of CSIR has been engaged in developing improved technologies for playing, tanning, treatment and preservation of leather goods making and uses for leather wastes and animal wastes.

For fuller utilisation of these technologies a variety of extension activities are proposed to be undertaken in West Bengal during 8th Plan period.

- (i) Tanneries get-together.
- (ii) Establishment of Model training Centre.
- (iii) Training courses and demonstration workshop. Most of the beneficiaries have belong to SC/ST population. The main objective of such pilot plant will be to induct improved process technology at rural level in place of traditional process. This will improve productivity. An amount of Rs.50.00 lakhs is proposed under this scheme during 8th plan period.

(d) Pilot Plant on Medicinal, Aromatic and other Plants :-

(e) Mini Jute Mill :

To solve the problem of Jute cultivators, and also to generate employment Science and Technology Department has launched a programme for establishment of Mini Jute Mills. The first of that kind has been set up at Kamarpukur, Hooghly District during 7th Five Year Plan. This Jute Mill is now producing yarn. The characteristic feature of this scheme are :

- (i) The Jute cultivators are now in a position to sell Jute in neighbouring areas at reasonable rate.
- (ii) The Jute Bags manufactured from the yarns are meeting up the requirement of the local cold storages.
- (iii) Bags, rags, carpets etc. are being prepared from the yarns by the ladies belonging to backward communities.
- (iv) This scheme is also helping in generation of employment in the rural areas.

It is proposed to set up two more mini jute mills during 8th Five Year Plan in two jute growing district of West Bengal.

(f) Pilot Plant on Utilisation of Sisal and Pineapple leaves Fibre :-

A Pilot plant is proposed to be set up at Birbhum District to demonstrate appropriate utilisation of Sisal. This will boost up the economy of rural people living in rural areas and will also generate employment opportunity.

Pineapple leaves can also be utilised as fibre and cattle feed. A small pilot plant is also proposed to be installed during 8th Five Year Plan on utilisation of pineapple leaves.

(g) Utilisation of Non-Conventional Oil Seeds as Oil Sources :-

Non-Conventional Oil Seeds like Akashmani (in Purulia, Birbhum District) Tea Seeds (in Darjeeling District) Kusum, Raddish, Dopati etc. are available in the State of West Bengal in plenty. There are some technology available for extraction of oil (edible and non-edible) from these seeds. Under this scheme an attempt will be taken to set up a pilot plant on utilisation of Non-Conventional oil seeds.

(h) Rural Technology Demonstration Centre :

The technology is indispensable to agriculture and allied activities that constitute the main occupation of the bulk of Indian people living in Rural areas.

The Centres will demonstrate available technology and train local people in the following areas.

- (i) Agro-based technologies.
- (ii) Spice based technologies.
- (iii) Mushroom cultivation and processing.
- (iv) Poultry based Technologies.
- (v) Marine based technologies.
- (vi) Leather processing Technology.

5. BIO TECHNOLOGY CENTRE

It has been felt, in view of tremendous potentiality of Bio-technology in the field of Rural Development a complete Bio-technology Centre should be set up in West Bengal during 8th Five Year Plan. The Centre will be set up in consultation with Department of Bio-Technology, Government of India.

6. PROGRAMME ON ACQUA CULTURE :

The Science and Technology Department, Government of West Bengal propose to launch a scheme on Aqua culture in the district of South 24-Paraganas and Midnapore during 8th Five Year Plan. The technical assistance of the Department of Bio-Technology would be sought for.

7. INTEGRATED WASTE MANAGEMENT :

8. REMOTE SENSING :

Remote Sensing Technique has become an invaluable tool for survey and mapping of natural resources. Realising the capabilities of remote sensing Government of West Bengal has taken a decision during 7th Five Year Plan to set up a State Remote Sensing Centre.

9. ECOLOGICAL PARK AT HOWRAH - PADMAPUKUR JALA :

10. PROVISION FOR 35 POINT ACTION PLAN :

In line with the decision of the Government to implement a 35 point Action Plan, attempts will be made to initiate and implement specific time bound action plans for poverty alleviation, water management and land use, for the benefits of the rural society and SCs/STs.

11. S & T MANPOWER AND OTHER INFRASTRUCTURE STUDIES :-

Practically there has been no such studies carried out in West Bengal. It is proposed during 8th Five Year Plan a complete Science & Technology Manpower Infrastructure System would be developed in West Bengal.

12. SPECIAL S & T PROGRAMME FOR DARJEELING HILL DISTRICT :

It is proposed to launch a special S & T programme for Darjeeling Hill District during 8th Five Year Plan. The specific activities to be undertaken in this programme are :-

- (a) Sensitising voluntary organisation, project officers and other Development Projects to S & T approach for hill area development. This would include both short-term intensive workshop as well as long term training courses.
- (b) Set up S & T cell at Darjeeling for interfacing between R & D Institutions, Universities, Funding Agencies, Voluntary organisation and the peoples residing in the hills.
- (c) Viable models have been demonstrated in the area of rural pottery, fish, fruit processing etc. Extension of these models in hill areas would be undertaken.

13. SCIENCE & TECHNOLOGY FOR WOMEN :

During 8th Five Year Plan following programmes are proposed to be undertaken :

- (i) Post harvest technology in fish farming in South 24-Parganas and Midnapore District.
- (ii) Special Training on Food processing and preservation.
- (iii) Training for rural health worker.
- (iv) Involvement of women in afforestation and waste land development programme.

14. NATURAL RESOURCE MANAGEMENT :

15. DISASTER MANAGEMENT PROGRAMME : - The programme includes

- (i) To review the disasters-prone areas from technical, social and management angle.
- (ii) To understand the problems.
- (iii) To work out ways and means for better management of disaster warning, relief and rehabilitation and other activities.

16. WATER RESOURCES :

Management for Draught Prone Area :

In some parts of West Bengal particularly in Bankura, Purulia and part of the Midnapore District, water is scarce even for drinking purposes. The following S & T programmes are proposed to be undertaken during 8th Five Year Plan.

- (a) Augmentation Conservation and Delivery System :
- (b) Water Conservation :
- (c) Water Economy Tap :
- (d) Water Quality Assessment and Water Treatment :

17. DIRECTION AND ADMINISTRATION :

This Department has already undertaken a good number of scientific and technological programmes of its own for implementation of which filling up of the posts already created is urgently needed. Besides, for smooth functioning of the administrative set up some modern equipments like electronic typewriter xerox etc. have been purchased. Similar other equipment will be purchased in the coming years.

PROGRAMMES PROPOSED FOR 1991-92 - ANNUAL PLAN

This is covered under a number of categories and sub-categories adumbrated below :-

1. Science Promotion :-

- a) Research and Development :- This is a continuing scheme.
- b) Seminar/Workshop/Symposium :- This is a new scheme.

2. Science Popularisation :-

a) Field Projects :- This covers field level science communication programmes generally implemented through Science Clubs and other voluntary organisations. This is new scheme.

b) District Science Centre :- The department has proposed to extend partial financial assistance for setting up two District Science Centres in Burdwan and Darjeeling Districts.

- c) Mobile Planetaria :- This has been devised by the National Council of Science Museums. This is a new scheme.
- d) Training on low cost toys/kits :- This will be implemented through Science Clubs and is a new scheme.
- e) Preparation of Film :- Work of preparing a film on "Superstition and its explanation" has already been taken up in 1990-91 financial year. Another film is to be produced in 1991-92.
- f) National Science Day :- Large scale observance of National Science Day, 1992, in financial collaboration with NCSTC is proposed.
- g) School Level Science Survey and Research Project :- Already around one hundred schools of the State have been covered by this project. 100 schools per year is to be covered.
- h) Library-cum-Documentation Centre :-
- i) Partial Assistance to setting up of Astronomical Observatory at Calcutta and Burdwan University.
3. Entrepreneurship Development :-
- a) Entrepreneurship Awareness Camps :
- b) Entrepreneurship Development Programme :
- c) STEP :- This department has already given financial assistance for setting up a Science and Technology Entrepreneurship Park at I.I.T., Kharagpur.
4. Science & Technology Programme for Socio-Economic Development :-
- a) Housing :- This is a continuing scheme. The low cost technology already tried in 7th plan period is proposed to be demonstrated further in the 8th plan period.
- b) Building Centre :- The programme would be a joint venture of S&T Department, Zilla Parishad and HJDC.
- c) Pilot Plant for Hides and other Animal Wastes :-
- d) Pilot Plant on Medicinal and other Aromatic Plants etc. :
- e) Mini Jute Mill :- A mini jute mill is already in operation in Kamarpukur Ramkrishna Mission successfully.
- f) Pilot Plant on utilisation of Sisal and Pineapple leaves fibre :-
- g) Utilisation of Non-conventional Oil Seeds as oil sources :-
- h) Rural Technology Demonstration Centre :

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5. Bio Technology Centre :
6. Programme on Aqua-Culture :
7. Integrated Waste Management :- The Department proposes to give partial financial support.
8. State Remote Sensing Centre :-
9. Ecological Park at Howrah :-
10. Other Programmes :-

N a m e

- i) Provision for 35 point action plan
- ii) S & T Manpower and other infrastructural study
- iii) Special S & T programme for Darjeeling District
- iv) S & T for Women
- v) Natural Resources Management
- vi) Disaster Management Programme
- vii) S & T in Water Resources

Details of all these are given in the Draft 8th Plan.

11. Direction and Administration :- Although creation of new posts is not proposed here, but emphasis is given on setting up of the existing vacant posts of scientific and technical officers which are essential for carrying out various important programmes of this Department like Remote Sensing etc.

Hence the proposed outlay for Annual Plan 1991-92 of Science and Technology Deptt. is Rs.361.55 lakhs.

2. Programme of the Development & Planning Department

a) National Informatics Centre Network (NICNET)

Under the joint venture of National Informatic Centre Govt. of India and State Government (Development & Planning Department) NICNET Programme is under implementation in this state in order to create a computer information system in Calcutta and Districts. A memo of understanding has been signed between State Government and Govt. of India to implement in the programme. A committee known as National Informatic Centre, State Co-ordination Committee, NSCC has also been formed for recommending measures for implementing the programme. Guidelines in this regard have also been circulated to districts side preparation for computer centre in Calcutta is also in process. Computer centres have also been set up in different districts in order to carry out this programme in Calcutta and districts and allocation of Rs.5.50 lakhs have been earmarked. A provision of Rs.5.75 lakhs (5% increase) or Rs.6.00 lakhs (10% increase) has been proposed for 1991-92. Accordingly, 8th Plan outlay for this programme has been proposed that Rs.15 lakhs.

b) Ocean Development

A committee on setting up of the centre for management of estuarine coastal zone of West Bengal was formed. The committee furnished detailed project proposals and the same were sent to Govt. of India Department of Ocean Development. After review in the matter Govt. of India indicated to furnish more specific proposals in specific areas. To such reports were already forwarded to Govt. of India but their decision is still awaited. Meanwhile, a centre for management of estuarine zone has been set up at Sea Explorer Institute at Outram Ghat Calcutta and to more projects prepared by the institute have also in order to Govt. of India for approval of financial assistance, Govt. of India is awaited. In view of this position central assistance still uncertain and State Government may have to increase the rate of expenditure if the centre is to run accordingly. A provision of Rs.2 lakhs has been earmarked for 1990-91 and 8th plan outlay has been proposed at Rs.10 lakhs. Proposed outlay for 1991-92 has been fixed at Rs.2.10 lakhs (5% increase) or Rs.2.20 lakhs (10% increase).

c) Natural Resource Data Based Management System Project

Natural Resources Data Based Management System (NRDMS) Projects has been sanctioned for Bankura. The system aims at providing generation of data based natural resources and

socio economic parameter to be utilised for planning and other purposes. Recently, a computer has been set up at Bankura and a workshop in this connection is proposed to be held in the month of October, 1990. We are required to incur incidental expenses in this connection. So, a token provision of Rs.2.00 lakhs has been proposed for 8th Plan period.

ECOLOGY & ENVIRONMENT

Programme of the Environment Department

The Department of Environment was set up in June, 1982 as an 'Administrative Department' for direction and co-ordination of measures for abating environmental pollution, environmental protection and for promoting development consistent with environmental preservation. This Department has under its control the following organisations :-

1. Zoological Garden, Alipore, Calcutta.
2. Fadmaja Naidu Himalayan Zoological Park, Darjeeling
3. Lloyd Botanic Garden, Darjeeling
4. West Bengal Pollution Control Board, Calcutta

The proposals include improvement and development in these organisations.

This Department also acts as NODAL Department in respect of Ganga Action Plan which is being executed by the C.M.D.A., F.H.E. Department, Irrigation & Waterways Department, Calcutta Municipal Corporation, Howrah Municipal Corporation and some other Municipalities.

A short note on the activities of this Department is given below :-

I. IMPROVEMENT OF ZOOLOGICAL GARDENS

(a) Alipore Zoo

The Zoo needs improvement and development in different areas. The schemes thereof are included in Annexure-I.

(b) Fadmaja Naidu Himalayan Zoological Park, Darjeeling

For Development of the Zoo, attention is proposed to the following activities :-

1. Preservation of existing living and non-living assets of the Zoological Park
2. Improvement of the quality of life for animals in captivity.
3. Development of land and area for conservation of Wild Life in captivity and development of the Zoo exhibits.
4. Research work.
5. Education, Publicity and visitors amenities
6. Management Development Activities.

A list of schemes will be found in Annexure-III.

(c) Extension of the Zoo Garden

The Alipore Zoo is now located in a very overcrowded area of the city. The Garden has no scope for its expansion. The animals of the Zoo are much strained by the din and bustle of the city. It was therefore felt necessary to establish another Zoo in any place near about Calcutta. A site at Sonarpur in 24 Farganas (South) has been tentatively selected.

(d) Lloyd Botanic Garden, Darjeeling

This Garden is the only high altitude facility of its kind in the country. This garden is a tourist attraction in Darjeeling and is intended to provide research and conservation facilities to students of Botany and Scholars.

II. WATER AND AIR POLLUTION

West Bengal Pollution Control Board administers the Central and State Acts for control of Air and Water Pollution in this State.

For implementation of the Acts, the following activities are essential, which may be taken up in the 8th Five Year Plan period.

- (a) Monitoring of Important rivers
- (b) Monitoring of Ambient Air Quality of important cities and industrial complexes.
- (c) Operation of Hazardous Chemicals Management Cell.
- (d) Survey of Noise Pollution
- (e) Mass Awareness Programme
- (f) Establishment of a Documentation Centre.

III. ENVIRONMENTAL INFORMATION AND AWARENESS PROGRAMME

The long history of environmental degradation calls for all round efforts towards protection and improvement of environment. In the first instance it was felt necessary to arouse public interest about environmental awareness. For this purpose grants are paid to non-Government institutions for organising seminars, exhibition and other awareness programme etc. This Department in collaboration with the West Bengal Pollution Control Board brings out posters, leaflets etc. on environmental guideline is being published.

IV. RESEARCH AND DEVELOPMENT

The programme of Environmental Research and Studies is another major responsibility of this Department. There are serious environmental problems in different areas. For this purpose grants are given to different Institutions and University

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Professors for undertaking research and studies in various fields wherever there is technological gap and database is not up-to-date.

Under the above programme the Environment Department have sanctioned grants during 1988-89 for the following project, final reports of which are yet to be received.

1. Studies on insecticides/posticides and their impact on environment & health.
2. Monitoring of insecticides/posticides residues in edible fishes in fresh water ponds.
3. Studies on extend of water pollution and its effect in some major lakes in and around Calcutta.

V. STRENGTHENING OF ENVIRONMENTAL IMPACT ASSESSMENT CELL (TECHNICAL CELL)

Presently Technical Cell is composed of one each of Sr. Environment Officer, Environment Officer, U.D. Assistant, Steno Typist. The Cell could not be set up on the lines indicated by Government of India mainly for want of accommodation. It is proposed to enlarge the cell with additional technical personnel almost to the parallel set up suggested by the Government of India so as to activate the Department.

PREVENTION AND CONTROL OF POLLUTION

GANGA ACTION PLAN

During the Seventh Plan period, schemes worth over Rs.110 crores were under execution by different Implementing Agencies with hundred per cent central assistance. Such schemes relate to construction of Sewage Treatment Plants, and interception and diversion, crematorium and two-pit pour flush latrine, improvement of bathing ghats and also bank protection.

(2) We have been able to complete 51 schemes and spend Rs.72.00 crores till the end of the Seventh Plan (i.e. till 31.3.1990). Government of India have however agreed to bear the entire cost of schemes in the Eighth Plan Period. As regards new schemes under Ganga Action Plan for the 8th Plan period. Government of India have yet to take decision regarding funding of such schemes. In the Annual Plan for 1990-91, the State Government proposed to have a token provision for new schemes under the Ganga Action Plan pending decision of the Government of India in this regard but the Planning Commission did not agree to such provision being made, although in the 17th Meeting of the Steering Committee under the Central Ganga Authority, a decision has been taken that instead of depending entirely on Central assistance, State

Government should also make investment out of its own resources of its own resources under the Ganga Action Plan as an additionality.

(3) In order to fulfill the objectives behind the Ganga Action Plan, it is absolutely necessary to cover some areas with suitable schemes which could not be considered by the Government of India for inclusion within the total allocation for the State.

X. GENERAL ECONOMIC SERVICESSECRETARIAT ECONOMIC SERVICES.Secretariat :

The Development and Planning Department of the Government of West Bengal is in sole charge of preparing and monitoring the state and District Plan. The Department maintains liaison with the Planning Commissions and functions as model Department for Planning. A small Secretariat is maintained with One Research Officer, One Jr. Statistician and One Assistant Statistician. There are three Investigators also. For constant monitoring, there is a Central Monitoring Cell under the control of the Department which collects data, marshals them and prepares end-table. Analytical part is, however, done at the Planning Cell.

The Planning Cell at the Secretariat also operates the District Plan Scheme Fund that is the untied fund, the necessity and use of which have been elaborated in appropriate place.

The Department also functions as Nodal Agency of Twenty Point Programme which forms an integral part of the Planning.

The organisations at the district level like DPCC, DPC, BPC are also looked after by this Secretariat.

PLANNING BOARDState Planning Board, West Bengal :

1. The Plan budget administered by the State Planning Board is primarily intended to meet the organisational expenses of the State Planning Organisation. Under this organisation a number of group 'A' posts including posts of Consultants have been created. In the context of decentralised planning it is likely that the State Planning Board infrastructure will have to be strengthened.
2. Further the State Planning Board is required to undertake special studies relating to perspective planning and project evaluation. Also the Board has been entrusted with the responsibility of publishing the Economic Review of the State each year. The Board maintains a good reference library.
3. In view of the above reasons the Plan outlay of Rs.12.00 lakhs for the Annual Plan for the year 1991-92 has been proposed.

DISTRICT PLANNING MACHINERYDecentralised Planning :

1. Democratic decentralised Planning system has been introduced in West Bengal right from the first year of Seventh Plan. The Decentralised Planning is implemented by forming Planning Committees at the Block and District level majority of which are from regularly elected Panchayats bodies. The Decentralised Planning methodology followed in the state has been elaborated in the

T_O_U_R_I_S_MTOURIST INFRASTRUCTUREProgramme of the Tourism Department :

Introduction : In the 8th Plan strategy of the Govt. of India tourism is going to occupy a very important place and allocations for the tourism sector are expected to be considerably increased. In order that this State may find its rightful place in the new strategy on tourism being involved by the Govt. of India it is necessary for us to extend tourism facilities and remove the infrastructural inadequacies facing tourism in the State. To detail the resources of other departments relevant to tourism with the outlay of Tourism Department proper.

Tourist Centres.Tourism development in the Sunderbans :

Sunderbans, in the southern reaches of West Bengal, is the biggest estuarine forest in the world teeming with wildlife and a landscape perhaps unparalleled in any part of the world. It is also the home of the legendary Royal Bengal Tiger. Tourism Department has selected Sunderban as a major thrust area for promoting tourism in the State and a number of schemes for creating tourism infrastructure in the area apart from acquisition of tourist launches or cruising vessels has been formulated. The major schemes which are proposed to be taken up during the 8th Plan for promoting tourism in the Sunderbans are as follows :-

Tourist Complex at Piyali Closure :

A tourist complex will be developed in Piyali Closure during 8th Plan. The Central Government has been proposed to participate in the programme.

Tourist Complex at Kaikhali :

Kaikhali Island in South 24-Parganas district has been identified as another Island in the Sunderbans which has great potential for development of tourism. Tourism Department has acquired a land measuring 4.5 acres at Kaikhali for development of a tourist complex comprising accommodation facilities with 40 beds. The scheme is proposed to be taken up with Central assistance.

Development of tourism in the Doars including Tourism Complex in the Teesta Barrage area :

It is proposed to set up a tourism complex in the Teesta Barrage area near Siliguri with its unique scenic charm. The project envisages setting up various tourist facilities in an area measuring 232 acres in the Teesta Barrage complex and an area measuring 20 acres at Chalsa Bill Top with a total estimated

project cost of Rs.128.00 crores. The project has been prepared with a view to setting up a tourist resort of international standard in the area which will be the nodal point for domestic and foreign tourists for visit to other places of tourist interest, such as Darjeeling, Sikkim, Bhutan, wildlife sanctuaries of Kaziranga and Mansa in Assam and the Himalayan region of North-Eastern States.

Tourist Complex at Mathura Beel :

It is proposed to set up a Day Centre along with houseboat and arrangement of water sports at Mathura Beel in North 24-Parganas district. The Beel is a $7\frac{1}{2}$ km. long lake which has the potential of being promoted as a tourist spot with facilities for water sports.

Development of a Tourist Complex in Coochbehar Kalibari Trust Property at Benaras :

The administrative control of Coochbehar Religious Trust Properties has been transferred from Land & Land Reforms Deptt. to Tourism Department. A proposal to provide accommodation facilities for tourists and pilgrims visiting Benaras at the Kalibari Complex at Benaras under Coochbehar Religious Trust by the joint collaboration of I.T.D.C. and the West Bengal Tourism Development Corporation Ltd., is under consideration of the State Government. The vacant land at the Kalibari Complex measures about 3.5 bighas and it is proposed to build an Ashok Yatri Nivas type of hotel in the place which has unique locational advantages.

A provision has been made for equity participation of the West Bengal Tourism Development Corporation Ltd., in the joint sector company to be floated for the purpose of the project.

New satellite tourist Centres :

It is proposed to set up some new satellite tourist centres around Calcutta for week end/holiday outlets. The centres are Rajnagar island on the Ichhamati river in North 24-Parganas District Chandannagar in the Hooghly district and other places.

Development of Vishnupur Temple Complex :

During the 8th Plan Tourism Department proposes to implement several important projects in the Joint Sector with equity participation of the West Bengal Tourism Development Corporation. These projects are :-

Tourist Resort at Haldia and Shankarpur near Digha :

Haldia on the mouth of the Hooghly has an excellent river front and with the coming up of Haldia Petro Chemical Complex the plan will gain popularity as a tourist resort also. W.B.T.D.C. has a plot of land near the river. A hotel project in the joint sector is proposed at the place. Shankarpur near Digha has also potential for development as a new beach resort. Resort complex in the joint sector at this place is also contemplated.

Amusement Parks at Jhilmil, Salt Lake and Rabindra Sarobar :

A Theme Park is being set up at Jhilmil, Salt Lake in the joint sector with equity participation of W.B.T.D.C., W.B.I.D.C. and NICCO. NICCO Parks and Resorts Ltd., a new joint sector company has been floated and has started construction work. Provision for equity participation by W.B.T.D.C. has been made in the State Plan.

Another Amusement Park at Rabindra Sarobar in the joint sector has also been proposed. Equity participation for this project has also been provided in the State Plan.

Grant-in-Aid to Darjeeling Gorkha Hill Council for Implementation of schemes in the Hill areas of Darjeeling District :

With the formation of Darjeeling Gorkha Hill Council, the Council will formulate and execute Plan schemes in Darjeeling Hill Areas. In order that Darjeeling may regain its premier position as a tourist destination in the State several schemes have already been conceived. Some of the major schemes which will be taken up during the 8th Plan in Darjeeling hill areas are listed below :-

Development of a Tourist Complex at Tiger Hill.

Development of Mirik Tourist Resort.

A broad outline of the 8th Plan proposals is given below :-

Tourist Accommodations :

i) Continuing spill-over projects from the 7th Plan (State component for Central Sector Schemes):

The following schemes have been sanctioned by the Govt. of India under the Central Sector during the 7th Plan. Under the conditions stipulated in the Central Sector schemes the State Govt. has to provide infrastructural facilities like land, site development, external water supply, external electrification, fencing or boundary wall. The requirements of funds under the State component for these schemes are also furnished.

ii) Construction of 2nd Tourist Lodge at Digha.

iii) Construction of cottage blocks at Gadiara.

iv) Tourist accommodation/trekking facilities in the districts in Bankura & Midnapour in the western tract:

The Govt. of India sanctioned the scheme for setting up a Day Centre with 35 bed accommodation facilities each at Mukutmanipur in Bankura district and Kankarjhere in Midnapur district at an estimated cost of Rs.44.68 lakhs. The scheme has been entrusted to the C.P.W.D. directly by the Govt. of India for execution. C.P.W.D. is yet to start construction work for the project and it will continue during the 8th Plan.

v) Wayside facilities at Durgapur :

The Govt. of India sanctioned construction of wayside facilities 24 bed accommodation at Durgapur at an estimated cost of Rs.28.38 lakhs. The scheme was also entrusted to the C.P.W.D. by the Govt. of India for execution. C.P.W.D. has started construction work which will spill-over in the 8th Plan.

vi) Construction of additional accommodation at Santiniketan:

The Govt. of India sanctioned a scheme for construction of additional accommodation with 34 double-bed rooms at Santiniketan at an estimated cost of Rs.38.75 lakhs.

vii) Construction of a launch for cruise in the Hooghly.

viii) Construction of a cruising vessel for use in the Sunderbans :

The Govt. of India sanctioned construction of a cruising vessel for use in the Sunderbans at an estimated cost of Rs.49.50 lakhs during 1988-89.

Shalimar Works Ltd. (A State Govt. Undertaking) has been entrusted with the construction work which is in progress and will continue during the 8th Plan.

New Schemes proposed under the 8th Plan :-

i) Construction of a Tourist Lodge at Sagar Island :

A scheme for construction of a 40 bed tourist lodge at Sagar Island at an estimated cost of Rs.49.95 lakhs has been sent to the Govt. of India under the Central Sector Annual Plan. Sagar Island is proposed to be developed into a popular beach resort near Calcutta.

ii) Tourist accommodation at Falta.

iii) Tourist accommodation at Coochbehar.

iv) Construction of a launch for cruises on the Hooghly :

River cruises on the Hooghly are very popular with the tourists. The existing arrangement for conducted tours by only one launch namely Madhukar, to such places as diamond Harbour, Gadiara, Haldia and Sagar Island is inadequate. The launch fleet of Tourism Deptt. needs to be augmented to give a boost to river front tourism which has great potential in the State. This will be a Central sector scheme.

v) Construction of launch for cruise in the Sunderbans :

Sunderbans has been identified as a major tourist destination in South Bengal and emphasis has been laid in the 8th Plan strategy to promote tourism in the Sunderbans. Augmentation of tourist vessels for cruises in the Sunderbans, is necessary in this purpose. The scheme for acquisition of a cruising vessel for Sunderbans at an estimated cost of Rs.49.84 lakhs has been sent to the Govt. of India for sanction. The launch will provide overnight

accommodation facilities for 30 persons.

vi) Hotel project at Salt Lake City :

Tourism Deptt. is in possession of a plot of land by the side of Udayachal Tourist Hostel at Salt Lake. It is proposed to construct a hotel of 2/3 star category at the site in the joint sector with equity participation of the West Bengal Tourism Development Corporation in the new company to be floated.

Provision has been made for the above purpose under the head 'Equity Participation in the TDC and Joint Sector Projects'.

vii) Transit Camp near Bagdogra Airport :

It is proposed to set up a transit camp near Bagdogra airport to provide facilities to tourists using Bagdogra airport during their visit to Darjeeling, Sikkim, Bhutan and other North-Eastern States. The scheme envisages construction of 10 double-bed rooms, a shopping arcade, provision of information counters for different North-Eastern States, a lounge and a restaurant. The scheme has been sent to the Govt. of India for inclusion in Central sector Annual Plan

A provision has been made for the State component for the project.

Tourist Transport Service.

Tourist transport including watercraft and replacement of tourist coaches :

A provision has been made for acquisition, renovation of tourist coaches, maintenance of new assets, acquisition of watercraft for river cruises, construction of tourist coaches and other related expenses in connection with tourist transport.

Assistance to Public Sector and Other Undertakings :

Equity participation in W.B.T.D.C.

All the commercial activities at present run by the Tourism Deptt. will soon be transferred to the Corporation. To strengthen the financial base of the Corporation it would be necessary to provide equity share contribution of the State Govt. to the Corporation. Provision has been made for the purpose in the State Plan.

Other expenditures :

Expansion and Improvement of tourist lodges :

Some of the tourist lodges belonging to the W.B.T.D.C. or under direct ownership of the department need expansion, renovation and upgradation of facilities. Provision has been made for taking up these works.

Tourist Organisation including Reorganisation of
Tourist Information and Assistance Service :

Provision has been made for recruitment of staff in connection with implementation of new schemes and also maintenance of assets under Plan schemes.

Organisation of Planning & Plan Monitoring Cell :

Provision has been made for meeting the salaries and other contingent expenditure in connection with setting up of the cell.

Other schemes :

Tourist activities, local authorities, voluntary organisations, Grant-in-Aid to educational institutions, etc.

T r a i n i n g .

Facilities for adventure tourism including trekking, river rafting and other sports.

Wayside facilities :

A scheme for construction of wayside facilities on National Highway No.6 at Mecheda (near Kolaghat Thermal Power Station) at an estimated cost of Rs.19.82 lakhs has been sent to the Govt. of India for sanction under the Central Sector Annual Plan.

The schemes for construction of wayside facilities at Krishnagar and Farakka have been sent to the Govt. of India for sanction. Total estimated cost is Rs.107.82 lakhs. The schemes, if sanctioned, will be implemented during the 8th Plan.

Food Craft Institute at Darjeeling :

A proposal to set up a Food Craft Institute at the Lewis Jubilee Sanatorium Complex at Darjeeling has been given on principal clearance by the Govt. of India. The Institute will fulfil a long-felt need for providing professional courses in catering technology to the students of hill areas.

Reconstruction programme of Lewis Jubilee Sanatorium :

A programme of new construction in place of some old blocks of L.J. Sanatorium was undertaken during the 7th Plan and the scheme has remained incomplete. The scheme will be completed during the 8th Plan.

Besides the above schemes the Hill Council have formulated some new plan schemes on their own and funds will be provided from the Central Government for the purpose.

Provision has been made for implementation of different schemes in Darjeeling hill areas from the State Plan Budget.

G E N E R A L :

Promotion and Publicity.

Tourist information and Publicity :

Provision has been made for publishing publicity materials, participation in exhibitions, holding tourism seminars and workshops, making of tourism films, etc. especially in view of Visit India Year 1987 and the strengthening of tourism infrastructure.

I - 8
SURVEYS & STATISTICS

Economic Advice & Statistics/Computer Services.

Programme of the Bureau of Applied Economics & Statistics.

The Planning Commission has approved the inclusion of the above Scheme in the 8th Five year plan and a provision of Rs.5 lakhs has been made for this scheme in the budget of the Bureau of Applied Economics & Statistics during the current financial year. It has been estimated that there will be a spill-over liability of about Rs.4.0 lakhs of the scheme entitled "Installation of a Mini-Computer in the Bureau of Applied Economics & Statistics" for which a budget provision of Rs.10 lakhs was made during 1989-90 and the scheme was implemented last year. The budget provision of Rs.5 lakhs for 1990-91 will, therefore, be spent to meet this spill-over liability. The total outlay of the scheme for the remaining four years of the 8th Plan has been proposed to be of the order of Rs.70 lakhs. This amount of Rs.70 lakhs will be required to provide each District Statistical Office with one personal Computer, with printer at a cost of Rs.2 lakhs and one plain paper copier at a cost of Rs.1 lakh. The total cost of personal Computer and plain paper copier for 17 district Statistical Offices amounts to Rs.51 lakhs (17 x 3 = 51). The remaining Rs.19 lakhs will be provided @ Rs.1.12 lakhs to each District Statistical Office for purchase of air-conditioners, softwares and stationeries for personal Computer and plain paper copier. Out of this total outlay of Rs.70 lakhs for the period 1991-95, an outlay of (i) Rs.5.25 lakhs on the basis of 5 per cent increase of the outlay for 1990-91 has been proposed to be included in the plan scheme for 1991-92. With the outlay of Rs.5.25 lakhs for 1991-92 two District Statistical Offices at Jalpaiguri & Burdwan may be provided with PC AT and the District Statistical Office at Krishnagar may be provided with one plain paper copier.

CIVIL SUPPLIES

Programme of the Food & Civil Supplies Department.

1. Modernisation of Inspection & Quality Control Directorate Laboratory and installation of two testing Laboratories at Durgapur and Siliguri :

2. Implementation of Consumer Protection Act, 1986 :

For protection of interest of consumers the Government of India enacted the Consumer Protection Act in 1986 and as per provision of the Act the State Government will have to constitute State Commission at the State level and one District Forum in each district. Necessary rules have been framed by the State Govt. There will be paid members in the Commission and Forums

Appointment of staff will also be required in the Commission and Forums. It is hoped that State Commission and some of the District Forums will start functioning shortly.

The estimated recurring cost for the bodies in the entire State alongwith non-recurring expenditure including that for purchase of vehicles and fuel would be considerably high. An outlay of 80 lakhs is being proposed for the 8th Five Year Plan 1990-95 for setting up of the State Commission and District Forums.

3. Haller Subsidy Scheme

OTHER GENERAL ECONOMIC SERVICES

Programme of the Commerce & Industries Department.

Regulation of Weights and Measures - Change over to the Metric System of Weights and Measures.

1.0. The Weights and Measures Organisation is entrusted with the task of consumer protection by periodical verification and stamping of weights, measures, weighing and measuring instruments. The Government of India has promulgated the Standards of Weights and Measures(Enforcement) Act, 1985, which encompasses much larger field of activities to ensure greater consumer protection.

1.1. The Seventh Plan expenditure on different programmes of the organisation, mainly related strengthening of the Directorate and purchase of standards or weights and measures, balances, etc. was about Rs.57 lakhs.

1.2. During the Eighth Plan, the following programmes viz. (i) Setting up of a calibration unit with workshop facilities for calibration of vehicle tanks, taxi metres, electricity meters, electronic weighing instruments, clinical thermometers; accommodation of training centres, (ii) establishment of Regional Secondary Standard Laboratories, (iii) strengthening of the organisation to cope with the additional load of work, and (iv) purchase of additional equipments for enforcement work, will be continued.

1.3. The total expenditure in connection with implementation of the above programmes has been estimated at Rs.100.00 lakhs during the Eighth Plan and a provision of Rs.40.00 lakhs has been suggested for these scheme during 1991-92 against Rs.35.00 lakhs in 1990-91.

XI. SOCIAL SERVICESEDUCATIONGeneral Education.Elementary Education :
Primary & Secondary Education.Programme of the Education Department :

It has been mentioned in the Annual Plan proposal for the year 1990-91 that because of fund constraints the School Education Department was not in a position to increase number of schools during the last 3 years of the 7th Five Year Plan. Based on the assumption that the total plan size for the 8th Five Year Plan will be 180% of the total plan outlay for the 7th Five Year Plan, it will be very difficult to accommodate all children of age group 6-14 in the school system by the end of the 8th Five Year Plan, i.e., 1994-95. However, the position may be eased if resource availability improves.

Assuming that the targets of enrolment of different age groups set for the year 1990-91 are reached, the additionality in enrolment of different age groups will be as follows upto the end of the 8th Five Year Plan :-

Age Group.	Additional enrolment.
6-11	8.31 lakhs
11-14	3.84 lakhs
14-16	1.76 lakhs
16-18	1.56 lakhs

During the second year of the 8th Five Year Plan no increase in supervisory staff has been proposed and the proposed allocation is meant for maintaining the additional posts created in 1990-91.

It has already been pointed out in the draft annual plan for 1990-91 that achievement of universalisation of elementary education is very much dependent on the various types of incentive schemes that are to be provided for the children of the age group. Like the previous year, the incentive schemes proposed in the Draft plan for 1991-92 in the primary education area are as follows :-

- 1) Distribution of free text books to all students up to Class-V.
- 2) Distribution of school dress to all girl students in both rural and urban areas.
- 3) Provision for games and physical education equipment for the primary schools along with holding of athletic meets at Circle, District and State levels.
- 4) Provision for Mid-day meals for all children in primary schools.

It is a common experience that the provision for Mid-day meals cuts down the absenteeism and ultimate drop-out in the primary education area. Hence the outlay for this programme has been proposed at Rs.22.00 lakhs which is the same as that sanctioned for the year 1990-91. For the last three years of the 8th Five Year Plan, it is proposed that the same outlay would be there for this programme. Provisions have also been made for other three items of the incentive programme and it is hoped that this would go a long way in achieving universalisation of primary education by the end of the 8th Five Year Plan.

In the upper primary and secondary areas, provisions have been proposed for library books and science equipment with a view to improving the standard of education and retention of pupils in the upper primary level thereby ensuring universalisation at this stage.

The requirement of funds for capital expenditure in connection with the school buildings and office accommodation is a pressing need. During the last Plan period apart from the allocation of funds from the 8th Finance Commission for upgradation of the standard of primary school buildings it was not possible to allocate sufficient funds for renovation/alteration/improvements of school buildings. In addition to this, there is a need for allocating funds for the existing Government schools. Provision has been made in the draft plan for the year, 1991-92 for such improvement to the extent possible.

As mentioned in the draft plan for 1990-91 the State and district offices for different sectors of education are situated at different places, resulting in inadequate co-ordination of work of these sectors. Hence there is a need for establishing educational complexes, both at the State and district levels. Provision has been made in the draft plan for the year 1991-92 for construction of such educational complexes and it is proposed that similar allocations be made for the other three years of the 8th Five Year Plan.

Like the previous year, the following five indicators have been considered in ascertaining the inter-district disparity in the Primary Education area : (1) literacy rate, (2) schooling facilities available per 1000 population, (3) percentage of children of the age group not enrolled, (4) teacher-pupil ratio and (5) enrolment rate per school. District-wise figures for these indicators have been tabulated in the annexure. It is believed that these indicators will help in locating new schools, allotting additional teachers, distributing incentives and making optimum use of the available resources, both human and physical.

It needs to be mentioned at this stage that the Board of Primary Education at the State level has been set up during the current year 1990-91 which is also the first year of the 8th Five Year Plan. It is expected that there will be better management, co-ordination and supervision of the total primary education in the State because of setting up of the Board. In view of the fact that this organisation is absolutely new and will need sufficient infrastructure for efficient functioning, sufficient provision for allocating funds to this Board has been provided in the draft plan.

I_N_D_I_C_A_T_O_R_S

Statement showing the Schooling facilities for the Primary Stage (6-11) in West Bengal.

(Figures as on 30.9.86)

Sl No	District.	Literacy Rate (%) (1981)	Schooling facilities available per 1000 population.	Percentage of Children not enrolled.	Teacher Pupil Ratio	Enrolment rate per School.
1	2	3	4	5	6	7
1.	Bankura	36.5	1.30	19.66	33.3	92
2.	Birbhum	33.8	0.99	33.31	33.3	115
3.	Burdwan	42.8	0.70	31.78	41.3	148
4.	Calcutta	69.0	0.42	44.54	36.9	194
5.	Coochbehar	30.0	0.85	10.86	47.5	157
6.	Darjeeling	42.5	0.91	14.96	42.2	154
7.	Howrah	51.5	0.66	8.38	43.6	183
8.	Hooghly	48.8	0.75	14.89	38.3	148
9.	Jalpaiguri	29.9	0.75	36.15	36.8	125
10.	Malda	23.1	0.81	37.39	33.7	110
11.	Midnapore	42.8	1.01	15.39	41.9	128
12.	Murshidabad	25.0	0.67	42.76	39.2	135
13.	Nadia	36.8	0.70	25.50	45.0	170
14.	Purulia	29.8	1.44	25.54	33.2	79
15.	West Dinajpur	26.9	0.90	27.13	32.0	104
16.	South 24-Parganas	45.9	0.62	34.59	52.5	194
17.	North 24-Parganas		0.58	40.34	44.1	182

University and Higher Education

Special Education/Language Development :

As in the previous years, the Higher Education Department will be awarding prizes in the names of Rabindra Smriti Puraskar, Bankim Chandra Smriti Puraskar and Vidyasagar Smriti Puraskar. Rendering financial assistance for publication of books by Institute of Historical Studies and other such organisations of eminence will also be there. Expenditure will also be there during 1991.92 on account of the publication of the State Government as would come out on the occasion of the Tercentenary of Calcutta. The West Bengal Urdu Academy and the West Bengal State Book Board would be maintained. The work of the Hindi Academy which has since started will be extended. The construction works of the West Bengal

Urdu Academy complex on a plot of land at Hazi Mohammad Mohasin Square at an estimated cost of Rs. 74.41 lakhs which is to be started in 1990-91 will be continued at a greater pace. The scheme for financially assisting the Sanskrit Pandits will be continued. The work of publication of Rabindra Rachanavali will be completed.

University Education :

The enhanced provision in the Annual Plan for 1991-92 will be mostly used, in the first place, to meet the carry-over liabilities of the Universities on account of the construction projects that had already been taken up, including the second campus of the University of Calcutta at Alipore and the second campus of Jadavpur University at Salt Lake. Work of restoration of Maharshi Bhavan of Rabindra Bharati University at Jorasanko, which is likely to be started in 1990-91 will be continued during 1991-92. Usual grants for items like purchase of books and journals, furniture and equipment would also be provided to the Universities.

College Education including Degree Colleges, Physical Education Colleges, Teachers' Training Colleges and Art Colleges :

In all the Government Colleges, development schemes for strengthening of the existing courses of studies, opening up of new streams and subjects in modern sciences, purchase and replacement of books, journals, furniture and equipment will be undertaken. The proposal for introduction of post graduate course in Government Degree Colleges is likely to be put to effect during 1991-92. By way of capital outlay, works of construction of new college buildings and hostels and of special renovation of existing buildings would be undertaken. Stress will be laid on completion of such works as have not yet been completed.

Insofar as Non-Government Colleges are concerned, proposals for setting up of new colleges may be considered only for such remote areas which are not served by an existing one. In any such case also, the standards outlined in the Report of the Bhabatosh Datta Commission will be rigorously applied. There will also be proposals for opening of new subjects of study, setting up of Day Students' Homes, development of Women's Colleges and strengthening of collegiate education service. Provisions have also been made for replacement and purchase of books and journals, furniture and equipment for as many colleges as may be possible within the available resources.

Under the capital head of account, a provision of Rs. 25.00 lakhs, each, has been made for the construction works of the Physical Education College at Dinhata and the Teachers' Training College at Burdwan.

Adult Education : Mass Education Extension.Introduction :

The Programmes under Adult Education are aimed at imparting of literacy training to the adult illiterate men and women in the age group of 15 to 35. This work has so long been done by setting up 35 Rural Functional Literacy Projects by spending a major portion from plan fund. Besides this, the Department is also running a scheme for imparting of post literacy education for the neo-literates made literate through the Adult Education Programmes run by the aforesaid R.F.L. Projects. For this purpose, 300 Jana Siksha Nilayams under the State Sector have been set up. These institutions are expected to cater to the neo-literates of only 24 lakh population against the total requirement of 1050 Jana Siksha Nilayams to meet the requirements of 84 lakh population in the aforesaid 35 Rural Functional Literacy Projects.

Physical targets to achieve :

Total number of adult illiterates as has been calculated by the Government of India on the basis of 1981 Census comes to 91.45 lakhs. It is very difficult to achieve this target even within the eighth plan period if the pace of progress is not accelerated by launching of some massive schemes for Adult Education by organising mass campaigns. For that purpose, some massive schemes on Adult Education like that of complete eradication of illiteracy from Midnapore district and complete eradication of illiteracy from Burdwan district have already been launched. Both these new schemes have been cleared by the Government of India and the National literacy Mission Authority. Approximately 3.20 lakh volunteers have already been engaged for imparting of literacy training to additional 32 lakh persons in the age group of 9 to 50 in the two districts mentioned above. A big chunk of plan fund is being utilised for the purpose. Other districts will also gradually take up similar intensive programmes. Hooghly district has already chalked out such a detailed programme.

Post literacy and follow-up programme :

750 Jana Siksha Nilayams have been proposed to be opened for covering the shortfall of Jana Siksha Nilayams/Rural Functional Literacy Projects in the State Sector. Approximately 400 additional Jana Siksha Nilayams are also proposed to be opened, at least 50 per cent of which should be funded from the plan allocation. Provision for post literacy and follow-up education has been made to the extent possible so that the achievement of literacy training is sustained and the huge sum already spent or likely to be spent do not go waste.

In the Annual Plan for 1991-92, proposals are afoot to cover fully additional 8 to 10 districts and some municipalities with total literacy as the Department is fully convinced of the idea that the major break through in this programme can only be achieved by launching of such massive schemes only through voluntary efforts and by spending amounts for reading and writing assisting materials and necessary equipment. Imparting of post literacy and follow up education to the neo-literates have been kept in view.

Adult education through school students :

A unique scheme for Adult Education through students of Class-IX of all recognised schools has been launched. At least 3.50 lakh illiterates will be made literate by 3.50 lakh students within a period of one year. Provision in this regard for execution of the scheme has been made in the Annual Plan for 1991-92 to the extent possible. Further funds in the regard need, however, to be provided.

Calcutta Tercentenary Programme :

A massive literacy programme for observance of the Tercentenary of Calcutta has been launched in 1990-91. This programme will be carried over to 1991-92. A target of 3.71 lakh adult illiterates to be covered with literacy training has been fixed, to achieve which a large sum of money of the order of Rs.50.00 lakhs would be needed.

Technical Education :

The provision in the Annual Plan for 1991-92 is proposed to be utilised as follows :

In the diploma level, new course on Instrumentation Technology, Computer Engineering, Electronics, Automobile Engineering and Diploma in Computer Application Courses are proposed to be started in Polytechnics. One new Polytechnic for women at Chander-nagore is also proposed to be started. Setting up of another new Polytechnic at Haldia the preliminary works for which are likely to be completed in 1990-91, has also been provided for. Provisions for modernisation of laboratories and workshops and for purchase of books and furniture have also been made. Hostel facilities for students in a few rural Polytechnics and hostel for women's Polytechnic in Calcutta have also been provided for.

For development and expansion of the Polytechnics, World Bank assistance may be obtained. The scheme is estimated at about Rs.8,600.00 lakhs of which 50 per cent, more or less, will be the capital content. The scheme is likely to be finalised this year and put to implementation during 1991-92. Keeping this in view, a provision of Rs.200.00 lakhs has been proposed under the capital head of account.

As regards technical education at the degree level, proposals are there for setting up of new laboratories for Environment Engineering, Power Electronics and Water Resource Engineering at Bengal Engineering College and Jalpaiguri Government Engineering College. Works of construction of building of Workshop at Bengal Engineering College and ladies' hostel at Jalpaiguri Government Engineering College will be continued during 1991-92. A proposal for conversion of Bengal Engineering College into a Deemed University is also under consideration.

Estimate for the construction of building of the new Engineering College at Salt Lake, Calcutta, which is in progress has been revised to Rs.1480.00 lakhs. Similarly, the revised estimate for construction of the building of the College of Leather Technology, Calcutta, has been Rs.206.228 lakhs. Provisions have been made accordingly to accommodate the capital expenditure on these works during 1991-92. Work of construction of the administrative building for the College of Textile Technology, Berhampore will also be continued. Usual provisions for purchase of books and journals, furniture and equipment have also been made for all the Engineering Colleges. Proposal for re-organisation of the State Council for Engineering and Technical Education may also be undertaken during 1991-92.

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SPORTS & YOUTH SERVICES1. Programme of the Department of Sports & Youth Services.

In the approach of framing Eighth Plan for the Sports Wing this Department aims at constructing Sports complexes at the very Block level within the State as well as improving and developing various Sports activities even at the grass-root level in the rural areas. Special emphasis has been given to the evoking of interest in Games and Sports of village people. With this object in view, a greater allocation has been proposed against the following existing schemes :-

1. Improvement of Sports & Games :

Instead of providing grants to West Bengal State Council of Sports and different Sports organisations in the State for organising various coaching camps, tournaments, State, Inter-State and National Championships, greater emphasis has been given to Sports coaching and talent hunting in rural areas of the State. The State Government proposes to conduct bigger number of coaching camps in the rural areas where intensive Sports coaching in different disciplines will be given to the promising boys and girls of different schools in the districts so that the boys and the girls can achieve position of merit in various State and National level meets. This programme has already started from 1.8.1989 with 33 selected schools.

2. Expansion of Games & Sports for Women :

Emphasis has been laid down on the development of Sports and Games for women within the State. This provision includes sanction of financial assistance to individual sports woman and to women's Sports organisations for participation in the holding various national and inter-national meets in the country and abroad respectively.

3. Stadium Complex at Bidhannagar :

During the Eighth Plan period the State Government aims at repaying loan of Rs. 6.41 crores taken from various nationalised Banks on Government Guarantee by the Society for Sports & Stadium for construction of Yuba Bharati Kirangan at Salt Lake. The principal alongwith interest accrued on the capital loan of Rs. 6.41 crores has now accumulated upto Rs. 19 crores. Necessary steps have been taken with the Finance Department of this Government for providing extra budgetary allocation in order to meet up the capital loan and the interest thereon without any further delay. Parallely, attempts have been made for waiving interest of the capital loan.

For meeting the excess expenditure of Rs.1.09 crores above Government of India's grant of Rs. 10.00 crores towards construction of IInd Phase work of Yuba Bharati Kirangan for which Government of India was moved severally, necessary clearance seem to have been obtained from the Government of India. In the first instalment, Government of India is shortly releasing Rs. 30.00 Lakhs out of the total demand of

4. Campus Works, Stadium, Play grounds etc. :

Apart from providing infrastructural facilities in the district and sub-division towns during the Seventh Plan period, the State Govt. envisages constructing Sports complexes and improving Sports consciousness at the very block level within the State during the Eighth Plan period. Government of India has sanctioned setting up Sports Project Development Area (SPDA) as was proposed earlier in the district of Burdwa. As reiterated previously, there should be a contribution of Rs.50.00 lakhs each from the Central and the State Government in implementing the scheme for such S.P.D.A. units.

5. Other Schemes :

This category includes the schemes (i) Development and Maintenance of Kshudiram and Ranji Stadium (ii) Development and Maintenance of Netaji Indoor Stadium, (iii) Rabindra Sarabar Stadium and Subhas Sambar Swimming Pool, (iv) District Sports Council etc. Majority of these schemes include sanction of grants for maintaining and developing these infrastructure. In respect of District Sports Council various developmental activities for Sports and games have been the objective throughout the Eighth Plan period. As a result greater provision of fund has been suggested under this scheme.

II. Programme of the Sports & Youth Services (Youth Services) Deptt.

The Youth Services Wing of the Sports & Youth Services Department has already set up Block Youth Offices in 335 Blocks out of 341 Blocks of this State and 40 Municipal Youth Offices in 40 Municipalities. A directorate of Youth Services with 17 District Youth Offices under it has been overseeing the activities of the Youth Offices.

The aim of this Department is to implement different youth Welfare schemes both for Students and non-students so that every youth gets the benefit of at least one scheme given more coverage, scope and financial support of the programmes.

Programmes :

1. Development of rural sports :

The provision of 8th Plan is Rs. 183.15 and the same for 1991-92 is Rs. 30.00.

This programme consists of four parts :

- i. Development of Play-grounds;
- ii. Supply of Sports equipments;
- iii. Organising Sports Coaching Camps;
- iv. Construction of Gymnasium and supply of Gymnastic equipments;

2. Vocational training :

The provision of 8th Plan is Rs. 61.05 lakhs and the same for 1991-92 is Rs. 10.00 lakhs.

3. Educational Excursion of Students :

One of the important schemes of this Department is to promote touring habit amongst the youths which meet their educational needs and provide active recreation. Students of Secondary Schools, Higher Secondary Schools, Colleges and Universities are given this facility.

4. Open Air Stage :

The provision of 8th Plan is Rs. 30.52 lakhs and the same for 1991-92 is Rs. 5.00 lakhs.

In order to provide large scale opportunities to youths in cultural activities in rural areas the Department has taken up the scheme of constructing Open Air Stages in rural areas.

5. State Youth Centre :

The provision of 8th Plan is Rs. 100.00 lakhs and the same for 1991-92 is Rs. 25.00 lakhs.

One of the important schemes of this Deptt. is the construction of State Youth Centre in Calcutta. At Moulali in Calcutta a 9-storeyed building has been constructed on 10 cottahs of land involving an expenditure of Rs. 55 lakhs and this is the State Youth Centre. The serves as the meeting place not only for the youths of this State but for youths from all over India. In this State Youth Centre there are air-conditioned auditorium with accommodation of 307 seats. In the library where books mainly required for research works by youths have been kept. There are youth hostels for boys and girls, a Store of Mountaineering equipments, Vocational Training Centre etc.

6. District Youth Centre :

There is also a scheme of establishing District Youth Centre in the districts on a smaller scale.

7. Youth Festival :

The provision of 8th Plan is Rs. 61.05 lakhs and the same for 1991-92 is Rs. 9.00 lakhs.

This Department has been holding youth festival each year for securing active participation of youths in cultural activities and to encourage them in healthy cultural pursuits. The youth festivals are held at the Block level, at the district level and the State level.

8. Programmes on Science :

The provision of 8th Plan is Rs. 24.42 lakhs and the same for 1991-92 is Rs. 4.00 lakhs.

Other programmes include promotion of mountaineering, Information Centres at various levels etc.

ART & CULTURE

1. Programme of the Information & Cultural Affairs Department :

1. Archaeology :

(a) Exploration and Excavation :

During the eighth five year plan period the Archaeology

Directorate under I & C.A. Deptt. will carry out some exploration and excavation programme in the district of North 24-Parganas, Midnapore, Malda, Howrah and Darjeeling for which a provision of Rs.4.60 lakhs may be made during the Eighth Plan period.

(b) Grants in aid to Archaeological Museums :

Some of the old and renowned museums of West Bengal should be given grants in aid for their development.

2. Archives and Museums :

State Archaeological Museums :

The State Archaeological Museum, West Bengal has offered to the nation new aspects of history of art and culture of West Bengal in its rich collection of antiquities and archaeological objects. In order to transform the museum into a viable and dynamic institution capable of disseminating education and culture among the mass & new building is proposed to be constructed in the vacant place adjacent to the present museum. Moreover, arrangements for Museum Display, Study Collection, Conservation Laboratory, Photographic Laboratory and Camera Equipments, Modelling Unit, Museum Publication etc. will be made.

Moreover, Government proposes to take over some museums and museum like institutions which have the potentiality to grow into direct Museums.

Government also proposes to set up two site Museums at Pakbira and Chandrakotugarh having pre historic and antiquities.

3. Other Programme :

(a) Construction and Renovation of Public Halls.

(b) Nepali Academy.

(c) Financial assistance to the distressed persons in the field of culture.

(d) Financial assistance to the cultural Institute.

(e) Awards for drama & Music.

(f) Printing of Publications.

(g) Institute of Folk Culture : It is proposed to set up Rajya Loka Sanskriti Charcha Kendra (Institute of Folk Culture) at Salt Lake, Calcutta. The Institute shall be provided with seminar Hall, audio visual unit, open air stage etc. to promote Folk Cultural activities in the State.

(h) Tribal Cultural Centres : Two Tribal Cultural Centres at Jhargram and Purulia has already been set up. To promote tribal culture it is proposed to enlighten the tribal people in the field of their own culture in their own language. Under this scheme necessary provision has been made during 1990-91 Annual Plan.

(i) Setting of an Art Gallery and Exhibition Hall : This scheme may be continued during the 8th Plan period.

(j) Construction and Developments of Rabindra Bhawans : This scheme is proposed to be continued during the 8th Plan period for giving grants-in-aid/Contributions for construction and developments of Rabindra Bhawans in different districts in West Bengal.

(k) State Academy of Music : A State Music Academy has been set up in the previous plan. This scheme will continue.

(l) Popular Theatres : Under this scheme Girish Mancha has been set up and opened during the 7th Plan period. Madhusudan Mancha is under construction. It is proposed to set up another Mancha 'Sarat Sadan' at Howrah. 'Calcutta University Institute Hall' and Mahajati Sadan' will also be modernised during the 8th Plan period.

(m) Setting up of Bangla Academy : Bangla Academy has been set up during the 7th Plan period which is now housed in a room at Calcutta Information Centre. Besides running of establishment of the Bangla Academy and continuance of several research schemes and printing of books it has been decided that a suitable building will be constructed for the accommodation of the Bangla Academy.

(n) Eastern Zonal Cultural Centre : A centre under the scheme has been set up at Bolepur in West Bengal. State Government provides corpus money under this scheme. Hence a sum of Rs. 25.00 lakhs may be provided under this scheme during the 8th Five Year Plan.

(o) Natya Academy : A Theatre Academy styled as Paschim Banga Natya Academy was set up in the year 1987. Now it is functioning in a room at Girish Mancha. Growing Activities of the Natya Academy demand a suitable accommodation. A plot of land for the construction of building for Natya Academy has already been purchased contiguous to Girish Mancha. During the 8th Plan period a total amount of Rs. 125 lakhs may be provided for construction of a building and to meet the running cost of the Academy.

(p) Setting up of a Children Complex.

(q) Financial support to the Folk Artists.

(r) Promotion of Folk Cultural activities at Panchayat Samity level.

(s) Setting up of a training centre of Chhou dance.

(t) Group Insurance Scheme for Folk artistes : The rural folk artistes generally come from very poor family. After passing away of the head of the family who is considered to be a folk artist, the family is no doubt thrown into a deplorable situation. It is not possible to give full financial support to all the family members of the deceased artist, but as a gesture of moral support it is proposed to bring the Folk Artists of the Rural Sector of West Bengal under the Group Insurance Scheme. For this scheme a sum of Rs. 5.00 lakhs may be provided during the 8th Plan period.

2. Programme of the Education Department :

Provisions have been made for improvement and development of organisations devoted to music, dance, drama and aesthetic educational activities and also for grant of financial assistance to the distressed persons of the age of not less than 58 years who are distinguished in art and letters. Netaji Institute for Asian Studies and Sahitya Academy will be maintained. The work of construction of a building in the campus of Government College of Art and Craft will be continued. A provision of Rs. 100.00 lakhs has been made for the construction of the building of State Archives the foundation stone of which has already been laid. The estimated cost of construction is about Rs. 212.00 lakhs and the building will be a five-storeyed building having much enough space for development and expansion of State Archives.

MEDICAL & PUBLIC HEALTH

Programme of the Department of Health & Family Welfare.

The Eighth Five Year Plan (1990-95) has not been finalised. In this context the State Health & Family Welfare Deptt. has endeavoured to prepare the Annual Plan proposals for Medical and Public Health Scheme for 1991-92 on the basis of a total outlay of Rs. 210,60.00 lakhs in the Draft Eighth Plan, being 80% more than the Seventh Plan approved outlay of Rs. 117,00.00 lakhs. Against the total 1990-91 plan size of Rs. 37,00.00 lakhs the total plan size for 1991-92 for Medical and Public Health has been proposed in two scenarios - (a) Rs.38,85.00 lakhs (being 5% increase) and (b) Rs.40,70.00 lakhs (being 10% increase).

The targets in physical terms in the 8th Plan and the Annual Plan for 1991-92 are as below :-

I. Minimum Needs Programme :

The targets under this programme for 8th Plan and Annual Plan for 1990-91 are as below :

	8th Plan	1991-92	
		A	B
1. Community Health Centre (Rural Hospital).			
By upgradation	100	25	30
New	21		
	121		
2. Primary Health Centre	125	15	20
3. Sub-Centre (Construction)	3021	1100	1100

Besides, in the 8th Plan provision has been made for completion of spill-over works (Rs.15.33 crores) and special repairs and maintenance of health Centre buildings.

A provision of Rs.298.09 lakhs has also been made in the 8th plan for meeting state's share of expn. towards IPP - IV project. In the Annual Plan for 1991-92 the provision on this account is Rs.48.09 lakhs.

II. Other than M.N.P. :

Hospitals and Dispensaries :

In the 8th Plan provision has been made for establishment of one full fledged District Hospital with 300 new beds at Barasat, one Sub-divisional Hospital with 250 new beds at Khatra and one State General Hospital at Garden Reach with 100 beds. Besides, provision has been made for opening of 500 additional beds in the existing hospitals.

Provisions has also been made for completion of spill-over works (Rs.8.82 crores), special repairs and other constructional works for the existing hospitals, establishment of T.B.Isolation beds in S.D.Hospitals and Chest O.P.Ds in P.H.Cs, improvement of Blood Transfusion Services, purchase of new ambulances, establishment of Cancer Detection Centres in some of District Hospitals and Teaching hospitals and establishment of a Modern Diagnostic Centre at Manicktala, Payment of grants-in-aid to non-Government hospitals is also in view.

The targets in physical terms in the Annual Plan for 1991-92 are below :-

	A	B
Number of addl. beds	200	250
New Blood Banks	3	3
New Ambulances	5	5

I.S.M. & Homoeopathy :

In the 8th Plan provision has been made for nationalisation of 4 Undergraduate Homoeopathic Medical Colleges, with their hospitals, establishment of one 100-bedded Homoeopathic College and Hospital at Cooh Behar, improvement of the existing private institutions conducting diploma courses in Homoeopathy and establishment of a number of State Homoeopathic Dispensaries for expansion of treatment facilities in Homoeopathy.

Provision has also been made for improvement of the existing State Ayurvedic institutions, establishment of a Hostel for Ayurvedic Students and establishment of Ayurvedic Dispensaries.

Besides, provision has been made for expansion of the Integrated Drug Production & Research Centre for both Homoeopathy & Ayurveda functioning at Kalyani to meet the total demand of our institutions and dispensaries.

For Unani provision has been made for creation of a separate Unani Directorate and establishment of 50 Unani Dispensaries.

Medical Education

The following provision has been made in the 8th Plan for development of medical education in Allipattai :-

- i) Augmentation of different branches of Surgery, Medicine, G&O, Eye, ENT & Orthopaedics.
- ii) Improvement of operation Theatre facility by providing sophisticated equipments.
- iii) Opening of Post-doctoral courses, like Nephrology, Urology, Surgical Gastroenterology and also MD, MS etc.
- iv) Development of different super speciality disciplines in teaching Hospitals in Calicut.
- v) Opening of MDS course and establishment of a 2nd Dental College.
- vi) Establishment of a Nucleus of Research by Research Cadre.
- vii) Renovation of existing condemned buildings and construction of new buildings, including completion of spill-over works (Rs. 10.00 crores)
- viii) Providing basic equipments to teaching hospitals for development of medical education facilities.
- ix) Improvement of Libraries in Teaching institutions.

Training

Provisions have been made for training of Doctors, introduction of training courses for X-ray technicians, ECG, Laboratory and Dental Technicians, training of Nurses and Health and para Medical personnel.

Public Health :

Provision has been made for control of Communicable diseases, like malaria, T.B., Filaria, Kala-azar, Japanese Encephalitis, Gastro-enteritis, Hepatitis, etc. Besides, provision has been made for improvement of Drugs Control Organisation, P.H. Laboratories, Health Education, Mass Information system and prevention of food adulteration.

Other Items :

In the 8th Plan provision has been made for setting up of a separate Directorate for Medical Education and improvement of State Health Organisation. Besides provision has also been made for improvement of storing arrangements and school Health Services.

Construction of quarters for medical officers working in the rural areas is also in view.

A part of the above programmes will be implemented during 1991-92.

WATER SUPPLY & SANITATIONProgramme of the Public Health Engineering Deptt.1) Direction and Administration etc.:-

During the 8th Plan period works worth about Rs.350.00 Crod (including Central Assistance in the Water Supply Sector) have be executed by the Public Health Engineering Directorate. The posed outlays are intended to be spent for creation of new establishments and strengthening of the existing infrastructure of t Directorate along with providing training facility and carrying Survey and Investigation.

Water Supply.2. Urban Water Supply :-

There are 78 Municipal Towns, 97 Non-Municipal Towns and 1 Urban Out Growths in Non-CMD Part of the State of West Bengal

Water Supply Schemes for non-Municipal Towns are being executed at present under MNP & ARWSP in the Rural Water Supply Sector. As the Govt. of India is yet to take a final decision about introduction of the Extended ARWS Programme for towns having population of less than 20,000, it has been proposed to continue the present practice of funding Water Supply Schemes for Non-Municipal Towns and Urban Out Growths from MNO and ARWSP. The fund provided in the current year's State Budget to match the prospective Central assistance under Extended ARWS programme will be accommodated under Minimum Needs Programme in case the Central Govt. does not introduce the Extended ARWS Programme.

The proposed outlays in the Urban Water Supply Sector will, therefore, be utilised for Municipal Schemes only.

A total outlay of Rs.50.00 crores has been proposed under the State Plan in the Urban Water Supply Sector. Priority in order has been given to --

- I) take up execution of two (2) schemes aiming at maximising benefits from the existing capacity;
 - II) meet the spill over liability of none (9) commissioned water supply schemes.
 - III) commission ten (10) critical ongoing schemes;
 - IV) take up execution of three (3) schemes sanctioned/ committed in 1990-91
- and
- V) take up execution of New Schemes for uncovered

Special mention is made about the necessity of taking up augmentation of Siliguri Water Supply Scheme which is one of the schemes at priority (I) above.

The estimated cost of this single scheme being Rs. 45.96 crores, it has not been possible to accommodate the scheme fully within the proposed outlay of Rs. 50.00 Crores in total in the Urban Water Supply Sector during the 8th Plan period.

Out of 10 Nos. of Critical Ongoing Schemes, Water Supply Schemes for Bongaon, Habra, Sainthia, Krishnagar (Interim), Bankura (Interim), Chandrakona and Old Malda are expected to be commissioned by March 1991 and those at Kalna by March 1992.

New Schemes can be sanctioned only after March 1992, when the financial liability for the schemes already commissioned/ ongoing/ sanctioned or committed in 1990-91 would be substantially reduced.

3) Rural Water Supply :

In the Rural Water Supply Sector an outlay of Rs. 123 Crores has been proposed in the State Plan for the 8th Plan period of which an amount of Rs. 118 crores is the outlay under Minimum Needs Programme. It is expected that the Govt. of India will continue to provide matching grant under ARWSP. It is also expected that the Govt. of India will continue to provide additional Central Assistance for Non-Recurring Expenditure towards setting up of Laboratories, Construction of Water Conservation Structures in the hilly and water scarcity areas and more intensive coverage of SC and ST Population.

At the end of 8th Plan period it is expected that the entire population will be served with at least one source per 250 persons. Special emphasis will be given to coverage of SC and ST hamlets with the provisions made under SCP and TSP under the State Plan and earmarked fund under ARWSP. A target has been set to raise piped water supply coverage from 9.62 % (as on 3/90) to 23% by end of 8th Plan period.

Identical Priority as has been indicated for the Urban Water Supply Sector will be followed for Rural Piped Water Supply Sector also. During 1990-91 and 1991-92, investments will be made both under MNP and AWWSP towards meeting spill over liability for commissioned schemes and commissioning of critical ongoing schemes. During 1992-93 and onwards, schemes aimed at maximising benefits from existing schemes, schemes sanctioned/committed in 1990-91 and new schemes will be taken up for execution.

Construction of new spot sources by Zilla Parishads will, however, be undertaken from the very first year of the 8th Plan. So, will be the case of construction of Rig Bored Tubewells. Rejuvenation of spot sources will be undertaken by Zilla Parishads out of plan fund allotted to them out of Minimum Needs Programme as and when required.

Sewerage & Sanitation.

4(a) Rural Sanitation :

Rural Sanitation Programme in the rural area is mainly promotional in nature. Fund will be provided to the Zilla Parishads for construction of Low Cost Latrines.

(b) Urban Sanitation :

Proposed Outlays will be provided to the Municipalities in non-CMD part of the State for conversion of dry latrines into Sanitary ones.

5. Sewerage Services :-

Due to fund constraint it has been proposed not to take up any new sewerage scheme in non-CMD part of the State. The proposed outlay will be utilised for completing the ongoing sewerage scheme at Ranaghat.

6. Externally Aided Water Supply Project :

Negotiations are being held with FRG for assistance for execution of a few Rural Water Supply Schemes. None has materialised so far. A token provision of Rs. 4.00 Crores has been kept for the 8th Plan period. Corresponding figures for 1990-91 and 1991-92 are Rs. 20 lakh and Rs. 40 lakh respectively. In case externally aided projects do not come up the proposed outlays will be accommodated under MNP.

HOUSING

Government Residential Building & Urban Housing General Pool Accommodation

I. Programme of the Housing Deptt.

The Housing Department is presently having the responsibility of framing and execution of urban housing schemes. The Department undertakes housing schemes for providing shelters to the members of the public belonging to the Middle Income Group, Low Income Group and the Economically Weaker Sections. The Department is having the total responsibility of constructing and allotting dwelling units to the serving State Government employees. These apart, the Department administers the Middle Income Group Housing Loan Scheme and the Low Income Group Housing Loan Scheme. Under the administrative control of the Deptt., there is one Brick Production Directorate having the only mechanised Brick Factory in the State under its control and several manual brick fields in the districts as well as in and around the city. The West Bengal Housing Board set up under the West Bengal Housing Board Act with the sole objective of providing shelters by constructing additional housing stock is under the administrative control of the Deptt.

During the last two plan periods (From 1980-81 to 1989-90) only two housing estates with around 400 odd flats could be completed in and around Calcutta for the serving State Govt. employees although in the districts an additional stock of around 3000 flats at a total investment of nearly Rs.24 crores had been contracted for the same purpose. Because of persistently low priority for the housing sector and mainly due to lack of adequate funds for constructing housing units for the serving State Government employees the consistently increasing demand had to be kept unattended. Over years there has been a huge gap between the demand and supply of flats for Govt. employees that has created a great deal of frustration.

During the period of 8th plan, effort will be made to construct as many housing Estates as possible within the budgetary parameter for the serving government officials.

II. The Housing Department as already stated, is responsible for framing and execution of housing schemes for the members of the public. In order to avoid strain on State Budgets and to take full advantage of the institutional finance available in the existing arrangements, the Deptt. has entrusted the schemes

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for construction of dwelling units for the members of the public belonging to Middle Income Group, Low Income Group and Economical weaker Sections to the West Bengal Housing Board. The West Bengal Housing Board has incidentally prepared a plan for around Rs.400 crores for the purpose. The Housing Deptt., has, therefore, not proposed any outlay for MIG, LIG and EWS Housing Schemes in the 8th Five Year Plan except for completion of the continuing projects from the 7th Plan period.

III. It has been the experience of the Housing Deptt. that a good number of Govt. employees occupying Rental Housing flats do not voluntarily vacate such flats on their superannuation simply because they could not manage to have any dwelling units for residential accommodation of their families. They continue to stay in the flats meant for serving Govt. employees on some plea or other and continuously go on hammering on the demand for an alternative accommodation from the Govt. The Housing Deptt. has, therefore, proposed to construct dwelling units for being transferred to only the State Govt. employees on ownership basis.

IV. In Calcutta and in important district and sub-divisional towns as well there is acute scarcity for residential accommodation for single working women. Married women are sometimes forced to remain alone at the working places because their husbands work elsewhere. There are similar cases where divorces, widows and unmarried working women have to remain alone at their working places. The Housing Deptt. has proposed to construct 600 one-roomed apartments at an estimated cost of Rs.3 crores during the 8th plan period.

V. It is not possible for the Housing Deptt. and the West Bengal Housing Board to meet the housing need of the entire State. People's own endeavour and the involvement of private agencies are equally important.

VI. In the context of the National Housing Policy the development agencies are required to develop house sites for being provided to the members of the public who intend to construct dwelling units on such lands with institutional finance. The Home Loan Account Scheme of the National Housing Bank envisages that the subscribers to such accounts shall on expiry of five years avail of the loans from the concerned nationalised bank to construct dwelling house on the plot either in possession of the subscriber or on the plot to be made available by development agency on a priority basis. Unless we plan for such development of house sites we may not be able to get a due share of the accumulated balance in Home Loan accounts to be invested in our

State. Accordingly a substantial outlay has been proposed for Land Improvement and Development scheme.

VII. - Renovation of the existing housing Estates will also be taken up during the 8th plan

VIII. Subsidised housing scheme for plantation workers is a discontinued centrally sponsored scheme under which the State Government has some committed liabilities towards payment of subsidy. The total amount of such liability has been worked to Rs.1.65 crores at the beginning of the 8th Plan. Accordingly an outlay of Rs.1.65 crores has been proposed.

IX. The Department has under its control one mechanised brick factory at Palta. Fund will be needed for its expansion and improvement during the 8th Five Year Plan period.

X. Housing Department intends to introduce a new scheme for shelter upgradation with subsidy from Government of India channelled through the Housing and Urban Development Corporation.

The programme of the Housing Department will be remodelled after the national housing policy is finalised.

POLICE HOUSING

2. Programme of the Home (Police) Deptt.

The importance of Police Housing has two different aspects. For administrative reasons the policemen should be accommodated as near to the Place of their duty as possible. To ensure that, departmental housing is the most suitable method. But there is another aspect, namely, the service conditions of the policemen regarding housing, which makes it incumbent on Government to arrange accommodation for them. According to the provision of the Police Regulations, Police Officers and men are entitled to rent free accommodation. It is here that the Govt. is in a very unhappy situation. The number of departmental quarters is far too short, only 34% of the Officers can be accommodated in Govt. quarters. In the sub-ordinate ranks (S.Is and downwards), the total accommodation including barracks at the end of Seventh Plan is about 45% of the sanctioned force (This contrasts sharply with the National Police Commission's recommendation for providing residential accommodation, i.e. quarters for 80% of the policemen).

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2. Because, of the shortage of departmental accommodation, the Police authorities have to resort to requisition and hire private premises for the Officers and men. But the scope for this procedure is also limited. Therefore, the Police authorities have been compelled to allow their staff, with the approval of Govt., to hire accommodation for themselves. This situation can be remedied only by large-scale construction of residential buildings for Police Officers and men.

(i) Quarters for Superior Officers

The superior ranks comprise of officers, of and above the rank of Inspectors. There are about 1600 superior officers in the State Police. But the number of departmental quarters is only 550. That means 1050 officers (66%) of the superior ranks have to be provided with accommodation. Though it is desirable to build up quarters for all of them, the monetary constraints have also to be taken into account. It is, therefore, being targetted that during the Eighth Plan period at least 100 quarters should be built up.

(ii) Quarters for Sub-Ordinate Ranks

The total strength of the sub-ordinate ranks in the State Police is 7200. It has been estimated that the total departmental accommodation including barracks is available to only 45% of the staff. That means that departmental accommodation for 55% of the staff are not available. For various reasons the gap could not be bridged at the end of the Seventh Plan, the 7th, 8th and 9th Finance Commission.

(iii) Barracks :

Barracks are attached to Police Stations and Out-posts in addition to barracks at Battalion Head Quarters. Though the National Police Commission has laid stress on residential accommodation for all in preference to barracks, on practical impulse the State will have to continue with barracks for many more years to come. Money is likely to be available for construction of barracks under the recommendations of the 9th Finance Commission (The 8th Finance Commission did not give any). Therefore, the State will have to create some barrack accommodation where it is essential. On a most modest scale, 1000 units should be created during the next five years.

(iv) Accommodation for Battalions

We are short of accommodation for six battalions - one in Calcutta Police (5th Bn.) and five in West Bengal (7th, 10th, 11th, 12th & 13th Bns) Additional Bns are likely to be created in near

future. We have already sanctioned Rs.5.00 crores out of the special funds of Rs.5.20 crores awarded by the 9th Finance Commission for restoration of damaged assets in Darjeeling due to GNLG agitation, for construction of barracks, etc. at Dabgram, Jalpaiguri and also at Chharra, Purulia for the accommodation of the 10th and 12th Bns, at the former and for the 11th and 13th Bns at the latter sites. It is roughly estimated that at least Rs.8.00 crores will be required to complete the two projects. Hence, at least Rs.3.00 crores are required to supplement the expenditure on the said two on-going schemes.

(v) Inspection Bungalows/Officers' mess etc.

With the growth of population the law and order machinery is being strengthened and new police stations are being sanctioned every year. For maintaining proper supervision over these police establishments, some inspection Bungalows are required to be created in outlying areas of the State. Similarly, Officers' mess for senior police officers is essential.

A lump provision of Rs.25.00 lakhs has been sought in the Eighth Plan.

RURAL HOUSING

3. Programme of the Rural Development Deptt. (C D Branch)

i) Rural Housing Scheme: Provision of house sites for landless labourers etc. including members of the SC & ST and construction of huts.

(a) House sites : Out of the families identified about 82,000 families are yet to be provided with house-sites. These being constraints on the availability of land, the proposed outlay for the Eighth Plan is Rs.20.14 lakhs and that for 1991-92 is Rs.3.47 lakhs.

(b) Construction of huts : More than 250000 huts are yet to be constructed to cover the families identified still to be provided with huts. The proposed outlay for the Eighth Plan (1990-91) is Rs.420.00 lakhs as that for 1991-92 is Rs.81.10 lakhs. Proposed target for 1990-95 is 7900 huts and 1991-92 is 1688 huts.

For the present the scheme is having a set back in as much as the unit costs for construction of huts have become too inadequate. Revision of the unit costs is under active consideration of govt. Some parity with the rates of the Indira Awas Yojna (for S.C. & S.T. only) is expected. In West Bengal the Rural Housing Scheme is the only scheme which also covers landless labourers other than members of the SC & ST. Rate per hut under the Rural Housing Scheme, for plain areas is Rs.1600/- while that under Indira Awas Yojna is Rs.6000/- plus Rs.3000/- for infrastructural & environmental development.

ii. Demonstration cluster Housing Complex under N B V

20 hut cluster at village Bansa in Raina Development Block, in Burdwan, is under construction. A similar project for construction of huts in Taldanga Block of Bankura District is under process.

URBAN DEVELOPMENT

State Capital Development

1. Programme of the Local Government & Urban Development Department

At present there are 114 urban local bodies in West Bengal, of which 36 are within the Calcutta Metropolitan Area (CMA) and nearly 20 urban local bodies are likely to be constituted within the Eighth Five Year Plan period. Since the urban local bodies within CMA have been brought under the massive investment of CUDP-III and the State Government have decided to reduce the regional imbalance between the urban local bodies within CMA and those outside it in accordance with the recommendations of the West Bengal Development Strategy Committee in 1981, higher allocation of fund under the plan budget for the urban local bodies outside CMA has been accepted in principle.

In the urban local bodies outside CMA, the development schemes are implemented by the urban local bodies themselves with the technical assistance from the Directorate of Municipal Engineering, West Bengal, if and when needed. For general development the urban local bodies now accord priority to the projects for improvement of bustees, conversion of service privies into sanitary latrines construction of commercial estates, improvement of the working conditions of the scavengers. The urban local bodies are now free to choose the most suitable projects in relation to the local needs and resources. The scheme which can improve the most backward areas and the lot of the poorest section of the people are now receiving highest priority.

In addition to the general development of the urban local bodies, this Department have also taken up Centrally Sponsored Scheme 'Integrated Development of Small and Medium Towns in 25 urban local bodies. It is expected that this scheme will continue during the Eighth Five Year Plan period. On this assumption higher allocation of fund on this count has been proposed for this period.

The State Government has also taken up another Centrally Sponsored Scheme 'Special Component Plan for Scheduled Castes Programme for Liberation of Scavengers by conversion of service privies into latrines'. So far 20 urban local bodies have been brought under this scheme with the approval of the Government of India, 16 projects are now under scrutiny of HUDCO as per instruction from the Government of India.

Together with this scheme, State Government have also taken up the lowest sanitation programme in some of the remaining urban local bodies.

At present there are more than three lakh service privies and this number may increase with the constitution of new urban local bodies. The Department have decided to convert 80,000 service privies during the Eight Plan period.

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This Department have another scheme 'Bustee Improvement Scheme'. Only about 1,77,900 slum dwellers could be covered upto 31st March, 1989. During the Eight Plan period a total number of 2,80,000 slum dwellers is expected to be covered. Hence a substantial provision during the Eighth Five Year Plan is necessary.

This Department have another small scheme 'Urban Basic Services'. The resources for urban development are extremely limited and may continue to be so in the pursuable future in view of the existence of the wide-spread poverty and lack of basic services. Under this scheme with assistance of UNICEF and the Government of India, basic services to the selected towns of Darjeeling and Purulia are provided.

It may further be added here that every year the urban local bodies face the difficulties regarding the problem of supply of drinking water to their people during the summer. Commissioning of a water supply project is a time taking job. So far immediate relief provision is required for sinking and repairing of tube wells within the urban local bodies. A substantial provision has been, therefore, kept during the Eighth Plan period.

This year a new Centrally Sponsored Scheme 'Nehru Rozgar Yojana' has been introduced. Necessary provision has been shown in the plan papers.

The Development proposes to take up a new scheme 'Drainage Scheme' for the urban local bodies. It is clear that without the drainage facilities the improvement of an urban local body shall remain incomplete. Implementation of this this scheme will improve the environmental conditions of the urban local bodies to a great extent. We have kept Rs. 100 lac for this scheme during the 8th Plan period.

2. Programme of Development & Planning (Town and Country Planning Department).

The Town & Country Planning Department takes care of the Urban over growth outside the CMDA area. There are three area authorities under this department viz. Haldia Development Authority, Asansol - Durgapur Development Authority and Siliguri-Jalpaiguri Development Authority. Besides, there are few Planning Authorities in the State.

- i) Jaigaon Area in the District of Jalpaiguri
- ii) Mirrick area in the District of Darjeeling.
- iii) Burdwan Town .
- iv) Falta area in the District of South 24-Parganas,
- v) Sriniketan Santinikatan area in the district of Birbhoom.

Digha is likely to be declared as planning area very soon with extension up to Sankarpur where very long splendid beach has developed. To meet the growing need of those area the outlay of Rs. 6300 Lakhs has been proposed for the 8th 5 Year Plan and for the Annual Plan, 91-92. The proposed requirement works out to Rs. 892 Lakhs which attempts at a balanced mix of spill over programmes, on going programmes & new programmes envisaged during the 8th plan

3. Programme of the Metropolitan Development Department

A. Howrah Improvement Trust.

This is an old organisation which tackles with the development problem of Howrah district town. Bally Municipal areas has also been annexed within the zone of the HIT. As a result, the sphere of activities of the HIT has been extended. Schemes included in the 8th Five Year Plan period are mainly of the following nature :-

- a) General Development Schemes
- b) Park Schemes.

General Development Schemes envisages Planned water supply, Development of Sewerage, Drainage, Roads and other civic amenities to be extended to under developed and fringe areas where land is available.

Park Schemes are so located that the open space accrues the benefits to the residence of the adjoining areas of the town. Development works will be taken up at Salkia Salt Gola, Kadamtala, Doomrajala, Bally Municipal area and the area north of the Central Park.

B. Kalyani Town-ship.

The programme of the 8th 5 Year Plan consists of installation of Sewage disposal Plant, Construction of Water-line, Surface drains, Shinking on Deep Tubewells and Pumping Station, Electrification, Construction of connected Halls and set up of markets at Kalyani.

C. Calcutta Improvement Trust.

The Trust has two types of Schemes :

- i) Remunerative types which includes 4 Civic Centre Projects at Manicktala, Gariahat Golf Club and Kasba. Civic Centre at Manicktala & Gariahat are under execution and works at Golf Club and Kasba will be taken up soon.

As regards non-remunerative schemes the main emphasis is on Road Widening Projects. This non-remunerative Schemes include widening of Bentinck Street, Amharst Street, Baisnabghat Street, Ultadanga Railway Station Underpass, Extension of Manicktala Main Road to Salt Lake etc.

D. Hooghly River Bridge Project

In 1987-88 it was found that the Second Hooghly Bridge Project had reached a cost overrun of Rs. 100 crores in consequence of timeoverrun in completing the project. As per agreement with the Government of India the State Government got committed to meet Rs. 20 crores out of the additional cost of Rs. 100 crores. The State Government has already spent around Rs. 17 crores. The State Government has already spent around Rs. 17 crores and the balance Rs. 3 crores has been proposed in 1991-92 planned Budget. In this connection, it may be mentioned that due to price escalation and other reasons, the cost of the project may go up to Rs. 340 crores against Rs. 250 crores as estimated earlier. After settling the terms & conditions of meeting such cost over-run with the Government of India, fund that may be required to provide under this

E. Urban Rennal Schemes in the C.M.D. Area.

Under this scheme rationalisation of the existing land use with a view to release some land for the road system is made. This helps to ease the internal trific circulation problems in Calcutta.

F. Reclamation and Development to New Salt Lake Area.

The demand for development of the additional land arises because of living status included and its neighbourhood and high rocketing price of urban land. A project has been taken up to fill up some marshy lands in the adjoining area of the present Salt Lake and to earmark the same for residential purposes. Here the objective is to provide housing accomodation to 1,4000 people in Group Housing Scheme. The Project Report & Technical Sanction of the Scheme are expected to be approved in no time. The project has been so down up that the ecological balance in the area is properly maintained.

G. Augmentation of Water Supply in Bidhannagar Town-ship(Salt Lake)

At present thecity is supplied water from few deep tubewells located at different places of the city. But tube-wells are become defuned within 5 to 6 years and pipe-lines are being choked with iron deposition due to excessive iron content in the ground water. To mitigate the problem CMDA has proposed a Project for Supply of Water from Surface source to Bidhannagar, Dumdum and South Dumdum Municipal areas. The project has been phased into 3 parts and the first part will be executed during the 8th Plan.

H. Calcutta Metropolitan Development Authority.

C.M.D.A is currently implementing the CUDP-III Project. The likely completion date of CUDP-III is March, 1992. Even after completion of CUDP-III there will remain many problem areas to be attended to. Dialogue is continuing for CUDP-IV Project for tackling the enormous problems of Calcutta. However, even if CUDP-IV does not materialise the State Government will have to fund the necessary project even at much stress on its resources. The Chief Minister, West Bengal has in June N.D.C. Meeting urged upon the Central Government for implementing the Correa Commission Report for Development of National City like Calcutta.

4. Programme of the Development and the Planning Department
Digha Development Scheme.

Digha Development Scheme came into being in the year 1956 as a Plan Scheme with two main objectives viz. a) Development of Modern Town-ship and b) Development of Tourism at Digha of all the sea resorts, Digha is the cheapest. The middle-class people normally visit the place. Recently Digha has seen a big rush of tourist and for their accomodation the Government, have planned to construct a 4000-bed accomodation in phases. One phase of the scheme with 500 beds will be implemented during the 8th 5 year Plan. There is one water-works which is unable to cater to the drinking water needs to the town. Second, Water-works will be constructed during the current Plan period. Other schemes like construction of Bye-pass road, Linkage roads, Afforestation and Electrification of certain parts will also be done during this Plan. The outlay of Rs. 4 Lakhs has been proposed for the 8th Plan with provision of Rs. 70 Lakhs for the 9th Plan.

INFORMATION & PUBLICITY

Programme of the information and Cultural Affairs Department.

Films :

During the 7th Plan period emphasis was placed on setting up of Sound and Colour Film Laboratory Complex and Art Film Theatre which has since been named as Nandan. In the last two five year plans effort was made to provide better infra-structural facilities for production and exhibition outlet for good cinema. In the 8th Plan, the Department intends to explore possibility in new area.

Proposals

1. Modernisation of film studios

During the hey day of Bengali film industry, there were as many as 14 film studios in Calcutta. The number has come down to 4. One of them has been acquired by the Government and much improvement of the studio has been made during 7th Plan. In 8th Plan also, provision has been made for its further improvement. It has also been decided to rebuild the studio complex in a sprawling area contiguous to the colour Film Laboratory Complex at Salt Lake. Other important programmes are Development and Maintenance of Film Production Unit including providing subsidy to WBFD, loan for construction of cinema Hall, holding of Film Festivals. Setting up of film archive and improvement of facilities at West Bengal Film Centre, Nandan, Setting up of a Video complex to meet the growing demand profile and setting up of a Degree/Diploma course in film making.

Information & Publicity

The Information & Cultural Affairs Department is a Common Service Department of the Government serving all Departments of Government in dissemination of information and in educating public opinion through different media. The cultural activities of the Government are also looked into by this Department. Schemes proposed for implementation during the Eighth Five Year Plan are discussed in the following notes under three broad heads :-

Information : The area of activities of information Branch have been widened. The publicity/public relations arrangements have been centralised in this Department and all information and public relations work of the State Government are being carried out in this wing in a centralised manner. To cope with the growing demand the activities of this Department have been extended upto Block level and now it is being further extended upto Panchayat Samity level. For efficient management and functioning

of the information network in rural, industrial, urban, tribal and plantation areas as well as these in/outside the State it is only imperative that the existing arrangements and infrastructure should be adequately augmented and modernised. With the sophistication of modern public relations system and publicity devices and channels we too have to keep pace and adopt techniques of effective communication and equip our arrangements accordingly.

In view of the facts presented above schemewise proposals are given below for consideration.

Direction and Administration

1. Construction of Information and Cultural Complex :

At present the offices of the Information & Cultural Affairs Department are located in different places spread over the city mostly on hired accommodation. A proposal was moved during the 7th Plan for construction of a multistoreyed building on the plot at 85, Acharya Jagadish Ch. Bose Road where Folk Entertainment Section of this Department is situated.

But the proposal was ultimately dropped for want of fund in the 7th Plan. The plot of land is owned by this Department and the old premises is now in a dilapidated condition. The location of the plot is suitable for office cum commercial complex. It is proposed to build a multistoreyed building there with about 10,000 Sq. ft. floor space. The building after construction may accommodate all offices of this Department.

2. Information Centres :

- (a) Setting up of State Level Information Centre at Siliguri - Construction of Information Centre at Siliguri was taken up during the 7th Plan period. A sum of Rs. 101.45 lakhs was spent upto 1988-89. To complete the work and to run the establishment cost therefor provision has been made during 8th Plan and 1991-92 Annual Plan.
- (b) Setting up of Information Bureau in different States :- We have set up 4 Information Centres under the Schemes at (1) New Delhi (2) Bhubaneswar (3) Madras (4) Agartala. Two other centres are proposed to be set up at Bombay and Trivandram during the Eighth Plan period.
- (c) Setting up of a State Information Centre at Durgapur :- A plot of land has been acquired at Durgapur during the 7th Plan period. Construction of the Information Centre with an auditorium is proposed to be taken up during the 8th Plan period.

(d) Setting up of an Institute for Mass Media Research and Training :-

A nucleous Mass Media Centre has been functioning at the Calcutta Information Centre at present. During the Eighth Five Year Plan an Institute for mass media research and training is proposed to be set up with arrangement for training of journalists of small newspapers and inservice training of the officers of I. & C.A. Department.

(e) Panchayat Information Centres :-

The Rural Information Organisation is at present functioning in the districts at two levels - District and sub-division. District and Sub-divisional level Information Centres have been set up in the previous plans. But no centre at Block level has yet been set up though 90 Field Workers have been appointed during the previous plan for working in Block areas in co-ordination with Panchayats. The scheme is proposed to be extended in the 8th Plan and also in 1991-92 Annual Plan.

(f) Setting up of Special Tribal Information Units :-

In order to undertake effective publicity and public relations work amongst the tribal population of the State through their languages and culture, special Tribal Information Units are proposed to be set up in the eight districts of the State having large number of tribal population. These units will be set up in the districts of Midnapur, Bankura, Purulia, Burdwan, Birbhum, Malda, West Dinajpur and Jalpaiguri.

2. Field Publicity

(a) Appointment of field workers at Block levels and Block Information Centre.

(b) Strengthening of A.V. Units :

The scheme was taken up in earlier plans and may be continued in the 8th Plan with necessary budget provision.

(c) Strengthening of Exhibition set up :

This scheme was taken up during the 7th Plan and the work of construction of a permanent pavilion at Pragati Maidan, New Delhi is in progress. To complete the said pavilion and for construction of a permanent exhibition site at a selected area near Eastern Bypass a total sum of Rs.130 lakhs will be required during the 8th Five Year Plan.

- (d) Conversion of fixed point A.V. Units into mobile Units :

This scheme was taken up in the previous plan and may be continued during 8th Plan. At present there are 15 Fixed point A.V. Unit which requires to be converted into Mobile Unit.

- (e) Setting up of Rural Video Screening Units :

It has been decided to introduce in our rural Information system the technology of video with existing staff and infrastructure.

- (f) Strengthening of Advertising Wing :

- (g) Modernisation of Distribution Section :

- (h) Special Publicity Units for Sundarban Areas :

With the help of the existing infrastructure the Sundarban area of North 24-Parganas and South 24-Parganas can not be properly covered. In order to cover the entire area effectively it is proposed to divide the total area into 4 zones viz. Kakdwip Zone, Canning Zone, Baruipur Zone and Hasnabad Zone.

3. Song and Drama Services :

- (a) Setting up of a F.E. Unit at Siliguri :

This scheme is proposed to be continued in the 8th Plan period for expansion of the existing activities of the Unit.

- (b) Setting up of a Song Unit and Jatra Unit :

With a view to strengthen the existing Song Unit and Jatra Unit this scheme is proposed to be continued in the 8th Plan.

4. Photo Services :

- (a) Setting up of a Colour Photo Laboratory :

At present this Department has no colour photo processing Laboratory. It is therefore, proposed to set up a Colour Photo Laboratory at a total cost of Rs.10 lakhs during the 8th Plan period.

- (b) Modernisation of Photo Section :

The Photo Section of this Department has been proposed to be modernised with new equipments.

5. Press Information Service :

- (a) Teleprinter Service Linking Calcutta with districts :

The scheme was taken up in earlier plans and it may be continued during the 8th Plan period. It is

proposed to link up at least 5 districts with teleprinter service during the 8th Plan period.

(b) Modernisation of News Bureau :

The News Bureau of this Department is proposed to be modernised by installing some electronic equipments like News Scanner, Photo copier Machine etc.

(c) Modernisation of Teleprinter Service :

Plan for installation of Electronic Teleprinter and Telex Machine at New Delhi and Calcutta Teleprinter Service with provision for quick delivery of T.P. messages, may be taken up during the 8th Plan period.

6. Publications :

Development of Basumati Corporation Ltd. :

Management of Basumati Corporation Ltd. has been taken by Government. It is now being run as a corporation under the administrative control of the Government. The economic condition of this corporation is very critical. So to make it economically viable it is proposed to install some modern printing machinery and equipments at the Basumati Press. For this purpose provision has been made in 1991-92 Annual Plan and also in 8th Plan.

WELFARE OF SCHEDULED CASTES, SCHEDULED TRIBES AND OTHER
BACKWARD CLASSES

Programme of the Scheduled Castes and Tribal Welfare Department

The Department of Scheduled Castes & Tribes Welfare has a two-fold function. It has its own departmental Plan where schemes benefit scheduled castes and scheduled tribes of the State. Along with this, this Department is responsible for ensuring that all other sectoral departments spend a stipulated portion of their plan outlay for the Welfare of scheduled castes and scheduled tribes. As is well-known, the State Plan, to ensure this flow of funds, has two components, viz., Tribal Sub-Plan and Special Component Plan.

The S.C. and S.T. population of West Bengal, numbering 121.00 lakhs and 30.7 lakhs respectively as per 1981 census, constitute 27.62% (S.C. - 21.99%, S.T. - 5.63%) of the State's total population. Major emphasis has been given to cater to their welfare needs in consideration of their backwardness in educational and economic fronts and the handicaps suffered by them in enjoining social services and infrastructural facilities.

In consideration of the growth rate and investment trend the S.C., S.T. and other Backward Classes Sector Plan received priority attention both at the State Planning Board and Planning Commission levels. The outlay approved for the 7th Plan under this Sector is Rs.5800.00 lakhs. But actually the total amount of Rs.6244 lakhs was allocated in different years during seventh Five Year plan period. Sums of Rs.1885 lakhs have been shown under Annual Plan for 1991-92 and Rs.11239.00 lakhs has been shown as Eighth Plan outlay.

The Department of S.C. & T.W. of this Govt. is responsible for the implementation of the schemes under the S.C., S.T. and other Backward Classes Sector Plan. As a nodal Deptt. the S.C. & T.W. Deptt. has also to coordinate, monitor and supervise implementation of S.C. . and T.S.P. and the Spl Central Assistance Programmes related to these plans. The committed level of expenditure has also increased manifold during the successive plan periods. The machineries responsible for implementation of the provisions of the protective laws, namely, the West Bengal Land Reforms Act, the W.B. Reservation of vacancies (in Govt. Services & Posts) Act, the Protection of Civil Rights Act etc. are also required to be geared up for their proper functioning. The administrative apparatus has, however, remained static and inadequate. Due to ban on creation of new posts the structure of the existing District. Sub-Division/Region and Block machinery is ill-equipped to cope with the increasing volume of work. In fact, proper justice can not be meted out to the people for

inadequate staffing at all levels. The provision proposed under the head 'Direction and Administration' during 1991-92, therefore, envisages toning up the S.C. & T.W. organisation with minimum manning at key positions.

Prief descriptions of the schemes contained in those programmes are given below :-

Educational Development

The State Education Policy for free universal education upto class XII, free supply of text books at the primary level, establishment and construction of primary schools as per minimum needs and also covers the S.C. and S.T. student population. The supplemental programmes implemented under this plan are to support those students with Ashram Hostel facilities at the primary level, providing book grants, hostel charges, examination fees, maintenance grants etc. at the secondary level and creating suitable educational infrastructures through construction of various hostels, coaching centres, residential schools etc. The schematic pattern of these programmes are as follows :-

1. Ashram Hostels attached to Primary Schools :

This scheme intends to benefit the Scheduled Castes and Scheduled Tribes children of the poor families. Previously for construction of a hostel with a provision for 30 children a ceiling cost of Rs.50,000/- was fixed. It is no longer possible to complete hostel building within the present ceiling limit. The ceiling cost per building is therefore proposed to be enhanced to Rs.1,00,000/-. Primary school children residing in these hostels would be provided with boarding, lodging, clothes, medicines books etc. free of cost.

The amounts proposed for 1990-91 and 1991-92 are both for completion of hostels under construction and for new hostels. All the Ashram hostels at primary level are run under Government management.

2. Book Grants and Examination fees :

Book grants are paid to Scheduled Castes and Scheduled Tribes students reading in secondary stages. The rates have since been revised with effect from 1.5.90 as follows :

		<u>Old Rate</u>	<u>Revised enhanced rates</u>
Class	- V	*Rs.10.00	Rs. 20.00
Class	- VI	Rs.30.00	Rs. 50.00
Class	- VII	Rs.70.00	Rs.150.00
Class	- VIII	Rs.70.00	Rs.150.00
Class	- IX	Rs.90.00	Rs.200.00
Class	- X	Rs.50.00	Rs.100.00

Grants are also given for payment of Examination fees at the rate prescribed by the Board of Secondary Education, West Bengal. It may be noted that the some beneficiary may be awarded stipends for more than one year.

About 6,50,000 students (approx.) are expected to be benefited under the scheme including committed budget during 1991-92.

3. Hostel charges at the Secondary Stage :

The object of the scheme is to provide Scheduled Caste and Scheduled Tribe students at Secondary Stages with hostel charges. At present the rate of hostel charge has since been revised with effect from 1.5.90 from Rs.100/- to Rs.150/- per month for 10 months in a year.

Similar enhancement has been made in the rate of meal charges to ashramites of ashram hostels run by this Deptt. and residential students of Belpahari Girls' High School.

4. Grant of maintenance charges to the Day Scholars at the Secondary Stage :

The object of the scheme is to grant maintenance charges to Scheduled Caste and Scheduled Tribe day scholars per month for 12 months in a year reading in Classes V to X and belonging to the families having annual income upto Rs.6,000/-. In case of Scheduled Tribe all the eligible day scholars are given the stipends and in case of Scheduled Caste awards are given to a limited No. of day scholars on the basis of meanstest.

The rate of maintenance charges has since been enhanced from Rs.20/- p.m. to Rs 25/- per month.

From 57,000 Scheduled Tribes and 80,000 Scheduled Castes day scholars will be benefited under the scheme. The coverage of Scheduled Tribe students has been increased by raising the income limit.

5. Extension of Hostel Facilities :

Location of schools, both primary and secondary, are not always contiguous to S.C. or S.T. habitations. Accordingly extension of hostel facilities to S.C. and S.T. students has been accepted as a basic pre-requisite for propagation of formal education among these population. It has been noticed that extension of such facilities has contributed largely in attracting S.C. and S.T. students within the fold of formal education. In consideration of the need and resources a number of variations have been introduced in this scheme from time to time.

These are :-

- a) Ashram Hostel for Primary students ;
- b) Ashram Hostel for Jr. basic/Jr. High students ;
- c) Construction of Hostel buildings for boys attached to High Schools ;
- d) Construction of hostel buildings for S.T. college students ;
- e) Construction of Girls' Hostels under Centrally Sponsored Schemes.
- f) Construction of Govt. hostels for boys and girls.

Necessary provisions have been proposed for taking up construction of hostel buildings during 1990-91 and 1991-92.

6. Coaching arrangement for Scheduled Caste and Scheduled Tribe Students reading in school :

20,000 SC/ST students are likely to be benefited under this scheme.

7. Improvement and expansion of the Residential School for the Tribal Girls at Belpahari in the District of Midnapore :

The residential school for tribal girls at Belpahari is now a full-fledged Higher Secondary Institution. The number of students has been enhanced from 240 to 360. The provision proposed in the Plan is for improvement of working condition of the Residential school.

8. Improvement of working condition of the Boys' Hostels and Girls' Hostels started previously out of the fund sanctioned by this Department including provision for repair and completion of incomplete buildings

The aim of the scheme is to provide additional amenities to the Boys' and Girls' Hostels and to complete the incomplete hostel buildings by giving supplementary grants as necessary.

9. Additional stipendiary benefits to Scheduled Castes & Scheduled Tribes meritorious students reading in Classes IX to XII :

Additional stipendiary benefits will be given to Scheduled Castes & Scheduled Tribes meritorious students with aim to train up them by providing Special Coaching and better amenities to that they will be in a position to compete with general students for admission in Medical, Engineering and other Competitive Examination for Higher studies. 600 students will be benefited per year.

Economic Betterment :

The main thrust under these programmes are given through Land Reforms and poverty alleviation programmes. Improvement of the traditional skills of the SC/ST artisans and involvement of the

SC/ST entrepreneurs in the new technology has also been aimed at under the Plan. The functioning of W.B.S.C. & S.T. Dev. & Fin. Corporation and the West Bengal Tribal Development Co-operative Corporation Ltd. have been defined precisely to live upto this expectation.

The West Bengal Scheduled Castes and Scheduled Tribes Development & Finance Corporation is assisted under the Plan with matching share capital assistance in 51:49 ratio. The margin money loan scheme of the Corporation has gradually assumed a key role in alleviating poverty.

The West Bengal Tribal Development Co-operative Corporation Ltd. and its affiliated LAMPS numbering 90 have also undertaken a number of activities for the Scheduled Tribes through Cooperative structures in conformity with the State Govt. policy. LAMPS continue to enjoy monopoly rights relating to collection of MFP and Tree-Felling operation.

TRAINING-CUM-PRODUCTION CENTRES (T.C.P.C.) :

There are 72 TCPC centres which are run departmentally. These centres provide training both in traditional trades of the SC and ST as well as in some new trades. Each centre provides training @ 20 SC/ST trainees at a time in trades like 1) textile, 2) leather, 3) carpentry, 4) sericulture, 5) tailoring and knitting, 6) other handicrafts, 7) Lac and 8) Misc. trades. Each trainee is paid Rs.75/- p.m. during the training period which is usually for one year. Ex-trainees are provided with one-time grant, which is often linked with bank-loan, to establish them in such trades. The products of these centres are marketed through a number of outlets and are supplied to different State/ Central Govt. offices on made-to-order basis. The working condition of the Centres will be improved.

HEALTH, HOUSING AND OTHER AMENITY PROGRAMMES :

The entire provision proposed in the Backward Classes Sector Plan under this broad programme, in fact, are meant only to supplement the sectoral programmes. Thus the maintenance of T.B., Leprosy and V.D. mobile clinics and beds for S.T. people are borne under Backward Classes Sector Budget in the non-plan to make to health facilities provided under State Plan Programmes available at their reach. The dug-well/water-supply schemes will similarly be used in emergent cases to meet drought and other situation. These will, no doubt, supplement the sectoral programmes implemented for the purpose. The roads, bridges and culverts schemes are similarly of supplemental natures, to link SC/ST hamlets. The scheme has accordingly been proposed to be implemented in the existing pattern with higher ceiling cost.

- a) Promotion of cultural activities of Scheduled Castes,
- b) Promotion of literary and cultural activities of Scheduled Tribes, the new schemes introduced in the year 1989-90 will continue in the year 1990-91 and 1991-92.

Information and Cultural Affairs Department of this Government implement schemes for promotion of cultural activities of people in general of this State. But it is felt that special effort for S.C. & S.T. people are necessary as these two communities are far behind the general stream. Moreover, Tribal culture is different from that of General people of this State and as such Govt. should have to take up special schemes suitable for the development of these people. In view of the above the aforesaid schemes have been proposed to be continued in the Annual Plan for 1991-92.

- c) Rehabilitation Schemes for scavengers rendered unemployed due to conversion of dry latrines :

The scheme has been included as per instruction of Govt. of India. The provision proposed for the scheme represents matching share of State Govt. for the C.S. Schemes of same nomenclature. Already scavengers in 12 Municipalities have been liberated and Training programmes for rehabilitation in other trades are under progress.

- d) Payment of stipends to S.C. & S.T. Type and Shorthand learners attached with recognised commercial colleges.

With the unemployment problem growing acute day by day it is necessary to ensure that S.C. & S.T. unemployed youth are fit to complete in all disciplines. In order to enable them to compete with general candidates and filling the reserved quotas for posts involving knowledge of shorthand and typewriting Govt. desire that they should be given incentives for taking training in shorthand and typewriting. But it is very difficult for S.C. and S.T. candidates in general to pay the fees payable to the commercial colleges. In view of this Govt. want to provide with necessary stipend to these S.C. & S.T. candidates for learning typewriting and shorthand in approved commercial colleges.

- e) Improvement of working conditions of school buildings located in areas having S.C. concentration :

The provision is in the nature of an additive intended to cover special expenditure for improving the working condition of schools in Scheduled Caste concentrated areas for the benefit of S.C. students.

LABOUR & EMPLOYMENT

Labour

1. Programme of the Labour Department

This sub-sector comprises two programmes (1) Labour & Labour Welfare including Employment and Employees' State Insurance (Medical Benefit) Scheme.

A. Labour And Labour Welfare Including Employment

The programme includes the strengthening of industrial relations machinery. The Barrackpore office will be upgraded to D.L.C. level.

Owing to industrial development the regional offices in the district of Murshidabad, Nadia and North 24 -Parganas will have to be improved. For implementation of Minimum Wages Act to Agricultural Labourers there are large number of Inspectorate staff at the district level. Besides, the Directorate of Labour has got to collect various statements for various purposes. The Directorate may have to be strengthened during the period of 8th Plan.

B. Strengthening of State Labour Institute

At present the Institute suffering from acute shortage of space. It is necessary to construct a new floor for providing better space to the Institute.

C. Grants to the Indian Institute of Social Welfare And Business Management for conducting Labour Welfare Officers' Course.

The Institute trains the Welfare Officers. As the workers are ultimate beneficiary of the function of the Institute the State Government provides financial assistance to the Institute from time to time.

D. Industrial Tribunal And Labour Court

There are at present 9 industrial Tribunals and 2 Labour Courts in West Bengal. For speedy disposal of the industrial dispute cases, it is proposed to set up two Industrial Tribunals one each at Howrah and Barrackpore where concentration of the industrial units is very high.

E. Directorate of Boilers

The Directorate has a Testing Laboratory for examination of boilers. The laboratory will have to be strengthened by providing equipments and officers and staff.

F. Directorate of Factories

Owing to large number of factories in the district of Howrah, it has been proposed to open a new branch office at Howrah for which additional post off officers and staff may have to be

created. Other schemes of the Directorate are strengthening of the Research and Development Wing, Strengthening of the Research Statistics Cell, Creation of Major Accident Hazard Cell, Strengthening of Industrial Hygiene Cell. Creation of Training Cell and Strengthening of the Medical Cell.

Employment

G. Directorate of Emoloyment

Opening of new Employment Exchange in 1) Basirhat Sub-division and North 24-Parganas district.

2. Opening of 3 (three) W.E.I and G.B.X. with North Bengal University, Kalyani Agricultural University and Biswa-bharati University. There is also proposal for opening of 40 (forty) Employment Informations and Assistance Bureau Units in 40 Blocks with concentration of SC/ST population.

Setting up of Women's Cell

In the area of Development and Human Resources the programme of Women Development needs special emphasis. Last year the Planning Commission working group recommended that separate cell should be set up for women at each Employment Exchange under the supervision of a women officer. Few Women's Cells will be opened during the period of 8th Plan and also in the Annual Plan, 91-92

Opening of Physically Handicapped Cell at District Head Quarters

Proposal for opening Cell for Physically Handicapped persons at District Head Quarters in 8th Plan few such units will be opened.

Opening of Employment Market :

At present there are 31 E.M.T. units which cover 66 Employment Exchanges in the State. In order to expand the scope of activities of this wing more EMI units will be gradually set up within the premises of the existing exchanges.

Self-Employment Scheme for the Registered Un-employed in West Bengal

This is an unique scheme in the State of West Bengal for tackling unemployment problem. It has been shown in the review chapter that under SESRU around 20,000 (Twenty thousand) unemployeds are being provided with self employment per annum. This scheme will continue in full swing in the 8th Plan and for this purpose strengthening of the machinery of the Labour Employment Directorate will be necessary.

H. Directorate of Industrial Training

The basic programmes of this Directorate are setting up of I.T.I. exclusively for women, setting up of new I.T.I.'s,

Setting up of Plastic Processing Operator Trade, Improvement of Basic Training Centre (chemical) at I.T.I. Hooghly. There is also a scheme for extending facilities to I.T.I.s boys.

I. Directorate of ESI (EB) Scheme

In the interest of the workers of the State improvement of the existing facilities of the E.S.I. Hospitals and setting up of a few new units have been envisaged during the period of 8th Five Year Plan.

2. Programme of the Development & Planning Department

Additional Employment Programme

CONCEPT

Additional Employment Programme was introduced in the State in the year 1973-74 as a Central Sector Scheme with 100% Central assistance. Initially the objective of the programme was to provide employment to the educated unemployed persons particularly in the urban areas. The programme had at that time three components viz., Training, subsidised Employment and Self-employment. In the year 1974-75, however, emphasis was laid under the programme mainly on self-employment schemes among the educated unemployment persons. Since 1978-79 the scope of the programme has been further widened to include all categories of unemployed persons educated or uneducated for promoting self-generating employment schemes in the field of industries, commerce and service and also providing assistance to employed persons for the purpose of creating additional employment according to the prescribed yardstick which lays down that there should be employment of at least one person for every Rs.5000/- of margin money. Unemployed persons from families having no source of income, however, get priority over others. Social attention is also paid to the members of the S.C. and S.T., other backward classes, War-widows and ex-servicemen..

MARGINAL MONEY ASSISTANCE - TERMS AND CONDITIONS

Under the programme margin money assistance is provided to proprietary concerns/partnership firms, public/private limited companies and cooperative societies for the purpose of setting up of new units in the Cottage & Small Scale Industries Sector, establishment of ancillary units, promotion of agro based industries, transport etc. Such assistance is also extended to schemes for expansion of existing small scale units provided other conditions are fulfilled. Out of the fund provided for margin money to any unit, there should be, on an average, one employment in that unit for every Rs.5000/- of margin money. The extent of margin money assistance is normally 10% of the total project cost as approved by the bank or other financial institutions provided that 20% margin money assistance is extendable

to entrepreneurs belonging to S.C. & S.T., physically handicapped entrepreneurs, ex-servicemen and Industrial Co-operatives. The margin money advance carries interest @ $6\frac{1}{2}\%$ per annum, reducible to 4% in case of regular repayment. The loan together with interest thereon is repayable in four equal annual instalments. Repayment of margin money against Block Capital starts after the terms loan from bank/financial institution with interest has been fully repaid or eight years whichever is earlier. Repayment of margin money against working capital commences from the 3rd year of the date of advance.

ACHIEVEMENT

Under the programme total investment of margin money upto the 4th year of the Seventh-Five Year Plan (1982-89) was Rs.410 lakhs. In terms of the stipulations in the guidelines, employment generation during Seventh Five Year Plan period (1989-90) was 24,230 from 3505 units assisted.

PROPOSED PROVISION FOR THE 8TH FIVE YEAR PLAN AND ANNUAL PLAN 1990-91

To continue the programme in the Eighth Five Year Plan it is proposed to make a provision of Rs.375.00 lakhs for the eighth five year plan (1990-95) and Rs.82.50 lakhs for Annual, 1991-92.

SOCIAL SECURITY & WELFARE

1. Social Welfare

Programme of the Relief & Welfare (Welfare) Department

DIRECTION AND ADMINISTRATION

1. Strengthening of District Set-up : About 100 posts of Inspector of Social Welfare will be filled up during 1990-91, the first year of the Eighth Five-Year Plan. A provision of Rs.20.00 lakhs for 1990-91 and a total provision of Rs.137.00 lakhs for 1990-95 may therefore be made for the Annual Plan and 8th Plan period respectively for payment of salaries etc. in respect of the Inspector of Social Welfare.
2. Training Scheme for different categories of Functionaries of Department and Directorate of Social Welfare : This a continuing scheme. A slightly enhanced provision of Rs.2.00 lakhs for 1990-91 and a total provision of Rs.10.00 lakhs for 1990-95 may be made for imparting training to different functionaries responsible for implementing social welfare programmes.
3. Implementation of the Recommendations of the Home Reforms Committee : A committee has been set up by this Department for a study of various problems of different institutions under this Department and for suggesting remedial measures. The Committee has submitted its report which is under active

consideration of this Department.. For implementation of the recommendations of the Committee a provision of Rs.5.00 lakhs for 1991-92 and a total provision of Rs.25.00 for 1990-95, the 3th Five-Year Plan period may therefore be made.

4. Creation of Public Awareness for Different Social Welfare Programmes : For creation of public awareness for different social welfare schemes through seminar, work-shop etc. a provision of Rs.4.00 lakhs is proposed for 1991-92 and a total provision of Rs.10.00 lakhs is proposed for 1990-95.

5. Establishment of Social Defence Planning Unit : This is a centrally sponsored scheme under which a separate unit at the Directorate of Social Welfare has been set up. The expenditure under the scheme is shared between the State and the Central Government on 50:50 basis. Accordingly, a provision of Rs.2.00 lakh for 1991-92 and Rs.10.00 lakhs for 1990-95 may be proposed.

Other programmes include Welfare of Handicapped, Child Welfare, Women's Welfare, Welfare of Aged and Infirm and Destitute.

CORRECTIONAL SERVICES :

1. Scheme of Prevention and Control of Juvenile Social Mal-adjustment :- The Parliament has passed the Juvenile Justice Act, 1986 in order to provide uniform pattern of care, protection, treatment, education, training and rehabilitation of neglected and delinquent juveniles. This Act has come into force from 2.10.87 in this State. The introduction of the said Act and the denotification of Jails and Sub-Jails have made it imperative that some new Juvenile Homes and Observation Homes should be established and essential services provided according to the provisions of the Act.

Metropolitan Development Department of this Government have allotted one acre of land at Salt Lake, Calcutta to this Department for construction of a new Home under the said Act. Agriculture Department have also agreed to transfer a plot of land at Balurghat to this Department for construction of a new Home under the said Act. A few new Homes will be constructed through voluntary organisations for the beneficiaries of the Juvenile Justice Act. 50% of the cost of constructions and maintenance of the Homes under this Act will have to be provided by the State Government. Besides, some Vocational Training Centres and Training-cum-Production Centres will also be established for the children covered under the Act.

ASSISTANCE TO VOLUNTARY ORGANISATIONS :

1. Aid to Voluntary Organisations for Social Welfare Works :-

Voluntary Organisations have a vital role to play in the field of Social Welfare activities. Those Organisations have always been encouraged by the Government.

A provision of Rs.10.50 lakhs for 1991-92 and Rs.60.00 lakhs for 1990-95 may therefore be made for this purpose.

ASSISTANCE TO PUBLIC SECTOR AND OTHERS UNDERTAKINGS :

1. Assistance to West Bengal Comprehensive Area Development Corporation for Social Welfare Works : The CDAC has been running Balwadi Centres and Community Centres etc. with financial assistance from this Department. For maintenance of the Balwadi and Community Centres through the CADAC a provision of Rs.14.70 lakhs for 1991-92 and Rs.75.00 lakhs for 1990-95 may therefore be made.

2. Programme of the Education Department (School Wing)

STATE WELFARE HOMES

There are 11 Govt. managed Welfare Homes in the State to look after boys and girls of the age group 6-18 who are economically very poor, parentless and destitute. The total quota of inmates in the State Welfare Homes is at present 8272. In all the Government managed homes except two homes Govt. Junior High Schools are attached for the education of the inmates. A Govt. High School is attached to Banipur State Welfare Home for the inmates of the home. There is a proposal to increase the per capita grant for maintenance of the children.

Other Social Security & Welfare Programme

Other Schemes

Programme of the Home (Political) Department

The Minority Cell of the Home (Political) Department has undertaken a scheme for construction of Muslim Girls' Hostels in the Muslim Minority concentrated districts. The scheme will meet the needs of the Muslim Girls' in those districts and is expected to solve a problem of the Muslim Community. During the last three years of the 7th Plan period, it has been proposed that eleven hostels will be constructed in eleven Muslim Minority concentrated districts. Out of the 11 hostels, construction of the hostel at Burdwan is near completion and it will be inaugurated on 23.9.89. Construction works of the hostels in Murshidabad and Malda are continuing and Rs. 5 lakhs for each have already been allotted in the financial year 1987-88. More funds are likely be allotted for these two hostels during this financial year so that the construction works may continue. Administrative approval for construction

work has already been accorded in respect of these two hostels to the tune of Rs. 15 lakhs and Rs.13 lakhs respectively. For the district of Birbhum Rs. 5 lakhs will also be allotted during this financial year against the total administrative approval to be accorded for this purpose to the tune of Rs. 15 lakhs. Such schemes in the districts of West Dinajpur, North 24-Parganas, Nadia, Howrah, Cooch Behar, South 24-Parganas and Midnapore, which were proposed to be taken up during the 7th Plan period, but could not be taken up during that period, will be taken up during the 8th Plan period.

NUTRITION

Programme of the Relief & Welfare (Welfare) Department

INTEGRATED CHILD DEVELOPMENT SERVICES SCHEME - 8TH FIVE YEAR PLAN

From 1975-76 till the end of the 7th Plan Period, i.e., till 1988-89 Govt. of India has allocated 127 projects to this State of which 14 Projects have been allocated during 1988-89 and no project was allocated during 1987-88. These 14 projects are not now in operation, but steps have been taken to make these projects operative very soon. Hence, at present 113 numbers of Centrally Sponsored ICDS Projects are in operation in this State.

The target for 8th Plan is as follows :

<u>Y e a r</u>	<u>Projects to be sanctioned</u>
1990-91	14
1991-92	16
1992-93	20
1993-94	20
1994-95	30
Total :	<u>100</u>

2. Programme of the Education Deptt. (School Wing)

Midday Meal Programme for all children in Primary Schools

Mid-day Meal Programme cuts down the drop out rates to a great extent and hence it is proposed to provide mid-day meal for at least 80 working days to a sizeable number of children in the primary area. For proper administration of this programme, it is proposed to introduce efficient supervisory and monitoring system with the help of Panchayat bodies at different levels alongwith Govt. functionaries. The outlay for Mid-day meal programme has been substantially stepped up.

XII. GENERAL SERVICESJAILSProgramme of the Home (Jails) Department

This Department administer two different types of plan-schemes viz. Upgradation of Prisons Administration and Modernisation of Prisons Administration. During the 7th Plan period, total sanction amounting to Rs.1024.29 lakhs was accorded under Upgradation Programme (8th Finance Commission). P.W. Department furnished a report regarding expenditure incurred amounting to Rs.672.32 lakhs. Final statement is still awaited. Govt. of India approved schemes amounting to Rs.422.17 lakhs under Upgradation Programme during 1989-90 (9th Finance Commission). This Deptt. issued sanction orders covering the entire amount but P.W.D's progress report is yet to be received. Current year's budget provision for Upgradation stands at Rs.282.17^{lakhs} (4059 P.W.D. & 4216 P.W.D.).

Govt. of India approved schemes under Modernisation Programme (on 50:50 basis) amounting to Rs.326.04 lakhs during 1986-87 to 1988-89. They have since released their share of 50%. They have extended 100% assistance on schemes amounting to Rs.2.38 lakhs. Expecting that the programme will continue, a provision of Rs.140 lakhs has been made in the current year's budget (2056-Jails). Govt. of India very recently has intimated that the Modernisation Programme will further continue up to 1991-92 and asked for Plan-proposals. This Deptt. have already furnished proposals to Ministry to Home Affairs, Govt. of India with a total outlay of Rs.456.45 lakhs (Rs.212.85 on 100% central assistance and Rs.243.60 on 50:50 basis). The plans which could not be implemented though approved by Govt. of India during 1986-87 to 1988-89 and some other new schemes constitute the action plan for 1990-91 and 1991-92. Approval of Govt. of India is awaited.

STATIONARY & PRINTINGProgramme of the Commerce & Industries Department

1.0. There are five different units of the State Government Presses situated at Alipur, Kadapara; Raj Bhavan, Cooch Behar and Darjeeling. Most of the machines in these presses are old and have not been renovated or replaced for long. Consequently, these presses have been experiencing difficulties to cope with the ever increasing load of urgent and immediate nature of work.

1.1 During the Seventh Five Year Plan (1985-90), there was an agreed outlay of Rs.100 lakhs only for modernisation of the Govt. Presses. The total expenditure at the end of the Seventh

Plan period on this account is Rs.26 lakhs only. Owing to smaller plan outlay and light resource position, the work of replacement/renovation could not be undertaken in a big way.

1.2 The Eighth Plan proposals for modernisation of the Government Presses envisage phase-wise renovation and replacement of the old and worn-out machineries in these Government Presses. A Technical Committee has been constituted with a view of improving the working condition of the West Bengal Government Press at Alipore and for augmenting the printing capacity of that Press. The Committee will interalia recommend the necessity of replacement of existing machinery and/or purchase of additional machinery.

1.3 An outlay of Rs.360.00 lakhs has been proposed during the Eighth Plan for implementation of the phased programme of replacement and renovation of old machineries in the Government Presses. The outlay for 1990-91 under the Programme is Rs.100.00 lakhs and the requirement of fund for 1991-92 is estimated at Rs.100.00 lakhs.

PUBLIC WORKS

Office Buildings

1. Programme of the Home (Police) Department

A. (1) Construction of Thana Buildings :-

We have 80 Thana Buildings in rental premises, 75 of W.B. Police and 5 of Calcutta Police. The necessity of shifting thanas to departmental buildings requires no elaboration. We have proposals for setting up new Police Stations during the Eighth Plan. Therefore, the requirement of departmental buildings for our P.S. by the end of 8th Plan is expected to go upto 100. It is proposed that during the 8th Plan period, we should construct at least 16 buildings for our P.S., 12 for W.B. Police and 4 for Calcutta Police. Our P.S. building in Calcutta will cost about Rs.50.00 lakhs (approx.) each and the corresponding cost in the districts will be Rs.25.00 lakhs (approx.) each. On the above basis, the total cost on account of thana buildings during the 8th Plan will be Rs.500.00 lakhs.

(2) Water supply Arrangement

One of the standing problems in the Police Buildings is inadequacy of water supply. Every year we have to spend some amount for maintaining and making arrangement, such as sinking of deep tube-wells, construction of dug wells, installation of Pump lines and Pump sets, etc. so as to alleviate the problems of water supply.

In the Eighth Plan, an amount of Rs.15.00 lakhs has been

(7) Base Hospital

A Base Hospital for the State Police has been a crying need for many years. Some time ago, about 5 acres of land were acquired at Salt Lake for the purpose. It is proposed to set up a 300-bed hospital with modern arrangements there. The cost of construction of the hospital is estimated at Rs.5.50 crores. Development and Planning Deptt. has advised to pend this scheme for the present. A provision of Rs.50.00 lakhs is, however, proposed in the Eighth Plan in anticipation of clearance of the scheme by the State Planning Board.

(8) Other Schemes

In a big establishment like that of Police, numerous contingencies arise from time to time. Having regard to such contingencies, a provision of Rs.17.00 lakhs has been proposed in the Eighth Plan for the purpose.

B. 4059-C.O. On P.W. (Acqn. of Land)

Land Acquisition

The Police Administration requires land on a large scale for thana buildings, administrative buildings, barracks, battalions, residential quarters, training centres, etc. Therefore, acquisition of land is a matter of priority in the Police Plan. Besides, with the passage of time, getting suitable land is becoming more and more difficult. Therefore, land should be acquired not merely for immediate purpose but also keeping view the future requirements as far as possible. Already, Home(Police Deptt. has been spending every year more than 30.00 lakhs for acquisition of land. A lump provision of Rs.121.50 lakhs has been proposed for the purpose in the Eighth Plan.

D. 2059-P.W.

Minor Schemes

Schemes involving expenditure not exceeding Rs.1.00 lakhs are booked under this head. The expenditure on this account is expected to be Rs.5/6 lakhs during the next five years. (Previously a much larger amount was spent under this head. But with the escalation of prices, most of the schemes, even the relatively small ones, are exceeding Rs.1.00 lakh. And so, the number of schemes under this head is coming down). A token provision of Rs.5.00 lakhs has been proposed under this head in the State Budget during the Eighth Plan period.

E. 2055-Police

(i) There is a small cell in the Home (Police) Deptt. especially created to look after the Planning matters of Police. The expenditure of this cell is booked under the

revenue head. It has been estimated that an amount of Rs.2.50 lakhs will be necessary for the cell during the Eighth Plan.

(ii) Improvement in Traffic Management

This is a new scheme introduced in the current year's plan to alleviate the traffic problems in the city of Calcutta and in the districts. An amount of Rs.25.00 lakhs has been earmarked in the budget for 1990-91 for the purpose. A provision of Rs.152.90 lakhs, has been proposed for the scheme during the Eighth Plan period.

2. Programme of the Land & Land Reforms Department

Construction and maintenance of Circuit House are perennial task of this office Circuit Houses in the districts were built in independence days and most of them have outlived their span of life. Due to financial restraint it is not possible to construct new circuit Houses, all at a time to replace the old ones. Renovation of these old Circuit Houses is a major item of expenditure under construction Scheme.

As the administrative machinery both at centre and in the State are people oriented. Ministers and officials from both Central and State Govts frequently pay visits to the districts to have a glimpse about various developmental and other works. As a result along with the work of renovation of old Circuit Houses it has become necessary to construct large and modern Circuit Houses in the districts in a phased manner.

With introduction of Integrated set up of Revenue Administration it has become necessary to set up 17 district level, 51 Sub-division level 336 Block level and 3305 Panchayat level offices. Out of these, it has been estimated that 10 district level, 20 subdivisional level 105 Block level and nearly 2000 RI Office Buildings are to be constructed in phased Manner. With everincreasing cost of construction material, these schemes constitute the bulks of the construction programme.

Introduction of computer system in Land Reforms Administration is a new feature. Preliminary civil and Electrical Works (including air conditioning) are part of construction work for installation of computer system.

It becomes sometimes necessary to provide funds to district Authorities to undertake petty addition and alteration works to their official residences/office buildings necessary funds for which are, not provided by the P.W. Department. This also forms a part of the construction programme.

(3) Special repairs, major repairs, renovation, additions and alterations to the existing Police Buildings.

The Police Est_ablishment has a vast net-work of buildings spread over the State. Some of them are quite old and require major repairs. A lump provision of Rs.20.00 lakhs has been proposed for this purpose during the 8th Plan period.

(4) Est_ablishment of Training Centres and Sports Facilities

There are more than 72,000 Policemen in the sub-ordinate ranks in the State. The number will go up further when all the recruits of the recently-sanctioned battalions join the posts. The existing training f_acilities are inadequate to meet the requirement. Extension and expansion of the existing training arrangement is an imperative necessity. Similarly, the existing sports facilities for the Policemen are not at all satisfactory. For the sake of body and mind of the Policemen, proper facilities for sports and games should be created. The State Govt. submitted detailed proposals in this regard for consideration of the Ninth Finance Commission. The Commission did not allocate any funds for the purpose. However, in recognition of the importance of the matter, a token provision of Rs.10.00 lakhs has been suggested for the Eighth Plan.

(5) Forensic Science Laboratory Buildings

The State is now depending on the single laboratory in Calcutta for Forensic examination of the exhibits, etc. in connection with the criminal cases and otherwise. The existing laboratory is not fully equipped. For example, it has no serological examination of blood, a very important thing for criminal examination. Its Chemistry, Biology and Toxicology sections are too small to meet the demands placed on it. To meet the demands of the present day, a two-fold programme is necessary - one for the extension of the existing laboratory in Calcutta and the other for setting up research laboratories in the remote areas of the State. With that purpose, a research laboratory has been set up at Jalpaiguri. It is yet to be fully equipped. An amount of Rs.30.00 lakhs has been proposed in the Eighth Plan for the purpose.

(6) Explosive Laboratory Buildings

This is a very important item. The Dy. Chief Controller of Explosives, Calcutta, who used to examine and report on bombs and materials seized by the Police, has stopped such examination for the last four years. In consequence, the Police has been handicapped in presenting Offenders. We are required to make our own arrangement for examination of bombs, etc. A provision of Rs.25.00 lakhs has been proposed in the Eighth Plan for the purpose.

3. Programme of the Judicial Department

Approved outlay for the 7th Five Year Plan concerning the Judicial Department was for Rs.300.00 lakh. Out of which Rs.197.80 lakhs and Rs.102.20 lakhs were approved for General office building and Residential quarters respectively.

During the year 1986-89 the grants recommended by the 7th Finance Commission were included in the Annual Plan allocations and as such only a meagre sum was allotted for financing schemes outside the purview of up-gradation programme. There are many important projects which need implementation with State fund.

The dearth of accommodation in different Judgeships are still posing a serious problem inspite of construction of 23 court buildings during the 8th Finance Commission's period. More schemes for construction of court buildings are to be taken up during the 8th Plan period to meet the increasing demands for better accommodation in courts. Keeping this in view proposals for construction of new court buildings at Kalna and Asansol has been included in the plan proposals.

The Registration offices are accommodated mostly in rented buildings and some of which are old and delapidated. Some rural sub-Registry offices are still located in mud built houses. Construction of sub-Registry offices at different stations have become an imperative necessity.

Construction of central Record Room for the Registration offices at Salt Lake where land has already been obtained on payment of Salami and construction of district Record Rooms at District head quarters deserves priority.

Construction of Judicial complex within the Bankshall Court building of Court complex at Kalna and Asansol requires adequate augmentation of Annual Plan allocation so that flow of funds can be assured for early completion of the schemes within reasonable period and to avoid escalation of cost.

With a view to finance the schemes as referred to in Statement-IIID and IV this Department needs the barest minimum funds to the extent of Rs.432.60 lakh for 1990-95 and Rs.45.00 lakh for 1991-92 under the Head "XII-General Services-Public Works-01-Construction General Pool Office Accommodation".

4. Programme of the Finance (Taxation) Department

The Commercial Taxes Directorate and the Entry Tax Directorate collect the major share of revenue of the State Government. Collection of Entry Tax is checkpost based while

check posts under the Commercial Taxes Directorate check evasion of sales tax. The schemes under the Finance (Taxation) Department relate to construction of office buildings, check posts and residential quarters and help in maximising collection of revenue. Collections of revenue by both the Directorates have increased manifold over the years and there has been substantial growth in the organisational structure of these Directorates. This has necessitated setting up new offices and check posts and residential quarters.

2. Plan proposals for the 8th Plan of the Finance (Taxation) Department contain 105 schemes. The achievements of this Department in utilising plan allocation for 1989-90 has been very good. This year also we expect to achieve a similar performance. Though the plan proposals for 1991-92 have been framed on 5% and 10% step up, the outlays arrived at on this basis are considered quite inadequate for implementing the schemes of this Department. The outlay for 1991-92 calculated on the above basis comes to Rs.260 lakhs (10% step up) while the total Eighth Plan proposed outlay is Rs.2886 lakhs. Considering the importance of the schemes from the revenue point of view, the proposed outlays for Annual Plan for 1991-92 and for the 8th Plan deserves approval without any reductions.

5. Programme of the Finance (Audit) Department :

During the coming 5 year within the span of 8th Plan, the Government proposes to construct new buildings at as many places as possible out of the 38 Treasuries, where new buildings are absolutely necessary. Construction cost of a new treasury buildings as per standard span requires a sum of Rs.20 lakhs or around.

6. Programme of the Home (Parliamentary Affairs) Department

1. Construction of a multistoried Building at High Court Tram Terminus for accommodation of MLAs and Group 'D' staff of the West Bengal Legislative Assembly.

2. Construction of a Library Building within the compound of the West Bengal Legislative Assembly.

In addition following Departments have also programmes in the Public Work sector.

1) Home (P&AR) Department ; 2) Public Works Department ; 3) Food & Supplies Department ; 4) Home (Defence) Department ; 5) Excise Department ; 6) Relief & Welfare (Relief) Department.

Outlays and targets etc. of their programmes may be found in appropriate statements in the Volume-II of State Plan Proposals.

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17-B, Sri Aurobindo Marg, New Delhi-110016
DOC. No. D-6328
Date 22/7/91

