

WEST BENGAL
THIRD FIVE YEAR PLAN



सत्यमेव जयते

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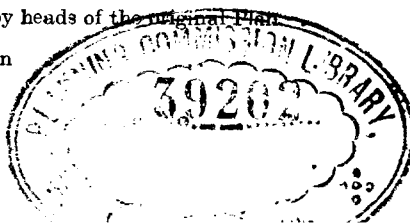
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CHAPTER I

INTRODUCTION

Background—Objective of the All-India Plans

Planning of an under-developed country inevitably becomes a long-term affair. It should naturally extend over several years. It is a long story which unfolds itself in many chapters. For convenience of execution, however, it is necessary to break it up into plans of a definite duration. Planning involves both preparation of a blue-print and its execution. To the extent funds are available, a programme of execution can be undertaken but resources are an imponderable element. A certain degree of flexibility is, therefore, necessary to allow for adjustment in the light of developments. A plan of a fixed duration makes allowance for that. Moreover, a set plan for a set target accentuates endeavours. It is on this consideration that our plans have been divided into so many Five-Year plans.

The different plans, however, are not isolated programmes. They are inter-linked and organically integrated so that they influence one another. The factor that gives them direction and unity of purpose is the main objective which in point of time is the ultimate goal.

The main objective as adopted in our plans stems from the Directive Principles of the Constitution. The Constitution has adopted the objectives of securing adequate means of livelihood and the right to work, to education and to assistance in cases of distress brought about by factors like old age, disablement, etc. To bring this about, an economic policy has been adopted in the Constitution which broadly says that the ownership and control of the material resources of the country should be so distributed as to promote the common good of the people and the operation of the economic system should not result in the concentration of wealth and economic power in the hands of the few. This economic policy was reaffirmed in the December 1954 Declaration of the Parliament which said that the broad objective of the economic policy should be to achieve the "socialistic pattern of society".

These ideas have been adopted in the main objectives of the First Plan to give unity of purpose to the different plans to follow. This main objective is "to raise the standard of living of the people and to open to them opportunities for a richer and more varied life". For achievement of this main objective two broad methods are to be adopted which represent the positive and the negative side of the approach. They are increase of wealth through increased production, and reduction of inequalities in the distribution of wealth to prevent concentration of wealth and the means of production in the hands of a few.

The First Plan was intended as the first step towards the realisation of this main objective. In this Plan an effort was made to strengthen the economy at the base mainly by putting emphasis on larger agricultural production and power. The multi-purpose river valley schemes are typical examples. Special mention may also be made of the Community Development movement and the programme for land reforms.

It was in the Second Plan that for the first time a deliberate policy for rapid industrialisation was adopted with a view to evolving a self-sustaining economy. It launched a programme which would lead to maturity through different phases. The first phase logically is the building up of basic industries, to be followed by machine-producing industries and at a later stage leading to growth of industries producing consumer goods on a large scale.

That is why in the Second Plan the emphasis is on basic industries. The provision for the Steel Plants in the public sector marks out this feature very prominently.

In the Third All-India Plan the emphasis on basic industries is a continuing feature. Steel, fuel and power will still retain the pride of place. Additionally, a step has been proposed to be taken towards initiating the next phase which will build up machine-producing industries. Mainly, therefore, the phase of basic industries will still continue.

The other important objective adopted in the Third Plan is achievement of self-sufficiency in foodgrains and increase in agricultural production to meet the requirements of industry and export. There are two considerations which led to its adoption. Self-sustaining growth can only be achieved by balanced development both in agriculture and industry. Secondly, there is the need for fighting inflation by ensuring that prices of essential consumer goods remain stable. Price of foodgrains has a tendency to react on the entire price and cost structure. Increased agricultural production will ensure stability in the price level of foodgrains.

Another important feature of the Third Plan is the proposal that free and compulsory education should be provided for all children in the age group 6-11 years. The objective behind is to develop the human resources of the country.

APPROACH TO THE STATE PLANS

The main objectives of the All-India Plan and special objectives of each Five-Year Plan have been kept in view in drawing up the different State Plans. Problems peculiar to the State were also kept in view which, to some extent, gave a local touch to the State Plans.

Thus in the First Plan the State gave emphasis on multipurpose river valley projects and at its own initiative undertook implementation of the Mayurakshi Reservoir Project. On the other hand a new pattern of requirements emerged direct, as a result of the partition of the old Province. The configuration of the new state demanded fresh alignments. The loss of fresh-water fisheries to East Pakistan compelled immediate attention to the possibilities of the systematic exploitation of the Bay for deep sea fishing.

In the Second Plan in conformity with the new policy of rapid industrialisation through the foundation of basic industries the State Government also shifted emphasis to them. Coal, being the only major resource available in the State, basic industries based on the exploitation of coal found an important place in the Plan. This explains for accommodation of the Durgapur Projects providing for installation of a Coke Oven Plant and also a Thermal Plant. The provision for industries was over twenty times what had been provided for in the First Plan.

The objectives and priorities adopted in the State Third Plan are based on those adapted in the All India Plan. It has been already observed that in the Central Plan the special objectives adopted are expanding basic industries like steel, fuel and power and achievement of self-sufficiency in foodgrains and increase in agricultural production. In the State Plan also, special priority has been given to these two items. Utmost emphasis has been laid on increase of agricultural production particularly aiming at self-sufficiency in foodgrains. A very ambitious programme for agricultural production has, therefore, been adopted. Similarly the policy regarding founding of basic industries in West Bengal initiated in the Second Plan has been continued. This includes the provision of doubling the Coke Oven Plant at Durgapur, installation of a Fertiliser Plant at the same place and the installation of a super-thermal station at Bandel.

As regards social services also, it falls in-line with the policy adopted in the Central Plan. At page 7 of the Draft Outline of the Third Five-Year Plan it is observed that "free and compulsory education will be provided for all children in the age group 6-11 years during the period of the Third Plan". Under Education a sizeable allocation has been provided to achieve this objective.

The problem of Calcutta has loomed large on the eve of the Third Five-Year Plan. To be precise it is a problem which faces Greater Calcutta comprising a considerable size of land situated on both sides of the Hooghli of which the city of Calcutta proper is the nucleus. Being the first port of the country and the most important industrial and commercial centre of its eastern region it attracted a cosmopolitan population, leading to rapid urbanisation. As a result, Calcutta grew in a haphazard fashion without any well laid-out plan to follow. This led to the growth of slums without provision for minimum sanitary requirements. To some extent Calcutta's problems stem from geographical events also. There has been a gradual but most definite alteration to the east in the flow of the Ganges. The result is that the Hooghli which serves Calcutta has been reduced to a spill channel. Absence of head waters causes rapid silting and also is responsible for the increase in the salinity of the river water which is the source of drinking water supplied to Calcutta. Thus both the port and the population are threatened.

The problems of Greater Calcutta are as multifarious as they are complicated. Their magnitude and heavy financial implications make them formidable. But with Calcutta is linked the vital interests of India as a whole. The magnitude of the problem throws up a challenge which we must meet. Provisions of some nucleus funds have, therefore, been made in the Plan for adoption of an integrated plan for development of Greater Calcutta.

Procedure adopted

Special efforts were made to see to it that Planning bodies at the lower levels become engaged in drawing up the State Draft Five-Year Plan. For this purpose the schemes were broadly divided into three categories, viz., State schemes, Regional Schemes and local schemes. Different groups were entrusted with the working out of schemes falling under the first two categories. Local schemes which satisfy local needs were entirely referred to the District level and Block level bodies and even Panchayat level bodies for drawing up the first draft. In West Bengal there are three tiers of Planning bodies below the State level, viz., (1) District Development Council at the district level, (2) Block Development Committee at the Block level, and (3) Anchal Panchayat or Union Board at the village level workers' circle level. It is the Anchal Panchayats or Union Boards which initiated the draft. They were then passed on to the Block Committee which integrated them into Blockwise plan. It was then transmitted to the District Development Council which drew up the district level plans. These district level plans were then routed to the different Departments. It is the Departments that compiled the different plans falling under different heads, after integrating the draft plans as prepared by the different working groups and the District Development Councils.

The plans prepared by the different Departments were again subjected to scrutiny by the Development Department. Its efforts produced the first outline of the Draft Plan. It was discussed in special meetings of the Cabinet and then emerged the final draft which was submitted to the Planning Commission.

The above analysis will show that the State Government took particular care to see that Planning started from the lowest possible level, so that the different planning bodies at different levels could all participate in drafting the Draft Plan.

Outlay of the Third Plan.

The Draft Plan as submitted to the Planning Commission provided for an outlay of Rs. 346.03 crore. This included a provision of Rs. 5 crore for outlay on the Damodar Valley Corporation during the period of the Plan. At the time of discussion with the Planning Commission the State Government suggested an outlay of Rs. 341.03 crore and proposed to treat any outlay necessary for the Damodar Valley Corporation as outlay outside the Plan. This was considered convenient for more than one reason. The execution of the Damodar Valley Project had started even before the First Five-Year Plan had been initiated. During the period of that Plan the outlay on that Project was conveniently left outside the Plan. It was only during the Second Plan that a departure was made and the outlay on the Project was included in the Plan. The inclusion was, however, partial, only expenditure on irrigation and power being given a place in the Plan. The expenditure on flood control and interest which was being added to the capital, on the other hand continued to be treated as expenditure outside the Plan. Such halfway measures rather complicate the affairs.

The Planning Commission, however, proposed a reduced outlay of Rs. 250 crore on the basis of the available resources of the Plan estimated by them as indicated below:—

		Rs. Crore
Central assistance	..	160
State's resourcee	..	90
	Total	250

The State Government however strongly felt that on account of the numerous problems facing West Bengal it could not agree to this reduced outlay. It considered an outlay of Rs. 341 crore to be the irriducible minimum. The following are among the special circumstances which justify this:

- (1) The State is chronically deficit in the production of foodgrains. The Planning Commission have repeatedly stressed the importance of increasing food production which they consider essential for the success of the Plan. Further, West Bengal is an industrialised State and it is necessary that the surrounding countryside should develop its food potential to the maximum extent possible in order to ensure continuity of food supplies to the workers. Food production in West Bengal acquires added importance because 876,000 acres have been diverted to growing jute and 202,000 acres to growing tea, the two principal commodities earning foreign exchange for the benefit of the whole of India.
- (2) To ensure industrial development in the State it is necessary to found some basic industries at Durgapur. This is considered to be of vital importance, as it is hoped that the development of these basic industries will foster in their turn the growth of ancillary industries. Although West Bengal ranks fifth in order of population nevertheless the total number of registered unemployed is the highest in West Bengal. The only scope for easing the acute unemployment situation is by expanding small, medium and large industries.

- (3) It is necessary to increase the installed capacity of the power stations in West Bengal so that they can keep pace with the demand for electric power. Any shortage of power will retard industrial development. A detailed load survey of the Damodar Valley Corporation service area only was carried out by the C.W.P.C. in 1958 and this survey indicated that by 1965-66 there would be a power deficit of the order of 718 MW. Even after allowing for the installation of 2 units of 125 MW. each by the Damodar Valley Corporation there would still remain a deficit of about 500 MW. The State Government has therefore had to provide a sum of Rs. 38.5 crore for Power including an additional power station at Bandel and the connected transmission lines.
- (4) The Planning Commission has envisaged the necessity of making up lags in development so that progress is uniform throughout the country. The per capita outlay in West Bengal so far as the Second Plan was concerned was only Rs. 60. Several States have achieved an outlay of over Rs. 70 per head, e.g., Bombay, Madhya Pradesh, Mysore and the Punjab. Even Orissa achieved an outlay of Rs. 68 per head. In fact, West Bengal ranks ninth amongst the States so far as per capita outlay is concerned. The case for an increased outlay in the Third Plan is, therefore, clear.
- (5) The State Government have been asked to take over two important Express Highways in West Bengal, viz., (i) the Express Highway from Calcutta to Durgapur, and (ii) the Super Highway from Calcutta to Dum Dum Airport.

The discussions continued for a considerable time till ultimately an agreed outlay took shape on the following lines:—

The Planning Commission expressed their willingness to agree to a working plan with an outlay exceeding the outlay of Rs. 250 crore proposed by them provided the State Government could provide additional resources from their own funds. The State Government made a re-assessment of their own resources and found that it could raise further additional resources of Rs. 43 crore. The State Government, accordingly, suggested an outlay of Rs. 293 crore for the working plan. This was accepted by the Planning Commission subject to the additional resources being vetted by the Commission.

It was accordingly decided that the State Plan would be prepared on the basis of two different outlays. There will be a Plan with an outlay of Rs. 250 crore being the aggregate of central assistance of Rs. 160 crore indicated by the Planning Commission and the State's own contribution of Rs. 90 crore as estimated by the Planning Commission. Secondly, there will be a working plan of Rs. 293 crore on the basis of an outlay to be fixed by taking into consideration the additional resources available to the State Government which amounts to Rs. 43 crore. It was decided after further discussion that this outlay of Rs. 293 crore would include Rs. 9.49 crore on account of the States share of the expenditure on some specified schemes of the D.V.C. The State Government also decided to retain the original outlay of Rs. 341 crore as adopted in its Draft Plan to indicate the physical target it will keep in view.

This plan will give an abstract of the break-up under different heads and sub-heads of development in respect of the outlay of Rs. 293 crore and Rs. 341 crore. It will give detailed statements only in respect of the outlay of Rs. 293 crore which it has adopted as its working plan.

Resources

The question of resources, particularly resources of the State, was the factor that determined the size of the outlay of the plan. The Planning Commission promised a total Central assistance of Rs. 160 crore towards financing the plan. As regards the resources of the State they were estimated on the basis of discussion between representatives of the State Government, the Ministry of Finance and the Planning Commission. In the discussions that took place in August 1960 they were estimated to be Rs. 19.73 crore.

The break-up is indicated below:

		(Rupees in crore.)	
A.	Revenue receipts .. .. .	..	3,95.32
	Revenue expenditure .. .. .	..	3,98.05
		Balance ..	-2.73
B.	Capital receipts .. .. .	..	1,06.38
	Capital expenditure .. .. .	..	83.92
			+22.46
	Total resources A plus B ..	..	19.73

During discussions in October 1960 the Planning Commission felt that the resources would be much higher and would be near about Rs. 90 crore inclusive of the State Government's contribution to the pool of additional taxation in the State Sector as fixed by the Planning Commission. Accordingly a supplementary statement showing State's resources was submitted to the Planning Commission. This indicated additional resources amounting to Rs. 73.08 crore raising the total to Rs. 92.81 crore. In fixing the outlay of Rs. 250 crore for the Plan the Planning Commission took credit for Rs. 90 crore out of that. The following statement gives the break-up of the additional resources of Rs. 73.08 crore:

		Rupees (crore)
1.	Receipts from Third Plan Schemes (excluding major industrial schemes) ..	7.00
2.	Additional recovery of loans and advances—	
	(a) For Third Plan Schemes	3.00
	(b) By Special drive to realise arrears	4.00
3.	Receipts from the Spinning Mill	0.50
4.	Durgapur Group of Industries—	
	(a) Debt-services, interest	4.42 (Revenue)
	(b) Capital recovery	4.80 (Capital)
	(c) Depreciation Fund	2.90
		12.12
5.	State Electricity Board—	
	(a) Additional interest receipts	2.11
	(b) Additional depreciation fund	0.85
		2.96

6. Additional Small Savings over estimate of 35 crores in forecast	3·50
1961-62	6·50
1962-63	7·00
1963-64	7·50
1964-65	8·25
1965-66	9·25
	<hr/>
	38·50
Less forecast	35·00
	<hr/>
	3·50
7. By additional taxation, by framing rules to plug loopholes and tightening tax collection, and by re-estimation of taxes in the light of recent trends ..	40·00
	<hr/>
Total ..	73·08
	<hr/>

During further discussions with the Planning Commission which took place in January 1961 the representatives of the State Government indicated that the latest trends of receipts of shares of Central taxes and other items would show that further resources could be expected. With the approval of the Planning Commission the State Government prepared an estimate of these further resources and it was found to amount to Rs. 40 crore under different heads as indicated below:—

	Rupees (crore)
(a) On account of increase in small savings beyond earlier estimates	13·00
<i>Note:</i> Average estimated increase in collection during Third Plan on actuals of Second Plan for all States is 51 per cent. West Bengal estimated an increase of 29 per cent. only, Yielding Rs. 57·7 crore. 51 per cent. increase will mean a collection of Rs. 67·5 crore. So a sizeable increase is expected.	
(b) On the basis of trends of receipts of share of Central taxes as indicated in the revised estimate of 1960-61	14·00
<i>Note:</i> According to the latest indication given by the Finance Ministry, the Government of West Bengal will get additional amount of Rs. 2·8 crore in the current year and Rs. 2·5 crore in 1961-62 on account of its share of income-tax.	
(c) Loan to be raised by the State Electricity Board ..	10·00
(d) Drawing on reserves	3·00
	<hr/>
	40·00
	<hr/>

The total resources of the State as finally estimated amounted to Rs. 132.81 crore made up from different estimates as follows:—

	Rupees (crore)
1. As estimated in August 1960	19.73
2. Additional resources as estimated in November 1960 ..	73.08
3. Further additional resources as estimated in January 1961	40.00
Total	<u>1,32.81</u>

Allocations under different heads of development.

It has been already stated that the State Government has adopted an outlay of Rs. 293 crore for its working plan. For purpose of comparison, therefore, the allocations under different heads of development as made under this outlay will be quoted. While the total outlay of the Second Plan was Rs. 157.67 crore that of the Working Plan is Rs. 293.15 crore. The outlay is thus nearly double. The allocations under different heads of developments will consequently show a considerable increase as compared to those made in the Second Plan. The increase under different heads of development will not be, however, uniform. It will go above the overall ratio in respect of heads of development which have been assigned priority. Correspondingly in respect of other heads the increase will be comparatively low. In conformity with the objectives adopted in the All India Plan special priority has been assigned to Agriculture, Power and other basic industries and education. This is clearly reflected in the comparative table given below:—

Distribution of State Plan outlay by heads (on the basis of outlay of Rs. 293 crore in the Third Plan)

Head	Second Plan outlay	Third Plan outlay.
1. Agricultural Programmes ..	17.86	54.34
2. Co-operatives and Community Development	16.63	16.81
3. Irrigation and Power ..	30.74	63.85
4. Industry and Mining ..	9.44	12.04
5. Transport and Communications ..	19.47	26.50
6. Social Services	55.34	78.28
7. Miscellaneous	8.19	41.33
	<u>1,57.67</u>	<u>2,93.15</u>

It is noticeable that there is a big increase in the Agricultural Programme. The outlay is Rs. 54.34 crore against Rs. 17.86 crore only in the Second Plan. The major increase is under the sub-head minor irrigation schemes. The plan provides for installation of deep tube-wells to be operated by electricity in areas which are not served by canal irrigation system.

The next notable increase is under the head Irrigation and Power. This is explained by the fact that there is very liberal provision for power in the Third Plan which alone accounts for Rs. 38.50 crore out of a total of Rs. 63.85 crore under this head.

The increase under the head Social Services is accounted for by heavier allocations under the sub-head Education out of the total allocation of Rs. 78.28 crore under this head that under Education alone accounting for Rs. 36.85 crore. The detailed break-up under this sub-head both for the Second Plan and the Third Plan is indicated below:—

Sub-head	Second Plan outlay		Third Plan outlay.	
		Rs. (crore).		Rs. (crore).
General Education	19.70	..	29.20
Technical Education	2.27	..	7.17
Scientific Research	0.20	..	0.48
		<hr/>		<hr/>
Total	22.17	..	36.85
		<hr/>		<hr/>

The sharp increase under General Education is due to liberal provision for primary education.

Under the head Miscellaneous the major allocation is for State Capital Projects amounting to Rs. 36.94 crore out of the total allocation of Rs. 41.33 crore. The corresponding provision against State Capital Projects in the Second Plan was only Rs. 6 crore. Out of this amount of Rs. 36.94 crore, Rs. 10 crore have been earmarked as State Government's contribution for implementing schemes for the development of Greater Calcutta. This item was altogether absent in the Second Plan. The balance is mainly earmarked for the different basic industries being set up at Durgapur including doubling of the Coke Oven Plant and installation of a Fertiliser Factory.

Some Major Projects

It has been already observed that in conformity with the objectives adopted in the All India Plan the State Plan has attached utmost emphasis to power and basic industries. This will be confirmed by the fact that all the major new schemes accommodated within the Plan apart from the development of Calcutta are for development of basic industries including power. The following are the major schemes accommodated within the State Third Plan:

- (1) Super Thermal Plant at Bandel.
- (2) Chemical Plant at Durgapur.
- (3) Fertiliser Plant at Durgapur.

(1) Super Thermal Plant at Bandel

The generation and distribution of the electricity outside the D.V.C. area in West Bengal is the statutory obligation of the West Bengal State Electricity Board. Having regard to the anticipated increase in demand for power in the Calcutta area during the Third Plan it has been decided to instal a super thermal station at Bandel. It will consist of four sets of generators each having a capacity of 75 MW. It is likely to commence commercial operation by June 1964. The total estimated cost is Rs. 29.19 crore.

(2) Chemical Plant at Durgapur

The Coke Oven Plant at Durgapur will yield certain by-products which allow considerable scope for exploitation for production of chemicals. It has been, therefore, decided to set up Chemical Plants for production of electrolytic and synthetic chemicals at Durgapur in collaboration with a French Firm which will provide for the foreign exchange component of the capital outlay. It will produce caustic soda, chlorine, ammonium chloride, phenol, etc. The plant is likely to be completed by 1963. The total estimated outlay is Rs. 5.00 crore.

(3) Fertiliser Plant

The idea to have a fertiliser plant in the State sector is linked up with the objective adopted by the State Government of achieving self-sufficiency in foodgrains within the Third Plan. The Plant is to be located at Durgapur as the raw gas from the Coke Oven Plants there will provide excellent raw material for the manufacture of fertiliser. It will produce urea and nitrochalk. The total estimated cost of the Project is Rs. 20 crore out of which State contribution will be of the order of Rs. 10 crore. The plant is expected to be completed by 1965.

CHAPTER II

PROGRESS UNDER THE STATE FIRST AND SECOND PLANS

First Plan

In the First Plan the overall outlay remained undecided for a considerable time. In the Draft Plan the State Government provided for an outlay of Rs. 69 crore. The Planning Commission however reduced it to Rs. 34 crore on ground of absence of adequate resources. Subsequently, as a result of further representation the Planning Commission raised the figure to Rs. 47 crore. The State Government, however, still pressed for a bigger outlay and ultimately was able to get the original outlay of Rs. 69 crore accepted. Subsequently the Planning Commission agreed to include within the Plan certain schemes originally left outside the Plan which were analogically of similar character to schemes accommodated in the Plan. On inclusion of these items the total outlay increased to Rs. 72.25 crore.

The allocations under different heads of development of this outlay are shown in the following table:

Head of Development	(Rupees in crore)	
	Outlay	per cent.
I. Agriculture and Rural Development ..	8.52	11.8
II. Irrigation and Power ..	15.80	21.9
III. Industry ..	1.15	1.6
IV. Transport and Communications ..	15.54	21.5
V. Social Services ..	31.24	43.2
Total ..	72.25	100.0

Against this total outlay of Rs. 72.25 crore the actual expenditure amounted to Rs. 67.71 crore. The break-up of this expenditure under different heads of development is given in the table below:

Head of Development.		[Rupees in lakh].		
(1)	(2)	(3)	(4)	
Head of Development.	Outlay provided in the revised Plan.	Actuals, 1951-56.	Percentage of Col. 3 to 2.	
I. Agriculture and Rural Development ..	852.40	844.32	99.1	
II. Irrigation and Power ..	1,580.44	1,354.77	85.7	
III. Industry ..	114.95	115.48	100.5	
IV. Transport ..	1,553.59	1,510.26	97.2	
V. Social Services ..	3,123.65	2,946.10	94.3	
Grand Total ..	7,225.03	6,770.93	93.7	

The head of development called "Social Services" includes the important items of (1) Education and (2) Medical and Public Health. The achievements in respect of these two sub-heads deserve specific mention. They are given in the following table:

				[Rupees in lakh]		
Sub-head of Development				Outlay provided for in the revised Plan.	Actuals, 1951-56.	Percentage of Col. 3 to 2.
(1)				(2)	(3)	(4)
Education	..	..	..	1,118.24	1,178.57	105.4
Medical	..	..	..	1,259.08	1,134.84	90.1
Public Health	..	..	..	316.52	315.52	99.7

In their review of the First Five-Year Plan the Government of India give somewhat different figures*. According to their estimates the total outlay of the Revised Plan for West Bengal was Rs. 76.5 crore and actual expenditure during the period of the Plan was Rs. 74.55 crore. This will definitely work out a higher percentage of success. The difference in these figures can be explained as follows:

As regards outlay, the estimates of the Government of India are Rs. 76.5 crore against our estimate of Rs. 72.2 crore. There is thus an excess of Rs. 4.3 crore. This is due to inclusion of certain schemes of development undertaken by the Government during the period but which had not been included in the approved State Plan. These schemes are as follows:

				Rupees (crore)
Scarcity Area Programme	..	..	..	1.0
Power Expansion Programme	..	..	..	1.6
Urban Water-supply	..	..	..	0.9
Rural Water-supply	..	..	..	0.8
				4.3

As regards actual expenditure, our estimate is Rs. 67.71 crore as shown in the table above against Rs. 74.55 crore worked out by the planning Commission. There is thus an increase of Rs. 6.84 crores in their figures. This discrepancy is explained by a variety of factors. Expenditure incurred against the following schemes not included in our approved Plan explains it in part:—

				Rupees (crore)
Scarcity Area Programme	..	..	..	1.00
Power Expansion Programme	..	..	..	1.63
National Water-supply and Sanitation	..	..	..	0.50
				3.13

*Review of the First Five-Year Plan, Government of India, Planning Commission, page 340.

The balance of Rs. 3.71 crore is explained by shortfall in actuals as against revised estimate for 1955-56. The figures of the Planning Commission are based on the revised estimates for 1955-56 while those of the State are based on actuals.

Second Plan

The total outlay as fixed by the Planning Commission for the Second Five-Year Plan of West Bengal was Rs. 153.67 crore. With the addition of new territories due to readjustment of boundaries with Bihar an additional sum of Rs. 4 crore was allotted to West Bengal for financing schemes for the development of these territories. The final outlay of the Plan was thus raised to Rs. 157.67 crore. The following table will show the distribution of this outlay under the different heads of development:

Head of Development.	[Rupees in crore]	
	Outlay.	Percentage on total.
I. Agriculture and Community Development ..	34.49	21.9
II. Irrigation and Power ..	30.74	19.5
III. Industry and Mining ..	9.44	6.0
IV. Transport and Communications ..	19.47	12.3
V. Social Services ..	55.34	35.1
VI. Miscellaneous ..	8.19	5.2
	<u>157.67</u>	<u>100.0</u>

The actual figures of expenditure for the Second Plan are as follows:

Actual expenditure	[Rupees in crore]
1956-57 ..	22.38
1957-58 ..	25.00
1958-59 ..	28.28
1959-60 ..	32.11
1960-61 ..	40.80
	<u>148.57</u>

The above statement shows that the total expenditure is Rs. 148.57 crore which is only Rs. 9.10 crore below the total outlay. The percentage of total expenditure on total outlay is 94 per cent.

The expenditure however did not conform to the allocations as adopted in the original Plan. There was shortfall in many heads which was set off by an increase in expenditure under other heads. The total actual expenditure is Rs. 148.57 crore. Its distribution under the different heads of development will show in the following table how it compares with the original allocations:

Head of Development.	[Rupees in crore]	
	Allocation in the Plan.	Total actual expenditure.
I. Agriculture and Community Development ..	34.49	20.96
II. Irrigation and Power ..	30.74	31.04
III. Industry and Mining ..	9.44	7.04
IV. Transport and Communications ..	19.47	16.95
V. Social Services ..	55.34	51.18
VI. Miscellaneous ..	8.19	21.40

It may be noted that there has been an excess of expenditure against outlay under head Irrigation and Power of Rs. 0.30 crore. Similarly there has been considerable excess of expenditure against original outlay under head Miscellaneous. These are explained by the fact that the State Government eventually spent more on the Power project and the Coke Oven Plant at Durgapur. This explains for the excess in both cases.

Major Schemes

It is proposed to give below an idea of the progress made in respect of the major schemes sponsored in the First and the Second Five-Year Plans of the State.

Of the major schemes again, some are altogether new and were taken up during the Second Five-Year Plan. There are other major schemes which were started in the First Five-Year Plan but were continued into the Second Plan. This is explained by the fact that such schemes involve considerable outlay of money, construction work as well as setting up of complicated machinery and plant. These are all time-consuming processes. Naturally they spill over from one Plan to another and are aptly called spill-over schemes. There are six major schemes under implementation in the Second Plan of West Bengal. Of them three are spill-over schemes. These are: (1) the Coke Oven Plant, (2) the Thermal Plant of Durgapur and (3) the Dairy and Milk Supply Scheme of Haringhata. We shall start with the spill-over schemes.

Durgapur Coke Oven Plant

Coal is the only raw material resource in West Bengal. Any major industrial project of the future has necessarily to be based on coal. The demand for hard coke in the country is considerable. With the expansion programme for heavy industry in the Second Plan its demand will increase considerably. On these considerations, the West Bengal Government decided to set up a Coke Oven Plant at Durgapur primarily for carbonisation of coal. Incidentally, it will provide raw materials for development of heavy chemical industries. The estimated capital outlay of the plant is Rs. 7.2 crore. Out of that Rs. 47.17 lakh were spent during the First Five-Year Plan. The plant has been nearly completed and has gone under production from March 1959.

Power Projects

With all-round development of the country going apace the demand for power is rapidly on the increase. The West Bengal Government, therefore, decided to set up a Thermal Power Station at Durgapur as well. The project provides for a plant with a capacity for generation of 60,000 k.w. Work on this project was also started in the end of the First Plan. The estimated outlay was Rs. 6.61 crore. Out of that only Rs. 34.97 lakh was spent in the First Plan and Rs. 5.97 crore, in the Second Plan. There will be a small spill-over expenditure of Rs. 28.49 lakh in the Third Plan towards last payment to contractors for materials supplied. The work has now been completed. A part of the plant has been put into commission and is supplying powers to Commercial undertakings. A Second Thermal Plant has since been sanctioned and work on it has already started.

Dairy and Milk Supply Scheme

The Dairy and Milk Supply Scheme has for its objective the removal of all cattle kept in the different Khatals of Calcutta to Haringhata and also

ensuring supply of pure milk to the people of Calcutta. The scheme provides for setting up of 22 units of milk colonies at Haringhata. Each such unit accommodates 1,272 milch cows. The scheme was started in the First Plan period during which four such colonies were established. In the Second Plan there is provision for setting up of 18 more units of such colonies. The estimated outlay of the scheme is Rs. 6.85 crore. Out of that Rs. 70.24 lakh was spent during the First Plan. The fund provided for the Second Plan is Rs. 4.66 crore. Three additional units have been completed while work on another five is going on. With increase in the cattle population in the colony the output of milk has increased. It has now increased to 120,000 lbs. daily. This increase in output necessitated increase in the number of milk distribution centres in the city. From 97 in the First Plan their number increased to 305 by the middle of 1960.

Irrigation Projects

Of the new major schemes that found a place in the Second Plan the Kangsabati Reservoir Project is the biggest with an estimated outlay of Rs. 25.36 crore. Like the Mayurakshi Project it is a multipurpose river valley project. Its main objective is to control flood and provide for irrigation of large tracts of land in the Bankura and Midnapore districts. When completed it will irrigate 800,000 acres of Khariff crops and 150,000 acres of Rabi crops. The total allocation for the Second Plan for this scheme is Rs. 4.75 crore. Against this Rs. 4.91 crore have been spent. The project has spilled over into the Third Plan.

Jaldhaka Project

The Jaldhaka Project is the major hydro-electric project undertaken by the State Government. It envisages harnessing the Jaldhaka river near Bindukhola on the boundary between Darjeeling district and Bhutan by building a 230 feet long barrage across the river. From this point the water will be conveyed to a point at Jhalung through a tunnel where the power station will be located for generation of electricity. It will generate 12,000 K.W. during the dry season and 24,000 K.W. during the period of the monsoon. The total outlay during the Second Plan for this project was Rs. 1.86 crore. Out of that Rs. 61.68 lakh had been spent during the first three years. Construction of staff quarters has nearly been completed. Detailed investigation for fixing the alignment of the tunnel has also been completed.

Spinning Mills

The handloom industry is the biggest cottage industry in West Bengal. But this State is not self-sufficient in the matter of yarn supply. For attainment of self-sufficiency in yarn, provision had been made in the Second Plan for setting up three spinning mills with capacity to work 75,000 spindles. Ultimately it was decided to set up one single mill at Kalyani which will work 50,000 spindles through Government agency. The total provision in the Second Plan for this scheme was Rs. 1.4 crore. Workshop sheds and buildings have been constructed.

Plants and machinery are being installed. The mill was formally opened on the last day of the Second Plan.

In the last year of the Second Plan two new schemes which also deserve reference were introduced. One of them does not, strictly speaking, form a part of the State's Second Plan, but the other does. Even so, it is essentially of the nature of a development scheme in the full sense of the terms. It is difficult, therefore, to resist the temptation of making a reference to it.

Second Thermal Power Plant

We may start with the scheme which finds a place in the Plan itself. This is the scheme for a second Thermal Power Station at Durgapur. The demand for power is increasing so fast in West Bengal that the Planning Commission decided to provide for additional power projects which should go into commission in the early part of the Third Plan. In conformity with that decision the State Government decided to set up a second Thermal Station at Durgapur. It will be a bigger project and have a generating capacity of 210 M.W. The estimated outlay for the project is Rs. 14.00 crore. Out of that Rs. 2.91 crore had been spent within the period of the Second Plan.

Build Your Own House Scheme

The scheme that does not strictly form a part of the Second Plan is the Build Your Own House Scheme. The Build Your Own House Scheme was the direct result of the heavy floods that visited West Bengal in September, 1956. As many as seven districts on both sides of the Bhagirathi were devastated by this flood which made history by giving birth to this novel scheme. The huts in these areas were built with mud walls which collapsed as soon as they came in contact with flood water. It was estimated that nearly two lakh houses were damaged.

What was the answer to the problem? It was thought that a change in the pattern of housing was called for. So it was decided to introduce the practice of having brick-built houses. But many complicated problems hence to be faced to make this feasible. At the first instance, there is the question of supply of building materials like bricks and mortar. There is then the need for skilled persons to mould bricks, fire them and then to build houses. Government, therefore, adopted a modest scheme which provided for a small brick-built structure with a corrugated iron sheet roof. Mud were to be used as mortar but there would be cement pointing outside. The total estimated cost was Rs. 340.

A bold decision was also taken that villagers themselves should be trained to mould bricks, fire them and also to build houses. This bold step fired the imagination of the victims of the flood and they responded wholeheartedly in making a success of it. These results were beyond expectation. About 30,000 families participated and 28,000 houses were completed.

The floods of 1959 put these new structures to severe test which they passed. No even one per cent. of them get damaged. So the scheme was revived on a larger scale as an answer to the second flood that visited West Bengal in 1959.

CHAPTER III

AGRICULTURE

General Background

Agriculture is the bed-rock of any planning in India. This is particularly, so in West Bengal where the population density has now reached 1031 per sq. mile. It is moreover a focal point of industrial development and has to meet the fast growing demand for industrial raw materials of agricultural origin, in addition to providing food for its residents. There is however not much scope for extending the area under cultivation. The total area of the State is about 22 million acres, out of which the gross and nett crop areas are about 15 and 13 million acres, respectively. More than one crop is grown on about 16 per cent. of the nett cultivated area and 22 per cent. of the gross crop area is under irrigation. The emphasis has therefore been on bringing more of the cultivable area under irrigation, to make two or three crops grow where one is growing at present and adopting improved cultural practices for efficient utilisation of such land as is available.

Review of the Second Plan

As the State suffers from a chronic shortage of food the principal aim of the agricultural programme has been to grow as much food as possible within its boundaries. A target of 6.5 lakh tons of additional food production was set for the Second Five-Year Plan. In spite of various adverse factors operating it has been possible to reach this target. A considerable amount of basic work was also done, and this is expected to produce results in course of the Third Five-Year Plan.

For reasons stated above great stress was laid on extending the area under irrigation, a detailed account of which will be found in Chapter XI. Adequate attention was also paid to other measures for increasing production. The various steps taken are briefly indicated below.

The use of manures and fertilisers is, after irrigation, the most potent factor in pushing up yield from agricultural operations. Various measures were undertaken to make sure that the cultivators could produce the maximum quantity of manure from local sources and in addition get an adequate supply of chemical fertilisers. A scheme for the preparation of compost from town refuse and night-soil was taken in hand. By the end of the Second Five-Year Plan 36 major municipalities from all over the State had been covered by this scheme. A scheme for utilisation of about 120 million gallons of sewage per year from Calcutta as a manurial resource has also been continuing since 1947. The consumption of manure produced under these schemes is on the increase. Steps were at the same time taken for training up the farmer in efficient conservation of cattle urine and other substances which can be composted into organic manure. Gram Sevaks have been trained up so that they can pass on their knowledge and experience to the villagers. Seventy blocks have so far been covered under the scheme and 4,387 farm leaders and 615 Gram Sevaks trained up for the purpose. Chemical fertilisers were also distributed all over the State.

The other important means of increasing production is the development, production and distribution of improved varieties of seeds. Intensive research was carried out in order to breed high yielding varieties of paddy, wheat, maize, potato, jute, sugar-cane, pulses, oilseeds, etc. The results have been most encouraging. Varieties of paddy—by far the most

important crop of the State—yielding 10 to 15 per cent. more than the local types have been developed. Suitable varieties for saline and flooded areas which amount to about 20 and 5 lakh of acres, respectively have also been evolved.

The improved seeds are multiplied in Government Farms. Ten such multiplication farms and 100 Thana Seed Farms were established during the Second Five-Year Plan. At the end of the First Five-Year Plan the production of foundation stock was about 10,000 maunds and it reached 40,000 maunds mark at the end of the Second Five-Year Plan. The ultimate aim is to saturate the entire State with these improved varieties of seed.

Though the scope for extending the area under cultivation in this thickly populated State is extremely limited, steps were nonetheless taken to reclaim such waste land as was available and bring it under cultivation. Two schemes were taken in hand to reclaim the laterite areas at Garbeta and in the Keleghai basin in the district of Midnapore. In the first phase the entire 3,800 acres of the Keleghai basin received soil conservation treatment in the shape of contour bunding. Adequate amounts of organic manure in the form of sludge was also supplied to increase productivity. On 800 acres of the reclaimed land Aus Paddy was grown and Sisal was planted on another 600 acres. Contour bunding operation was also undertaken in the Garbeta area covering about 5 thousand acres. Out of this 2,700 acres have been reclaimed. Aus paddy was grown on 1,700 acres of the reclaimed land. In the third scheme a Char of the river Testa was reclaimed by ploughing it up with heavy tractors. Out of the total area of over 5 thousand acres about 1 thousand acres have so far been reclaimed. Early Aman was sown here with good results. Besides the three schemes referred to above, work on the reclamation of all available land, which is found in small lots scattered all over the State has been going on apace.

The table below will indicate the results obtained so far:

Agricultural Programmes—Progress in the Second Plan

Programme	Unit	Coverage		
		1950-51	At the end of First Plan (1955-56)	At the end of Second Plan (1960-61)
1. Major and Medium Irrigation ..	000 acres			
Potential: Gross ..	..	353	664	1,813
Net ..	..	290	654	1,663
Utilisation: Gross ..	..	264	562	1,145
Net ..	..	59	557	1,134
2. Flood Control, Drainage, etc. ..	..	..	151	453
3. Minor Irrigation ..	..	..	487.4	589.0
4. Soil Conservation on agricultural land ..	..	..	..	6.75
5. Land Reclamation ..	..	..	..	37.326
6. Area under improved seeds—				
Paddy ..	..	..	29.5	1,000
Other than foodgrains ..	000 seedlings	..	..	111.88
7. Consumption of nitrogen (N) ..	Ton	1,500	3,300	9,170
8. Consumption of phosphatic fertilisers (P O ₅) ..	..	285	1,000	4,000
9. Urban Compost Production ..	000 tons	..	22	40
	000 acres	..	7	20
10. Rural Compost Production ..	000 tons	..	..	500
	000 acres	..	..	166.7
11. Green manuring ..	..	..	13.2	192.2

The physical production potential created by measures described above can be utilised to the full only when certain other conditions are satisfied. Of these, the most important is the adoption of improved cultural practices which include, among other things, selection of seed to suit the soil type and climate, choice of the appropriate cropping pattern, use of the correct type and quantity of fertilizers according to the appropriate time schedule, pre-treatment of seeds to avoid plant disease and application of pesticides in the event of the incidence of any disease or pest infestation, careful preparation of the soil, proper handling of seedlings and the use of simple labour-saving devices, including the improved types of agricultural implements. These practices are extensively publicised throughout the State by a staff specially trained in extension methods. They bring different types of improved cultural practices to the notice of the cultivators, by imparting the relevant information as well as by practical demonstration on suitable plots and farms. These are chosen in such a way that they cover the entire State in an effective manner. The Japanese method of paddy cultivation together with its variants have in particular been propagated with a considerable amount of success. The use of pesticides has also been getting more popular as a result of such extension work. 184,593 and 496,600 acres have respectively been covered by the Japanese method of rice cultivation and pesticides.

In order that the cultivators may take advantage of the various developmental measures it is essential that they should have enough funds at their disposal. It is for this reason that emphasis has been laid in recent years on the extension of cheap credit facilities through the operation of a large number of co-operative societies distributed throughout the State. Much work has already been done in this direction, the details of which will be found in the chapter on 'Co-operation'.

But these facilities by themselves do not insure their optimum utilisation. The cultivator must have an incentive for utilising them. An adequate price for the produce of his land is naturally the most powerful of such incentives. It is not often easy to control the large forces of demand and supply which ultimately determine the price level, and when prices slump heavily, building up of a buffer stock through State purchase is the only effective remedy. But minor oscillations unfavourable to the producer may be dealt with by much less drastic measures. The middleman's profits for one thing can be cut down to the minimum and the State can take steps to see that the cultivators are not compelled to dispose of their stock at the time when the ruling price in the market is at its lowest. Much care has therefore gone into developing agricultural marketing and establishing a large number of warehouses where the cultivators can keep their stock for disposal at a convenient moment. Other ancillary work, such as commodity grading, market research, development of market intelligence service, etc., have also been pursued alongside.

The expansion of the scope of work in connection with the development of agriculture has necessarily given rise to an ever-increasing demand for trained personnel. The training facilities have therefore been expanded considerably. At the time of partition there was only one agricultural school at Chinsurah. Eight different centres have since been opened for imparting training in basic agricultural and extension methods. One agricultural college with an extension wing also started functioning in 1942 offering a three-year degree course. It has recently shifted to Haringhata. About 40 students are admitted into it every year.

All these necessarily entailed a strengthening of the administrative and operational staff. It will require further strengthening during the Third Five-Year Plan.

A Few Important Crops

Though rice dominates the agricultural scene in West Bengal and most of the attention has of necessity to be devoted to it, there are a number of other crops which deserve some mention, however brief, in view of their special importance.

Jute.—With the partition of Bengal the jute areas of the Province were cut off from Calcutta and its neighbourhood where all the Jute Mills were located. As these Mills met with increasing difficulty in getting supply from the Eastern Pakistan it became necessary to grow as much jute as possible within the confines of West Bengal. The "Grow More Jute" campaign was undertaken for the purpose and it has been a tremendous success. The production has gone up from 6.48 lakh bales in 1948 to 19.86 lakh bales in 1961. This has gone a long way in bridging the gulf between demand and indigenous supply of jute for the Indian Mills.

Potato.—Potato plays a very important part in the agricultural economy of West Bengal, especially in the districts of Hooghly, Howrah and Burdwan. It is usually rotated with jute. Intensive efforts were made for the extension of the area under this crop through demonstration, distribution of disease-free seeds, popularising a potato fertiliser mixture and persuading the cultivators to adopt plant protection and improved storage methods. The results have been very satisfactory, for the acreage had gone up in 1959-60 to 138,300 acres producing about 652,500 tons.

Sugarcane.—A sugarcane growing scheme has been in operation since 1956. Trials in different types of soil and climatic zones have been undertaken and an optimum manurial schedule worked out. The area under this crop increased from 56,400 acres in 1956-57 to 99,000 acres in 1959-60.

Sisal, Ramie and Mothra.—Considerable attention was given to these three crops in the Second Five-Year Plan, because there are specific advantages in cultivating them.

Sisal, for example, is grown where nothing else can grow. It is the source of a variety of coarse fibre, as well as organic manure. It also provides the raw material for synthesizing certain important drugs. About one thousand acres each in the districts of Birbhum and Midnapore have already been planted with Sisal.

Ramie is also a fibre yielding plant, the fibre being much finer. The yarn produced from the fibre alone or in combination with rayon, wool, etc., has a good potential market. About 100 acres have been planted with Ramie at Mohitnagar farm and some of the Tea Estates have taken to Ramie cultivation.

Mothra is a plant from which Sitalpati is made. After partition about 18 out of 35 thousand artisan families who used to depend on making Sitalpati came away to West Bengal. They have ever since been suffering from a shortage of raw materials. A decision to grow Mothra locally has therefore been taken. Observational trials have been undertaken at the Chinsurah Farm with a view to finding out the best conditions for adapting it to West Bengal. Search for suitable low land in the district of 24-Parganas has also been in progress.

Third Plan Proposals

Though a sizeable increase in the production from agriculture had been effected over the first two Plans, the population, it appeared towards the end of the Second Plan, had been increasing much faster, and the gap

between the demand and supply of foodgrains in the State had become wider than ever. This trend cannot be allowed to continue. The Government therefore set up an expert committee to examine the matter and make recommendations on the steps that should be taken to attain self-sufficiency in food by the end of the Third Five-Year Plan. The target of additional food production during this period was, after consideration of these recommendations and other matters, set at 14.75 lakh tons. The measures proposed to be adopted for achieving the target do not differ radically from those adopted during the two preceding Plans, the essence of the present Plan lying in an intensification of effort on all fronts together with some redistribution of emphasis. The comparative table below will show, at a glance, the change in the scale of operations as well as the manner of the deployment of resources:

Comparative Outlay figures for the Second and the Third Plans

	Second Plan			Third Plan	
	Provision (Rs. in lakh)	Expendi- ture (Rs. in lakh)	Percentage of the total ex- penditure.	Provision (Rs. in lakh)	Percentage of total
Agricultural Production ..	522.86	370.32	23.3	1,819.00	33.6
Major and Medium Irrigation ..	771.21	876.02	55.2	1,180.53	21.8
Minor Irrigation ..	293.50	183.40	11.5	1,632.00	30.2
Soil Conservation ..	82.63	45.66	2.9	470.91	8.7
Warehousing and Marketing ..	38.00	14.00	0.9	62.00	1.2
Co-operation ..	196.51	98.26	6.2	245.35	4.5
	1,904.71	1,587.66	100.0	4,509.79	100.0

It will be noticed that irrigation continues to receive a preponderant weightage as in the Second Plan. The various items of the agricultural production programme will however receive greater emphasis this time. The break-up of the outlay among the different items of this programme is shown in the table below:

Break-up of Outlay on Agricultural Production

	(Rs. in lakh)	Percentage of total
(1) Manures and fertilisers ..	241.87	13.3
(2) Seed Farms ..	100.00	5.5
(3) Supply, multiplication and distribution of seeds ..	193.29	10.6
(4) Improved cultural practices and plant protection ..	230.00	12.7
(5) Agricultural extension and training ..	288.00	15.8
(6) Land Development ..	124.00	6.8
(7) Development of cash crops ..	204.15	11.2
(8) Agricultural research and horticultural crops ..	159.66	8.8
(9) Horticulture ..	45.28	2.5
(10) Subsidiary food crops ..	58.67	3.2
(11) Agricultural education ..	42.00	2.3
(12) Demonstration and publicity ..	16.88	0.9
(13) Agricultural marketing ..	42.15	2.3
(14) Agricultural statistics ..	27.05	1.5
(15) Administration ..	36.00	2.0
(16) Consolidation of holding ..	10.00	0.6
	1,819.00	100.0

The details of the irrigation programme will be discussed in the appropriate chapter. A brief account of the schemes which constitute the agricultural production programme is given here.

Supply, multiplication and distribution of seeds.—By the end of the Second Five-Year Plan 100 Seed Farms had been established. Another 100 will be established within the course of the Third Five-Year Plan raising the production of foundation stock from 40 thousand maunds to 80 thousand maunds per year. It is hoped that these will suffice to saturate the whole of the State with improved varieties of seed. In addition to multiplying seeds of the suitable crops like rice, jute, pulses, oilseeds, etc., multiplication of Dhaincha seeds will also be undertaken, the target being 65 lakh packets of 2 ounces each. These packets will be distributed among the cultivators who will be prevailed upon to grow Dhaincha as green manure which with other manures and fertilizers will provide an adequate supply of nitrogen for the soil.

Manures and Fertilisers.—During the plan period, it is proposed to prepare and distribute two lakh tons of town compost, 80,000 tons of sludge and 100 lakh tons of rural compost, 9.10 lakh tons of ammonium sulphate and 33,500 tons of superphosphate, 27,000 tons of bonemeal, 335,000 tons of paddy fertiliser mixture and 385,000 tons of potato fertiliser mixture. Besides, the people are being encouraged to practise green manuring in about 50 per cent. of the land under cultivation.

Improved Cultural practices and Plant Protection.—Development of improved agricultural implements and methods for increasing the yield will be continued. Plant protection is a very important part of improved cultural practice. Destruction of wild animals, insect pests and disease producing organism will be pursued with vigour. Distribution of subsidised pesticides will be raised considerably in the Third Five-Year Plan.

Agricultural extension and training.—Agricultural extension and training will comprise improvement of agricultural schools and training centres, the establishment of an extension wing at the Birla College of Agriculture, the establishment of a new training school and the execution of a scheme for farm advisory work.

Agricultural Education.—More advanced training on agricultural sciences has also been provided for. The number of seats in the Birla Agricultural College will be raised from 40 to 80 and a second college will be established. Some schools for training of farmers' sons will be started and aid given to private institutions for fostering agricultural training.

Research.—Research schemes will be continued to add to the fund of agricultural knowledge. Rice research will be intensified by the establishment of a Central Rice Research station at Chinsurah and some Zonal stations in different parts of West Bengal. Provision has also been made for research on other important agricultural and horticultural crops as well as agricultural engineering.

Demonstration and Publicity.—The work includes dissemination of information and arranging for demonstration plots to show the efficacy of the improved techniques in agriculture.

Subsidiary Food and Horticulture Crops.—Several schemes will be undertaken to improve the subsidiary food crops and to increase the yield from horticulture. Improvement of potato, sweet potato, other root crops, various types of fruits, etc., will come under these schemes.

Development of Cash Crops.—Jute is by far the most important cash crop of the State and the major portion of the funds allotted under this sub-head will be applied to schemes for increasing its yield and total production. The development scheme for Sugarcane, Oilseeds, Coconut, Cashewnut, etc., will also be undertaken. A Government Company is going to be established for the exploitation of Sisal, Ramie and Mothra cultivation within the State.

Consolidation of Holdings.—In view of the extreme fragmentation of the agricultural plots in West Bengal consolidation of holdings has become an urgent necessity. Rupees ten lakh has been earmarked for this purpose.

Agricultural Marketing.—A number of schemes covering various aspects of agricultural marketing will be undertaken in addition to continuing the work already taken up. The State Warehousing Corporation will have more funds to expand its activities. Provision has been made for the development of regulated markets and establishment of grading services for different commodities. Two State owned Cold Storages are proposed to be set up and loans will be advanced to the municipal and private markets so that they may have cold-storages and cooling chambers of their own. Three food preservation and processing centres will be established. There is also provision for granting loans to the vegetable and food preservation industries.

Administration.—In view of the scale of the proposed expansion in the activities of the agricultural department the staff requirements have also increased. Rupees thirty-two lakh has been provided for re-organising the Agricultural Directorate and another Rs. four lakh for worn out vehicles and purchasing a few new ones.

Statistical organisation is a very important wing of the administration and Rs. 27.05 lakh more will be spent in strengthening it.

(Details of Schemes)

Manures and Fertiliser

Town Compost Scheme. Distribution of 2 lakh tons of town compost at the rate of 40,000 tons per year at a total cost of Rs. 3.41 lakh.

Calcutta Sludge Distribution Scheme.—Distribution of 80,000 tons of Calcutta sludge during the plan period at a total cost of Rs. 15.17 lakh.

Rural Compost—Local Manural Resources.—Training of villagers in preparing compost from the local resources in 341 development blocks in this State leading to production of 100 lakh tons of manure at a total cost of Rs. 80.95 lakh.

Town Compost in under developed Municipal and non-Municipal towns.—Extension of the operation of compost-making to 60 under-developed or less-developed towns of this State to produce 210,000 tons of manures during the plan period, at a total cost of Rs. 13.34 lakh.

Distribution of Chemical Fertilisers.—Distribution of 5 lakh tons of ammonium sulphate, to be purchased with short-term loan to be provided by the Government of India. A provision of Rs. 10 lakh will be required during the plan period to cover the expenditure on subsidy payable by Government in respect of movement of ammonium sulphate. The cost of purchase of fertiliser will be provided under a scheme outside the plan.

Scheme for Distribution of Super Phosphate.—Subsidized distribution of 4.50 lakh tons of super phosphate during the plan period. The total cost will be Rs. 100 lakh.

Scheme for the Distribution of Bonemeal.—Subsidized distribution of 52,000 tons of bonemeal during the plan period at a total cost of Rs. 19 lakh.

Supply Multiplication and Distribution of Seeds

Strengthening of Seed Testing Organisation.—During the Second Plan a nucleus seed testing organisation has been set up which will be strengthened considerably to do the work of seed certifications on a large scale consequent on taking up of the seed saturation scheme and development of vegetable production during the Third Plan at a total cost of Rs. 8.95 lakh.

Seed Saturation with Improved Seeds.—Supply of a total quantity of 2,10,000 tons of improved seeds to the cultivators and inducing them to multiply these seeds on their land and to supply a portion thereof to the cultivators who have not received improved seeds, on exchange basis. In this way it is proposed to saturate a large part of the State with improved paddy seeds during the plan period. A set of supervisory staff will be needed at different levels to persuade the cultivators to adopt improved methods mentioned in this scheme. The total cost of the scheme will be Rs. 64.34 lakh.

Seed stores for every 10 villages.—At present cultivators have to walk a long distance to obtain seeds, implements and other equipments from the seed stores located at subdivisional and Block headquarters. It is now proposed to have a seed store for every 20 villages for storing seeds, plant protection equipment, manures, etc., at a total cost of Rs. 120 lakh.

Improved cultural practices and plant protection

Plant Protection.—In order to help the cultivators to save food crops from attacks of insects, pests and diseases it is proposed to make arrangements for plant protection operation on 73.5 lakh acres of land by the end of the Third Plan at a total cost of Rs. 163 lakh.

Destruction of wild animals.—Appointment of 25 hunters and to award prizes to private individuals for killing monkeys and boars, which cause considerable damage to crops are proposed at a total cost of Rs. 5 lakh.

Improved Agricultural Practices and Improved Agricultural implements.—Distribution of improved types of agricultural implements, viz., paddy weeders for *aman* and *boro* paddy and wheelhoes and seed drills for *aus* paddy at a subsidy of 50 per cent. during the plan period. The total cost of the scheme will be Rs. 62 lakh.

Agricultural Education

Expansion of the Birla College of Agricultural.—Kalyani University has since taken over the administration of Birla College of Agriculture.

Establishment of a second Agricultural College.—A second college of agriculture will be established at a cost of Rs. 20 lakh during the plan period.

Establishment of Agricultural Schools for training of Farmers' Sons.—Setting up of six agricultural schools for the training of farmers' sons in the modern method of agriculture, at a total cost of Rs. 21 lakh.

Aid to private institutions for agricultural training.—It is proposed to give Rs. 1 lakh as aid to private institutions during the plan period for agricultural training.

Agricultural Extension and Training

Improvement of Agricultural Schools and Training Centres.—Reorganisation of two existing agricultural schools, three UAA training centres and four Extension Training Centres are proposed to introduce two years' course of training from 1961-62 at a total cost of Rs. 74.80 lakh.

Establishment of an Extension Wing at the Birla College of Agriculture.—Kalyani University has since taken over the administration of the Birla College of Agriculture.

Miscellaneous Training Schemes.—A lump provision of Rs. 13.20 lakh has been made in the Third Five-Year Plan for the miscellaneous training schemes for different categories of the staff and non-Government agencies.

Establishment of new Extension Training Centres.—It is proposed to establish three more new schools in the integrated pattern of 2 years' course at an outlay of Rs. 25 lakh.

Establishment of a training centre for refresher course.—

Establishment of a training centre for tubewell operators.—

Scheme for Farm Advisory Works.—Besides providing subject-matter specialists at district, range and State levels, it is proposed to have five Agricultural Graduates in each Block, each of whom will be a specialist in a subject and have under him 20 villages constituted into a Farm Advisory Centre. Each such Centre will do 10 demonstrations in improved agricultural practices every year during the plan period at a total cost of Rs. 25 lakh.

Agricultural Marketing

Development of Regulated Markets.—(a) Loan up to the limit of Rs. 50,000 per market will be granted to Market Committees for development of 22 markets. The total provision for the scheme is Rs. 10.78 lakh.

(b) **Subsidy for entertainment of staff.**—It is proposed to give subsidy to Market Committees for entertainment of staff for execution and management of regulated markets at a cost of Rs. 1.82 lakh.

(c) **Departmental staff.**—To conduct and supervise the work of Market Committees, technical matters like disputes, arbitration, etc., notification of areas and commodities to be covered, initiation and proper utilisation of loan and subsidy, some officers and other staff will be appointed. The total cost of the scheme will be Rs. 2.40 lakh.

Establishment of grading services

(a) **Subsidy for entertainment of graders.**—It is proposed to allow a subsidy to Market Committees for entertainment of trained graders at the maximum rate of Rs. 1,800 per market per annum for the first 3 years (to be shared between the Centre and the State on 50:50 basis) for 22 markets. The total cost of the scheme is Rs. 1.48 lakh.

(b) **Subsidy for purchase of equipments.**—Subsidy to Market Committees of regulated markets for purchase of equipments at lump sum rate of maximum amounts of Rs. 1,500 per market (to be shared between the State and the Centre on 50:50 basis) for 22 markets. The total cost of the scheme is Rs. 0.40 lakh.

(c) **Establishment of Supervisory Grading Centres.**—Establishment of departmental supervisory control grading centres for exercising control over grading work at the rate of one centre for every 7—10 markets. A maximum amount of Rs. 10,000 per year for each centre will be provided (to be shared on a 50:50 basis between Centre and the State) for 3 centres. The total cost is Rs. 1.36 lakh.

(d) **Establishment of Ghee and Oil Grading Laboratories.**—It is proposed to establish two Ghee and Oil Grading Laboratories in the State during the plan period at a total cost of Rs. 1.87 lakh.

(e) **Setting up of a Museum in Calcutta.**—It is proposed to set up a museum in Calcutta for preserving graded samples of different commodities. This will be equipped with a laboratory for standardisation of agricultural commodities. The total cost will be Rs. 1.63 lakh.

Scheme for improvement of market intelligence.—To improve the existing arrangement of market intelligence 42 additional price reporting centres, will be established at a total of Rs. 4.81 lakh.

Scheme for improvement and extension of market research.—A scheme of research on storage-loss, transit-loss, packing, etc., of agricultural produce will be taken up at a total cost of Rs. 2.50 lakh. This is a continuing scheme.

Strengthening of the staff of the Marketing Branch of the Directorate.—A provision of Rs. 2.50 lakh has been made for strengthening of the staff of Marketing Branch for effectively implementing and executing the various schemes involving substantial amounts carried over from Second Plan as well the new schemes in the Third Plan.

Introduction of Marketing Extension Service.—It is proposed to introduce marketing extension service and to establish an extension cell at the headquarters during the plan period. The objective of this is to demonstrate and make propaganda about the various aspects of the improved methods of marketing. The total cost of the scheme will be Rs. 2.70 lakh.

Scheme for granting loan to the fruit and vegetable preservation units.—The loan is intended to be given to small manufactures of fruit and vegetable products for improvement of technique, packaging as well as hygienic conditions in their premises. The total cost of the scheme will be Rs. 4 lakh.

Scheme for establishment of three fruit-processing centres.—Three State-owned and State-managed fruit-processing centres will be set up at Baraipur, Barasat and Siliguri where there are large supplies of seasonal fruits. The total cost of the scheme will be Rs. 2.50 lakh.

Scheme for training in fruit and vegetable preservation.—Two peripatetic training centres will be established for imparting training in fruit and vegetable preservation in the important fruit growing areas of the State for three months in a year in each centre. The total cost of the scheme will be Rs. 1.40 lakh.

Administration

The Directorate of Agriculture will be reorganised at a total cost of Rs. 32 lakh.

Replacement of vehicles and purchase of new ones for S.A.O's.—The total cost of the scheme is Rs. 4 lakh.

Farms

Seed Multiplication farms.—One hundred additional thana seed farms of 25 acres each will be established for producing 60,000 mds. of improved paddy seeds as well as improved seeds of other crops at a total cost of Rs. 100 lakh.

Demonstration and Publicity

Agricultural Information Service and Demonstration.—It is proposed to strengthen the agricultural information service organisation of the Directorate with a view to training up the cultivators in the technical knowhow of agriculture at a total cost of Rs. 13 lakh.

Demonstration in irrigated and assured rainfall areas.—One hundred demonstration trials will be laid for each 1 lakh acre of land where rainfall is assured and irrigation facilities are available. Altogether there will be 2,000 demonstrations, each costing Rs. 50 on account of supply of fertilisers, seeds, plant protection services, etc. free. The total cost of the scheme will be Rs. 1 lakh.

Permanent exhibition ground in district Headquarters.—It is proposed to set up five permanent exhibition grounds in the district headquarters during the 5 year period at one such ground each year. The total cost of the scheme will be Rs. 2.88 lakh.

Land use Planning

Detailed Soil Survey of West Bengal.—The reconnaissance soil survey in the State has been completed. It is now necessary to undertake a detailed soil survey of the State on the basis of the report of the former survey.

Development of cash crop

Jute Development.—Jute seed-drills, wheel hoes, hand duster and hand sprayers will be distributed and subsidy will be allowed on the excavation of jute retting tanks and distribution of 2,000 mds. of improved jute seeds per year. The total cost of the scheme is Rs. 50 lakh.

Sisal and Ramie Development.—A sum of Rs. 5 lakh is proposed for technological work on Ramie and Sisal. One research sub-station for Sisal in Birbhum and another for Ramie at Mohitnagar farm will be established.

Sugarcane Development.—A sum of Rs. 70 lakh will be spent on measures necessary to increase the production of white sugar and gur and to extend the area under sugarcane.

Coconut Development. It is proposed to step up production of coconut by organising demonstration plots, distribution of manures, providing facilities for irrigation and making arrangement for plant protection and supplying quality seedlings and organising research at a total cost of Rs. 15.70 lakh.

Arecanut Development.—It is proposed to step up production of arecanut by having demonstration plots, distribution of manures, providing irrigation facilities and supplying quality seedling, etc. at a cost of Rs. 4.25 lakh.

Cashewnut Development.—Provision has been made for measures to extend the area under cashewnut by 5,000 acres by giving loans and distributing seeds on subsidised basis. The total cost of the scheme is Rs. 7.65 lakh.

Cardamom Development.—It is proposed to extend the area under cardamom by 200 acres by supplying subsidized fertiliser and making available plant protection services at a total cost of Rs. 0.86 lakh.

Pepper Development.—It has been programmed to extend the area under pepper by 200 acres by supplying subsidized fertiliser and making available plant protection services at a total cost of Rs. 0.86 lakh.

Oilseed Development.—It is proposed to achieve an additional production of 20,000 tons of oilseeds by extending the area under this crop, supplying improved subsidized seeds and insecticides and making fertiliser available to the growers. Demonstration plots are also proposed to be set up and crop competitions held. The total cost of the scheme will be Rs. 29.83 lakh.

Lac Development

Development of Lac Industry.—The object of the scheme is to provide regular and timely supply of brood lac in lac growing centres, to investigate local problems associated with lac cultivation and lac industry and find out effective methods to popularise lac cultivation and develop lac processing industries and to organise the artisans engaged in lac cultivation and industry on co-operative basis. About 4,000 persons will find employment directly and indirectly. The total plan provision is Rs. 20 lakh.

Horticulture

Scheme for establishment of progeny orchard-cum-nursery in the State.—It is proposed to establish a progeny orchard-cum-nursery in the State at a cost of Rs. 2.05 lakh.

Scheme for development of vegetable production and establishment of nucleus seed farms.—The scheme envisages increased production of vegetables in West Bengal. The items of work to be taken up are: (i) certification of vegetable seed for 1,00,000 acres; (ii) area to receive technical advice—70,000 acres; (iii) additional area to be brought under vegetable cultivation—9,000 acres; (iv) coverage under plant protection measures—2,00,000 acres, i.e., whole area. One of the important items of this scheme is the production and supply of stock seed of new and better varieties and to provide technical advice on agronomic practices. Additional staff for such intensive work as order for establishment of two nucleus seed production centres—one in the hill areas at Kalimpong for European types of vegetable like cabbage, cauliflower, etc. and the other for the plains for tropical vegetables—will have to be recruited. The total cost of the scheme will be Rs. 7.50 lakh.

Fruit Development Scheme.—Provision has been made for production of fruits by providing loan facilities to the growers for establishment of new orchards and for regeneration of unproductive but young mango and orange orchards at a total cost of Rs. 30 lakh.

Gardeners' Training Scheme.—It is proposed to train up gardeners in fruit development work. A stipend of Rs. 30 per month will be provided for each trainee. The total cost of the scheme will be Rs. 1.73 lakh.

Scheme for Development of Seed Potato Multiplication farm at Rangbull, Darjeeling.—A provision of Rs. 4 lakh has been made for acquiring 150 acres of land adjacent to the seed potato farm at Rangbull and constructing quarters, godowns, office buildings, etc.

Agricultural Research

Agricultural Engineering Section.—(a) *Scheme for Research on Agricultural Implements.*—Under this scheme it is proposed to establish a suitable research workshop with adequate tools, machinery and staff for carrying out the work of developing agricultural implements at a total cost of Rs. 4.88 lakh.

(b) *Scheme for study on water requirement of crops.*—To establish 3 additional research centres for continuing research on requirements of water for *Aus, Aman, Boro*, wheat and potato as well as to begin such work on sugarcane, mustard, etc. a provision of Rs. 3 lakh has been made.

Establishment of a Central Research Station.—The Central Agricultural Research Station will be strengthened by the addition of three sections, viz., Agronomy, Plant Physiology and Cytogenetics.

Lump sum provision for other Research Schemes.—A provision has been made for short term ad-hoc research schemes submitted by the department and also by the University and other institutions. Financial assistance from the Indian Council of Agricultural Research and other Commodity Committees are routed through the State Government for such schemes.

It may also be necessary to arrange for continuing some of the running schemes till these are merged with the schemes in the Third Five-Year Plan. Funds for that purpose will be available from this head.

Funds for the two preceding schemes have been included in the lump provision made for other research schemes.

Agricultural Statistics

Establishment of a State Socio-Agro-Economic Section.—It is proposed to establish a State Socio-Agro-Economic Section at the Secretariat to take up Agro-Economic and Farm Management studies in six centres in different soil climatic zones of West Bengal.

Establishment of Statistical Unit.—Setting up of a Statistical Unit for improvement of agricultural statistics during the plan period.

Establishment of a Statistical Section for Biometry and design and analysis of field experiments.—A lump amount of Rs. 27.05 lakh has been provided for the above three schemes.

Subsidiary Food

Scheme for development of sweet potato.—The present area under sweet potatoes in West Bengal is 16,000 acres. It is proposed to increase this by 7.9 thousand acres during the entire period of Third Five-Year Plan. The production from the existing acreages is .88 lakh tons which is proposed to be increased by .435 lakh tons as a period of 5 years giving an overall production of 1.315 lakh tons at the end of the Third Five-Year Plan. The scheme includes distribution of sweet potato cuttings on a subsidised basis and supply of fertilisers on loan, and provision of Rs. 0.45 lakh has been made for the plan period.

Scheme for development of Tapioca.—There is no reliable figure for the area under tapioca but it is grown in the State widely. This scheme aims at expanding the area under tapioca by distributing tapioca cuttings on a subsidised basis and fertilisers on loan. It is proposed to increase the area by 5.25 thousand acres during the plan period increasing production by .385 lakh tons. Provision has been made for Rs. .90 lakh for the purpose.

Scheme for development of root crops other than potato, sweet potato and tapioca.—West Bengal has a very large area under Colocasia (Kachu), Alocasia (Man-Kachu), Sweet Yama, Yams-Dioscorea, etc. The present area has been estimated to be 2,50,000 acres with an estimated production of 10,00,000 tons. It is proposed to expand the area under these root crops by 31.85 thousand acres during the third plan. It is proposed to supply seeds and fertilisers on subsidised basis. It has been estimated that the additional production during the period of 5 years will be 1,260 lakh tons giving an overall production of 11.260 lakh tons at the end of the Third Five-Year Plan. Rs. 3 lakh have been provided for the scheme.

Scheme for the Potato Seed Certification.—Production of certified seeds free from diseases is an important factor in the improvement of yield of potatoes per acre. At present the State annually produces certified seed potatoes on an area of .40 thousand acres producing .0145 lakh tons. It is proposed to expand the area under seed certification by 1.05 thousand acres which will give an overall production of .55 lakh tons of seed potatoes at the end of the 5 year period. The scheme envisages the multiplication of the foundation stock of improved seeds in suitable areas under the technical guidance of experts through registered growers. The foundation stocks of seed potatoes and fertilisers are proposed to be supplied on loan. Provision of Rs. 1.38 lakh has been made for the purpose.

Scheme for subsidiary seed production centre.—There is a great dearth of good seeds of subsidiary food crops. It has therefore been proposed to establish a subsidiary seed production centre for distribution among the growers. This production of subsidiary seeds is essential for the expansion of area under various subsidiary food crops. The subsidiary seed production centre will produce .025 lakh tons of seeds at the end of the 5 year period. Provision of Rs. .94 lakh has been made for the scheme.

Scheme for subsidiary Food Crops Division.—In view of the intensive work that is envisaged in the Third Five-Year Plan for production of various subsidiary food crops it has been proposed to create a subsidiary Food Crop Division. The existing tuber crops section will be integrated in the Subsidiary Food Crops Division for intensifying the work of production and distribution of seeds. Provision has been made for specialised staff for dealing with all matters of subsidiary food crops as envisaged in all the other above six schemes. Provision of Rs. 2 lakh has been made for entertainment of technical staff during the plan period.

Scheme for popularising subsidiary food.—This scheme envisages the development of the subsidiary food crops in the State of West Bengal during the Third Five-Year Plan. Intensive attempts will be made to popularise different preparations from subsidiary food, such as groundnut, tapioca, tuber crops and the like. The estimated cost of the scheme is Rs. 50 lakh.

Agricultural Research

Schemes for research on rice.—A rice is the most important crop of West Bengal covering an area of about 11 million out of 13 million acres of cultivated land, it is necessary to intensify rice research in the State. It is therefore proposed to establish a Central Rice Research Institute at Chinsurah and also to set up a salt paddy research station, flood resistant paddy research station, drought resistant paddy research station and some zonal stations for research on hill paddy and upland paddy.

Scheme for research on wheat.—In view of the increase in the irrigated areas in West Bengal due to river valley projects and tube-well projects it is necessary to intensify research on wheat and this section should be made independent and separate from the present Economic Botany Section which is now in charge of wheat work. In order to intensify work along these lines it has been decided to strengthen the staff and to establish two centres of work—one on the plains and the other on the hills—as suggested by the Indian Council of Agricultural Research.

Scheme for research on Maize.—We have now a small scheme on co-ordinated research on Maize. Work is being done mainly at one centre at Kalimpong. As hybrid Maize has great potentiality for increased production of starch per acre, and as the crop can be grown both during summer and winter in the plains, it is necessary to intensify work on this crop and to start centres both on the hills and the plains. To give impetus to this work it is also necessary that this work should be taken away from the Economic Botany section and placed under the charge of a well qualified and well trained officer trained in Maize breeding.

Scheme for research on pulses and millets.—As pulses are one of the most important sources of vegetable protein and as these cover the major part of the area under rabi crops in West Bengal, it is necessary to intensify work on these crops as also on millets.

Scheme for research on oilseeds.—Next to pulses the most important rabi crops are the oilseeds which cannot at present meet the local demand. Groundnuts and Castor seeds are also good foreign exchange earners. Groundnut grown during rabi season can also form an important crop in rotation in the tubewell irrigated areas. At the same time in the lateritic tracts where we are envisaging extensive soil conservation work covering an area of more than 1,00,000 acres during the Third Five-Year Plan, groundnut, castor seeds will form important crops as a cover for the newly reclaimed lands. To intensify this work it is necessary to establish a full-fledged research station for oilseed crops in the district of Murshidabad and two sub-centres—one for the Northern Region concentrating mainly on mustard and the other in the lateritic region concentrating on groundnut and castor seeds. There will also be a small sub-station attached to the main station at Malda.

Scheme for research on cononut.—A regional cononut research station is proposed to be established during the plan period.

Scheme for research on sugarcane.—Research on sugarcane has not so far received adequate attention in West Bengal. After the partition a small scheme in the existing seed multiplication farm at Burdwan has been started. With the establishment of the new sugar mill at Ahmedpur and in view of the proposal for establishing more sugar mills in the State it is necessary to intensify work aimed at increasing production. It is therefore proposed to establish a separate sugarcane research station on 100 acres of land and to provide adequate staff for the same, so that an adequate amount of research work may be undertaken. It is absolutely essential to intensify work on varietal selection and selection of types which are resistant to disease and which have a much higher sugar content.

Horticultural crops.—(a) *Expansion of the main horticultural research station at Krishnagar.*—In order to meet the increased requirement of horticultural research, the existing research station at Krishnagar which has only an area of 57 acres will be expanded in area. It will also be provided with additional personnel, equipment, etc. and converted into a better equipped fruit research station for the State.

(b) *Establishment of horticultural research sub-station for sub-tropical fruits in Darjeeling district.*—The scheme envisages intensive work on sub-tropical fruits, such as pineapples, oranges, etc., in Darjeeling district. Unless improved method for orange production can be found the economy of the hill areas will be badly affected.

(c) *Establishment of vegetable research station in Darjeeling district.* The scheme envisages the establishment of a station in Darjeeling district for undertaking research mainly on the European type of vegetables like cabbage, cauliflower, etc. and for their seed production.

(d) *Establishment of one horticultural research sub-station for temperate fruits in Darjeeling district.*—The scheme envisages the establishment of a horticultural sub-station in high altitude heavy rainfall tract in Darjeeling district at an elevation of 6,000 ft. for undertaking research on temperature fruits like apples, peaches, pears, etc., which have good potentialities. It is however essential to select suitable types for such areas.

(e) *Establishment of one horticultural research sub-station for lateritic tracts.*—It appears that there is extreme shortage of fruits in the lateritic districts, e.g., Midnapore, Bankura, Birbhum, etc., but with the provision of irrigation facilities developed under the Kangsabati and Mayurakshi projects and the Damodar Valley Corporation there will be good prospects for fruit production there. A research station is therefore considered essential for the tract.

(f) *Banana Research Station at Chinsurah.*—Banana is one of the most important fruits of West Bengal and has a great potentiality in view of the expansion of irrigation facilities under the tubewell projects. It can also be grown without irrigation. For increasing production of this fruit crop which may turn out to be the most important food for the people of West Bengal, intensification of work is necessary and a permanent research station will have to be established for the purpose. The staff for the work will have to be strengthened as well.

Potato and tuber crops.—(a) *Strengthening of potato section.*—Potato is one of the most important subsidiary food crops in West Bengal and gives considerable higher calorie yield per acre than rice or wheat. Along with the increase of irrigation facilities and establishment of more cold storages there is considerable scope for increasing production of potato in the State. Hence there is a need for strengthening the potato section and also for

undertaking more work on other crops, such as cashewnut, cotton, tuber and root crops, etc., which are looked after by the potato section.

(b) *Establishment of a Potato Experimental Station in Hooghly.*—As Hooghly is the most important potato growing tract of the State it is necessary to establish a sub-station for work on potato in this region on an area of 50 acres.

Strengthening of Mycology Section.—The present section consists only of a W.B.H.A.S. officer and three Research Assistants in the permanent set up. For catering to the needs of different crops as well as work on the different aspects of mycology and for the establishment of a separate Virus Research Station in the Mycology Section strengthening of staff and provision of equipment will be necessary.

Strengthening of Entomology Section.—As in the case of Mycology Section the staff in Entomology Section has also been inadequate in view of the increase in the volume of work. It is necessary to step up work on toxicology, ecology, storage pests and nematology. Adequate staff and equipments will have to be provided for the purpose.

Agricultural Chemistry Section.—(a) *Strengthening of Agricultural Chemistry Section.*—It is necessary to have more staff for undertaking additional work. The scheme will include intensified work on soil moisture studies for the irrigated and dry regions, foliar diagnosis of plants for finding out the requirement of major and minor elements and assessing the nutritional requirement by tracer technique. Additional staff will be required for implementation.

(b) *Model Agronomic Experiment.*—Under this scheme complex manurial, cultural, rotational and irrigational experiments are to be conducted at selected centres in various agro-climatic regions.

(c) *Simple Fertiliser trial.*—It is proposed to study the response of plants to nitrogen phosphorus and potash and also the relative value of nitrogenous fertilisers.

(d) *Soil Testing Service.* The object of this scheme is to analyse soil sample from plots of individual cultivators and to advise them in the judicious application of fertilisers and manures.

Strengthening of Microbiology and Biochemistry Section.—The object is to (i) study the nutrition of crop plants for improvement of their yield and quality, (ii) evaluate the food value and nutritional quality of different crops, (iii) study the microbiological action on soils in relation to fertility, (iv) study the problems of organic manures including green manuring and their effect on production of crops and on soils. It is necessary to strengthen the present section to undertake the work adequately.

Research Farms and Sub-stations.—For efficient conduction of research it is necessary to establish properly equipped research sub-stations in different soil climatic zones for testing of the varieties evolved by the breeders of different crops and also for assessing the requirement of manures and fertilisers in the different soil climatic regions. Such research sub-stations should have adequate laboratory facilities and personnel trained in different subjects like Agricultural Botany, Soil, Entomology, Mycology, Horticulture, etc. These should make it possible to undertake the work in a co-ordinated way for testing of varieties and for working out the different recommendations on the basis of observations made in the different research stations. Provision has been made for adequate

facilities in the different research stations to be located in the different zones of West Bengal, i.e., 24-Parganas, Burdwan, Purulia, Malda, Jalpaiguri and Darjeeling districts. The existing small experimental farms located in these regions will be attached as sub-stations to these. All the stations will be under the charge of a Class II Agronomist.

Intensive Agricultural Programme in Burdwan district (Package Scheme)

It is proposed to start an integrated agricultural development scheme in the district of Burdwan in the Third Five-Year Plan with a view to increasing production of food crops in the minimum possible time. Under this scheme, it is proposed to cover 6.85 lakh acres during the Third Plan. The additional food production including cereal, pulses and oilseeds is estimated to be of the order of 4.90 lakh tons. The total cost of the scheme is Rs. 150 lakh.

Consolidation of holdings

It is also proposed to take up an intensive survey of the nature of farmers' holdings in West Bengal. The total cost of the scheme is Rs. 10 lakh.

Land Development

Investigation in regard to the estuaring problems of Sundarbans.—Special investigation costing Rs. 9 lakh as advised by Prof. Jansen, a Netherland expert, will be taken up for collection of data required for preparation of an agricultural development plan of the Sundarban area.

Survey works in Sagar island in the district of 24-Parganas, closure of creeks in Sagar island in the district of 24-Parganas and closure of creeks in kakdwip in the Sundarbans.—There are taken provisions in the Irrigation and Waterways Department plan. Balance of requirement on these schemes is expected to be available from the Third Five-Year Plan allocation for land development in the agricultural sector of the Plan.

Northern Salt Lake Polder Scheme.—This scheme provides for reclamation for agricultural purposes a low-lying area of 14 sq. miles lying on the south-east of the proposed Northern Salt Lake City Extension scheme under Polder method. There will be at least two types of vegetables per annum. The total vegetable production will be about 67,275 tons annually.

Warehousing Marketing

Warehousing Corporation.—It is proposed to contribute to the share capital of State Warehousing Corporation as per provision of Agricultural Produce (Development and Warehousing) Corporation Act, 1956. The total cost of the scheme is Rs. 35 lakh.

Licensing of Warehouses.—Maintenance of staff for enforcement of the various clauses of the proposed Act on the licensing of warehouses, a legal necessity for functioning of warehouses, e.g., negotiability of its receipts and various other matters as contemplated under the Act. The total cost of the scheme is Rs. 2 lakh.

Setting up of State-owned cold storage.—It is proposed to set up State-owned cold storage for preservation of fruits and vegetables. The total cost of the scheme will be Rs. 8.50 lakh.

Scheme for granting loan to municipal and private markets for setting up of cold storages.—It is proposed to grant loan to 5 Municipal and private markets for setting up cold storages, cooling chambers, etc. for preservation of fruits and vegetables which often go waste in the peak season and cause severe loss to the growers. The total cost of the scheme will be Rs. 10 lakh.

Scheme for granting loan to Warehousing Corporation.—It is proposed to grant loan to Warehousing Corporation for setting up cold storages. The total cost of the scheme will be Rs. 6.50 lakh.

CHAPTER IV

ANIMAL HUSBANDRY

The role of Animal Husbandry in the predominantly agricultural economy of ours hardly needs any emphasis. The cultivator must continue to use draught cattle for a longtime yet and if agricultural production is to be increased a larger proportion of cattle droppings will have to be used as organic manure. A plentiful supply of milk for children and nursing mothers is essential for building up a healthy nation, and provision for augmenting milk production must form an integral part of our Plan. For the cultivators—specially those within easy reach of Calcutta and other industrial centres—it, moreover, forms a welcome addition to their moderate income. Goat and sheep rearing, poultry farms, piggeries, etc., have also great potentialities for boosting up the rural economy. Indeed, mixed farming has to be adopted on a progressively larger scale in course of our successive plans for development.

The ideal of a better animal husbandry lies not so much in trying to increase the number of domestic animals as in paying more attention to improving progenies and their nurture. On the one hand attempts are being made to improve the genetic quality of these animals and on the other, resources are being created with which they can be maintained at an optimum level of performance.

Review of the progress in the Second Five-Year Plan.

About 1.74 crore of rupees had been allotted for expenditure on Animal Husbandry during the Second Five-Year Plan, out of which only about Rs. 0.74 crore could be spent. Though the shortfall in expenditure which is mainly due to the fact that the scheme for establishment of a slaughter house at Dankuni involving an expenditure of Rs. 25 lakh could not be implemented on account of a rule issued by the High Court on the proposed acquisition of land for the purpose, it has nonetheless been possible to put through quite an appreciable amount of useful work. The major share of the Plan allocation was earmarked for work in connection with the genetic improvement of the cattle population. It was proposed to have an organisation of seven breeding blocks serving an area of about three thousand square miles with about three lakh heads of breeding cows and buffaloes by establishing 310 artificial insemination centres. Five more artificial insemination centres in urban areas were also to be established. Of these only 164 centres could be established. A scheme for the subsidized maintenance of graded heifers and bull calves was also undertaken so that these might serve as a genetic bank in future. A good start has now been made and the work will be pursued with renewed vigour during the Third Five-Year Plan.

With a view to improving the quality of cattle-feed, attempts have been made to popularise cultivation of better types of fodder and its preservation for use during the lean months. Fodder seed was distributed at subsidized rates and demonstrations were arranged for exhibiting better method of fodder cultivation and silage-making. Cattle shows were also organised both at the State and the district levels to show what can be done by better methods of management.

Considerable stress was laid on poultry development schemes. These included subsidized distribution of birds, establishment of poultry extension

and poultry multiplication centres, and establishment of a duck multiplication farm at Burdwan. The expansion of the existing poultry multiplication centres at Midnapore and Ranaghat was also included in the programme.

To get the maximum benefit from the development schemes outlined above measures for fighting different kinds of disease have to be tightened up. Both preventive and curative aspects have received attention. A scheme for mass production of vaccine against rinderpest—the dreaded killer of cattle—has been in operation since 1957. The volume of production was raised considerably during the Second Five-Year Plan, the production cost here being the lowest in India. With the help of the vaccine so produced an eradication scheme was undertaken with the result that the risk from this disease has been almost eliminated.

Facilities for treating diseased livestock have also been extended. Two 'A' Class Veterinary Hospitals—one at Alipurduars and the other at Baraset—were established and the existing hospital buildings were reconstructed. Under the scheme for construction of Veterinary Dispensaries in National Extension Blocks, 26 Dispensaries have so far been completed. In addition, 144 Veterinary Dispensaries and 118 Veterinary Aid Centres were opened in these development blocks and medicines and other supplies made available to them.

In order to meet the increased demand for trained personnel in connection with the development schemes extended training facilities have been provided in the Veterinary College. As many as 170 students were trained in the Condensed Diploma Course during the Second Five-Year Plan. Training for the Artificial Insemination Officers was also arranged.

The administrative set up needed some strengthening. Additional staff was appointed in the Animal Husbandry Directorate. In the Veterinary Directorate three new Range Offices were established for better supervision of work. One District Veterinary Office has also been established at Howrah.

Third Plan Proposals

The Working Plan of the State has made a provision of Rs. 4.11 crore for Animal Husbandry as against Rs. 1.74 crore for the Second Five-Year Plan. Work will be continued, more or less, along the lines followed during the Second Five-Year Plan but with a much wider coverage. Some new features have also been introduced.

The Key Village Centre Scheme for improving the breed of cattle will be intensified. Steps will be taken for expanding the existing Key Village Centres as well as establishing a new Key Village Block. The calf-rearing subsidy will also be continued on a much larger scale.

The emphasis this time will be on co-ordinating this work with the State's milk supply projects. The most important of these will be the introduction of mixed farming in the cattle development zones. Particular stress is also going to be laid on the supply of better cattle feed and several schemes will be undertaken for the purpose. Distribution of fodder seeds and cuttings and subsidy on silage pits, seed multiplication and fodder cultivation will continue as before. The State Live Stock Farm will be expanded and some Bull Rearing Farms will be established.

Special stress will be laid on the rapid development of the poultry industry in the State. As full exploitation of the available technical knowledge is possible only when there is an adequate economic incentive, every attempt will be made to make poultry-keeping as profitable as possible. Seventeen different schemes are proposed to be taken up for the purpose. The schemes include re-organisation of the marketing of egg and poultry stocks with a

view to benefiting the primary producers. Schemes for processing and merchandising will be undertaken for meeting the increasing demand from the large population of industrial areas at Durgapur and Panchet. One such processing centre is to be established at Durgapur. A Duck Farm with a stock of 3,000 laying birds will also be located at Panchet. Provision has also been made for the development of pig and sheep husbandry in the State.

A novel feature in this plan will be the establishment of a modern fully mechanized slaughter house with an endocrine unit attached to it providing for production, processing, and canning of meat and meat products. The glandular products which will be recovered in the slaughter house will also provide valuable raw materials for the pharmaceutical industry at home.

On the disease fighting front too, work will have to be intensified. The field campaign against rinderpest will continue on an extended basis. Production of vaccine against rinderpest, Black-quarter, Haemorrhagic Septicaemia, Ranikhet, etc., will also be undertaken on an increased scale. Construction of more veterinary hospitals and dispensaries and establishment of ambulatory clinics will continue. A Central Medical Store will also be established to facilitate proper distribution of medicine and equipment to veterinary units in the districts.

In view of the expanding activities of the department, provision has been made for strengthening the Animal Husbandry and Veterinary Directorates. This will include addition of a Statistical Wing to each. Training of personnel, development of research, etc., have also been provided for.

(Details of Schemes)

VETERINARY SCHEMES

Disease Control—Rinderpest Eradication

Establishment of twelve new check-posts.—During the Third Five-Year Plan twelve check-posts will be established at the inter-State border to check the ingress of animals bearing contagious diseases from the neighbouring States and for vaccination of all unprotected cattle against rinderpest within the check-post zones.

Continuation of second quarantine station.—In order to check infiltration of affected cattle from Nepal, Bhutan, Sikkim and Pakistan into this State and thereby to nullify the effect of mass rinderpest eradication campaign another check-post on the Indo-Nepal-Bhutan border will be set up. Here the affected incoming cattle will be quarantined, examined, vaccinated and treated. During the Second Plan one Quarantine Station at Naxalbari in Darjeeling district had been set up.

Extension of field campaign.—Rinderpest eradication scheme will have to be continued during the first year of the Third Plan. According to the Livestock Census of 1956, the total cattle population in West Bengal is 122 lakh. It is expected that 94 lakh of cattle will be inoculated at the end of the Second Five-Year Plan, while the remaining number of cattle, i.e., 28 lakh, will be inoculated during the first year of the Third Five-Year Plan. Government of India in Central Rinderpest Control Committee has since sanctioned continuance of the scheme in 1961-62. Continuance of the field campaign is necessary to protect cattle against the disease rinderpest by vaccinating continuously those which will be left unvaccinated during the mass campaign in the form of follow up programme.

Mass production of Rinderpest Vaccine.—In order to meet the demand of Freeze Dried G. T. Vaccine for the protection of the inoculable bovine population the vaccine production centre at Calcutta is required to be continued to ensure supply of vaccine to this State and also to Bihar, Orissa and Assam as at present. This scheme provides manufacture of freeze dried rinderpest vaccine up to the requirement to be fixed by the Indian Council of Agricultural Research.

Central Medical Store.—This Scheme provides for establishment of a Central Medical Store for better storage and quick distribution of medicines, equipments, vaccines and sera to veterinary organisations all over the State from a central pool. This will entail in minimising loss of valuable stores.

Expansion of Biological Product Stations

Production of Vaccine for B.Q., H.S.—With a view to manufacturing various kinds of biological products, i.e., black quarter vaccine and serum, anthrax vaccine and serum, etc., for combating epidemics in domesticated animal, it is essential to start, develop and expand the Biological Products Centre at Calcutta. The products are at present purchased from the Indian Veterinary Research Institute. The station when fully operated will be able to meet the demands of this State as well of other neighbouring States, such as Bihar, Orissa, Assam, Andaman and Nicobar Islands and Tipperah when required.

Increased output of Biological Products.—To meet the increased demands from the neighbouring States as well as to supply vaccine required for follow up work, Quarantine Stations, Immune Belts and Check-posts, it is necessary to increase the output of Biological Products at the Biological Product Station of the State.

Aid Centres and Clinics

Establishment of new Veterinary Aid Centre.—The object of the Scheme is to open one Veterinary Aid Centre in each of the Development Blocks. Already 118 Aid Centres have been opened. It is proposed to open 245 more such centres during the Third Plan period.

Establishment of Ambulatory Clinic.—The object of the scheme is to provide quick treatment to sick and afflicted animals in rural areas. Establishment of 4 Ambulatory Clinics and maintenance of 16 Ambulance cars is contemplated.

Slaughter House

Construction of a new Slaughter House with arrangements for recovery of glandular products.—Establishment of a highly mechanised modern slaughter house is contemplated for processing and canning of meat and meat products which will replace the present unscientific practices. Besides, the products can be exported to outside markets earning valuable foreign exchange and at the same time minimising the recurring cost for maintaining useless stocks.

Training Research and Statistics

Residential accommodation for the teaching staff of Bengal Veterinary College.—The scheme envisages construction of residential quarters for the teaching staff of the Bengal Veterinary College. The object is to provide for a corporate campus at the teaching centre and at the same time to obtain maximum return from the teaching staff.

Establishment of a Statistical Section in Veterinary Directorate.—One Statistical Section is necessary for the Veterinary Directorate with a view to methodical compilation of various statistics relating to Veterinary matters. The present scheme is designed to set up such a Section with a view to removing the inconvenience felt in compiling periodical statistics of field works, disease control, mortality figures, etc., as well as statistics in respect of research work done in the State.

Development of Veterinary Research Organisation.—Facilities for veterinary research are proposed to be expanded. Setting up of laboratories, purchase of scientific apparatus and equipment and provision for experimental animals are also envisaged. Employment of a suitable strength of scientific personnel is also contemplated. The Scheme which could not be implemented during the Second Plan, will be taken up during the Third Plan.

Other Statistics

Improvement of hide flaying and carcass utilisation.—The Scheme envisages establishment of a large urban centre for flaying, curing and carcass utilisation in Calcutta to make best use of hide and carcasses and to root out faulty technique of curing and flaying of hides, resulting in serious loss of the value of the same.

Strengthening of staff of Veterinary Directorate.—The scheme envisages strengthening of staff of Veterinary Directorate at Headquarters, establishment of regional offices for proper supervision of field work and disease control. Implementation of various development schemes during the Second Plan period has increased the work load and the same is expected to increase manifold during the Third Plan period.

Strengthening of Supervisory Organisation in Muffasil and Headquarters.—Under the scheme two additional Range Offices are to be opened. The creation of the subordinate offices is justified by the reason that adequate and quick supervision of disease control in rural areas cannot be obtained without them.

Construction of Office at Ranges and District Headquarters.—The Scheme envisages construction of buildings at District Headquarters for accommodation of the principal supervisory office organisations.

Construction of Hospitals and Dispensaries.

Construction of "A" Class Hospitals.—The scheme envisages new construction and re-construction of Veterinary Hospital buildings at District Headquarters and other important places and maintenance thereof. There are some hospitals housed in State-owned buildings, which require remodelling and reconstruction according to the approved type plan for Veterinary Hospitals. During the Second Plan period, one hospital building could be constructed while 8 were reconstructed. These will also be maintained during the Third Plan period.

Construction of "B" Class Hospitals.—The object of the Scheme is: (i) repairing and remodelling of existing structures of the "B" type hospitals of this State, most of which were taken over from the local bodies in dilapidated condition and (ii) construction of new Veterinary Hospitals at the Subdivisional Headquarters and other important places. Three Hospital buildings constructed and as many reconstructed during Second Plan will also be maintained in Third Plan phase.

Construction of Dispensaries in N.E.S. Blocks.—The object of the scheme is to construct buildings for Veterinary Dispensaries in each Development Blocks. It is expected that at the end of the Second Plan 25 Veterinary Dispensaries will be constructed. During the Third Plan 74 more Veterinary Dispensaries will be constructed.

Increase of grants for medicines, etc., to Veterinary Aid Centres outside C.D.P. and N.E.S. Blocks.—The Scheme provides for grant of medicines, etc., to rural Veterinary Aid Centres situated outside C.D.P. and N.E.S. Blocks and manned by this Departmental personnel.

ANIMAL HUSBANDRY SCHEMES

Intensification of existing Key village centres.—The scheme visualises intensification of work in some of the key village centres set up under the Second Plan.

Expansion of existing Key village centres.—Increased number of sub-centres are proposed to be attached to some of the key village centres started under the First and Second Plans to extend their areas of operation.

New key village blocks.—The object is to set up some new key village blocks in selected areas

Centralised semen collection centres.—The scheme aims at keeping the bulls of 5 or 6 contiguous key village blocks in one central station with a view to ensuring better control over collection, treatment, etc., of semen of such bulls as also to effect overall economy in implementation of the key village scheme.

Strengthening of supervisory organisation for the key village scheme.—The scheme aims at providing for adequate supervisory staff to ensure better technical and administrative supervision over the large number of centres and sub-centres set up under the key village scheme.

Calf-rearing subsidy.—The scheme is designed to encourage owners of graded calves to rear these properly and demonstrate the results thereof.

Organisation of marketing facilities in key village areas.—The scheme is designed to assist the stock owners in key village areas in better marketing of their products as far as practicable.

Marketing unit at Headquarters.—The scheme aims at setting up a marketing unit at the Headquarters to advise and guide the extension staff on problems relating to better marketing in key village areas.

Fodder Development staff.—The scheme provides for suitable technical staff to advise and guide cultivation of fodder crops of different kinds suiting conditions in different parts of the State.

Pasture Development at State Farms.—The object of the scheme is to improve existing pasture lands and to introduce pasture lands in State Farms located in areas where such pasture development work can be profitably carried on to increase production per unit of land.

Pasture Development in blocks.—The scheme aims at improving pasture lands in areas where pasture development work can be profitably carried on to increase production per unit of land.

Seed Multiplication and Fodder Demonstration Farm.—The scheme aims at setting up farms in different regions to produce seeds and cutting of different types of fodder crops for supplying to farmers and also to demonstrate to them the cultivation of different kinds of fodder.

Distribution of fodder seeds and cuttings.—The scheme is designed to encourage farmers to take to cultivation of fodder crops with a view to improving their cattle.

Subsidy of silo pits.—The object of the scheme is to demonstrate to the cultivators the method of preservation of green fodder as silage.

Subsidised chaff cutters.—The scheme aims at popularising use of chaff cutters for better and economic utilisation of fodders.

Establishment of Bull Rearing Farm.—The object of the scheme is to set up a farm to rear improved bulls in large number for distribution for cattle development work.

Demonstration on Farmers Lands.—The object of the scheme is to demonstrate to the farmers about cultivation of different kinds of fodder crops.

Mixed Farming.—The scheme aims at introducing mixed farming in areas where such a system of farming can be profitably adopted to increase production per unit of land and livestock.

Piggery Development

Pig Breeding Unit at Darjeeling.—Under the scheme it is proposed to set up a pig breeding station with Bacon Factory at Darjeeling with a view to developing pig industry in that area.

Piggery Development blocks.—The object of the scheme is to take up piggery development work in suitable areas by distributing pigs of improved strain.

Piggery Development staff.—The scheme provides for suitable staff to ensure proper technical and administrative supervision over the piggery development work.

Sheep Development

Sheep Development Scheme.—The scheme is designed to improve sheep in selected areas by distributing sheep of improved types.

Training, Research, Statistics, etc.

Specialised training in A.I. and Physio-pathology of reproduction.—The object of the scheme is to arrange for training of officers in Artificial Insemination and Physio-pathology of reproduction.

Specialised training in A.H. to extension officers.—Under the scheme it is proposed to arrange to impart short course training in Animal Husbandry to extension officers.

Training of stockman and field assistants.—The scheme provides for training of stockman and field assistants in Animal Husbandry works.

Strengthening of Nutrition Research Station at Haringhata.—The object of the scheme is to strengthen the existing Nutrition Research Station at Haringhata to enable the Station to carry on work on the nutritive value of feed and fodder on a wider scale.

Establishment of a statistical section at Headquarters.—It is proposed to set up a statistical section at Directorate Headquarters.

Other Schemes.

Cattle shows.—The scheme aims at organising livestock shows in different districts so as to enthuse local people towards improvement of livestock.

Mass castration of scruff bulls.—The scheme is designed to arrange for emasculation of undesirable bulls by Burdizze Emasculators.

Public Relations Service.—It is proposed to set up a Public Information and Relation Service at the headquarters level.

Strengthening of Range and District Officers.—The object of the scheme is to suitably strengthen the Range offices to ensure adequate technical and administrative supervision over the increased development work.

Strengthening of A.H. Branch at the Directorate Headquarters.—The scheme provides for suitably strengthening the headquarters office of Animal Husbandry branch to ensure proper technical and administrative supervision over the increased developmental work.

Implementation of recommendation of Nalagarh Committee in A.H. Department.—The scheme aims at re-organising the Animal Husbandry Directorate on the lines of recommendation of Nalagarh Committee.

Poultry Development Schemes.—The object of the scheme is to develop poultry in the State, by making available breeding and rearing equipments and loans to interested poultry farmers, by upgrading the poultry birds with stock of improved strains, by increasing the strength of laying flocks with a view to ensuring the increased production of improved birds, etc.

Poultry extension centres.—The scheme is designed to arrange for completion of work taken up under the scheme during the Second Plan period.

Improvement of Livestock Industry.—Under the scheme it is proposed to provide for replacement, of stud-bulls, equipment, etc., in the areas where concentrated cattle development work has been taken up through natural breeding.

Calf-rearing subsidy.—The scheme provides for subsidy to improved calves taken up under the Second Plan.

CHAPTER V

DAIRYING AND MILK SUPPLY

Dairying and milk supply have much in common with Animal husbandry but employing, as they do, highly specialised processing techniques, and elaborate transport and marketing arrangements they constitute an independent industry and deserve special treatment.

The present scheme arose from another with a limited purpose. It was the original intention of the State Government to remove the Khatala from Calcutta and arrange for the city an adequate supply of clean and wholesome milk. This scheme was later renamed the Greater Calcutta Milk Supply Scheme and included in the Second Five-Year Plan. It envisaged, among other things, (1) establishment of a Milk Colony at Haringhata to accommodate the cattle removed from the Khatala in Calcutta, (2) establishment of a Fodder Farm to ensure supply of the minimum requirements of green fodder for the cattle in the milk colony, and (3) establishment of a Central Dairy in Calcutta with ancillary services for distribution of milk.

Progress during the Second Plan period

The Second Plan allocation for the scheme was Rs. 4.66 crore out of which Rs. 3.02 crore could be spent. The progress made so far has been considerable. The progress made will permit evacuation of about 12,000 milch animals with their calves from the city's stables and accommodation thereof in the Milk Colony at Haringhata. A twelve hundred acre Fodder Farm has been established at Kalyani for feeding these animals.

To augment the supply of milk, collecting-cum-chilling centres were established at (a) Habra in the district of 24-Parganas, (b) Fulia in the district of Nadia, and (c) Beldanga in the district of Murshidabad. This has provided economic incentive to the people in these areas to increase the production of milk. As a result of these measures, the production of milk and milk products has been steadily on the increase. The stage reached at the end of the Second Five-Year Plan is shown by the figures for average daily production in the table below.

Product	Production
Milk	... 100,000 litres
Butter	... 250 kg.
Ghee	... 50 kg.

The need for increasing the number of technical personnel has also been kept in view. The preliminaries for establishing a Dairy Training Centre have been taken in. This will offer a course of training for the Indian Diploma in Dairy. Short courses and in-plant training in refrigeration, boiler and dairy mechanics, will also be provided for. The other subjects in which training is proposed to be imparted include extension in animal husbandry, costing of milk-production, etc.

With a view to improving the nature of the local stock, calves of superior quality were also distributed from the Haringhata Milk Colony.

Third Plan Proposals

During the Third Plan it is proposed to rationalise as well as to extend the Greater Calcutta Milk Supply Scheme. It has been considered necessary that the supply of milk to the city proper and its surrounding industrial belt known as the Greater Calcutta area should derive from the three Zonal Dairies, viz., (1) the existing dairy at Haringhata to cater for the requirements of the north-east of the Metropolitan area, (2) the Central Dairy at Belgachia for the south-east of the Metropolitan area, and (3) a new dairy at Bally on the West Bank of the river Hooghly for the consumers in Howrah and other municipal areas in its neighbourhood. In this connection provision has also been made for strengthening the existing Co-operative Milk Societies' Union in Calcutta. Medium-term loans will be granted to the members of primary societies for purchase of milch cattle and Rs. 5 lakh has been earmarked for the members of each such society for this purpose. Each Primary Society will in addition be given a loan of Rs. 2,000 for purchase of equipment, and managerial subsidy will be granted at Rs. 1,200 per society spread over five years. The Co-operative Milk Societies Union of Calcutta will be assisted with a loan of Rs. 1.50 lakh for purchase of trucks and equipment.

Apart from the expansion of the Greater Calcutta Milk Supply Scheme, a few other dairy schemes are proposed to be taken up for the benefit of the industrial townships of Burdwan, Durgapur, Asansol and Chittaranjan. A net work of milk collecting-cum-chilling centres will have to be established in the rural areas around these dairies.

A multipurpose dairy is also proposed to be established at Darjeeling for production of milk, butter, cheese and a limited quantity of skim milk powder. A part of the milk available will be placed in the market to supply the needs of the towns of Darjeeling, Siliguri and Jalpaiguri and the rest will be utilised for the production of the other items. This undertaking will provide the necessary economic incentive to the tribal and hillmen owners of cattle for production of milk in larger quantities. This is also expected to ensure the continued development of the graded milch cattle of the locality as well as the exotic varieties.

The targets of daily production set for the Third Five-Year Plan are as follows:

Product	Target
Milk	... 400,000 litres
Butter	... 650 kg.
Cheese	.. 950 kg.
Ghee	... 150 kg.

It is hoped that it would be possible to move more cattle from Calcutta during the Third Five-Year Plan so as to reach the target for removing a total of 22,000 heads thus relieving the city of yet another lot of unsightly and unhygienic Khatalas.

To sustain this programme it will be necessary to develop some ancillary services. There will be an extension wing to disseminate the know-how about all-round improvement in milk production. Credit for purchase of quality animals will be provided. A cattle-feed compounding factory will make available balanced and nutritious cattle feed at reasonable rates. A refrigerated transport service will enable the centres to collect milk from distant points of production. The schemes of the Animal Husbandry and Veterinary Services Directorates will also be co-ordinated with the milk production schemes.

The organisational aspects will also receive attention. The Dairy Development Staff will be strengthened and a Survey and Statistics Wing will be attached to it. Adequate arrangements for carrying out development research will also be made at the same time.

CHAPTER VI

FISHERIES

Fisheries rank high in the development programme of West Bengal. On the one hand, fish, the most popular item in the Bengali diet, provides an ample supply of proteins, vitamins and mineral salts which are essential for health, and on the other, fisheries offer considerable scope for the diversification of the rural economy.

Though the production in the State is fairly large it is not enough to meet the local needs and a considerable quantity has to be imported from other States of India as well as from East Pakistan. There are however, fairly extensive fishery resources in the State which remain to be fully exploited. The plan for developing fisheries therefore aims at bringing in stages all the available tanks, rivers and other areas under water into full production. The exploitation of the coastal fisheries is also included in it.

Progress during the Second Plan

A number of different approaches have been adopted with a view to developing the inland fresh water fisheries. Short-term loans were granted to the owners of culturable tanks to help them exploit their fisheries more intensively. Medium-term loans were also advanced to the owners of derelict tanks so that they might reclaim these for fish-rearing. Over and above, a plan for improvement of Government and private-owned derelict water areas under the direct management of the Fisheries Directorate was taken in hand. As a result of these, it has been possible to bring 3,706 acres of derelict and semi-derelict tanks, beels and other such areas under pisciculture after effecting necessary improvements.

But such improvement is only the beginning of the process. The varieties of carp which are popular with the pisciculturists do not breed in confined waters. Fish fry has, therefore, to be collected from their natural breeding grounds, grown to the fingerling stage in nurseries, and transferred first to the stocking tanks and then to the rearing tanks. A liberal supply of fingerlings is thus a vital link in the chain of processes which constitutes the development programme. A scheme for the production of quality carp fry through private pisciculturists was therefore undertaken and it was agreed that they would be given a bonus at the rate of Rs. 2 per thousand. About 365 lakh of quality carp fry could be produced under this scheme.

In order to promote the growth of fish it is necessary to provide them with sufficient food and the tanks for culture must be supplied with adequate quantity of fertilizers for the purpose. About 1,291 tons of fertilizers were produced through private agencies for use in fish rearing tanks during the Second Five-Year Plan. One hundred and sixty-nine demonstration farms were also started in the rural areas to educate the pisciculturists in improved methods of fish farming. Such methods are proposed to be kept under continuous review with a view to their further improvement. A fresh water Fisheries Research Station for carrying out investigation on different aspects of pisciculture is nearing completion.

The main obstacle in the way of effective exploitation of the coastal and estuarine fisheries is the poverty of the fishermen and lack of organisation among them. To remedy this a Central Fishermen's Co-operative

Society has been organised with State participation. It has 10 primary societies of 350 operatives for its constituents. Necessary financial assistance has been given to them for the exploitation of the coastal and estuarine areas. Medium term loans have also been advanced to 800 fishermen who are engaged in fishing. These loans were meant for purchase of 172 boats and 339 bales of yarns for fishing nets. With a view to introducing mechanised fishing in the coastal fisheries a scheme for imparting training to the local fishermen in the technique of power fishing with modern equipment has been taken up. It is contemplated that these fishermen will be provided with motorised boats and improved types of fishing gear after the training. It has been possible to procure locally 4 marine engines which have been fitted to boats and the preliminary work, such as, survey of fishing grounds, standardisation of engines, boats, gears, etc., have been completed.

A Deep Sea Fishing Scheme with Danish Cutters and Japanese Trawlers has also been in operation since the end of 1950. Its chief purpose is to train up our youngmen in the technique of deep sea fishing.

Third Plan Proposals

The principal lines of approach indicated in the preceding paragraphs will continue to be followed during the Third Five-Year Plan but on a much larger scale. Rupees 204.83 lakh as against Rs. 75.74 lakh under the Second Plan is proposed to be spent in course of the Third Five-Year Plan. It is contemplated that about 6,765 acres of culturable and unexploited areas will be brought under pisciculture and 7,394 tons of fish will be produced during the Plan period and 3,654 tons annually thereafter. About 1,543 tons of fertilizers will be produced which is likely to add 1,029 tons of fish to the production from the existing pond fisheries. Two hundred and ten Fish Farms will be set up to educate the fish farmers in improved methods of pisciculture. Besides, services of skilled fishermen will be made available to the rural pisciculturists for the development of small tanks in a systematic way. Fifty Producers' Co-operative Societies will be organised with State participation. Financial and managerial assistance will be extended to them. Provision has been made for the production of 562.5 lakh of quality carp fry through private agencies by giving them production bonus at an increased rate. In addition, six Seed Farms will be established in different areas of the State and 120 lakh of fry will be available therefrom during the Plan period. The annual production at the end of the Plan from these Seed Farms will be 72 lakh.

Sixty fishermen will receive training in the technique of power fishing and 10 motorised boats with the requisite fishing gear will be made available to them on hire-purchase. For facilities of berthing of these boats as also of the country crafts engaged in fishing operation in the coastal areas a small fishing harbour is proposed to be constructed. Medium term loans will also be advanced to the needy fishermen to help them procure fishing implements.

The marketing aspects will also receive attention. A wholesale fish market is proposed to be established in Calcutta. This will be provided with adequate cold storage facilities. It will be placed under the management of a Co-operative Marketing Society. In addition 75 selected primary fishery societies at the village level and six Central Fish Marketing Societies at the district level will be given financial assistance, so that they may develop along the right lines.

A scheme for the production of fish-meal, shark liver oil, etc., has been in operation at Jounput in the district of Midnapur for some time. The production at this centre will be stepped up during the Third Five-Year Plan. A new centre will also be started at Frasergunge for the above purpose.

An Aquarium will be started in Calcutta for biological studies of different species of marine estuarine and fresh water fish. The results so obtained will be demonstrated to the public in general and school and college students in particular.

(Details of Schemes)

Short-term loan scheme for augmenting fish production in culturable tanks of West Bengal.—The scheme aims at augmenting the production of fresh-water fish by advancing short-term loans at the rate of Rs. 225 per acre of culturable water areas to their possessors and their co-operatives to meet initial cultural cost. The loan is recoverable with 4 per cent. interest within 3 years.

During the Third Five-Year Plan period 2,977 acres of culturable tanks will be brought under pisciculture wherefrom the additional production of fish is expected to be about 2,143 tons during the plan period, 1,116 and 1,254 tons during the years 1966-67 and 1967-68, respectively and 1,323 tons annually thereafter.

Medium-term loan scheme for fish production in semi-derelict tanks of West Bengal.—The scheme aims at augmenting the production of fresh-water fish by advancing loans to the possessors of the semi-derelict and derelict tanks or their co-operatives at the average rate of Rs. 1,500 per acre of such areas for reclamation and cultural operations. The loan is recoverable with 4 per cent. interest within 12 years after remitting 25 per cent. of the loan and interest thereon at subsidy.

During the Third Five-Year Plan period 467 acres of water areas will be developed wherefrom the additional production of fish is expected to be about 275 tons during the plan period, 174 and 196 tons during the years 1966-67 and 1967-68 and 208 tons annually thereafter.

Development of large derelict fisheries in the State of West Bengal.—The scheme aims at the development of large derelict water areas at Government cost and supervision and subsequent recovery of the amount so spent with 4 per cent. interest thereon either by leasing out the same to fishermen's co-operative societies on reasonable rent or by exploiting departmentally within 20 years.

The area targetted under the scheme during the plan period is 1,886 acres wherefrom the additional production of fish is expected to be about 1,196 tons during the plan period, 710 and 796 tons during the years 1966-67 and 1967-68, respectively and 838 tons annually thereafter.

Carrying out a sample survey to assess the inland fisheries resources of the State.—The scheme aims at carrying out sample survey of all types of inland waters for the purpose of framing a workable policy for their development. The collection of detailed statistics under the scheme would be completed within the first three years of the plan period.

Demonstration fish farm on private parties' tanks in every thana of the State of West Bengal. The scheme aims at starting of demonstration fish farms on private-owned tanks in rural areas of the State with a view to

demonstrate the improved technique of tank culture to rural farmers to increase the rate of fish production in confined fisheries.

During the plan period about 210 such demonstration farms will be started throughout the State.

Intensifying production of Carp fry by granting bonus to culturists.—The scheme aims at the production of quality carp fry through private agencies by granting them production bonus and their subsequent distribution on reasonable price to be fixed by Government for stocking purpose.

During the plan period, about 562.50 lakh fry will be produced.

Exploitation of coastal fisheries of the State by mechanising indigenous fishing crafts and making the same available to the fishermen and their co-operatives on hire purchase system.—The scheme aims at imparting training to indigenous fishermen in the technique of power fishing with mechanised boats and modern gears and thereafter providing the co-operative societies to be organised with them with such mechanised boats and improved type of gears at subsidised costs on hire-purchase system.

During the plan period about 48 fishermen will be trained up in power fishing and 8 mechanised boats equipped with modern fishing implements will be distributed to their co-operatives.

Assisting the needy fishermen and their co-operatives by giving loan for augmenting fish production.—The scheme aims at advancing medium term loans to the needy fishermen engaged in capture fisheries for producing their fishing implements, such as nets, boats, etc., for increasing fish supply. The loan is recoverable with 4 per cent. interest within 5 years after deducting subsidies to the extent of 25 per cent. on the cost of boats and 33.1/3 per cent. on the cost of net or yarn.

During the plan period about 925 fishermen will be given such assistance for procuring their nets and boats which is likely to fetch an additional production of 2,685 tons of fish.

Popularising the use of fish pond manure for increasing the productivity of pond fisheries of West Bengal.—The scheme aims at the production of fish pond fertilisers through private agencies by subsidising their cost for introduction in the pond fisheries for the purpose of increasing the rate of production.

During the plan period about 1,543 tons of such fertilisers will be produced which is likely to fetch an additional production of 1,029 tons of fish.

Development of South Salt Lake area for increasing fish supply to Calcutta markets.—The scheme aims at undertaking intensive development of the partially derelict fisheries of Southern Salt Lake areas near Calcutta and their scientific exploitation as sewage fed fisheries for increasing fish production.

During the plan period about 1,133 acres of such areas will be developed wherefrom the additional production of fish is expected to be about 815 tons during the plan period and 1,148 tons annually from 1967-68 onwards.

Improvement of private owned derelict tanks and other confined water areas for pisciculture.—The scheme aims at improving private-owned derelict tanks by undertaking reclamation departmentally and subsequently

arranging pisciculture therein through their owners or co-operatives of the owners. The amount spent will be recovered with 4 per cent. interest within 20 years.

During the plan period, about 265 acres of such areas will be developed wherefrom the additional production of fish is expected to be about 163 tons during the plan period, 99 and 112 tons during the years 1966-67 and 1967-68, respectively and 118 tons annually thereafter.

Establishment of seed farms for production of quality seeds through artificial breeding of Indian major carps by hormonal treatment.—In order to meet the increasing demand of quality fish seeds for stocking of fisheries it is proposed to set up 6 seed farms in some selected districts for the purpose of producing fish seeds through hormonal treatment.

It is expected that about 450 lakh carp fry will be produced annually from these farms.

Development of fisheries in the hill areas of Darjeeling district by confining perennial jhora water.—The scheme aims at giving financial assistances in the form of long-term loans to the willing pisciculturists for construction of ponds by impounding jhora waters for the purpose of pisciculture therein. The loan is recoverable with 4 per cent. interest within 20 years after a remission of 50 per cent. of the loan and proportionate interest thereon.

During the plan period tanks of about 3 acres will be constructed wherefrom about 2 tons of fish are expected annually.

Pilot scheme for reorganisation of Calcutta fish markets on co-operative basis.—It is proposed to establish an ideal fish market with necessary cold storage facilities in Calcutta to ensure regular and steady flow of fish to retail markets. The management of the market will be entrusted to a marketing co-operative society to be sponsored by Government.

Scheme for having 'Service Parties' to render certain service facilities to fish farmers ancillary to increase fish production.—The scheme aims at extending service facilities of skilled fishermen to the fish farmers with a view to propagating the improved method of pisciculture among them.

During the plan period, 10 mobile service parties, each consisting of 4 skilled fishermen, will be organised.

Scheme for setting up producers' co-operatives in the culture and capture fisheries sector for improving the present supply and production of fish in the State.—The scheme aims at organising producers' co-operative societies with necessary financial assistance in the form of long and medium term loans and grants towards managerial costs, etc., for the purpose of development of small tank units and other water areas in proper way for increasing fish production.

Scheme for providing harbour facilities to coastal fishermen to enable them to continue fishing operations for longer period.—The scheme aims at the construction of a small fishing harbour in the coastal area of the State with a view to rendering necessary facilities to the fishermen engaged in fishing in the coastal areas for berthing their boats so that the fishing operations in the areas may be continued for longer period.

Scheme for increasing the present rate of production of shark liver oil and fish-meal in West Bengal.—With a view to increasing the present rate of production of shark liver oil and fish-meal, it is proposed to set up a small testing and standardisation laboratory with power plants and processing and storage facilities at the production centre.

This would result in an additional production of 30,000 lbs. of shark liver oil, 100,000 lbs. of fish-meal and 150,000 lbs. scrap fertiliser annually.

Scheme for establishment of an Aquarium in Calcutta.—It is proposed to set up an aquarium in Calcutta for the purpose of biological investigation about the fish and other aquatic animals with regard to their food and feeding habits as also for displaying to public.

Scheme for additional supervisory and headquarters staff to cope with the increased volume of work contemplated under the Third Five-Year Plan.—Provision has been made under the scheme for additional and headquarters staff for carrying out the increasing volume of work contemplated under the plan.

Experimental fish farm at Kalyani.—Scheme aims at establishment of a Fisheries Research Station near the new township of Kalyani. The constructional work, etc., started during the Second Five-Year Plan period are nearing completion. The provision represents the spill-over expenditure for the unfinished items of work.

Sea fishing with the help of Danish Cutters and Japanese Trawlers.—It has been proposed to construct a jetty at Kakdwip in order to avoid waste of time for berthing of the Danish Cutters and Japanese Trawlers. Construction of a Cold Storage Plant and an administrative colony near the jetty is also contemplated.

Scheme for Development of Fishery Societies.—It is a new scheme. In order to improve the economic condition of the fishermen and to create facilities for marketing of fish, it is proposed to provide for assistance to 75 selected Primary Fishery Societies at the village level and 6 Central Fish Marketing Societies at the district level, brought into existence by way of re-vitalisation and re-organisation. Two Central Societies will be set up during first year of the Plan period and 1 such Society in each of the last 4 years. As to Primary Societies, 15 Societies will be set up in each year of the Plan period. Assistance will be given to the Central Societies by way of share capital contribution at Rs. 10,000 each; assistance for setting up fish nurseries, markets, etc., at Rs. 10,000 each (75 per cent. loan and 25 per cent. subsidy); subsidy for managerial staff at Rs. 8,000 each spread over first 3 years at Rs. 3,000 plus Rs. 3,000 plus Rs. 2,000 and assistance for purchase of truck at Rs. 30,000 each (loan 75 per cent. subsidy 25 per cent.). Similar assistance will be given to the Primary Fishermen's Societies at village level by way of share capital contribution at Rs. 2,500 each, assistance for purchase of craft and equipments at Rs. 2,000 each (loan 75 per cent. plus subsidy 25 per cent.); assistance for setting up fish nurseries at Rs. 5,000 each (loan 75 per cent. plus subsidy 25 per cent.) and assistance for managerial staff at Rs. 1,800 each spread over 5 years at Rs. 600 plus Rs. 600 plus Rs. 300 plus Rs. 200 plus Rs. 100.

The total cost of the scheme will be Rs. 11.58 lakh. The cost will be made available from the overall savings in the State Third Plan ceiling.

CHAPTER VII

FORESTS AND SOIL CONSERVATION

Forests

Forests have an important role in the development of a nation's economy. On the one hand they are a source of timber and fuel for industrial and domestic consumption, and on the other, they bestow indirect benefits by protecting the soil and preserving the moisture where they grow as also in the areas surrounding. In order to be fully effective it is necessary, according to experts, that a minimum of 25 per cent. of the total area should be under forest cover. In the hills this coverage should go up to even 60 per cent. because of the topographical features of these regions. With 13.88 per cent. of forest cover in our State the benefits are much below the optimum. The beneficial effect is felt still less because of the irregular distribution of forests which are concentrated only in three regions, viz., (a) in the northern districts, (b) the laterite zone of the west, and (c) the Sunderbans. Moreover, out of the total of 4,500 sq. miles of forests, about 1,600 sq. miles of private forests which have now vested in Government are in a very degraded condition.

As against this the population density in the State is very high and a large number of industries, big and small, are coming up very fast leading to a rapidly increasing demand for forest products. The result has been that the supply of indigenous timber and other forest products can hardly cope with the current demand. The extent of shortfall in respect of certain categories of forest products is indicated below:

Forest Products.	Percentage of demand in the State satisfied by the local forests.		
(1) Furniture timber	75
(2) Packing-case timber	37
(3) Plywood timber	22
(4) Matchwood timber	6

The aim of our forest planning must therefore be to try and bridge the gap between the demand and supply in so far it is practicable and to make sure that the protective effects of forest cover are enhanced. With these aims in view the successive plans have attempted to expand the area under forest cover, planting suitable species on available land and to improve exploitation of existing forests through rehabilitation and better arrangement.

Review of progress during the Second Plan.

Results achieved during the Second Plan period in respect of planting operations can be judged from the table below:

Type of Plantation.	2nd Plan target. (Acres)	Area planted. (Acres)	Col. 3 as % of Col. 2.
1	2	3	4
Matchwood ..	5000	3646	72.9
Misc. timber ..	10000	6255	62.6
Bamboo ..	8500	7733	91.0
Teak ..	4750	4317	90.9

Where the target could not be reached it was due to non-availability of suitable waste land. Teak plantation is of particular significance because

though the demand for this timber is very great, there is practically no source of supply within West Bengal.

In addition to the above planting operation an area of about 11,400 acres were planted with sal, teak and other species under the normal scheme for felling and regeneration in the reserved forests of North Bengal. Due attention was also paid to the protective aspects. The private forests which have vested in Government under the provisions of the Estates Acquisition Act are in such a degraded condition that their capacity for retention of moisture and prevention of soil erosion is very much below normal. Extensive soil conservation measures were undertaken to remedy this state of affairs. The surface run-off from the treated area has dropped considerably and as a result the growing stock has shown marked improvement. This will also help in improving the condition of the rivers draining off the treated areas. Plantation for the dual purpose of growing firewood and preventing the movement of sand dunes into the cultivated areas was undertaken and a coastal shelter belt was created in the district of Midnapore. The targets and achievements are indicated below:

Scheme	Target (Acres)	Achievement (Acres)	Col. 3 as % of Col. 2
1	2	3	4
Treatment of degraded forests	54560	62199	114.0
Protective coastal belt	2400	904	37.7

Various measures in the sphere of improving forest management were also taken. Out of 4,500 sq. miles of forests in the State, about 300 sq. miles are still inaccessible for lack of communication facilities. To step up the exploitation of forest products the Second Plan made a provision of building 11.4 miles of motorable road in the foothills of Kalimpong Subdivision to bring about 6,000 acres of valuable forests under production. At the end of this Plan period about 10.5 miles of such road had been constructed. To meet the increasing demand for sawn timber the Siliguri Saw Mills was equipped with modern type of machineries specially imported from France during the period under review.

When a large area of private forests vested in Government after coming into force the West Bengal Estates Acquisition Act, a fairly large number of staff had to be recruited for looking after this. To begin with, they could not be provided with quarters in distant and far-flung areas. It was therefore decided to build about 690 residential quarters for accommodating the staff close to the place of their work. By the end of the Second Plan as many as 863 buildings were completed.

The Wild Life also received due attention. Arrangements were made for providing artificial salt-licks, glades, grazing and fodder, protection against fire and poaching. To attract visitors, a Tourist Lodge was built with modern fittings and the usual amenities.

Zoological Gardens.

Not many people can however afford to make a trip to the forest sanctuaries to have a look at the magnificent wild animals of our country, and most have to be satisfied with an occasional visit to the Zoo. It is of the utmost importance to make the latter class of people conscious of the rich wild life in our forests. For this purpose the Zoos must be kept well stocked and fresh animals brought into it from time to time to sustain the public interest. The specimens have also to be exhibited to their best

advantage. Closed cages should as far as practicable give way to open air enclosures, which though they cannot simulate the natural habitat to any great extent do at least give the animals more for movement. Where the closed cages are found to be indispensable, they must be re-designed to avoid re-crowding and mitigate the discomfort of the animals. The public has also to be informed of the various aspect of wild life with the help of audio-visual units. Work along these lines were taken up during the Second Five-Year Plan and will be continued during the Third.

During the Second Plan the following items of improvement in the Zoological Gardens at Alipore were taken in hand:—

- (1) Construction of a Rhino shed and Enclosure.
- (2) Open-Air-Enclosure.
- (3) Children's Zoo.
- (4) Purchase of animals.

The Rhino shed and enclosure has been completed and Open-air-enclosure and the Children's Zoo were nearing completion at the end of the Second Five-Year Plan. Under the last scheme many valuable and important animals and birds were procured from foreign countries. Some rare indigenous species were also procured for exhibition and breeding in captivity. The major part of the Plan allocation has been utilised.

Cultivation of medicinal plants.

Cultivation of medicinal plants is an operation closely connected with forestry. Considerable progress has also been made in the cultivation of medicinal plants in the hill regions of West Bengal. Plants grown include *Atropa acuminata*, *Atropa belladonna*, *Ocimum kilimandcharicum*, *Rauwolfia serpentina*, *Mentha piperita*, *Digitalis purpurea* etc. About 105 acres of land have so far been brought under such cultivation at an expenditure of Rs. 1.55 lakhs. Attempts to grow *Mentha piperita* and *Ocimum kilimandcharicum* have been successful and *Digitalis purpurea* has also been acclimatized.

THIRD PLAN PROPOSALS.

The Third Plan proposals are in the make of continuation of the schemes.—on a wider scale—taken up during the earlier Plan periods, though certain new features have also been introduced. A short account of the different schemes is given below:—

(Details of Schemes)

Farm Forestry.

In order to save cowdung from burning as fuel it has been decided to establish small blocks of forests at farm land. It is hoped that in addition to making cowdung available as manure this serve materially to enhance the preparation of forest cover in the State.

Plantations.

The attempt to bridge the huge gap between the demand and supply of the forest products will continue and as much land as available will be brought under forest cover. Preference will be given to quicker growing species in place of the species in the class of quality timber. Processed wood will have to be introduced as an ancillary operation.

Consolidation.

The boundaries of the private forests which are vested in the Government as well as the rights and privileges of the people in these forests are still to be determined. Their management can be placed on a sound footing only when this work is completed. About 1,600 sq. miles of forest will be taken up for such consolidation work during the Plan period.

Forest Resources Survey.

The basis of any planning for scientific exploitation of forest products is a thorough knowledge of the growing stock of all. The large areas so long left as undeveloped due to their inaccessibility have great potentiality. But before any step for exploitation is taken, a thorough survey of the growing stock is essential.

Working Plans Organisations.

Working Plans are the basis of the forest management. 1600 sq. miles of forests are to be covered immediately by Working Plans.

Rehabilitation of degraded forests.

1600 sq. miles of private forests vested in Government are in urgent need of rehabilitation.

Nature Conservation.

Concrete steps are urgently necessary to prevent further depletion of wild life population and to create better living conditions for them.

Timber operation and Forest Utilisation.

Scarcity of timber can be removed to some extent by utilising processed wood like particle board etc. The adoption of such an important scheme in the public sector was overdue.

Training of staff.

Due to the increased tempo of work the requirement of trained personnel has gone up and the training facilities need a corresponding increase. It is proposed to expand the existing capacity at the Dow-Hill School for this purpose.

Forest Research and Institute.

Forest research indicates the pattern of management practices conforming to the present day needs. The research wing of the Forest Directorate is therefore to be expanded.

Communications.

The improvement of communication facilities in the inaccessible regions will be continued.

Buildings.

The programme of building houses for the staff has also to be continued at an accelerated pace.

Labour and other amenities.

Houses are also proposed to be built for the forest labourers as well as labour employed at the Siliguri Saw Mills.

Forest Publicity.

To highlight the importance of the need for development and protection of forests, a systematic propaganda through exhibitions, leaflets, brochures, documentary films, etc., will be undertaken.

Protection.

Protection is the backbone of forest management. It is proposed to enhance the mobility of the protective staff during the Third Plan.

Zoological Gardens

Under the Third Five-Year Plan the following items of work will be taken up in the Alipore Zoological Gardens.

- (1) Establishment of an Aquarium.
- (2) Remodelling of the Burdwan House.
- (3) Enlargement of the present enclosure with natural settings of rockery, trees etc. for cageless display of carnivores.
- (4) Audio-visual Exhibition Centres.
- (5) Development of the Lake Area.
- (6) Construction of staff quarters.
- (7) Construction of Open-Air-Enclosure for Bear tribe.
- (8) Building of a new Reptile House.
- (9) Publicity.
- (10) Purchase of animals.
- (11) Development of Animal Welfare-cum-Health Centre and Clinic etc.

Cultivation of Medicinal Plants.

Cultivation of medicinal and other economic plants will be further extended and attempts will be made to grow the species like Ipecac, Cardamom, Tung, Lycopodium and 17 others. The break-up of the expenditure is shown below:

Species to be grown	Allocation Rs. (Lakh)
(1) Ipecac	28.00
(2) Cardamom	2.47
(3) Tung	7.52
(4) Others	0.85

Forest planning has undergone some evolution over these years. The First Plan was confined to the afforestation of the waste land alone. While this work was continued, in the Second Plan a number of other schemes which conferred direct benefit to the forests were also undertaken. In the Third Plan equal stress has been laid on the project research, systematic

planning for industrial houses of wood and protection and publicity. In addition an altogether new scheme viz., Farm Forestry has been incorporated to cater for the needs of the growing industries.

Forestry, however, is a long term business and the full benefits of the different schemes can be derived only after their pursue over a number of years.

Soil Conservation.

An account of soil conservation work undertaken by the Forests Department during the Second Five-Year Plan has already been given. Irrigation and Waterways Department had also undertaken some soil conservation work in the hill areas of Darjeeling at a cost of Rs. 12,000 during 1960-61.

Third Plan proposals

The Forest Department will continue on a more extensive scale their work of soil conservation in the denuded forests of the Western Districts, which have vested in Government under the West Bengal Estates Acquisition Act.

The Irrigation and Waterways Department will also carry on this work in the hilly areas at an estimated cost of Rs. 73 lakhs as flood control measure.

The Department of Agriculture and Food Production have formulated schemes to bring during the Third Five-Year Plan fairly extensive areas under soil conservation work. A detailed survey has already been completed. A Soil Conservation Research Station in the laterite zone will be established on 369 acres of land and another on 50 acres in the hills. Pilot development projects on 1000 acre blocks will be undertaken in the districts where such work is necessary, so that the people may get enthused in such work. Demonstration will also be carried out on 1000 acres of land each year on the model of the pilot demonstration projects. Other demonstration units on 25 acre blocks will be opened at several centres in the catchment area of the tributaries to the Teesta. About 1,14,000 acres of waste and agricultural land are expected to be brought under soil conservation work. Under another scheme about 1,50,000 acres in blocks of 200, 300 and 400 acres will receive soil conservation treatment during the Plan period. This will later form the nucleus of soil conservation work in the Himalayan region.

(Details of Schemes)

Soil Conservation survey and land use planning.—The Soil conservation survey will be done by three parties each consisting of one soil conservation assistant, two surveyors, two chainmen, two flag staffmen and one night guard. A total of 40,000 acres of land will be surveyed by each party in a year. The total cost of the scheme is Rs. 4.82 lakh.

Soil conservation extension work on waste lands and agricultural lands.—Soil conservation work on 1,14,000 acres of waste lands and agricultural lands will be extended during the plan period at a total cost of Rs. 265.27 lakh.

Scheme for land reclamation and land development.—It is proposed to reclaim 1,13,640 acres of land for agricultural purposes.

Soil conservation research stations in laterite soil zone and on the hills.—

A soil conservation research station on 369 acres of land in the laterite soil zone and another such station of 50 acres in the hills at a total cost of Rs. 10.14 lakh will be established.

Soil conservation demonstration projects on the plains and on the hills.

(a) *Demonstration scheme in the plains.*—Pilot demonstration project on an 1,000 acre block will be taken up in the important districts where there is necessity for intensive soil conservation work so that the people may get enthused in the work. Demonstration will be carried out in 1,000 acres each year, on the model of the pilot demonstration project at a total cost of Rs. 4.99 lakh.

(b) *Soil conservation measures in the catchment of the tributaries of Teesta originating in Darjeeling hills.*—It is proposed to undertake demonstration work in several centres on blocks of 25 acres each. This will be undertaken mainly in the catchment areas of the tributaries of the river Teesta originating in the hills of Darjeeling district. As terracing on the hills will be costlier than that on the plains the expenditure will be higher. The total cost of the scheme will be Rs. 11.76 lakh

(b) *Demonstration work on soil conservation at 25 acres of land in the catchment areas of Lish, Gheesh, Chel, Neora, Relli in Darjeeling district.*—A total area of 1,500 acres will be worked out during the period in several blocks of 200, 300 and 400 acres during different years. This will become the nucleus for further soil conservation work in that region of the Himalayas. The total cost of the scheme will be Rs. 0.93 lakh.

Soil Conservation Schemes (I. & W. Dept.).—These schemes will stabilise slips in hill areas for abating floods in the Teesta and its principal tributaries. The provision will be accommodation in the Forest Sector of the Third Plan.

Soil conservation in Denuded Forests.—It is proposed to undertake soil conservation measures in eroded forest lands and in the ravine lands in the Southern Circle, and to stabilise the slips in the Northern Circle. The physical target aimed is 1,60,000 acres.

Improvement of Zoological gardens.—(i) *Construction of an Aquarium.*—The features of the Aquarium will include display cases and pools. Arrangements will be made for illumination, decoration and circulation of water drawn from suitable sources of water supply.

(ii) *Remodelling of the Burdwan House and extension of the Mymensingh Enclosure.*—The Burdwan House has been excellent for housing carnivora. But the open Air Enclosure for carnivora now under construction under the Second Plan will accommodate 4 pairs of the Greater Cats. It has therefore been proposed to provide more moving space to the remaining exhibits in the said House by reducing the number of cages, Mymensingh Enclosure it too small for exhibition purposes; so its enlargement is essential.

(iii) *Establishment of an Audiovisual Exhibition Centre.*—For successful running of the Children's Section in the Garden as well as for promotion of popular enthusiasm in wild life, it would be very useful to have recourse to audiovisual exhibition. A children's Zoo is already under construction.

(iv) *Development of Lake area and Drainage.*—There are two islands inside the Big Lake, which shelter large numbers of water birds including winter visitors as well as breeding residents. The islands have dwindled in size due to ripple scour over a long period, the trees thereof are falling into the lake for want of foot-hold space and other vegetation has been destroyed owing to the milling of many birds on too small an area. It is, therefore, necessary to extend the islands and restore trees and herbaceous vegetation thereon.

(v) *Staff Quarters, etc.*—At present there are structures for some of the Class IV employees scattered over the Garden. These are unseemly and dilapidated. Quarters have to be built for other such employees whose whole time attendance is essential for administration of the Garden.

(vi) *Open Air Enclosure for Bear tribe.*—Important species of Bear (Polar, Kodiak, Japanese and European Brown Bear) are at present exhibited in a scattered manner in small confined areas with bear and cages. It is necessary to modernise the system of housing these popular exhibits in a natural setting. The two existing enclosures are worn out and are too costly to repair or renovate.

(vii) *Reptile House.*—The building where reptiles are now housed is completely unfit for the purpose and in crowded days, the house is to be closed down to avoid untoward incidents. Further this house is just by the side of the area where the children's Zoo is under construction and the site now available is so small that many essential units have been kept in abeyance. In view of these circumstances construction of alternate accommodation for reptiles is essential.

(viii) *Publicity.*—It would be a matter of great educative value to the public if suitable coloured illustrations of the animals and their native habitats could be put up in their respective enclosures. The want of suitable, well-illustrated guide books (which are an essential feature of all important Zoos of the world), is being felt keenly by various sections of the public. The preparation of such guide books and other suitable publications e.g., picture postcards, illustrated albums, etc. etc. for purposes of publicity will also be undertaken.

(ix) *Purchase of animals.*—There can be no question that for keeping up popular interest in the Zoo as well as in the interest of scientific study, the institution requires constant additions of, foreign and indigenous fauna. During the Second Plan, too, provision for such purchases was considered essential. Purchases will also be made during the Third Plan period.

CHAPTER VIII

COMMUNITY DEVELOPMENT PROGRAMME

The Community Development Programme was launched by the Government of India in 1952 on a pilot basis with the object of improving the social and economic condition of the rural areas. As a new venture in all-round rural development through aided self-help, the programme has undergone several changes from time to time in its career as a result of experience gained in its working. The National Policy for this programme envisages that the entire rural area of the country would be covered by October 1963 with a net-work of development blocks to be started according to a phased programme laid down by the Government of India in consultation with the State Governments.

On the basis of the latest revision of the programme put into effect from the 1st April 1958, each development block will go through two distinct stages, designated as Stage I and Stage II, each of five years' duration, with budget allocations of Rs. 12 lakh and Rs. 5 lakh, respectively. It is also the accepted policy that all blocks to be allotted after the 1st April 1958, should pass through at least one year's pre-extension or preparatory stage before it is promoted to Stage I and that during this preparatory stage certain activities, primarily on the agricultural sector, should be promoted by the Block Development Officer and the agricultural staff posted in the Block for the purpose.

Expansion in coverage—Phasing and Over-all targets

It will thus appear that the C.D. programme which started early during the First Plan period will continue right through the Second and Third Plan periods and even beyond. Under this All-India Programme West Bengal had 43 blocks in operation at the end of the First Plan period and 190 such running blocks at the close of the Second. During the Third Plan period the remaining Blocks will be started gradually and according to a phased programme to make up a total of 341 blocks, covering the entire rural area of the State. The annual programme of starting blocks during the Third Plan period is indicated below:

Programme of starting blocks						
Year.						No.
1961-62	..	..	..	..	..	38
1962-63	..	..	..	..	..	44
1963-64	..	..	..	..	..	69
					Total ..	151
Blocks started up to the end of Second period						190
Grand total ..						341

The march of this multi-pronged programme in so far as physical targets in the shape of coverage both in terms of area and population are concerned is shown below:—

Ref. to time	No. of blocks	Coverage.					
		Area.		Village.		Population.	
		Area in sq. miles	Percentage of total rural area	No. of villages	Percentage of total villages to be covered	Population in lakhs	Percentage of total population to be covered
1	2	3	3	5	6	7	8
At end of First Plan period	43	5,450	17.7	6,131	17.5	39.0	18.4
At end of Second Plan period	190	19,502	57.5	22,191	60.4	127.2	56.2
October 1963	341	33,941	100	38,367	100	226.5	100

Expenditure and Performance during the Second Five-Year Plan

The expansion of the programme as reflected in the geographical coverage of the Community Development programme during the Second Plan period has already been indicated above.

The revised Second Plan provision for the programme was Rs. 12,84.14 lakh. Out of this amount, a total sum of Rs. 809.32 lakh, as detailed below has been spent:—

	(Rs. in lakh)
1956-57	... 165.53
1957-58	... 135.13
1958-59	... 165.75
1959-60	... 153.61
1960-61	... 189.30
Total	... 809.32

The balance of Rs. 474.82 lakh will be carried over to the Third Plan as spill-over. Administrative bottlenecks (since largely overcome), natural calamities in the shape of devastating floods and droughts alternating with each other and certain other factors beyond control, stood in the way of better results being achieved.

Estimates for the Third Plan

The following elements enter into the calculation of the Third Plan estimates of funds:—

- (a) Spill-over from the Second Plan;
- (b) Total expenditure during the 5 years of the Third Plan period on account of Stage I and Stage II Blocks on the basis of pro rata annual expenditure and number of such Blocks functioning from year to year.

As regards (b), it has been assumed in the case of Stage I Blocks that the Stage I period will run for 6 years, as one year's extension beyond the

normal five-year period is found to be necessary and is allowed by the Government of India. The annual pro rata expenditure for each such block has thus been assumed as Rs. 2 lakh, i.e., one-sixth of Rs. 12 lakh. In the case of Stage II blocks the annual pro rata expenditure per block has been taken to be Rs. 1 lakh which is one-fifth of the total five-year budget provision of Rs. 5 lakh. On this basis, the total demand for Stage I and Stage II blocks for the entire Third Plan period (leaving aside spill-over expenditure) comes to Rs. 18,96 lakh and Rs. 4,75 lakh, respectively. Thus the total Third Plan estimates including spill-over from the Second Plan work out at Rs. 28,45.82 lakh.

As against the aforesaid amount, worked out on the basis of physical targets the funds actually made available for the Community Development Programme in the sectorwise allocations of the State's Third Plan is Rs. 12,39 lakh. Accordingly, it has become necessary to confine the overall estimates to this ceiling by imposing proportionate cuts in the annual estimates to arrive at the last-mentioned figure.

Regarding Assets Created

In this State, the different components of the multi-purpose Community Development programme are planned and implemented by the respective subject-matter Departments of the Government within whose functional jurisdiction, the several activities constituting the programme fall. A further arrangement, which has been given effect to, is that all works, institutions and assets undertaken, established and created during the programme period would be continued, maintained and utilised by the departments concerned.

CHAPTER IX

CO-OPERATION

There is hardly any aspect of social life which the principles of co-operation cannot permeate and influence. In India where most of the productive units are small and scattered over a wide area the significance of co-operation is all the more marked inasmuch as it combines the initiative of the small-scale production with the advantages that go with larger undertakings. The medium of co-operative institutions has, therefore, been chosen to provide the supply and services that are required to sustain the multifarious developmental activities—specially in the agricultural sector.

Progress made during the Second Plan

The improved agricultural practices which have been discussed in the chapter on Agriculture require a liberal supply of working capital. A countrywide co-operative credit organisation has, therefore, been envisaged to provide credit to the cultivators. This form of co-operative organisation has functioned for a long time in the State, but as the old set-up was not considered adequate for the needs of a fast growing economy a comprehensive programme of reorganisation and extension was taken up.

At the top of this organisation stands the Provincial Bank. As a result of partition it found itself with a net deficit assessed at Rs. 1.38 crore on the basis of the balance-sheet for the year 1955-56. The State Government has given a grant of a little over Rs. 90 lakh, which together with another Rs. 48.25 lakh sanctioned by the Union Government has wiped off the entire deficit. The State Government has also purchased shares worth Rs. 15 lakh from this bank in addition to granting it out of the Plan Budget Rs. 24,588 as managerial subsidy. These measures have considerably improved its position.

Next below are the Central Banks and Banking Unions at the district level. In 1955-56 there were 44 such units. The contemplated reorganisation envisages their replacement by 19 strong Central Banks—3 for Midnapur, 2 each for 24-Parganas and Burdwan and 1 each for the remaining districts. Twelve of these had been established by the end of the Second Five-Year Plan. The pace has been somewhat slow because the banking concerns were a bit hesitant at first. Now that they have appreciated the benefits accruing from the reorganisation, the process is expected to be faster during the Third Five-Year Plan. Six of these reorganised banks received a lakh of rupees each as State Government's contribution to the share capital. In addition, the Central Banks were given Rs. 4,39,713 as subsidy towards cost of supervision and Rs. 1,65,982 on account of pay and allowances of their Executive Officers/Managers. Independent of the plan scheme the Government of India also helped the reorganisation of the Central Co-operative Banks by sanctioning a grant of Rs. 12.04 lakh and an interest-free loan of Rs. 28.73 lakh.

The policy of reorganising the Primary Agricultural Societies underwent some modification in course of execution. Originally it was decided to establish 1,100 large-sized Primary Credit Societies with the participation of State Government in their share capital at the rate of Rs. 10,000 per unit. These were to have received managerial subsidy on

a sliding scale for the first three years of their lives. Provision was also made for giving loans and grants for construction of 200 Storage Godowns to a few selected Societies. Five hundred and fourteen such large-sized Credit Societies were organised up to 1958-59. Two hundred and thirty of them received share capital contribution of a little over Rs. 9 lakh on a matching basis. One hundred and twenty of these large-sized Credit Societies were also given assistance at the rate of Rs. 10,000 each for construction of godowns.

The revised policy which came into operation in 1958-59 discontinues the establishment of large-sized Credit Societies and switching over to organising Service Co-operatives with a smaller area of coverage. It is believed that smaller Societies, which in addition to extending credit will render other services, will be of greater assistance to the people. As many as 2,466 of such Service Co-operatives had been established by the end of the Second Five-Year Plan. A total amount of Rs. 1,85,159 was given to these Service Co-operatives during the Second Plan period by way of managerial subsidy. Five hundred and eighty-two small-sized Credit Societies were also reorganised during the Second Plan period. The large-sized Credit Societies and the small-sized Credit Societies (other than Service Co-operatives) together received Rs. 13,10,240 as managerial subsidy.

The Primary Agricultural Societies are meant for extending short-term credit only. It was proposed to establish one Central Land Mortgage Bank and 5 Primary Land Mortgage Banks during the Second Plan in addition to the 9 already existing to provide long-term credit to the agricultural sector. Of these 3 Primary Land Mortgage Banks and a Central Land Mortgage Bank were established by the end of the Second Plan. The remaining two could not be set up for practical difficulties. The State Government advanced a loan of Rs. 10,75,000 to the Central Land Mortgage Bank for financing the Primary Land Mortgage Banks. It also received Rs. 5 lakh as the State's contribution to its share capital. The Central and the Primary Land Mortgage Banks received Rs. 4,81,322 from the State Government as managerial subsidy.

Two funds, namely, the State Agricultural Credit (Relief and Guarantee) Fund and the State Co-operative Development Fund were provided for during the Second Plan period. The object of the first is to make grants to Credit Co-operative Societies to help them to write off accumulated bad debts when these threaten the stability of the credit structure in the State. Grants may however be made only in cases where the accumulation is due to causes beyond the control of the Societies concerned. The second is to make available funds, required for co-operative publicity and propaganda, share capital contribution and grants, for the development of marketing, processing and other non-credit co-operatives. Rupees 1 lakh each had been provided to these funds by the end of the Second Five-Year Plan.

The Service Co-operatives are more versatile than pure Credit Societies, but there are some aspects of production for which special types of Co-operatives are needed. Co-operative Farming Societies are of such a special type and in view of the smallness of agricultural holdings in the State great stress is being laid upon organisation of joint farming societies. Originally it was the intention to organise 100 co-operative farming societies per year, but later the policy underwent a slight change. There is no longer any target, but it has been decided to set up two pilot projects

in each district selected for intensive work. Managers for such Farming Societies are trained at Government expense. Managerial subsidy is also provided for these Societies. There is in addition provision for advancing loans and grants for purchase of important implements such as pumping sets. Two hundred and forty-two of these Societies were organised during the Second Five-Year Plan. Rupees 1,47,000 as loan and Rs. 1,34,197 as grant were received by them. The State Government has appointed one Assistant Registrar and 15 Inspectors to look after this work.

For the purpose of boosting up production it is not enough to provide the cultivator with the factors of production which he cannot himself procure. It is also necessary to make sure that he gets an adequate return for his endeavour. As it happens, a disproportionate share of the product from land goes to the middlemen. Organisation of Agricultural Co-operative Marketing Societies is one of the ways in which middlemen's profits can be brought down to reasonable levels. The scheme for organising a network of such Marketing Societies envisaged the establishment of one Apex Marketing Society and 115 Primary Societies in the course of the Second Five-Year Plan. The Apex Society was to get Rs. 2.5 lakh and each of the Primary Societies Rs. 25,000 as State Government's contribution to the share capital. Provision was also made for setting up godowns attached to the Marketing Societies. The Apex Society and 115 of the Primary Societies were established by the end of the Second Five-Year Plan. One hundred and seven of these Societies received State assistance—75 per cent. of which was loan and 25 per cent. grant—for the construction of godowns at the rate of Rs. 20,000 each Primary Society. Thirty-seven of such godowns have been constructed. Thirty-eight out of 107 Societies referred to above also received additional financial assistance at the rate of Rs. 10,000 each for construction of branch godowns. The State Government paid Rs. 9,19,607 as its contribution to the share capital of the Marketing Societies on a matching basis and sanctioned managerial subsidy aggregating to Rs. 1,19,016. Four selected Marketing Societies received additional share capital at the rate of Rs. 5,000 each for setting up jute baling plants.

Two processing Societies have also been organised. They have received Rs. 12,500 and Rs. 2,500 as State's contribution to their share capital and managerial subsidy, respectively.

The developmental activities enumerated above require the services of a larger number of trained personnel for execution. There was only one Co-operative Training Institute in West Bengal at the time when the First Plan was initiated. The Second Plan made provision for setting up of 3 more Regional Training Institutes. All the three had been functioning at the end of the Second Plan period. Three hundred and ninety-four departmental employees and 1,000 institutional employees (subordinate personnel) were trained by these at a total expenditure of Rs. 6,52,531.

Under a scheme for training of non-officials (for example, Managers and Office bearers of the Co-operatives sponsored by the Co-operative Union), a total number of 17,041 persons underwent training. The total cost of such training for non-officials was Rs. 1,55,650.

The departmental set-up also needed strengthening at the same time. Four hundred and eighty-one officers, out of which 29 are gazetted, have been appointed. The cost involved for the period of the Second Plan was Rs. 11,87,217.

Third Plan Proposals

The Third Five-Year Plan envisages a total outlay of Rs. 2,45.35 lakh on Co-operation. The schemes which were undertaken during the Second Five-Year Plan will be continued, with slight modifications where necessary, during the Third Five-Year Plan as well. Some new schemes are also proposed to be taken up. These include development of Milk Co-operatives, Fishermen's Societies, Consumers' Co-operatives, etc., details of which will be found in the relevant chapter. Provision has also been made for setting a Co-operative Sugar Mill and Co-operative Cold Storage Units during the Third Plan period. Special emphasis will be laid on setting up Panchayat Level Service Co-operative Societies so that there may be more effective coverage of the rural areas. A special scheme for liquidation and revitalisation of moribund societies which have been operating as a drag on the co-operative movement has also been included in the Third Five-Year Plan. With all these steps taken, it is hoped that at the end of the Third Five-Year Plan the co-operative organisations will be in a better position to serve as the principal instrument of the social revolution now in progress.

(Details of Schemes)

Creation of Funds.—Two funds, viz., State Agricultural (Relief and Guarantee) Fund and State Co-operative Development Fund were created during Second Plan period. It is proposed to contribute Rs. 1 lakh to the former and Rs. 2 lakh to the latter during the Third Plan period.

Expansion of Rural Credit—Short-term and Medium-term.—

(a) Re-organisation of Central Banks, (b) Subsidy to Apex Co-operative Bank.—The name of an analogous scheme under the Second Plan was "Re-organisation of Central Banks." By amalgamation and merger of the existing Central Banks, 12 Central Banks have already been re-organised and 7 more are expected to be re-organised shortly under the Third Plan, resulting in the emergence of 19 Central Banks ultimately in the State. For effective development of these re-organised Central Banks, 30 branch offices will also be established under these re-organised Central Banks in different areas of the State before the end of the Third Plan period.

By the end of the Third Plan, the loan target for short-term credit will be Rs. 12 crore and that for medium-term credit Rs. 3 crore, thus reaching a total of Rs. 15 crore. This target includes loans for production and marketing also. It is proposed to subsidise the pay of Central Bank Managers, Branch Managers, certain indoor staff of these institutions and Supervisors already employed under the Second Plan and to be employed under the Third Plan. Three hundred eighty-seven supervisors have already been appointed and another 43 will be appointed in course of the Third Plan. In addition, the pay of the Secretary and 5 Inspectors of the West Bengal Provincial Co-operative Bank will be subsidised on a sliding scale. Details are shown below:—

		(Rs. in lakhs).
(a) Subsidy for the Managers of 19 Central Banks	..	1.30
(b) Subsidy for the Managers of 30 Branches	.. ..	1.35
(c) Managerial subsidy for certain indoor staff of Central Banks and Branch (62 heads).		1.49
(d) Subsidy for 367 old and 43 new Supervisors	..	10.32
(e) Managerial subsidy for the West Bengal Provincial Co-operative Bank Ltd.		0.20
Total	..	<hr/> 14.66 <hr/>

Besides, a provision of Rs. 1.90 lakh has been made for payment of outright grants to the 19 Central Co-operative Banks to enable them to create special bad debt reserve against the short-term agricultural loans that they will issue in a year in excess of their previous year's investment in short-term agricultural loan.

Organisation of Primary Panchayet-Level Service Co-operative Societies.—The name of an analogous scheme in the Second Plan was "Re-organisation of Primary Credit Societies" for which there will be some spill-over expenditure in the Third Plan period also. During the Second Plan, out of the target of 1,100 large-sized Credit Societies, 514 Societies were organised. During the last 2 years of the Second Plan period, the target of organisation of Service Co-operatives was 1,000 and 3,000, respectively. With a view to covering the whole of the State, it is proposed to organise 6,000 Service Co-operatives at Panchayet level during the Third Plan. Of these 6,000 Societies, 1,500 Societies will be newly organised and 4,500 Societies will be reorganised. The phasing is shown below:

	I.	II.	III.	V.	VI.
Re-organisation	1,000	1,500	2,000	Nil	Nil
New organisation	500	500	500	Nil	Nil

With a view to ensuring integrity and mutuality amongst members, the size of these Societies will be moderate but not of course at the cost of economic viability. Provision has been made in the scheme under the Third Plan to subsidise all these 6,000 Service Co-operatives for managerial costs at Rs. 900 per Society spread over 5 years. The break-up will be Rs. 300 plus Rs. 300 plus Rs. 100 plus Rs. 100 plus Rs. 100.

Besides managerial subsidy, an amount of Rs. 6.21 lakh will be given to the primary Credit Societies as outright grant in order to enable them to create special Bad Debt Reserve against the investment in short-term agricultural credit in a year in excess of previous year's investment.

Development of Consumers' Co-operative Societies.—It is a new scheme. During the Third Plan, one Wholesale Society will be set up in the second year. Along with it 60 Primary Societies will also be set up and assisted. The phasing of organisation is shown below:

1st year	21 societies.
2nd year	19 societies.
3rd year	20 societies.
4th year	Nil.
5th year	Nil.

Organisation of Co-operative Sugar Mill.—It is proposed to set up 1 sugar mill of sugarcane growers during the Third Plan period. The mill will be set up during the second year of the Plan. Taking into account all relevant aspects including the quantity, quality of the cane and economic viability of the proposed Unit, it is estimated however that the cost of a Unit of 1,250 tons crushing capacity will be of the order of Rs. 1.40 to 1.45 lakh. The sugarmill will be provided with share capital contribution of Rs. 25 lakh. The total outlay under this scheme will be Rs. 25 lakh.

Creation of Administrative, Supervisory and Office Personnel.—In place of an analogous scheme of the Second Plan regarding "Supervisory Staff", this scheme has been included in the Third Plan. The costing under it represents new items of expenditure exclusive of the committed expenditure.

on account of staff sanctioned in the Second Plan period. A provision of Rs. 16.45 lakh has been made under the scheme. The provision is intended for creating 3 posts of gazetted officers including 1 Additional Registrar of Co-operative Societies at headquarters. In addition, supporting non-gazetted staff at headquarters and for the Pilot Projects of Co-operative Farming in the districts will be appointed. For supervision and audit of credit, marketing, consumers' co-operatives and for other miscellaneous works, 10 Inspectors and 100 Auditors will also be appointed.

Supply of Long-term Credit.—A target of Rs. 2 crore is envisaged by the end of the Third Plan by way of long-term credit. The phasing of long-term credit operations under the Third Plan will be Rs. 30 lakh in the first year, Rs. 35 lakh in the second year, Rs. 40 lakh in the third year, Rs. 45 lakh in the fourth year and Rs. 50 lakh in the fifth year.

Development of Agricultural Marketing Societies.—During the Second Plan, an analogous scheme was brought into existence under the name "Agricultural Marketing Co-operatives". As per target one Apex Co-operative Agricultural Marketing Society has been set up at the State level and out of the target of 115 Primary Marketing Societies, 113 Societies have been set up under the Second Plan. Under the Third Plan it is proposed to set up 35 Primary Marketing Societies, the break-up of which is shown below:

1st year	..	..	..	..	..	10 Societies.
2nd year	..	..	..	..	..	10 Societies.
3rd year	..	..	..	..	..	8 Societies.
4th year	..	..	..	..	..	6 Societies.
5th year	..	..	..	..	..	1 Society.

As large-scale development of business is envisaged, provision has been made for construction of 100 rural godowns in selected places in addition to the godowns to be constructed by the Primary Marketing Co-operatives.

Establishment of Co-operative Cold Storage.—In addition to 1 Co-operative Cold Storage set up in the Burdwan district before the Second Plan period, 1 more Co-operative Cold Storage will be set up during the second year of the Third Plan in a suitable area of the State. The storage will have a capacity of 20,000 mds. For setting up the Storage, assistance will be provided by way of a long-term capital loan of Rs. 4 lakh.

The total outlay under the scheme will be Rs. 4 lakh.

Development of Processing Societies.—Though not originally included in the Second Plan schemes, an analogous scheme was approved to be implemented during 1960-61 of which there will, however, be no spill-over expenditure in the Third Plan period. During the Third Plan, 2 Co-operative Rice Mills will be set up. One will be set up during the first year and the other during the second year. Four Fruit Canning Units will also be set up during the Plan in suitable regions of the State. Assistance will be given to selected Marketing Societies for setting up 4 Fertiliser Mixing Units. Assistance will also be given to selected Marketing Societies for setting up 25 Paddy Hullers.

Co-operative Farming.—Under the Second Plan, there was an analogous scheme under the same name and provision had been made to assist selected Farming Societies by granting them Rs. 500 annually by way of managerial subsidy and Rs. 3,000 by way of capital loan. About 300 Farming Societies

were organised during the Second Plan period. Under the Third Plan the scheme has reoriented according to the latest policy decision of the Government of India in this respect for more effective organisation of the farmers and farming on co-operative lines. It is proposed to set up 16 Pilot Projects of Co-operative Farming in selected development blocks in the State, each project involving organisation of 10 Farming Societies. One hundred and sixty societies are expected to be set up in all these 16 Pilot Project Development Blocks under the Third Plan. Provision has been made in the scheme to assist all these societies in various ways. During the 1st year 25 societies will be set up in 3 Pilot Project areas. In the second year 35 societies will be set up, in the third year 40 societies and 30 societies in each of the last two years will be set up. The total costs under the Scheme will come to Rs. 25.14 lakh.

Organisation of Non-official Training Agencies.—By the end of the Second Plan, 16 peripatetic units have been functioning in the districts and are being utilised for training of the members of societies. For covering all the Assistant Registrars' ranges with at least one such touring unit in each of the ranges, 4 more peripatetic units will be set up during the first year thereby bringing the total number of such units to 20. Provision has also been made under the scheme for an early grant to the West Bengal Co-operative Union for arranging publicity, production of literature, organisation of Seminars, award of prizes.

Expansion of Co-operative Training and Education.—Provision was made during the Second Plan for training of departmental staff and of office-bearers of Co-operative Institutions under an analogous scheme of the same name. The existing 3 Training Institutions will be retained during the Third Plan together with the Institute at Uttarpara in the district of Hooghly existing from before the Second Plan period. They are expected to provide the necessary training of co-operative personnel—both departmental and institutional. It is contemplated to take necessary measures which would result in the utilisation of full capacity of all these four Institutes under the Third Plan.

CHAPTER X

PANCHAYATS

Democracy is the basis of planning in India. One of its principal aims is therefore to build up and develop democratic institutions down to the lowest level. The West Bengal Panchayats Act, 1957, has laid down the lines along which this work is to be taken up.

Broadly, the scheme of operation is as follows: Each unit of the Panchayati system consists of one Anchal Panchayat and its constituent Gram Panchayats. The area of a Gram Panchayat is normally a revenue mouza with an approximate population of one thousand. The members of such a Panchayat, varying from 9 to 15 in number according to size of the Panchayat, are elected from among the persons enrolled as voters in the Electoral Roll of the State Legislative Assembly pertaining to the area. On an average, there is one member in the Gram Panchayat for every 100 voters on the Assembly Rolls.

Eight to ten contiguous Gram Panchayats with a total population of about ten thousand constitute an Anchal Panchayat. Each of the constituent Gram Panchayat elects 2 to 3 members to the Anchal Panchayat at the rate of one member for every 250 voters on the Electoral Rolls of the locality.

To each Anchal Panchayat Government make an annual lump grant of Rs. 1,000 for development work and also make contributions equivalent to the pay and allowance of its Secretary and 50 per cent. of the salaries of the rural Police maintained by it. When any department of Government entrusts to a Panchayat the execution of any village level project, the money sanctioned by it for the project is made over to the panchayats. The money provided for in the Block budget for local development works will also be made over to the Panchayats for execution of the works.

Progress during the Second Plan

Work in connection with the establishment of Gram and Anchal Panchayats started during the Second Five-Year Plan. The following figures will indicate the progress achieved within the period of the Second Plan.

Number of Gram Panchayats established	..	..	4,556
Number of Anchal Panchayats established	..	..	714
Number of villages covered	..	..	11,601
The population covered	..	..	56 lakh.
Grants paid	..	..	Rs. 22 lakhs.

The population so far covered by these Panchayats is about 28 per cent. of the entire rural population of West Bengal.

Third Plan Proposals

During 1961-62, 1,473 Gram Panchayats and 231 Anchal Panchayats have been set up. About 1/3 of this State has been covered so far by Panchayats set up in 105 Blocks. Rupees 1.97 crore has been provided for the development of Panchayats during the course of the Third Five-Year Plan. Out of this, Rs. 53 lakh will be utilised on Panchayat ghars and training programmes and the rest will go to the Anchal Panchayats in the form of lump grants. The present target is to establish 20,000 Gram Panchayats and 3,300 Anchal Panchayats within 1963-64 covering the entire State during the plan period.

CHAPTER XI

IRRIGATION AND POWER

Irrigation is the largest single factor which can change the face of West Bengal by revolutionising its agriculture. Not only will it ensure a steady yield from land which has hitherto been subject to recurrent drought and help bring more land into cultivation, but it will also change the entire cropping pattern enabling the cultivator to grow a larger number of crops on the same plot in a year, and obtain a higher yield from each by employing more of labour, fertilizer and improved technique than he is used to at present.

The problem of getting water to the agricultural land has to be tackled at several levels. There are the large and not so large monsoon fed rivers which after each cloudburst in their upper catchment areas suddenly turn into mad rushing torrents and carry their huge load of water uselessly into the sea, while the land on their banks may be withering for want of rain. These have to be controlled by dams and weirs and their water channelled into fields of the cultivators. The smaller streams too can be dealt with much in the same manner and though the contribution made by each such stream may not be large, their total effect is by no means negligible. The stored waters which remain over after the demands of the Kharif crops are met, may be utilised later in the season for growing Rabi crops. Next in importance are the big swamps of the deltaic region and the derelict channels of dead or dying rivers, the stagnant waters of which can help grow a number of crops over extensive areas in the dry season, if suitable arrangements for lift irrigation can be made. Then there are a large number of irrigation tanks mostly in moribund condition in the drier district which if resuscitated can serve as an insurance against the October drought. Lastly there are vast underground water resources, which as yet remain largely untapped. Yet it should not be difficult to exploit these resources by sinking irrigation tubewells in areas where the prospects are favourable.

Flood control and drainage naturally link up with irrigation schemes. These two are also potent factors in pushing up the yield from agriculture and as the problem of too much water at certain places can be solved by diverting it to where there is too little, such schemes have to be integrated with the irrigation schemes.

The rushing waters of the torrential rivers are also an important source of Hydro-electric power. Wherever conditions are favourable, power schemes are being integrated with river-valley projects.

IRRIGATION

Progress during the Second Plan

An outlay of Rs. 8,92.58 lakh was provided in the Irrigation Sector of the State Second Five-Year Plan. To this was added a further sum of Rs. 2.73 lakh of the Central Plan for execution of flood control schemes. The total plan outlay in the Irrigation Sector thus amounted to Rs. 11,65.58 lakh against which the expenditure rose to Rs. 12,29.20 lakh including Rs. 2,24.75 lakh on flood control schemes. The Second Plan outlay for the

Durgapur Barrage and Irrigation Project of the Damodar Valley Corporation under the Central Plan was Rs. 9,43 lakh against which the expenditure was of the order of Rs. 8,27 lakh. For DVC's flood control schemes in the West Bengal, there was an allocation of Rs. 3,76 lakh against which a sum of about Rs. 2,96 lakh was spent.

Three major and one medium Irrigation Schemes were under execution during the Second Five-Year Plan. A short account of progress made and benefits given by each during the Second Plan period is given below:—

(a) **Major and medium irrigation projects.**—(i) *Durgapur Barrage and Irrigation Project of the Damodar Valley Corporation.*—The Project was to have been completed during the Second Five-Year Plan. But this was not possible, as extensive damages caused to the canal system by the devastating floods of 1959 retarded progress of construction. The target for irrigation under this project is 9.73 lakh acres of land inclusive of 2.20 lakh acres of the old Damodar and Eden Canal systems. About 5.53 lakh acres of land, including the Old Damodar and Eden Canal areas received irrigation during the Kharif season of 1960-61.

(ii) *Mayurakshi Reservoir Project [estimated cost Rs. 20.16 crore (revised)].*—The project was completed, as originally planned. Some extension and improvement work were taken up to facilitate maximum utilisation of the irrigation potential created. The revised target of irrigation under this project is 5.60 lakh acres. The total area irrigated during the Kharif season of 1960-61 was 4.62 lakh acres as against 2.09 lakh acres irrigated during the First Plan period.

(iii) *Kangsabati Reservoir Project.*—This is a Second Plan Project, estimated to cost Rs. 25.26 crore, out of which about Rs. 4.91 crore was spent up to the end of 1960-61. The barrage across the Silabati and a major portion of the Left Bank Feeder Canal, Khatra Main Canal and Garbeta Branch Canal were completed. Excavation of spill-way and head regulator was nearly completed. Excavation of distributaries was also taken in hand. About 45 per cent. of the major dam over the Kangsabati Valley was completed, and 62 canal structures were under construction. About 2,000 acres of land received free irrigation during the Kharif season of 1960-61 against the ultimate irrigation target of 8 lakh acres.

(b) **Medium Irrigation Schemes.**—The Karatowa Irrigation Scheme was the only medium irrigation scheme undertaken during the Second Plan at an estimated cost of Rs. 46.38 lakh out of which a sum of Rs. 21.18 lakh was spent up to 1960-61. 47 per cent. of earth work, 8.62 per cent. of land acquisition work and 23 per cent. of work relating to construction of building were completed. It will bring under irrigation 13,800 acres of land after its completion.

Minor Irrigation.—There was an allocation of Rs. 76.00 lakh in the Agriculture Sector of the State Second Five-Year Plan for 4 minor irrigation schemes, 40 minor drainage schemes of which 2 minor irrigation schemes and 32 minor drainage schemes were physically completed and the rest were in progress. The expenditure incurred up to 1960-61 on these schemes was about Rs. 47.42 lakh and the area benefited was 2,000 acres under minor irrigation schemes and 1.50 lakh acres under minor drainage schemes against the plan target of 180 lakh acres.

Minor irrigation in C. D. areas—Out of 31 drainage schemes and 10 irrigation schemes taken in hand at an estimated total cost of Rs. 46.53 lakh, 20 drainage schemes were physically completed during the Second Plan period. The total area benefited by these schemes was 93,000 acres against the target of 1.42 lakh acres.

As regards medium drainage schemes, two new schemes, viz. (i) Amla Drainage Scheme in Howrah district estimated to cost Rs. 23.30 lakh, and (ii) re-excavation of Etaberia and Kalabaria Khal in Midnapore district, estimated to cost Rs. 12.38 lakh together with two continuing schemes of the First Plan, viz. (iii) Sonarpur-Arapanch-Matla Drainage Scheme—Part II in the district of 24-Parganas estimated to cost Rs. 73 lakh and (iv) Bagjola-Ghuni-Jatragachi Drainage Scheme in the district of 24-Parganas, estimated to cost Rs. 1.04 lakh, were under execution during the Second Plan period. All the schemes were completed, and an area of 1.50 lakh acres of lands was thereby rendered fit for better agricultural use.

A sum of Rs. 2,24.75 lakh was spent on 74 flood control schemes in the Central Sector, including a few drainage schemes, of which 48 schemes were completed during the Second Plan period and 19 were in progress. The completed works protected about 1.61 lakh acres of land, urban and rural, mainly in North Bengal. As advised by the West Bengal Flood Enquiry Committee, 1959, two survey and investigation schemes costing Rs. 15 lakh were also taken in hand for collection of data required for formulation of flood control works in some flood affected parts of South-West Bengal.

The irrigation potential created and utilised by major, medium and minor irrigation schemes are indicated below:—

Major and Medium Irrigation Schemes

Year	Potential (area in acres)	Utilisation (area in acres)	(Area in acres).	
			Minor Irrigation Schemes.	
			Potential (area in acres)	Utilisation (area in acres)
By end of 1955-56	6,54,000	5,57,000	67,000	44,000
By end of 1960-61	16,53,000	11,34,000	69,000	46,000

Areas benefited by medium and minor drainage schemes are—

Year	Medium Drainage Schemes.		Minor Drainage Scheme.
	Benefited area (in acres.)	Benefited area (in acres.)	Benefited area (in acres.)
By end of 1955-56	68,000		4,15,000
By end of 1960-61	2,18,000		6,58,000

Third Plan proposals

The Third Plan will continue the work carried over from the Second Plan and take up a few more new schemes along the lines indicated above.

The outlay for Major and Medium Irrigation works will be Rs. 16,35.52 lakh including Rs. 3.21 lakh for one Centrally-sponsored Scheme under the

State Plan ceiling of Rs. 2,93 crore. The break-up of the amount is indicated below:—

	(Rs. in lakh)
(a) Schemes carried over from Second Plan	
Extension and improvement works of the Mayurakshi Project ..	210.00
Kangsabati Reservoir Project	807.00
Two Medium Irrigation Schemes	39.97
Four completed irrigation schemes of First Five-Year Plan ..	1.26
Two Investigation Schemes	6.58
Two Miscellaneous Schemes	1.55
One Centrally-sponsored research scheme	3.21
Six Medium drainage Schemes	23.50
Twenty Flood Control Schemes	71.83
Three investigation schemes under flood control programme ..	12.63
	11,77.53
(b) New Schemes	
Two medium irrigation schemes estimated to cost Rs. 95.29 lakh ..	67.75
Eight Schemes of administrative importance	35.21
One survey and investigation scheme for preparation of new irrigation and drainage schemes, estimated to cost Rs. 8.00 lakh.	8.00
Eleven medium drainage and anti-water-logging schemes of agricultural importance, estimated to cost Rs. 4,95.11 lakhs.	188.00
Twenty-two Flood Control and anti-erosion schemes, estimated to cost Rs. 2,71.76 lakhs.	148.53
Seven Survey and Investigation Schemes in connection with flood control programme.	10.50
	457.99
Total (a & b) ..	16,35.52

Tentative estimates of the new areas likely to be benefited during the Third Plan by the major and medium schemes included within the present framework are furnished below:—

(a) New area likely to be benefited by the major and medium irrigation schemes—

	Acres
Mayurakshi Project	78,000
Kangsabati Project	2,50,000
Karatoa Irrigation	13,800
Saharajore Irrigation	10,000
Hinglow Irrigation	25,000
Bandhu River Irrigation	7,100
	3,83,900

(b) The net irrigable area of the State under major and medium irrigation schemes will come up to about 20.13 lakh acres by the end of the Third Plan, including further potential of 54,000 acres to be created during the Third Plan under the DVC Project, as against the potential of 16.53 lakh acres, including 6.99 lakh acres created under the DVC Project up to the end of the Second Plan.

(c) Area to be benefited by the medium drainage schemes—

	Acres
Re-excavation of Tarajuli, Amodar and Hurhura Khal ..	10,000
Gobindapur Itakhola Scheme	3,800
Malior Beel Scheme	9,400
Moyna Basin Scheme	5,000
Champta Beel Scheme	5,000
Sealdahgong Basin	20,000
Nowi Basin	9,000
	62,200

Minor Irrigation.—In addition to the above, the Irrigation and Waterways Department will execute minor irrigation schemes, costing over Rs. 1 lakh and up to Rs. 10 lakh each, and minor drainage schemes, costing above Rs. 50,000 each. About Rs. 2,43.05 lakh, as detailed below, will be required during the Third Plan for execution of continuing and new schemes of this category.

	(Rs. in lakh)
Continuing minor irrigation and drainage schemes outside C. D. Blocks (30 schemes including 7 schemes in Purulia district).	73.53
Continuing minor irrigation and drainage schemes in C. D. Block areas ..	25.00
New minor irrigation and drainage schemes inside and outside C. D. Block areas.	1,44.52
	2,43.05

The bulk of the minor and small irrigation schemes during the Third Five-Year Plan will be executed by the Department of Agriculture and Food Production. The main emphasis will be on sinking deep tube-wells for perennial irrigation. Detailed investigations were carried out during the Second Plan to estimate the potentialities of such irrigation and the results have been most encouraging. Already a few of these tube-wells have been put into commission. To start with, it is proposed to sink 1,300 tube-wells, which together with 650 high powered pump to draw water from rivers, will command a total area of 5,20,000 acres.

Low-cost small irrigation schemes will be continued. Boring of shallow tube-wells, digging surface wells, setting up of power pumps and persian wheels, excavation of small irrigation and drainage channels, building of catchment bundhs, provision of sluice gates, etc., will be undertaken on an extensive scale. A programme of tank improvement under the provision of the Tank Improvement Act will also be taken up to resuscitate 2,800 derelict irrigation tanks of the drier districts. These tanks are expected to benefit 1,40,000 acres of land.

As a result of experiments conducted during the Second Five-Year Plan it has been found that where the sub-soil water level is not too low, bullock-driven pumps may be used for drawing water for irrigation purposes. The cost of each such pump is fairly low. Arrangements have been made to manufacture these pumps for distribution among cultivators.

The break-up of anticipated expenditure on these schemes is shown below.

	Third Plan Provision, 1961-66.
	(Rs. in lakh)
Minor Irrigation—	
1. Deep Tube-well Irrigation	7,13.92
2. Small Irrigation	91.00
3. Tank Irrigation	1,38.00
4. Minor Drainage Schemes	17.08
5. Nine Minor Irrigation Schemes including 6 schemes in Purulia district	20.00
6. Lift Irrigation from rivers and beels	3,98.00
7. Electricity Power	2,44.00
8. Minor Irrigation Schemes (New)	5.00
9. Minor Drainage Schemes (New)	5.00
Total	16,32.00

(Details of Schemes)

IRRIGATION PROJECTS

Mayurakshi Reservoir Project.—This is mainly an irrigation project, though hydel power is also generated as an additional benefit. It has provided a dam namely “Canada Dam” situated in the Santal Parganas in Bihar, a barrage namely “Tilpara Barrage” situated in the district of Birbhum in West Bengal. The canal system under this project spreads over the districts of Birbhum, Murshidabad and part of Burdwan district. This project carried over from the First Plan to the Second Plan has been completed as originally planned. Some extension and improvement works will be carried out during the Third Plan period in order to facilitate maximum utilisation of the irrigation potential created at the head works. The Third Plan provision also includes the outstanding land acquisition charges paid in Bihar, which have not yet been adjusted.

Kangsabati Reservoir Project.—This is a project carried over from the Second Plan. It will assure water for irrigation of 8 lakh acres of lands under Kharif crops and 1.5 lakh acres under Rabi crops in the districts of Bankura, Midnapur and part of Hooghly district. It will begin to irrigate some areas in 1961-62. It also envisages limited flood reserve in the dams to be constructed across the river Kangsabati and its tributary river Kumari.

Karatowa-Talma Irrigation Scheme.—This scheme provides for construction of a barrage across the river Karatowa at a place 6 miles to the West of Jalpaiguri town in order to irrigate 13,800 acres of lands under Kharif crops and 8,000 acres under Rabi crops through canals on both sides of the river. It is likely to be completed within a couple of years.

Saharajore Irrigation Scheme.—This scheme covers the area lying between Bagmundi hills on the south and the Kangsabati river on the north in P.S. Jhalda, district Purulia. It provides for construction of a dam with a saddle spillway and conduct pipe head regulator with one main canal about $4\frac{1}{2}$ miles in length which will feed a number of distributaries. The gross commanded area is about 25.8 sq. miles out of which 10,000 acres are cultivable. Besides irrigating this entire cultivable area of 10,000 acres, it may also irrigate about 2,000 acres of land for Rabi cultivation except in years of extreme draught.

It will be taken up as soon as its implementation is approved by the Planning Commission with whom the matter is in correspondence for about a year.

Research on basic and fundamental problems relating to River Valley Projects.—Research work is being done in the River Research Institute, West Bengal. This scheme will be entirely financed by the Government of India on grant-in-aid basis.

Rajar Bundh, Suvankar, Berai Canal Schemes and Jhargram Irrigation Project.—There are completed schemes of the First Five-Year Plan. The amount represents outstanding land acquisition charges.

Outlay on schemes from transferred territories— survey and investigation in Purulia district.—This scheme will furnish the essential data required for preparation of new irrigation schemes in Purulia district only.

Hinglow Irrigation Scheme in the district of Birbhum.—It envisages the impounding of a reservoir on the Hinglow river by constructing an earthen dam with masonry spillway. It will irrigate 38,000 acres of lands between the Ajoy and Sal rivers in the district of Birbhum. The head works will be located near village Islampur, 12 miles west of Dubrajpur Railway Station in Birbhum district. It is expected to bring under irrigation about 20,000 acres towards the end of the Third Plan.

Bandhu river Irrigation Scheme in Purulia district.—This scheme provides for construction of earthen dam and dyke with masonry spillway across the river Bandhu in Purulia district. It will irrigate about 7,100 acres of lands producing Kharif crops in P.S. Arsha, district Purulia.

Equipment of Central Design Office and Library.—This scheme provides for setting up a Central organisation with modern survey and design equipment which should be in charge of design work of the Irrigation and Waterways Directorate. A Central Irrigation Library will also be an integral part of the Design Office.

Training of Irrigation Engineers in Selected River Valley Projects.—This scheme provides for higher training of engineers and research officers of the Irrigation and Waterways Directorate in design and construction of large irrigation projects and in research works in hydrological institutions in India and abroad.

Development of River Research Institute of West Bengal—3rd Phase.—This scheme is intended to bring the institute up to the standard of a modern hydraulic laboratory. Work on the second phase is likely to be completed by the end of 1960-61. The work on the third phase will be taken up in 1961-62.

Construction of office buildings and quarters for engineers and staff under North Bengal Circle, Construction of buildings for shifting headquarters of East Sundarban Division from Calcutta to Hasnabad, Construction of building for shifting of headquarters of West Sundarban Division from Calcutta to Kakdwip, Residential quarters of officers and staff of Irrigation and Waterways Department in Sundarbans, Construction of buildings for shifting of headquarters of Etamogra Irrigation Subdivision to Bhagawanpur, Converting residence of Executive Engineer, West Midnapore Division into combined quarters of West Midnapore and East Midnapore Divisions and Construction of Inspection bungalows in North Bengal.—These are schemes of administrative importance.

Survey and investigation for preparation of irrigation, navigation and drainage schemes.—This provision is on account of survey and investigation required for preparation of new irrigation and drainage schemes in West Bengal other than the district of Purulia.

Investigation and model experiment in connection with the Ganga Barrage Project.—Investigation and model experiment are being conducted under the supervision of the Government of India. The provision represents West Bengal's share of the Third Plan.

Drainage and Anti-water-logging Schemes

Sonarpur-Arapanch-Matla Drainage Scheme—Part II.—This is a completed scheme of the First Five-Year Plan. The amount represents outstanding land acquisition charges. It has reclaimed about 5,491 acres and benefited a further agricultural area of 17,548 acres of land.

Bagjola-Chuni-Jatragachi Drainage Scheme.—This scheme consisting of 51.5 miles of channels, 2 major sluices, 14 regulators and 49 bridges is practically completed. The amount represents outstanding land acquisition charges. It has reclaimed about 21,020 acres of land and benefited a further area of 24,228 acres. It has provided drainage of an area of about 116 sq. miles in haroa, Bhangore, Rajarhat, Dum Dum and Baranagar P.S. in 24-Parganas district, out of which about 17 sq. miles is urban in character.

Amta Basin Drainage Scheme.—This is a Second Plan Scheme providing for re-excavation of Purana Khal and Nabin Babu's Khal with two branch channels namely Kumarchak Khal and Kawarchak Khal. There is also provision for foot bridges, cart bridges, etc. The area benefited is 21,450 acres. More than 70 per cent. of the work has been completed.

Bhuri-Shyamsundar Beel Drainage Scheme in the district of Burdwan.—The scheme is under preparation.

Re-excavation of the streams of Tarajuli, Amodar, Hurhura Khals in Hooghly district.—This scheme will benefit 20,000 acres of lands yielding 6,666 tons of crops as increased production.

Covindapur-Itakhola Scheme in Malda district.—The scheme is under preparation.

Malior Beel Drainage Scheme in Malda district.—This is an irrigation-cum-drainage scheme. It is under investigation.

Mayna Basin Drainage Scheme. It will provide for drainage of an area of about 37 sq. miles in Moyna Basin, P.S. Moyna, district Midnapore.

Contai Basin Drainage Scheme.—The scheme is under investigation.

Re-excavation of a Khal from Champta Beel and re-excavation of Guruli Khal in Ranaghat subdivision, Nadia district.—The scheme is under preparation.

Sealdagong Basin Drainage Scheme in 24-Parganas district.—This scheme provides for remodelling the whole of the upper reach of the Sealdagong river, about 23 miles in length, and excavation of a number of branch channels from the different low lying beel area leading their discharges into the main canal of Sealdagong and through the same ultimately into the river Kultigong. It will drain an area of about 169 sq. miles. It is expected to benefit about 44,442 acres of lands fully and 15,437 acres partially producing an additional yield of about 34,141 tons of foodgrains annually.

Churial Basin Drainage Scheme in the district of 24-Parganas.—This scheme provides for drainage of Churial Basin comprising 39.81 sq. miles of rural area, 6.53 sq. miles of Behala Municipality area, 3.16 sq. miles of Budge Budge Municipal area. About 340 acres of land will be fully benefited and 19,520 acres partially benefited.

Harahatuganj and Soadighi-Gangakhali Khal Drainage Schemes.—These are completed schemes of the First Five-Year Plan. The amount represents outstanding land acquisition charges.

Canalising the Lower Damodar from Bagerhana up to the Hooghly in Howrah district.—This is a flood-control-cum-drainage scheme. It will protect a vast area from occasional inundation.

Nowi Basin Drainage Scheme in the district of 24-Parganas.—This scheme provides for remodelling the Nowi Khal from its source in Basti Beel in Barrackpore subdivision its outfall on Harongong measuring about 18.4 sq. miles. It will drain an area of 82 sq. miles in Naihati, Amdanga and Baraset police-stations in the district of 24-Parganas. It is expected to benefit 3,200 acres of land fully and 14,000 acres partially producing increased yield of 6,800 tons of foodgrains annually.

Re-excavation of Etaberia and Kalaberia Khals.—This scheme consists of re-excavation of these two Khals in P.S. Bhagawanpur about 20 miles from Contai town in Midnapore district towards the north-west. These are the main drainage artery of this thana. It is meant for rendering benefit to about 47,360 acres and full benefit to about 33,269 acres. The expected additional yield of crops is about 10,000 tons of paddy. It is almost completed. The amount represents outstanding land acquisition charges and a few items of minor works.

Flood Control Schemes

Protection of the right bank of the Char Torsa above NH. 31 in Cooch Behar district.—This scheme provides for construction of an embankment for the protection of an area of 2.8 sq. miles against floods.

Preventing diversion of Beech Raidak into Daulajhora.—This scheme provides for construction of an embankment for the protection of some areas from floods.

Protection of Sal areas of Sambalpur Union in Malda district.—This scheme provides for construction of a circuit embankment about 20 miles long for the protection of an area of about 17 sq. miles.

Protection of Nagharia village in Malda district.—This scheme provides for protection of an area 0.5 sq. mile from erosion by bank protection work.

Protection work on the left bank of the river Hooghly between Shyamghat and Nathupalghat in the district of 24-Parganas and protection of the left bank of the Hooghly near Sukchar in 24-Parganas district.—These schemes are for the protection of the bank of the river Hooghly against erosion.

Protection of the right bank of the river Bhagirathi at Kalna—Part A and further expenditure in some emergent schemes to be taken up during the working season of 1960-61.—These schemes are meant for the prevention of erosion at Kalna town in the district of Burdwan.

Extension of Alipurduar town Embankment on upstream side in Jalpaiguri district.—This scheme envisages construction of an embankment for the protection of Suryanagar and Arabindanagar colonies and part of Alipurduar town.

Outstanding land acquisition charges on some completed flood control schemes in Cooch Behar and Jalpaiguri districts.—This is to provide a lump amount for meeting expenditure on land acquisition charges of some flood control schemes which have already been physically completed under the Flood Control Programme of this Government.

Construction of an embankment of the Teesta from Barnes to Domohani.—This scheme will protect an area of about 54 sq. miles and the Domohani town.

Protection of Hily town and village Aptair in West Dinajpore district from erosion and floods.—This scheme is for the protection of the river bank against erosion and flooding by the river Jamuna.

Hydrological investigations in flood affected parts of South and South-West Bengal required for preparation of new flood control scheme.—This scheme provides for gauge, discharge, silt and other observations for drawing up flood control schemes.

Aerial contour survey in flood affected areas of Murshidabad, Hooghly, Howrah and Midnapore districts.—This is for the preparation of contour maps in Kandi areas in Murshidabad district and certain areas in Howrah, Hooghly, etc. (about 2,000 sq. miles).

Protection of the right bank of the river Bhagirathi at Kalna, district Burdwan, against erosion (Part-B).—This scheme envisages protection of a length of about 8,800 ft. of the right bank of the river Bhagirathi between S.D.O. (Civil) Quarter and Mahishamardini at Kalna, district Burdwan.

Protection of the right bank of the river Bhagirathi at Patuli, P.S. Purbasthali, district Burdwan.—This is for the protection of length of about 6,300 ft. of the right bank of the river Bhagirathi at Patuli, P.S. Purbasthali, by short permeable spurs.

Protection of the right bank of the river Hooghly near Mallikghat, P.S. Chinsurah, district Hooghly.—This scheme is for the protection of a length of about 9,575 ft. of the Hooghly river at Babuganj, Chinsurah, district Hooghly.

Protection of Kapil Asram at Chowdhat Tribeni against erosion of the Hooghly, district Hooghly.—This scheme will provide for the protection of a length of about 250 ft. of the foreshore of the river Hooghly at Chowdhat Tribeni, district Hooghly.

Protection of the Upper Strand Road on the right bank of the river Hooghly in front of Old Collegiate School at Serampore, district Hooghly.—This scheme will protect a length of 471 ft. of the foreshore of the river Hooghly which is under erosion for some time past.

Protection of the right bank of the river Hooghly in front of Risra High School, district Hooghly.—This is for the protection of a length of about 130 ft. of the bank of the river Hooghly which is now under erosion.

Construction of an embankment on the left bank of the Char Torsa from Hasimara Railway Bridge to NH. 31, Jalpaiguri district.—This scheme envisages construction of an embankment for a length of 16 miles. It will save an area of 70 sq. miles including cultivable lands from floods.

Jalpaiguri town protection work—Second Phase.—It provides for the construction of an embankment for the protection of low areas of the Jalpaiguri town on the bank of the river Karala.

Protection of low areas in P.S. Kharba from inundation of the Mahananda and Mora Mahananda in Malda district.—This scheme provides for construction of embankment with sluices where necessary.

Training the river Mai below NH. 31 in Jalpaiguri district. This scheme provides for bank protection works and embankments, where necessary.

Protective work on the eroded left bank of the river Jalangi at Krishnagore, district Nadia.—It will protect the left bank of the river Jalangi near Krishnagore municipal pumping station.

Protection of Taki town against erosion of the Ichamati, district 24-Parganas.—It will protect Taki area from erosion at Harishpur, district 24-Parganas.

Protection of the right bank of the river Punarbhaba and left bank of the river Tangra in P.S. Gangarampur and Bansihari, district West Dinajpore.—It provides for bank protection and embankment.

Protection of the east bank of the river Punarbhaba in P.S. Gangarampur and Tapan, district West Dinajpur.—It provides for bank protection and embankment.

Protection of Balurghat town from erosion.—It provides for bank protection and embankment.

Hydrological observations in the Ajoy river.—These schemes are for collection of data for drawing up Ajoy Multipurpose Project.

Survey and investigation for the Ajoy Multipurpose Project.—These Schemes are for collection of data for drawing up Ajoy Multipurpose Project.

Survey and investigation for preparation of flood control schemes in Trans-Damodar areas and Kaliakhaye basin.—These schemes are for collection of data for drawing up Ajoy Multipurpose Project.

Survey and investigation for flood control in Kandi subdivision, district Murshidabad.—These schemes are for collection of data for drawing up Ajoy Multipurpose Project.

Preventing diversion of Beech Raidak into Sukumari and Raidak II in Jalpaiguri district.—It will benefit an area of about 14 square miles in Jalpaiguri district.

Training the river Cheesh below the road bridge in Jalpaiguri district.—It will benefit an area of about 14 sq. miles in Jalpaiguri district.

Protection of the right bank of the river Raimatong in Jalpaiguri district.—It provides for construction of an embankment with protective works.

Minor Irrigation

Deep Tube-well Irrigation.—Under this scheme it is proposed to instal 1,500 (12" x 8" inches) tube-well at a total cost of Rs. 7.45 lakh. Each tube-well shall have a command area of 200 acres. Thus the total command area will be 3,00,000 acres on completion.

Electricity.—Electricity is required for running deep tube-well and pumps for lift irrigation. An amount of Rs. 2.44 lakh will be paid to the Electricity Board for running the pumps.

Small Irrigation.—Under the head it is proposed to take up a large number of small projects such as boring of shallow tube-wells, surface-wells, supply of bullock driven pumps, power pumps, Persian wheels, excavation of small irrigation and drainage channels, catchment bunds, sluice gates, etc. It is expected that nearly 50,000 acres will be irrigated under this scheme. The total cost of the scheme is Rs. 91 lakh.

Tank Irrigation.—It is proposed to excavate and renovate about 2,800 derelict tanks benefiting an area of 1,40,000 acres at a total cost of Rs. 1,38 lakh.

Lift irrigation from rivers and beels.—It is proposed to instal 750 pumping plant for irrigation from rivers and beels. The irrigation command of each unit will be designed for 200 acres. Thus the total area under command will be 150 thousand acres. The total cost of the scheme will be Rs. 3,98 lakh.

Nine Minor Irrigation Schemes (I. & W. Dept.).—The amount required during 1961-62 is Rs. 20 lakh. The balance of Rs. 19 lakh will be accommodated in the Third Plan allocation for minor irrigation in Agricultural Sector. These schemes, individually costing between Rs. 10,000 and Rs. 10 lakh. These schemes are executed with the financial assistance from the Central Ministry of Food and Agriculture according to the existing pattern of financial assistance.

Thirty Minor Drainage Schemes.—These schemes cost between Rs. 10,000 and Rs. 10 lakh individually. The amount required during 1961-62 is Rs. 17,08 lakh. The balance of Rs. 12.08 lakh will be accommodated in the Third Plan allocation for minor drainage schemes in the Agricultural Sector. These schemes are executed with the financial assistance from the Central Ministry of Food and Agriculture.

New Minor Irrigation and Drainage Schemes.—The Schemes of this category will cost between Rs. 10,000 and Rs. 10 lakh individually and will be executed with the financial assistance available from the Central Ministry of Food and Agriculture.

POWER

In view of the rapid industrialisation of West Bengal, development of power is a matter of urgent necessity. Electrification of the Railways and the extension of power facilities to rural areas have added to the demand. Though there is much scope yet for development of hydro-electric power resources, the State must depend for a long time to come on thermal stations. Attempts are however being made to generate hydel power wherever it is possible under the existing circumstances.

During the first two Plans power development both in public and private sectors in West Bengal was poor. Only power scheme completed in Second Plan period worth mentioning and is the Durgapur Thermal Power Station of the State Government where 2X30 MW units have been installed. D.V.C. had however a few power schemes implemented during the Second Plan period from which West Bengal receive power supply. At the end of Second Five-Year Plan, West Bengal is getting an aggregate of about 155/160 MW of power from the D.V.C. This roughly represents 45 per cent. of the total of D.V.C.'s power generation.

For assessment of power requirement during First Plan period, no systematic load survey was made. Systematic load surveys for assessment of power requirement in the State during Second and Third Plan periods were carried out by the C.W.P.C. Government of India in consultation with the representatives of the W.B.S.E. Board and the D.V.C. Aggregate of

simultaneous demands of power in the State as well as the estimated firm power availability (saleable) are set out in the table below:—

	1950-51 (In MW)	1955-56 (In MW)	1960-61 (In MW)	1965-66 (In MW) Estimated
Simultaneous demand	270	444	560	1,263
Firm power availability (saleable) ..	300	600	*630	1,288

The estimated requirement of power in West Bengal by 1965-66 as assessed by the Sachdev Committee is 1184 MW (firm) of which D.V.C. will supply to the extent of 334 MW leaving a balance of 850 MW to be met from the various steam, hydro and diesel generations in the State. If the generation of the self-generating industries is also taken into consideration, the estimated requirement of power in 1965-66 will be of the order of 1,263 MW. The firm power availability in 1965-66 against this demand of 1,263 MW will be 1,288 MW approximately as per the table set out below:—

	Firm power availability in 1965-66 (kW)			
Government and W. B. S. E. Board	553,400
Private Utilities	320,000
Municipality-owned Undertakings	1,600
Self-generating industries	79,000
Availability from D. V. C.	334,000

		Total	..	1,288,000

The generation schemes against which a firm power availability of 1,288 MW has been worked out include the items known as "additional power schemes" of the State (Annexure I) as well as the 50 MW and 5 MW units proposed to be installed during the Third Plan period by the C.E.S.C. and the D.P.S.C., respectively.

Planning Commission's approval for installation of 2X50 MW units at Azimganj during the Third Plan period has not however been obtained as yet.

*This included 50 per cent. of D. V. C.'s total firm power availability. D. V. C.'s firm power availability was 346 MW and West Bengal's share was taken as 173 MW against 130 MW being actually supplied by the D. V. C. to the State in 1960-61. Moreover the three generating units of an aggregated capacity of 110 MW at the New Cossipore P. S. of the C. E. S. C. went out of order successively by about the same time which resulted in power shortage in the State.

Progress during the Second Five-Year Plan

An idea of the progress made during the Second Five-Year Plan can be obtained from Table I below:

TABLE I.

Serial No.	Name of scheme.	Plan Provision. (Rs. in lakh)	Targets (No. of places benefited).	Achievement.	
				Physical.	Financial.
1	Six Schemes: Rural Electrification Scheme envisages extension of mains to cater power to rural places.	85.52	85	52	} 120.20
2	Howrah-Hooghly Rural Electrification Scheme envisages electrification of a few places in the districts of Howrah and Hooghly.	18.21	22	16	
3	Kharagpur Midnapur Electrification Scheme envisages electrification of a few places in the district of Midnapur.	27.61	6	4	
4	Diesel Pool envisages purchase of Diesel Sets for electrification of places away from existing system.	2.25	Purchased sets— 4 Nos.	4 sets.	
5	Testing Laboratory (Rs. 9.15 lakh): Colliery and Suburban electrification scheme envisages electrification of a few places as also to cater bulk power to a number of collieries including testing laboratory.	25.74	16 bulk supply and 8 places.	2	
6	Survey and investigation envisages rivers of North Bengal for harnessing power therefrom.	6.88	..	..	3.67
7	Expansion of existing grids and supply undertaking envisages extension and augmentation of existing system to cope with increased power demand.	70.92	..	..	70.91
8	Extension of Mayurakshi Scheme envisages electrification of adjoining places of Mayurakshi grid.	4.62	..	4	3.53
9	Electrification of transferred territories envisages electrification of the places in the area and erection of a 132/33 KV S/S at Purulia.	18.91	4	1	4.93
10	Jaldhaka Hydel Project envisages harnessing power from Jaldhaka river in North Bengal and transmitting the power through 66 KV system.	149.34	Construction in progress.	..	64.14
		410.00			267.38

N. B.—Balance of Rs. 142.62 lakh has also been spent on suspense account for procurement of stores for completion of the Schemes referred to above.

Third Plan Proposals.

The Schemes proposed to be undertaken during the Third Five-Year Plan are shown in Table II, while Table III gives a comparative estimate of performance during the three plans, in terms of the mileage of transmission lines.

TABLE II

Power Projects during the Third Plan period—(A) included in Third Five-Year Plan originally, (B) included in Third Five-Year Plan subsequently as "Additional Power Schemes".

	Estimated cost (Rs. in lakh).
(A) (1) Jaldhaka Stage I	545.00 (spill-over)
(2) Bandel Thermal Power Station	2,919.00
(3) Transmission and Distribution	411.00
(4) Expansion of existing grids and supply Undertakings	150.00
(5) Rural Electrification	40.00
(6) Jaldhaka Stage II	15.00
(7) Testing Laboratory	12.00
(8) Hydro Investigation	8.00
(9) Little Rangit and Small Hydel Scheme	29.00
(10) Railway Electrification	163.44 (spill-over)
Sub-total I	4,292.44
(A1) Augmentation of Durgapur Power Station by 2 × 75 MW Units	1,190.00 (spill-over)
Sub-total II	1,190.00
(B) (1) 1 × 15 MW Power Plant for Gourepore Power Station	168.00
(2) Third 75 MW Unit (or 5th Unit) for Durgapur P. S.	677.00
(3) New Thermal P. S. 2 × 50 MW Units for Azimganj	1,037.00
(4) Additional transmission Scheme for Malda=West Dinajpur Area.	91.97
(5) Additional 9 MW Unit for Jaldhaka Stage I Power Station	83.90
(6) 6 × 1.5 MW Units as packaged Power Plants	161.00
Sub-total III	2,219.00

N. B.—(1) Scheme under (A1) relates to expansion by 2 × 75 MW Units at Durgapur under administrative control of Durgapur Projects Ltd. while schemes under (B) relate to State's Additional Power Schemes' included in Third Plan period against which a token provision of Rs. 100 lakh has been made for the year 1962-63.

(2) State Government have decided to keep the Railway Electrification Scheme outside the State Plan.

TABLE III

Particulars.	Prior to inauguration of First Five-Year Plan.	At the end of First Plan (Achievement).	At the end of 2nd Plan (Achievement).	At the end of 3rd Plan Target.
Length of transmission line in route miles—				
(a) 132 KV	.. ..	W.B.S.E.B. and W.B. Govt.—Nil.	W.B.S.E.B. and W. B. Govt.—Nil.	W.B.S.E.B. and W. B. Govt.—213.
		D.V.C.—82 ..	D.V.C.—287 ..	D.V.C.—287 plus lines that may be erected in Third Plan period.
(b) 66 KV	.. ..	W.B.S.E.B.—104.	W.B.S.E.B.—104.	W.B.S.E.B.—228.
(c) 33 KV	.. ..	152 W.B.S.E.B. and Others—260.	W.B.S.E.B. and Others—350.	W.B.S.E.B. and Others—630.
		D.V.C.—70 ..	D.V.C.—70 ..	D.V.C.—70 plus the lines that may be erected in Third Plan period.
(d) 22 KV and 11 KV	102	370	1,300 (Estimated).	2,122
Towns, villages and outskirts electrified.	87	247	462	762 (Special rural scheme under the auspices of I.D.A. included).
Annual Consumption in Kwh × 10 ⁶ .	1,350	1,550	2,500	4,500

Damodar Valley Corporation

Mention has already been made to work done by the Damodar Valley Corporation in preceding paragraphs on Irrigation and Power. A short self-contained account of its activities is given below.

Progress during the Second Plan

The plan provision during the Second period on account of State Government's contribution for D.V.C. was for Rs. 17.26 crore. The amount was provided for the following items of work:—(1) Irrigation and (2) Power.

All other works of the D.V.C. were financed outside the State Plan provision. The provision for Power in the State Plan did not represent the entire expenditure for all the Power Projects of D.V.C.

The entire Plan provision of Rs. 17.26 crore was spent during the Second Plan period.

Third Plan Proposals

The break-up of the Third Plan provisions is shown in the table below :—

Schemes.	Allocation (Rs. in lakh)
(1) Irrigation	691·00
(2) Flood Control	160·00
(3) Overheads	10·00
(4) Investigation	8·00
(5) One-third of the continuing Power Schemes	29·00
	(Rs. in lakh)
(i) Bokaro	27·00
(ii) Maithon	4·00
(iii) Panchet Mill	25·00
(iv) Central Workshop	30·00
	<hr style="width: 50%; margin-left: auto; margin-right: 0;"/> 86·00
(6) Share of expenditure on subsidiary objects	50·60
	<hr style="width: 50%; margin-left: auto; margin-right: 0;"/> 948·60
(i) Navigation	42·00
(ii) Fisheries	8·00
(iii) Tourism	0·60
	<hr style="width: 50%; margin-left: auto; margin-right: 0;"/> 50·60

About half of the outlay on irrigation will be utilised in improving and extending the barrage and irrigation system and the rest on the improvement of water courses. Flood control work will consist in raising the levels of the reservoirs. As regards power generation the State's contribution will be confined to financing only one-third of the cost of the continuing schemes.

(Details of Schemes)

Jaldhaka Project.—This project envisages harnessing the water of the Jaldhaka in North Bengal, to produce a firm power of 18 MW. It will supply the Tea Gardens in Dooars area and cater power to Darjeeling, Kalimpong and Cooch Behar through 66 KV and 33 KV Transmission System.

Rural Electrification Scheme.—This Scheme envisages electrification of about 60 rural places in the districts of West Bengal by drawing distribution lines from existing system.

Expansion of existing grids and supply undertakings.—This scheme envisages extension and augmentation of existing systems to cope with the normal load development in the system.

Transmission and Distribution Scheme.—This scheme has been divided in two parts—Part I envisages erection of 132 KV and 33 KV sub-station and lines from Bandel Thermal Power Station to feed a number of industries on the outskirts of C.E.S.C. Part II envisages erection of 66 KV and 33 KV lines and sub-stations beyond areas to be catered power from Bandel Power Station.

Super Thermal Power Station at Bandel.—It envisages installation of a Super Thermal Power Station near Bandel with an installed capacity of 4X75 MV sets in the First Stage. This will help to a considerable extent to relieve the acute power crisis in and around Calcutta area.

Jaldhaka Project—Second Stage.—This Scheme envisages harnessing further power from the Jaldhaka. A small provision has been made for preliminary work, investigation, etc.

Survey and Investigation.—The Scheme envisages surveying and carrying hydrological investigations on the rivers of North Bengal in order to harness power from natural resources of the country.

Testing Laboratory.—A provision has been made for purchasing equipment for the Testing Laboratory of the Board.

CHAPTER XII

VILLAGE AND SMALL-SCALE INDUSTRIES

While the large scale heavy industries lay the foundation for a self-sustaining economy, the role of the village and small-scale industries in our plan is no less significant. For one thing, it is more effective in drawing off surplus labour from agriculture. The employment opportunities created for each unit of capital employed is much larger in these industries, which moreover can be dispersed more widely than the heavy industries, and carry work to the worker when he dislikes moving away from home. Their shorter period of gestation ensures that no inflationary pressure develops during implementation—indeed when properly implemented, they act as a buffer against such pressure arising out of the execution of schemes requiring longer to mature. And finally, they meet the demand created as a result of the developmental process.

Great importance has therefore been attached to these industries in the successive plans. There had of necessity to be some selection from among the indigenous small-scale industries—only those with potentialities under the existing circumstances could be cultivated with any prospect of success. Even so they can hope to survive only, if they modernise their production techniques and improve the organisational base. Some new types of small-scale industries must also be introduced to keep pace with the modern developments. All these aspects have been kept in mind in formulating the schemes. Of particular significance are the Industrial Estates, which carry work to the people in the remote areas and will serve as the growing points in future.

Progress made in the Second Plan

Handloom.—The All India Handloom Board formulated certain general principles with the concurrence of the Government of India for organising and developing the handloom industry on a sound line. The schemes under this group were accordingly drawn up on the basis of these principles. The most important objective was to organise the weavers within the Co-operative fold and to increase the production of handloom cloth. A considerable measure of success was registered in this field during the Second Five-Year Plan. Against the plan ceiling of Rs. 153.96 lakh, we have been able to spend Rs. 140.45 lakh for 36 development schemes which will show that we almost reached the target. The total number of weavers' co-operative societies had gone up to 1,100 at the end of the Second Five-Year Plan against 900 (some of which were in a moribund state) at the beginning. It is very encouraging to note that most of these societies are running satisfactorily. The total number of weavers brought within the Co-operative fold is now about 1,40,000. The annual production, at the end of the Second Plan period, had risen to 185 million yards against the target of 190 million yards. As a result of taking up various training programmes through Peripatetic Weaving Schools, District Weaving Schools, Demonstration Parties, Training-cum-Production Centres under C.D.P. and Rehabilitation and also due to the influx of refugee weavers, the total number of weavers in West Bengal has increased from 1,00,000 to 3,37,000 including 1,40,000 weavers brought within the Co-operative fold. This also includes part-time workers of the weaver families.

Handicrafts.—Like other small industries, handicrafts has also problems of its own. Apart from marketing, there are other difficulties relating to

the (i) supply of raw materials, (ii) credit facilities, (iii) training, (iv) technical help in production, (v) design guidance, (vi) maintenance of quality, (vii) formation of artisan organisation, etc.

Keeping in view the above problems, this Government implemented during the Second Five-Year Plan altogether 27 schemes which extended help and encouragement to craftsmen at different stages of production. During the Second Plan period, a total sum of Rs. 14.47 lakh was spent for the development of handicrafts against the Plan ceiling of Rs. 8.38 lakh (subsequently raised to 25 lakh). Out of these 27 schemes, 24 schemes were not originally included in the Plan and expenditure incurred on these schemes during the first two years, i.e., 1956-57 and 1957-58, was not included in the Plan.

During the Second Plan period, Tutocorin and Ceylon chunks worth Rs. 35,00,000 (approx.) were distributed among the chunk artisans of the State. Supply of copper, tin and zinc has been made available to a considerable extent to the brass and bell-metal artisans. Cane, horn, raw ivory and some other essential raw materials were distributed among various artisans at reasonable rates.

Credit facilities were extended mainly through Block Loan Funds but some mat and chunk co-operative also received loans to the extent of Rs. 55,000 under special handicrafts schemes.

About 600 trainees received training under different training-cum-production schemes at peripatetic handicrafts training units during the Plan period. Since the end of 1958-59, the training-cum-production units were gradually converted into production centres and the ex-trainees were given facilities for formation of co-operative societies amongst themselves and actually 4 such industrial co-operatives were organised. Products of these centres, e.g., horn goods, artistic toys, cane and bamboo goods, etc. have been very popular. The artisans engaged in production received technical guidance at every stage. During the Second Five-Year Plan 32 co-operative societies of mat artisans and 29 co-operative societies of chunk artisans have been organised.

The scheme for quality marking of handicrafts taken up during the Second Five-Year Plan has made appreciable progress. Quality marking was first taken up in respect of silk and cotton fabric prints. It has since been extended to ivory, brass and bell-metal products.

Marketing of handicrafts was effected during the Second Five-Year Plan through various Government Sales Emporia and other agencies and it was possible to export some handicrafts goods to foreign countries, specially to East Germany.

In order to popularise the handicraft products, about 1,000 designs made out of old collection of textile, dolls, kantha and alpana, etc., have been sent to different production centres, co-operative societies and other handicraft organisations and most of these designs have been adopted by those units with encouraging results.

Industrial Estates.—Originally, it was proposed to take up the Kalyani Industrial Estates with an outlay of Rs. 57.02 lakh during the Second Five-Year Plan. Subsequently, 5 more Industrial Estates were included with a revised outlay of Rs. 1,00,00 lakh. Out of these 6 Estates, Habra

Industrial Estate has been deferred to the Third Five-Year Plan. Kalyani Industrial Estate has almost been completed, only some minor works to be taken up during the Third Five-Year Plan being left over.

Baruipur Industrial Estate has been completed. Saktigarh Estate has almost been completed and the remaining work is expected to be completed during the first year under the Third Five-Year Plan. The work of Howrah and Siliguri Industrial Estates started during the Second Plan and it will be completed during the first two years of the Third Five-Year Plan.

The total expenditure incurred on all these Industrial Estates is Rs. 73.68 lakh against the revised plan ceiling of Rs. 1,00.00 lakh.

Small-Scale Industries. In the Second Five-Year Plan, this Department took up several development schemes relating to ceramic industries, leather industries, small-scale engineering industries and other miscellaneous small-scale industries. Besides this payment of loan to industrial units under the B.S.A.I. Act and strengthening of the staff of the Directorate of Industries were additional features under this group.

(i) *Ceramic.*—The Bengal Ceramic Institute at Belehata and at the premises of Messrs. A. K. Sarkar Industries (P.) Ltd., Belghoria, undertook some production and training-cum-production schemes, viz.: (i) Bone-China and fine earthen ware, (ii) sanitary wares and electrical goods, (iii) common clay glazed pottery, (iv) ceramic lithographic transfers, etc. The Institute also supplied processed clay from Belehata and A. K. Sarkar Industries at Belghoria to different cottage units and more than 1,000 persons found employment in these units. In order to increase further production both in the Institute as well as in the cottage units, an electric tunnel kiln and oil-fired kiln have been installed at the Bengal Ceramic Institute and during the Third Five-Year Plan, it is expected that 2,000 persons will find employment there.

(ii) *Leather Industries.*—Due to various administrative difficulties, schemes relating to the leather industries which were taken up during the Second Five-Year Plan could not achieve the desired objectives. Only the baby shoe scheme has been implemented fully and 80 girls have been trained up and they have formed a co-operative society. The scheme for model servicing footwear was partially implemented at Katwa, Kurseong and Calcutta. The other units could not be started for want of suitable accommodation. Model servicing tannery scheme was only partially implemented for the same reason and it will be continued in the Third Plan.

(iii) *Small Scale Engineering Industries.*—Several schemes relating to the Small-Scale Engineering Industries including the Small-Scale Engineering Industries at Howrah and Quality Marking of Small-Scale Industries products were taken up during the Second Five-Year Plan. The scheme for Small-Scale Engineering Industries at Howrah could not be implemented fully. A reorganisation proposal was taken up during the Third Five-Year Plan. So far Quality Marking scheme is concerned, 8 items, viz. (i) Lock, (ii) Leather, (iii) Ink, (iv) Cutlery, (v) Sports good, (vi) Bucket, (vii) Builders' Hardware and (viii) Silk (woven fabrics) have been taken up. More items would be taken up during the Third Five-Year Plan.

An Experimental Workshop-cum-Research Institute for Cottage Industries has been set up at Baruipur with a view to experimenting the

possibility of utilisation of various locally available raw materials. Research is being conducted for effecting improvements in the production of various cottage industries. A lock factory has also been set at Baragachia where there is a concentration of lock artisans. Lock and lock-components worth Rs. 2,30,000 were produced.

The local lock-makers have been given the opportunity for working as constituent units under the scheme and marketing facilities where necessary are arranged. These units are being supplied with lock components from this factory for assembly at home.

Besides, under the Integrated Scheme for Training-cum-Production centres for Wood Industries, 3 units at Kalyani, Durgapur and Siliguri have been started. Here 1,000 persons have been trained up in the manufacture of various wooden products by using modern and up-to-date machinery and most of them have found suitable employment. Besides, there is a production wing under the scheme and wood products of various kinds worth Rs. 30,00,000 were produced and sold to Government and Semi-Government Organisations. There is a contemplation to supply the entire requirement of furniture, etc. of Government by this scheme. Apart from this, a Wood Industries Institute has been set up at Kalyani with a view to imparting higher training in wood working industries.

(iv) *Marketing*.—A Small Industries Corporation has been set up and the departmental schemes relating to the procurement and supply of raw materials and marketing of cottage and small industries products have been taken over by the Corporation.

(v) *Reorganisation of the Directorate of Industries*.—During the Second Five-Year Plan, the Directorate of Industries was suitably strengthened. Three posts of Jt. Director of Industries, 6 posts of Deputy Director of Industries, about a dozen Assistant Director of Industries, one Special Officer, one Audit Officer, one Accounts Officer, 15 District Industrial Officers for 15 districts, 70 Non-gazetted Extension Officers, several posts of Investigator, Inspector, other supervisory, clerical and other posts have been created.

(vi) *Block Loan*.—During the Second Five-Year Plan, industrial loan amounting to more than Rs. 52.00 lakh was disbursed to various cottage and small-scale industries units on easy terms.

A total sum of Rs. 2,38.34 lakh has been spent during the Second Five-Year Plan towards the development of small-scale industries against a Plan ceiling of Rs. 3,52.27 lakh which was subsequently reduced to Rs. 2,85.00 lakh.

Khadi and Village Industries.—The West Bengal Khadi and Village Industries Board is now a statutory organisation. All the Khadi and Village Industries schemes which were being administered by the State Government have been transferred to the West Bengal Khadi and Village Industries Board with effect from the 1st April 1960. Only a sum of Rs. 2.00 lakh will have to be provided by the State Government annually to the Board for organisational expenses for which necessary provision has been made in the Third Five-Year Plan.

Against a Plan ceiling of Rs. 12.00 lakh, an amount of Rs. 15.79 lakh has been spent for 'Khadi' during the Second Five-Year Plan. For the village industries, a sum of Rs. 22.99 lakh has been spent against a Plan ceiling of Rs. 69.15 lakh.

Coir.—A provision of Rs. 5.94 lakh was made during the Second Five-Year Plan for the development of coir industry in West Bengal, out of which only a sum of Rs. 1.54 lakh could be spent. The reasons for such small expenditure are that all the schemes included in the Plan could not be implemented after observing formalities in the State level as well as in obtaining the technical approval from the Ministry of Commerce and Industry and the Coir Board.

Lac.—Lac development in West Bengal was before the Second Five-Year Plan being administered by various departments at the State level. During the Second Five-Year Plan, it was decided that the C. & S.S.I. Department would look after all the aspects of lac development. There was a provision of Rs. 0.91 lakh in 'Agriculture' sector and Rs. 12.60 lakh in the 'Village Industries' sector for the development of lac industries. Most of the schemes included in the Second Plan were meant for Purulia which is the best lac growing area in West Bengal. A very small amount could be spent during the Second Plan as most of the schemes could not be implemented in full due to shortage of accommodation and non-availability of machinery, etc.

Silk.—West Bengal used to produce quality silk of high grade which had a reputation of its own in the world market. For various reasons, the quality as well as the quantum of production has gradually gone down. In order to revive this decadent industry, our First and Second Five-Year Plans proposals were formulated mainly aiming at (a) increasing mulberry cultivation with emphasis on quality of leaves, (b) supply of cross-layings to increase the quantum and quality of silk, (c) introducing improved method of rearing, (d) establishment of filature and improved type of domestic units, (e) revival of non-mulberry silk (eri and tassar) and (f) arrangement of marketing of raw silk and finished silk goods.

But due to various administrative and other difficulties, our objectives could not be fulfilled during the Second Five-Year Plan period. However, production of silk has increased from 2.5 lakh lb. to 5.00 lakh lb. per annum and the area of mulberry cultivation has gone up from 12,000 acres to about 16,000 acres.

Third Plan Proposals

Handloom.—In addition to various kinds of assistance and facilities provided by the Government to the weavers in the Co-operative fold during the Second Five-Year Plan which will mostly continue during the Third Five-Year Plan, special provision has been made during the Third Five-Year Plan for setting up mechanised preparatory plants and calendering units and also for establishing a co-operative spinning mill for production of coarse and medium counts of yard for the 'handloom' sector. The Apex Society in West Bengal is an infant organisation and its relationship with the primaries as well as district/subdivision federations is loose. Stress has therefore been laid on strengthening the Apex Society with adequate capital and other resources so that it can stock and distribute yarn, dyestuff and chemical and lift the cloth produced from the primary societies. Due to the weak co-operative banking structure, it has not been possible for West Bengal to switch over to the institutional credit during the Second Five-Year Plan. The Third Five-Year Plan has been formulated on the back ground of institutional credit through Reserve Bank of India, Provincial Co-operative Banks and Central Co-operative Banks.

Programmes have also been taken up in the Third Five-Year Plan for the development of silk and woollen handloom industries of the State. Silk handloom industry of the State receives help under the Khadi programmes as the silk yarn in West Bengal is mainly hand-spun and hand-reeled, but it still requires special attention to some extent. It is expected that during the Third Five-Year Plan, the total number of handloom weavers will increase gradually both in and outside the Co-operative fold and annual production at the end of the Plan will be between 230 to 240 million yards.

For creating a greater demand for West Bengal handloom products throughout India, schemes for the establishment of inter-State sale depots have been included in the Third Five-Year Plan.

The outlay for the 'handloom' sector is Rs. 50.50 lakh for co-operative spinning mill and Rs. 2,61.00 lakh for other handloom schemes.

Khadi and Village Industries.—The entire responsibility for the development of Khadi and Village Industries in West Bengal has been vested in the West Bengal Khadi and Village Industries Board (Statutory) and it will look after the programmes with the financial assistance from the Khadi and Village Industries Commission.

Only a sum of Rs. 10.00 lakh has been provided in the Third Five-Year Plan for meeting the State share of the expenditure on the organisational set-up of the State Khadi and Village Industries Board.

Handicrafts.—From experience gained during the Second Five-Year Plan, so far as handicrafts of West Bengal are concerned, it has been considered necessary to continue some of the existing schemes with suitable modification. Accordingly, the schemes for export promotion, supply of models and designs, quality marking scheme, handicrafts co-operatives and service centres for toy making and artistic pottery have been included in the Plan. More models and designs of up-to-date taste will be supplied, a sample house will be established in Calcutta for giving wide publicity to handicrafts both in the external and internal markets, more new crafts will be taken up for quality marking during the Third Five-Year Plan.

The artistic leather products of this State which have a good market inside the country and abroad, could not be developed properly in the Second Five-Year Plan. A scheme has, accordingly, been taken up for implementation during the Third Five-Year Plan. It will concentrate on the development of fancy leather goods, including ladies shoes, sandals, etc. Taxidarmy has also been included.

In order to make the rural people of West Bengal craft-conscious through display of handicrafts products, it has been proposed to establish one craft museum in each important district.

There is a great need for introduction of improved methods and techniques in moulding, casting, designing as well as rendering service in producing utility and artistic metal wares. A scheme has, therefore, been taken up in the Third Plan which will provide training in these crafts.

The outlay for 'handicrafts' is Rs. 38.00 lakh.

Industrial Estates.—The Howrah Industrial Estate and the Saltigarh and Siliguri Industrial Estates which were taken up in the Second Five-Year Plan will be completed within the first two years of the Third Five-Year Plan. These have been included as spill-over expenditure under the Third Plan.

Three large industrial estates, one of which will be functional industrial estate exclusively for hide and leather have been included in the Third Plan. The hide and leather industrialists who are concentrated mainly in Calcutta and neighbouring areas are at present in great difficulty in the matter of securing suitable accommodation for their factories. In order to help them, the functional industrial estate as stated above has been proposed to be set up near about Calcutta. One of the large industrial estates may be located in the Durgapur Industrial area.

Eight small industrial estates have also been proposed to be set up in the Third Five-Year Plan in the rural and semi-urban areas.

The total outlay for Industrial Estates is Rs. 1,70.00 lakh.

Small-Scale Industries.—In the light of experience gained during the Second Five-Year Plan, it has been considered necessary to take up expansion programmes for some of the Second Plan schemes in order to achieve the desired objectives. These are the schemes in respect of the ceramic group of industries, Howrah Engineering industries, the Lock making unit, the surgical unit at Baruipur and Quality Marking for small Industries Products. In this connection, it may be noted that the schemes which were completed by the end of the Second Five-Year Plan are being continued purely as State schemes in the Third Plan.

Some of the schemes, viz., (i) Washery for China Clay under 'Ceramic' group, (ii) Model Servicing for Tannery under 'Leather' group, (iii) Central Shot Blasting and Electroplating, etc., (iv) Development of Outlery Industry at Kanchannagore and (v) State Research Board and Research Institute under 'Engineering' group which were included in the Second Five-Year Plan could not be implemented due to various difficulties till the end of the Plan. These schemes have, therefore, been included in the Third Five-Year Plan.

In rural areas, where there is a large concentration of cobblers, it is essential to give them proper guidance in better methods and technique of production, so that they can make better quality goods and improve the prospects of the industry. Accordingly in the Third Five-Year Plan, stress has been given on the establishment of peripatetic parties for footwear and footwear servicing centres.

In the district of Purulia, the manufacture of hand-tools was once a very flourishing industry which used to engage a good number of people of that locality. This industry is now decaying and the artisans are in great distress. A service-cum-training centre for the manufacture of hand-tools has been included in the Third Plan for the revival of this industry.

Scarcity of hospital appliances is strongly felt in all parts of India. In the Second Five-Year Plan, it was established as a result of suitable experiments in our Central Engineering Organisation at Howrah that hospital appliances and even surgical tables could be manufactured in India. A scheme for the manufacture of hospital appliances has therefore been included in the Third Plan with an estimated outlay of Rs. 11.00 lakh.

In accordance with the decision of the Small-Scale Industries Board, a scheme has been included in the Third Plan with a token provision of Rs. 5.00 lakh for payment of subsidy for power supply to small industries units.

In order to make the supply of credit to small units quick and easy, this Government have greatly liberalised the provisions of the State Aid to Industries Act and have delegated the necessary powers to Officers at various levels including those in the rural areas. To meet the increased demand for financial assistance, a sum of Rs. 1.26.00 lakh has been provided for the purpose in the Third Five-Year Plan.

Marketing.—The West Bengal Small Industries Corporation has started functioning and the schemes relating to the marketing of products of cottage and small-scale industries and the procurement and supply of raw materials have been transferred to the Corporation. The Corporation has been provided with a sum of Rs. 20.00 lakh to start with. It may require further funds in future and a provision of Rs. 60.48 lakh has, therefore, been made in the Third Plan.

Re-organisation of the Directorate of Industries (Admn.).—During the Second Five-Year Plan, it was necessary to strengthen the headquarters organisation of the Directorate of industries with an adequate number of officers and other staff. The field organisation and the District Organisation also require to be strengthened during the Third Five-Year Plan in order that overall industrial development even in the rural areas may be given proper attention. A similar scheme has, therefore, been included in the Third Five-Year Plan as additional programme. The expenditure on posts created during the Second Five-Year Plan will be met from the State resources.

The total provision for small-scale industries group of schemes under the Third Five-Year Plan including those for Block Loan, Marketing and reorganisation of Directorate of Industries is Rs. 3,78.00 lakh.

Sericulture and Silk.—The programme which were taken up in the Second Five-Year Plan could not be completed and it has been considered necessary to intensify the work already undertaken as an explanation programme during the Third Plan. The target for mulberry cultivation has to be increased and the Third Five-Year Plan has been so formulated that the acreage of mulberry cultivation may go up to 20,000. A hundred basin filature in addition to 100 basin filature established during the Second Five-Year Plan has been proposed to be set up during the Third Five-Year Plan. A few demonstration-cum-experimental units are proposed to be set up to demonstrate to the rearers the superiority of the improved methods of rearing, etc. The existing nurseries have been proposed to be reorganised and a seed multiplication station for rearing of foreign races is proposed to be established in addition to the one already set up at Kalimpong. A spun-silk mill will also be set up at Malda for utilisation of silk waste. For the stabilisation of raw silk market, it is proposed to provide cheap credit facilities to the reeler and to enforce regulated purchase and sale of cocoons which will eliminate speculative manipulation in the market. The improved methods of sericulture which are found useful in other foreign countries will be tried out under local condition here so that these can ultimately be introduced amongst silk farmers of this State.

Sericulture will also be developed in the districts of North Bengal and it is expected that 1,500 lb. of standard eri-yarn will be produced per annum.

At the end of the Third Five-Year Plan, the annual production of silk may go up to 7.5 lakh lb.

The estimated outlay for this group is Rs. 79.00 lakh.

Coir.—In the Second Five-Year Plan, our progress in the development of coir industry has not been satisfactory. This was due to various difficulties and want of a co-ordinated development programme.

In the Third Five-Year Plan, an integrated scheme has been formulated, keeping in view of the various requirements of the coir industry in this State beginning from the extraction of fibre up to the marketing of finished goods. It has been proposed that the products will be sold to a central finishing centre which will have a depot of its own with provision for adequate working capital.

The outlay under this group is Rs. 10.00 lakh.

(Details of schemes)

HANDLOOM INDUSTRY

Silk

Supply of Improved Appliances to Weavers.—Silk weavers require replacement of existing appliances by improved ones to increase the quantity and better the quality of production of gaining confidence in the market. Implements worth Rs. 1 lakh will be distributed on 75 per cent. grant and 25 per cent. loans basis during the Third Plan period.

Supply of Working Capital Loans.—Silk being more costly than cotton, weavers require larger working capital for loan to carry on production. Loan at Rs. 500 each will be given to a thousand weavers which will be recovered in 10 annual equal instalments. This will no doubt partially help their survival.

Supply of Share Capital Loan.—The object of the scheme is to bring increasing number of weavers in the Co-operative fold. Loan at Rs. 100 each will be given to thousand weavers which is recoverable in 2 annual instalments.

Establishment of Design Centres.—It is only by the supply of fresh designs that a grip on the market can be maintained and the same expanded further. One centre will be established in Calcutta during the Third Plan.

Wool

Supply of improved appliances.—Wool weavers are generally the tribals who are of very small resources; they are in need of improved appliances for continuing production, and improving quality. Implements worth Rs. 1 lakh will be supplied to them on 75 per cent. grant and 25 per cent. loan basis.

Construction of Worksheds for weavers.—All India Handloom Board approved of grouping weavers under common workshed containing not more than 5 looms each. The scheme will be started in 1962-63.

Supply of Working Capital to Handloom Weavers.—Wool weavers are also in want of working capital. Loan at Rs. 200 each will be given to 500 weavers and will be recovered in 10 annual equal instalments.

Cotton

Supply of improved appliances.—To reduce the cost of production and to improve the quality and quantity of production, improved appliances will be supplied to weavers on 75 per cent. grant and 25 per cent. loan basis.

Subsidy in sales of cloth.—Rebate on sales will be paid on the approved scale of the All India Handloom Board for facility of marketing handloom products.

Publicity and propaganda.—To popularise handloom fabrics, publicity will be arranged through important media of modern propaganda. Exhibition as well as setting up of sample house will also be arranged.

Collection of statistics.—Statistics of the entire handloom industry—co-operative or non-co-operative—will be collected. Twenty-five per cent. of the field area will be covered by the contemplated set-up.

Housing Colony of Weavers.—To provide compact residential blocks to houseless weavers, 6 units consisting of 100 houses each are proposed under the scheme.

Renovation and Rehabilitation of Weavers' houses.—The weavers who are suffering for want of suitable house for installation of their looms and carrying on their trade will be given financial aid to renovate and repair their houses. Both grant and loan would be provided. The scheme is expected to be taken up during 1962-63.

Unit for Quality marking and Stamping.—To ensure marketing of handloom fabrics and maintain the confidence of the consumers, handloom products of Co-operative sector will be stamped. Five per cent. of the production will be inspected.

Award of prizes.—To introduce healthy competition amongst weavers and to encourage them, prizes will be distributed to the best weavers each year.

Expansion of Handloom Research Section.—The scheme aims at expansion of research in implements, fixtures and weaving, etc.

Share Capital loan to Weavers.—To increase the borrowing capacities of societies to enable them to increase production, share capital loan at Rs. 25 to Rs. 50 each will be given to weavers.

Establishment of a 25,000 spindle Cotton Mill on Co-operative basis for spinning yarn.—The proposed mill will produce 20s to 40s (average 30s) in order to feed the handlooms using lower counts and the powerlooms.

Mobile vans for marketing and Publicity of Handloom products.—To promote sales of Handloom fabrics, there are at present, two mobile vans. There is a need for four more mobile vans to cover the entire State.

Establishment of sales depots.—Sixty depots will be established by the co-operative societies during the Third Five-Year Plan, to whom subsidy will be given by the State Government.

Subsidy on interest charges on Working capital. The scheme aims at giving relief to weavers in the Co-operative fold. This will enable the weavers to borrow working capital loan at 3 per cent. interest.

Establishment of composite finishing plants.—Under the scheme, mechanised facilities for preparatories, finishing and dyeing will be given to the weavers' societies so that they may stand in the competitive market by reducing the cost of production and improving the quality.

Establishment of Model Block Printing and Pattern units.—The scheme aims at introduction of new designs, blocks and pattern in large numbers amongst weavers to attract the consumers.

State participation in share capital of West Bengal Handloom Co-operative Society.—To increase the society's borrowing capacity, the State Government will participate in purchasing share.

State participation in share capital of Industrial Unions and Primary Societies.—To increase the borrowing capacity of Industrial Unions and Primary Societies, the State Government will participate in purchasing shares.

Establishment of Inter-State Sales Depot.—To create and sustain a market for West Bengal Handloom Fabrics in other States, 10 sales depots will be established in other States.

Delivery vans, etc., for marketing.—To ensure quick and regular delivery of yarn, fabrics, etc., some vans will be purchased.

Supervisory grant for Apex Marketing Society.—Grant will be given to enable the Apex Society to maintain staff for adequate supervision.

Organisational Expenses.—The scheme aims at providing additional funds for expenditure on staff engaged in supervision of the general schemes for the development of handloom industry including personnel of the Bank Credit.

Khadi and Village Industries

Khadi and Village Industries.—West Bengal Khadi and Village Industries Board will be given grant-in-aid to maintain the Supervisory staff on different schemes run by the Board.

Handicrafts

Promotion of Handicrafts Exports.—Handicraft products worth Rs. 15 lakh will be exported under the scheme during the Third Five-Year Plan period.

Supply of Models, Design and Technical Assistance.—Under the scheme 300 models and designs per year will be supplied to artisans during the Third Five-Year Plan period. Technical and design guidance will also be given. The artisans are of small resources and cannot afford to pay for these services.

Publicity for Handicrafts.—To popularise the handicraft products, proper publicity will be given through various media and propaganda. One sample house will be established in Calcutta and one mobile unit will be formed for moving about the different districts of West Bengal for display of handicrafts as well as their sale.

Expansion of Quality Marking Scheme.—During the Second Five-Year Plan period, quality marking scheme has covered textile, block printing, ivory, and bell-metal. Five new crafts, viz., shell products, horn goods, artistic leather goods, lacquered work and ceramic goods will be taken up.

Organisation of Handicrafts Co-operatives.—Hundred new Handicrafts Co-operative Societies during the Third Five-Year Plan both for production and sale of handicrafts on Co-operative basis will be organised.

Development of Screen Printing.—Screen printing is not highly developed in West Bengal as in Bombay and U. P. The scheme is intended to give training in screen printing and also render services to the artisans. The Units will also undertake printing on commercial basis.

Service Centre for Artisans in Toy Making and Artistic Pottery.—Under the scheme, servicing facilities for firing, etc., would be extended to the artisans from the existing units at the Bengal Ceramic Institute and at Krishnagar to improve their quality of products.

Development of Fancy Leather Goods.—The scheme aims at training and production of ladies shoes, sandals and fancy leather goods. Twelve girls will be trained per year. After completion of training, they will be encouraged to form co-operatives of their own and get themselves engaged in production.

Establishment of Small Crafts Museum.—Some small museums will be opened in important districts of West Bengal. The main object of the scheme is to develop crafts practised in the rural areas.

Award of Prizes to Handicrafts.—Prizes will be awarded to best handicraftsmen each year for encouragement.

Development of Non-Ferrous metal-wire.—Under the scheme, 60 persons will be trained. Fifty persons will be employed directly and 10,000 persons indirectly. Finished goods worth Rs. 5 lakh will be produced under this scheme.

Industrial Estates

Establishment of Industrial Estate, Howrah.—The scheme aims at accommodating all types of small-scale industries in the estate with modern types of work sheds. Necessary land for the estate has been acquired. Preliminary work for the development of the land has been completed and the construction work has also been undertaken. The estate is scheduled to be completed in 1962-63.

Establishment of Industrial Estate, Habra.—In comparison with other important places, Habra is far less industrially developed. The estate was proposed to be set up in the Second Five-Year Plan. It has now been decided to change the site to some other place.

Establishment of Two New Estates.—It has been proposed to establish two big Industrial Estates. These two estates will accommodate all types of shall-scale industries, the sites for which are being selected.

Establishment of one Estate for hides and leather.—This estate will be located near about Calcutta. This will be a functional estate exclusively for hides, skins and leather.

Establishment of eight small Industrial Estates.—Five Industrial Estates have been taken up under the Second Five-Year Plan. Another eight will be taken up under the Third Five-Year Plan. This will cover thirteen districts of West Bengal.

Other Small-Scale Industries

Development of Bone China and Fine Earthenware.—The existing scheme at the Bengal Ceramic Institute requires to be expanded. The expanded scheme will produce 40 tons of ceramic goods per month. About 240 persons are likely to be employed.

Supply of processed clay for Sanitary wares and Electrical goods.—Bengal Ceramic Institute with its existing capacity is unable to meet the heavy demand for processed clay. The Institute provides employment to a large number of people including refugees and middle class men and women who get their articles fired in the kilns of the Institute. To meet the increasing demand, expansion is necessary. 350 persons are likely to be employed and about 850 persons will be benefited under this expansion programme.

Development of Lithographic Transfers.—Under the existing scheme transfers have successfully been made and expansion of the scheme is needed to supply the requirement of the Institute. It is expected that 40 persons will get their employment and about 175 persons will be benefited under the expansion programme.

Development of Common Clay Glazed Pottery.—Ranaghat being an area very suitable for potteries, it is proposed to expand the scheme introduced in the Second Plan period. Crockery, wall tiles, etc., will be produced.

Development of Glazed Pottery (Uluberia).—The local potters of Uluberia and its adjacent areas will be trained to produce glazed products of common use. About 80 persons will be employed and 60 persons will be benefited.

Development of Production of Roofing and Floor Tiles.—Existing Production Centre for roofing and floor tiles at Durgapur will be expanded to meet the growing demand. Twenty-six persons are likely to be employed.

Washery for China Clay.—There is no up-to-date washery in the State which may supply high grade clay for the Ceramic Industry. It has been proposed to establish one modern washery for china clay in Purulia or Bankura or Birbhum. A similar scheme was included in the Second Five-Year Plan but could not be implemented due to various unforeseen difficulties regarding availability of site.

Leather Industries

Modern Servicing for Tannery.—The object of the scheme is to provide the urban producers the facilities for use of machines and also to train up them in improved techniques of production. Twenty persons are likely to be employed.

Establishment of Peripatetic Parties for Foot-wear. Tanners and shoemakers in the outlying areas require to be given technical instruction and guidance to produce better quality of articles at cheaper prices, utilising

local raw materials as far as possible. The proposed parties will serve this purpose.

Establishment of District Foot-wear Servicing Centre.—The object of the scheme is to provide the producers the facility for use of machinery and also to train them up to adopt improved techniques of production.

Engineering Industries

Central Shot Blasting Electroplating and Stove Enamelling unit.—Small scale manufacturers with limited resources are unable to equip their factories with shot blasting and electroplating and stove enamelling plant. A Central Unit will, therefore, be established wherefrom the small-scale manufacturers will get their jobs done at cheaper rates. Fifty persons are likely to be employed.

Development of Small-Scale Engineering Industries, Howrah.—Under the existing scheme, in the Second Five-Year Plan, the engineering industries of Howrah have been brought together under the Central Organisation with a well equipped Central Workshop, a marketing organisation and a technical development section. It is expected that more firms will be brought under affiliation to the Central Engineering Organisation during the Third Five-Year Plan period.

Expansion of Lock-making Unit, Howrah.—Under the existing scheme in the Second Five-Year Plan the production is limited to the manufacture of standard components for brass padlocks which are made available to locksmiths. To make the scheme really of use to the locksmiths other types of locks are also to be produced. About 20 persons will find their employment and 1,000 persons will be benefited directly and indirectly.

Development of Cutlery Industries (Kanchannagar).—This will be a servicing and training unit for the local cutlery industry at Kanchannagar. The unit will ultimately be handed over to the Co-operative Society of Cutlery Manufacturers. Thirty persons are likely to be employed and 50 persons will be benefited.

Expansion of the Surgical Unit (Baruipur). The existing scheme in the Second Five-Year Plan has been producing instruments of standard quality. There is a steady demand for repairing and finishing services. In order to meet this growing demand, expansion of the scheme is necessary. It is expected that 56 persons will find their employment in the unit.

Expansion of Quality Marking Scheme for Small-Scale Industries.—Quality marking for several small-scale and cottage industries products has already been undertaken in the Second Five-Year Plan and it is proposed to extend the scheme for quality marking of more items of products. One hundred persons are likely to be employed.

Establishment of a State Research Board and State Industrial Research Institute.—It is proposed to constitute a State Industrial Research Board and to reorganise the Industrial Research Laboratory in Calcutta into a full-fledged State Industrial Research Institute equipped with machinery and equipment in order to render technical advice and other services to various industries in the State. It is expected that about 50 persons will get employment.

Loans under State-Aid to Industries Act (Block Loan).—The Bengal State Aid to Industries Act has recently been amended and the provisions have been further liberalised so that the Industrial Units (both S.S.I. units and Cottage units) may get loans quickly on easy terms. The demand for such loans will increase during the Third Five-Year Plan period.

Servicing-cum-Training Centre for Hand tools in Purulia.—There is a nucleus of this industry in Purulia. But the quality of articles produced is not up to the standard. Training and servicing facilities are to be provided to improve the skill and also the quantity and quality of the production.

Development of manufacture of Hospital Appliances at Central Engineering Organisation.—Hospital appliances, e.g., operation tables and other appliances made at the Central Engineering Organisation, Howrah, are a new development in the country. It is proposed to produce them commercially. It is expected that about 25 persons will get their employment.

Miscellaneous

Training-cum-Production Centre for woolen blanket with machine-spun yarn.—In order to impart training in blanket weaving with machine-spun yarn to 25 tribal people in hill areas, a co-operative will be formed under the scheme.

Establishment of an Automobile repair shop and cycle rickshaw body building in West Dinajpur.—At present, there is a dearth of automobile repair shop and cycle rickshaw body building shop in North Bengal, though larry, truck, vans, etc., are the main transport communication in that locality. It is accordingly proposed to set up a unit at West Dinajpur with up-to-date equipment.

Subsidy for power consumption for small industries.—Small-scale industrial units often find it very difficult to compete in the market after meeting the high rate of electrical charges. It has accordingly been decided in consultation with the Government of India that subsidy will be granted to small industrial units of this State for power consumption up to a certain stage.

Marketing

Marketing of products of small-scale and village industries and procurement and supply of raw materials to cottage industries.—A Small Industries Corporation has been set up to deal with the procurement of raw materials and marketing of cottage and small-scale industries products of our State.

Administration

Re-organisation of the Directorate of Industries.—In the Second Five-Year Plan, several gazetted and non-gazetted officers and other inspecting staff have been appointed to cope with increased activities of the Directorate of Industries. A statistical cell of the Industrial Directorate has also been set up. More technical and administrative staff will be required to manage the increased activities of the various branches envisaged in the Third Five-Year Plan. At present there is also a small supervisory staff for implementation of the powerloom scheme. In the Third Five-Year Plan additional staff will be required for this unit.

Sericulture and Silk

Reorganisation of the existing nurseries under the scheme.—It is proposed to increase the supply of mulberry grafts and to increase production of rocoons. Two lakh of grafts and 10,000 lb. of seed cocoons will be supplied to the sericulturists. 5,000 acres of additional land will be brought under mulberry cultivation at the end of the Third Plan period.

Hill nurseries for rearing foreign univoltine races.—The scheme aims at increasing the multiplication of foreign univoltine races for F.I. cross layings. The implementation of the scheme is likely to lead to an increase by about 25 per cent. in the output of raw silk. 3,000 lb. of seed cocoons will be produced and above 12,000 families of West Bengal will be benefited.

Establishment of Grainages for supply of disease-free layings.—Implementation of the scheme will lead to an increase by 7 per cent. of the production of raw silk and the cost of production is likely to be decreased by about 10 per cent. Two lakh of grafts will be distributed per annum at the end of the Third Plan period.

Establishment of 4 Craft Nurseries.—The implementation of the scheme is likely to lead an increase by about 50 per cent. in the supply of disease-free layings at the end of the Third Plan period. The scheme aims at supplying 8 lakh disease-free layings in the first year of the Third Five-Year Plan.

Foreign Race Seed Station, Kalimpong.—The scheme aims at supplying one lakh of disease-free univoltine basic layings per annum during the Third Five-Year plan.

Development of Tassar Industry.—Under the scheme it is expected that about 30,000 lb. of standard Tassar yarn will be produced per year during the Third Plan period.

eggs.—Under the scheme it is proposed to organise, under direct State supervision, a Central Grainage to meet the demand for disease-free seeds. Twenty lakh FI and 30 lakh of indigenous disease-free layings will be supplied per annum during the Third Plan period.

(b) Extension Service.—The object of the scheme is to introduce desirable changes in methods of mulberry cultivation as well as reeling amongst the villagers and to help them to organise themselves in co-operatives. Implementation of the scheme will lead to the production of 50,000 lb. of standard raw silk per annum by the small-scale reelers and the cost of production is likely to be reduced from Rs. 42 per lb. to Rs. 32 per lb.

Extension of Sericulture in hill areas.—The object of the scheme is to introduce sericulture in hill areas for production of long filament cocoons. Sericulture will be introduced amongst 200 farmers in the hill areas.

Extension of Experimental Stations.—The object of the scheme is to try out the improved methods in sericulture which were found useful in other countries under our local conditions so that this can ultimately be introduced amongst the farmers of this State.

Establishment of one Nursery-cum-Demonstration Centre for Ericulture.—

The object of the scheme is to develop Ericulture in North Bengal districts. It is expected that 14,000 lb. of standard Eri yarn will be produced per annum after the completion of the scheme.

Expansion of Peddie Silk Reeling Institute (Malda).—The object of the scheme is to try out methods of reeling, cocoon testing, cocoon drying, etc., which were already known and found useful in more advanced countries. Physical target of the scheme is the production of 1,000 lb. of international grade raw silk per annum.

Establishment of State Filature.—The object of the scheme is to standardise and improve quality and reduce cost of production of raw silk. It is expected that at the end of the Third Plan period 12,500 lb. of raw silk will be produced per annum. Implementation of the scheme will also lead to the creation of ready market for the cocoons to be produced by the rearers of Murshidabad and Birbhum.

Expansion of Sericulture Training Institute (Berhampore).—The scheme envisages to provide better arrangement of training in scientific sericulture industry. At the end of the Third Five-Year Plan period, 44 students will be trained per annum.

Scheme for stabilisation of Raw Silk Market.—Under the scheme, it is proposed to provide cheap credit facilities to the reelers and to enforce regulated purchase and sale of cocoons which will eliminate speculative manipulation in the market.

Re-modelling of Rearing Houses in Government Nurseries.—The scheme aims at remodelling the existing rearing houses of Government Nurseries.

Expansion of Silk Conditioning Houses. The object of the scheme is to evaluate the progress of technical development of the raw silk industries.

Coir

Development of Coir Industry.—The object of the scheme is to develop the coir industry in areas within this State where raw materials are available. The scheme covers all phases of production beginning from extraction of fibre and ending in the production of coir products, e.g., bristle fibre, mattresses, ropes, brushes, mats, carpets, etc. About 700 persons are likely to be employed.

CHAPTER XIII

INDUSTRIES AND MINERALS

West Bengal is in one sense the most industrialised State in India having, according to the 1951 Census, the largest proportion of people depending on industry. But, paradoxical as it may seem, the State stands in much greater need of further industrialisation than the rest of the country. Due to a variety of reasons the growth of population here has been very fast in the last 15 years and the pressure on the agricultural land has been terrific. It is absolutely essential therefore to have a very large number of industrial establishments to draw off the surplus population from agriculture. The State Government have been exploring every possibility of starting more and yet more industries in the State. What is being done about the coal-based heavy industries around Durgapur as well as the details about the development programmes in respect of village and small scale industries will be found in other chapters and the present chapter will be confined to what is not included therein.

Progress during the Second Plan

The establishment of a Spinning Mill at Kalyani with 50,000 spindles for manufacturing finer counts of yarn (60-100 counts) was undertaken during the Second Five-Year Plan. It was started as a departmental undertaking but has since been converted into a Government Company under the Indian Companies Act. Rupees 140 lakh representing about 56 per cent. of the total capital outlay has been invested by the State Government in the share capital of the Company. The Mill has started production in three shifts and it is hoped that the third shift which has just started will be brought to full strength, shortly.

A sugar mill named, National Sugar Mills Ltd., was established at Ahmedpur to serve the surrounding sugar cane growing areas. Government have given financial assistance in the form of a loan of Rs. 13 lakh to the National Sugar Mills Ltd.

Third Plan Proposals

Coal is about the only major mineral of any importance that has so far been found here. As West Bengal has not been thoroughly prospected yet, much is not known about the occurrences of other major minerals. There are however indications that some important mineral deposits might be found in the districts of Purulia, Midnapore, Bankura, Birbhum, Burdwan and Darjeeling. If our hopes of finding these minerals materialise the base of our industrial structure will be considerably strengthened. It has, therefore, been decided to reorganise the Geological Prospecting Branch of the Mines and Minerals Directorate for undertaking intensive geological prospecting in West Bengal. Exploration of coal seams by drilling or otherwise in the coal bearing areas will also be undertaken by the Directorate.

In view of the steeply rising demand for coal it is proposed to start a State-owned deep coal mining industry for which an initial provision of Rs. 80.87 lakh has been made under the plan while a sum of Rs. 50 lakh has so far been allotted for the purpose.

In order to supply the needs of handloom and power loom weavers it has been decided that two more spinning mills, each of 25,000 spindles, producing yarn of lower counts (20 to 60 counts), should be established in the public sector, one of the Mills being a Government-sponsored mill to be run by a Company under the Indian Companies Act in which not less than 51 per cent of the share capital will be contributed by Government.

A spun silk mill is also proposed to be established to utilise the silk waste which is now being exported to other countries at very low rates. The production target is 60,000 lbs. of spun silk per annum. The total allocation on this spun mill will be Rs. 50 lakh.

CHAPTER XIV

ROADS

Improvement of communications is a key factor in development. Road communication in particular is of very great importance in West Bengal where the deltaic soil and a long wet season keep large areas cut off from the centres of commerce and industry for a considerable part of the year. Great stress has therefore been laid on road construction in the successive Plans of the State.

One particular feature of road planning is that it has to be spread over a number of years. What begins in one Plan is generally completed in the next because the sequence of operations requires an irreducible minimum of time.

Progress during the Second Plan

The Second Five-Year Plan included in its scope 3,700 miles of road within the State. Of this, 1,400 miles had been carried over from the First Plan and 2,300 miles were altogether new schemes. About 2,000 miles have been completed and the remaining 1,700 miles have been left in various stages of progress. This part will be completed during the Third Five-Year Plan.

Third Plan Proposals

During the Third Five-Year Plan it is proposed to complete 1,700 miles of roads carried over from the Second Plan. Another 950 miles already constructed under the previous Plans will be upgraded in order to cope with growing traffic. A new length of 950 miles will also be taken in hand, but this will reach the final stage only during the Fourth Five-Year Plan. Construction of a number of bridges is also included. Some of these will close the gaps existing on roads completed during the Second Plan. The programme of road and bridge construction will be phased according to availability of funds from year to year within the ceiling of the Plan outlay.

This programme is based on a consideration of priorities and includes a number of district roads which were selected after the recommendations of the respective District Development Councils had been taken into consideration.

CHAPTER XV

INLAND TRANSPORT

Road Transport

With the increasing tempo of development there has been an enormous increase in the traffic on our roads. The extension of the hard surfaced roads has largely contributed to this increase. The entire business of transporting goods by road and the major part of the passenger traffic have so far been in the hands of the private operators. But in Calcutta with its population bursting at the seams traffic congestion has been so heavy and efficient maintenance of a road transport service requires the co-ordination of so many interests that the State Government had to step in. The taking over from the private owners started during the First Five-Year Plan and continued throughout the Second, towards the end of which a statutory Corporation was established to manage the undertaking.

Another undertaking in Cooch Behar came under Government control for a different reason. A bus service had been started by the Maharaja of Cooch Behar during the Durbar Regime and when Cooch Behar merged into West Bengal in 1950 the State Government had to take it over. Here also a statutory Corporation for management was established. It started functioning with effect from 1960.

Progress during the Second Plan

The Calcutta State Transport Organisation, started as a Departmental Organisation in 1948, has effected many improvements in transport service in Calcutta. In accordance with the policy of phased nationalisation, all routes except five had been taken over by the end of the Second Five-Year Plan, and alternative bus routes outside Calcutta provided for the displaced bus owners. The undertaking has now been operating on 29 different routes in Calcutta and it also provides a special service to Belur during holidays.

The entire Plan allocation on transport was spent by the end of the Second Plan period. 209 buses were purchased and the fleet strength stood at 751 at the end of 1960-61. The average number of vehicles put on the road per day was 575. These covered about 73,600 miles a day and carried 11,66,000 passengers daily.

As part of the services provided for the passengers the undertaking built bus stations at Jadavpur, Garia, Ballygunge Railway Station, Esplanade, Behala and Dum Dum Railway Station. Besides these, 26 passenger-shelters were built at different parts of the city.

The maintenance services had also been strengthened. Besides the Central Workshop, the organisation had four well-equipped depots for garaging and maintenance of buses on each at Belghoria, Howrah, Lake and Paikpara.

The Cooch Behar undertaking has also made considerable progress. After a 5 per cent. cut had been imposed by the Planning Commission on the Second Plan allocations there was a provision for only Rs. 22.49 lakh for the acquisition of buses, construction of depots, etc. The number of buses acquired was 46 which covered about 2,170 miles a day at that time. By

the end of the Plan period the total number of buses had increased to 99 and they had been covering about 7,500 miles per day. Express services of State buses had been introduced between (1) Khejuriaghat-Balurghat, (2) Balurghat-Jalpaiguri, (3) Jalpaiguri-Alipurduar, and (4) Alipurduar-Burneskhata. All the districts of North Bengal—the entire area from the Ganges in the south to the borders of Assam in the north—had been covered by these services. Wayside depots have been erected at Alipurduar, Raiganj, Balurghat, Islampur, Falakata and Moynaguri for the convenience of passengers.

A workshop has been started at Raiganj and machineries are being installed for more efficient maintenance of the buses. Another workshop equipped with up-to-date precision machinery at Cooch Behar has not only helped the proper upkeep of the fleet belonging to the Corporation but has also undertaken major repairs to the motor vehicles owned by different departments of State Government and Central Government offices in North Bengal.

The acute traffic problem in Calcutta had also to be tackled. The points of severe congestion were to receive attention at the first instance. The Dalhousie Square, which is the hub of administrative and commercial activity in Calcutta, is one of such points. After a thorough study of the problem posed by this area it was decided to shift the Tramway from the east, north and west of the Dalhousie Square and to construct a Car Park and a State bus stand and to take up construction of two subways at the north-east and north-west corners of the Square. Only the first of these could be completed by the end of the Second Five-Year Plan.

Another area of congestion is between Dharamtalla Junction and the Whiteway's crossing of the Chowringhee Road. Realignment of the Tramway terminus at Esplanade, construction of a subway across the Chowringhee Road and other improvements, such as, the realignment of the Kidderpur Road, construction of car and bus parks and provision of safety islands, foot-paths, street-refuge and automatic traffic signals were considered essential for ensuring a freer flow of traffic and safety to the users of the roads. Only the first of these had been completed by the end of the Second Five-Year Plan. The rest have been carried over to the Third Plan.

THIRD PLAN PROPOSALS

During the Third Five-Year Plan both the Road Transport Corporation will continue to expand their services and add to the number of buses in their fleet. The remaining five routes in Calcutta proper will be taken over in course of such expansion. The measures for easing traffic congestion in the Dalhousie Square and the Chowringhee areas will be completed.

Two other congestion points in front of Howrah and Sealdah Railway Stations will receive attention during the Third Plan. The present yard in front of the Howrah Railway Station was constructed many years ago and it is totally inadequate for the present needs. This will be thoroughly remodelled at an estimated cost of Rs. 26.09 lakh. The road and parking facilities in front of the Sealdah Railway Station will also be improved at a cost of about Rs. 12.33 lakh.

The expansion of the bus services requires the establishment or expansion of bus stands at important points. A central bus stand will be

constructed at Barasat where several important bus routes converge. In addition to providing passenger amenities it will help to relieve the congestion in the Shambazar area. The bus stand at Darjeeling which is a very important tourist centre will also be expanded.

With the expansion of the bus services in Calcutta the volume of maintenance work will also go up. A fifth depot with the necessary equipment will therefore be constructed at Taratala, Kidderpore for which necessary land has already been taken on lease from Port Commissioners, Calcutta.

The original break-up of the Third Plan allocations is given below:—

Scheme	Allocation (Rs. in lakh)
(1) Construction of Car Park around Dalhousie Square ..	9.62
(2) Construction of two Subways in Dalhousie Square ..	15.18
(3) Improvement of the Chowringhee Road from Dharamtalla Junction to Whiteaway's crossing.	3.86
(4) Remodelling of parking areas and road approaches to the Howrah Railway Station.	26.09
(5) Improvement of road and parking facilities in front of Sealdah Railway Station	12.33
(6) Construction of a Bus Station at Belgachia ..	2.03
(7) Construction of a Bus Station at Baraset ..	2.78
(8) Extension of the Bus Stand at Darjeeling Bazar ..	0.61
(9) Construction of a Depot	27.50
	100.00

Inland Water Transport

The need for improving and extending the scope of inland water transport has been kept in view. The Ganga-Brahmaputra Water Transport Board was set up in 1952 by mutual agreement between the Central Government and the State Governments of Uttar Pradesh, Bihar, West Bengal and Assam with the object of improving the inland water transport facilities within the States concerned. The State Governments contributed at the rate of Rupees one lakh per year from the year 1952-53 while the annual contribution of the Central Government was Rs. 2 lakh. The State Governments decided during the Second Five-Year Plan to step up their contribution to Rs. 2 lakh per annum. A total of Rs. 10 lakh was contributed to the Board during Second Five-Year Plan period for the purpose.

THIRD PLAN PROPOSALS

One of the principal bottlenecks in the development of inland water transport has been the non-existence of a suitable technical organisation in the State level to study and survey the problem of inland water transport and also the acute shortage of the trained Indian crew personnel, such as Masters, Serang, Drivers, etc. A suitable higher training scheme will therefore be taken in hand during the Third Five-Year Plan. The number of seats in the present I.W.T. Crew Training Centre (for ratings) at

Garden Reach Road, Kidderpore, will be increased from 100 to 150 totalling 600 per year and other improvements will be effected at the Institution. The scheme has been contributing substantially towards Indianisation of the crew personnel in inland water transport and has thrown open a new avenue of employment to young people of this State.

Some of the water courses within the State are in need of improvement. The Hijli Tidal Canal which connects Calcutta with the southern part of Midnapur district as well as parts of Orissa through Orissa Coast Canal will be re-excavated and the lock-gates and sluices will undergo special repairs.

A scheme for investigation and model studies in respect of the Rupnarayan and its tributaries will be initiated to find out what type of training works and corrective measures are necessary for restoring the navigability of this river system.

The Indian Botanical Gardens at Sibpur attracts a large number of visitors from Calcutta. But the facilities for travelling to the Gardens are now extremely limited. It has therefore been decided to construct a jetty on the Hooghly near the Gardens. This will not only extend the travel facilities but will also prove to be an attraction to the visitors.

The break-up of the original Plan allocations between the different schemes is given below :

Scheme	Allocation (Rs. in lakh)
(1) Crew Training Scheme	12.35
(2) Investigation and Model experiment for the Rupnarayan River System.	8.00
(3) Improvement of navigation in the Hijli Tidal Canal ..	11.00
(4) Construction of Jetty with Cafeteria	1.65
	33.00

(Details of Schemes)

Road Transport

Construction of Car Park and State Bus Stand around Dalhousie Square.—With a view to remodelling traffic arrangements and thereby removing acute traffic congestion in the area around Dalhousie Square which is the centre of Governmental and Commercial activities in Calcutta, a scheme for construction of car park and State bus stand around the Square was included in the Second Plan at an estimated cost of Rs. 12.80 lakh. Out of this amount, a total sum of Rs. 3.18 lakh was anticipated to be spent up to 1960-61 for initial work in connection with the scheme, namely, removal of statues, erection of fencing, shifting of ground hydrants, dismantling of latrines, construction and extension of garage, etc. (1957-58 Actual—46; 1958-59 Actual—40; 1959-60 Actual—32; 1960-61 budget—2.00.) As the scheme was not expected to be fully implemented during the Second Plan period, it was included in the Third Five-Year Plan for execution at an estimated spill-over expenditure of Rs. 9.62 lakh. During the current year) that is 1961-62, the matter relating to acquisition of necessary foot-path land from the Calcutta Corporation as well as some other engineering works not being settled as yet, a sum to the extent of Rs. 1.30 lakh only has been estimated by the Public Works Department to

be spent in connection with works relating to providing M.S. railing and path-ways, etc., in the Dalhousie Square park as well as construction and shifting of garage of Writers' Buildings to the Park. With the finalisation and settlement of various issues, the implementation of the scheme is expected to be continued and considerable progress achieved during the next year. A sum of Rs. 1.55 lakh is accordingly required to be provided in the Budget Estimate, 1962-63, in this connection.

According to Plan and estimates of the P.W. Department, a provision of Rs. 4.44 lakh is also required to be made in 1962-63 for part construction of an underground car park at Dalhousie Square East. The total provision thus required in the Budget estimate, 1962-63, is estimated as follows:

	Rs. in lakh.
(1) General improvement works including provision of M. S. Rolling and pathway, shifting and construction of garage, etc.	1.56
(2) Car Park	4.44
Total ..	6.00

Form the point of view of relieving acute traffic congestion and for minimising the chances of road accidents in this key area, the provisions proposed for both Revised Estimate, 1961-62, and Budget Estimate, 1962-63, for implementation of such scheme may be accepted without any curtailment.

Improvement of Chowringhee from Dharamtalla Junction of Whiteway's crossing—construction of Sub-way, etc.—With the object of removing the prevailing traffic congestion and thereby minimising the chances of road accidents, a scheme for improvement of the important area of Chowringhee from Dharamtalla Junction to Whiteway's crossing and construction of sub-way, etc. was included in the fourth year of the Second Five-Year Plan. Matters relating to utilisation of land by Calcutta Corporation for the purpose of diversion of existing sewer and watermains could not be finalised within the limited period of the Second Five-Year Plan. The scheme was, therefore, included in the Third Five-Year Plan for implementation at an estimated spill-over expenditure of Rs. 3.86 lakh. The matters have since been finalised and administrative approval accorded to the execution of various works under the scheme by State Government, Calcutta Corporation and Calcutta Improvement Trust relating to—

- (1) Construction of a sub-way across Chowringhee;
- (2) General improvement, viz. realignment of Kidderpore Road, construction of car and bus parks, safety island, footpaths, street refuge, installation of automatic traffic signals, etc.

As the matter now stands for execution of initial works under the scheme, a provision of Rs. .75 lakh has been proposed for the Revised Estimate, 1961-62. For continuance of the work and for achievement of appreciable progress during 1962-63 for implementation of this important scheme, the provision of Rs. 3.00 lakh in the Budget Estimate for 1962-63 may be allowed to stand without any reduction. It may be specifically mentioned that the scheme will not only contribute substantially towards relieving acute and frequent traffic jams in this busy area of the city but also minimise chances of fatal road accidents occurring very often in the Esplanade area.

Construction of a Bus Station at Belgatchia.—To remove acute traffic congestion and minimise the chances of road accidents around the important traffic centre of Shyambazar Five-Point crossing, a scheme for construction of a bus station at Belgatchia was included in the last year of the Second Five-Year Plan at an estimated cost of Rs. 3.60 lakh. An expenditure of Rs. 1.57 lakh was anticipated during 1961-62 for cost of land, etc., in connection with the scheme and the scheme was accordingly included in the Third Five-Year Plan at an estimated spill-over expenditure of Rs. 2.03 lakh. The land on which the bus station was proposed to be built was not ultimately available as the same was made over to the Housing Department for execution of their Rental Housing Scheme for the Low Income Group Government Employees. As the matter stands, the scheme has been deferred for the present and consequently, no provision for the purpose has been proposed in the Revised Estimate of 1961-62, and Budget Estimate of 1962-63.

Improvement of bus services in Calcutta—construction of a depot and equipment.—From the point of view of acute problem of congestion in public transport prevailing in the city of Calcutta, implementation of measures aiming at orientation, diversion and general improvement of transport conditions requires special consideration. To meet the growing expansion of the city and relieve acute congestion in public transport, a scheme for construction of a depot with provision of necessary equipment has been included in the Third Five-Year Plan for implementation at an estimated cost of Rs. 27.50 lakh. For the purpose of acquiring land for execution of the scheme, necessary steps regarding execution of a deed of lease and other formalities are in progress during the current year. A lump provision of Rs. 1.00 lakh has been made in the Revised Estimate, 1961-62, to cover the initial cost relating to the scheme. With the completion of necessary formalities, considerable work under the scheme are expected to be done and progress achieved during the next year for which a provision of Rs. 13 lakh has been proposed in the Budget Estimate of 1962-63.

From the point of view urgent need for improvement and efficient and economic operation of buses, the provisions proposed for both Revised Estimate, 1961-62, and Budget Estimate, 1962-63, may be accepted without any curtailment.

Construction of two sub-ways in Dalhousie Square.—For the improvement and better regulation of traffic in the congested area around Dalhousie Square which is the centre of Governmental and Commercial activities in Calcutta, remodelling of the traffic arrangements in the vital area has become imperative necessary. With a view to ensuring public safety, a new scheme of construction of two sub-ways at the north-east and north-west corners of Dalhousie Square at an estimated cost of Rs. 7,98,000 and Rs. 7,20,000, respectively, has been included in the Third Five-Year Plan for implementation. The total estimated cost of this scheme is Rs. 15,18,000. It has subsequently been decided to take up construction of one sub-way for the present at the north-west corner of Dalhousie Square at an estimated cost of Rs. 7.20 lakh. Public Works Department are taking action for obviating the engineering difficulties standing in the way towards execution of the scheme, viz., the removal of existing sewer and water mains and new construction of the same elsewhere and acquisition of requisite footpath land from the Corporation of Calcutta free of cost. To cover the payment for cost of land, if any, as well as to meet the initial cost of work under the scheme, a small provision of Rs. 1 lakh has been proposed in the Revised Estimate of 1961-62. Much useful work is expected to be done and progress achieved under the scheme during the next year and as such, the provision of Rs. 4 lakh for 1962-63 may be accepted without any reduction.

Improvement of road and parking facilities in front of Sealdah Railway Station.—There is a heavy traffic in front of Sealdah Station and congestion is so serious that there are frequent accidents. With a view to ensuring improvement of the deplorable condition and for better regulation of traffic and for minimising the chances of accident a scheme at a total cost of Rs. 12.33 lakh has been formulated in consultation with the Railways, the Calcutta Corporation and the Calcutta Tramways and included in the Third Five-Year Plan for execution. The break-up of the estimated cost is as follows:

				(Rs. in lakh.)
(1) Cost of Railway land	..	..	..	6.44
(2) Engineering work (viz., Bus stand including Pacca approaches and pavements, 2 waiting sheds, 2 invateries, etc.)				5.89
Total				12.33

Necessary steps for acquisition of the railway land for executing construction work under the scheme are in progress during the current year. It is expected that to cover the initial expenditure, a fund to the extent of Rs. 2 lakh will be necessary under the scheme during the current year. The Revised Estimate of 1961-62, may, therefore, stand at Rs. 2 lakh. In the interest of avoiding fatal road accidents and removing acute traffic congestion in this key area as well as to regulate the increasing traffic resulted by the electrification of the Suburban Railways, speedy implementation of the scheme is considered not only highly essential but also imperative. A considerable fund will be required for the scheme in the next financial year to achieve this object. Accordingly, the Budget Estimate, 1962-63, proposed at Rs. 8.33 lakh for the scheme may stand without any curtailment.

Remodelling of Parking areas and Road Approaches in front of Howrah Railway Station.—With the improvement achieved in the field of Transport as a result of execution of the First and Second Five-Year Plans, there has been heavy increase of traffic in front of Howrah Railway Station. The present yard was built many years ago and it is not sufficient to meet the present needs. There have been frequent traffic jams in front of this area or in the vital approaches due to want of sufficient moving space in the yard. The whole position was studied by the representative of Government, Chief Engineer, Eastern Railway and Calcutta Improvement Trust and a scheme for remodelling of parking areas and road approaches in front of Howrah Station has been included in the Third Five-Year Plan for implementation at an estimated cost Rs. 26.09 lakh. The total cost of the scheme includes—

				Rs. in lakhs.
(1) Cost of land	..	..	..	18.00
(2) Engineering works	..	..	..	8.09
Total				26.09

For covering the initial cost under the scheme, it is anticipated that a fund to the extent of Rs. 1.00 lakh may be necessary during the current year. As such, the Revised Estimate of 1961-62, may be allowed to stand at Rs. 1.00 lakh. From the traffic and safety point of view as well as to cope with the growing volume of traffic caused by the electrification of the

Suburban Railways at Howrah, speedy implementation of the scheme is considered not only highly essential but also imperative. To achieve this object, a considerable fund will be required for the scheme during the next year. Accordingly, the budget estimate of Rs. 14.00 lakh proposed for the scheme may stand without any reduction.

Construction of a Bus Stand at Baraset.—At present there is no central bus stand at Baraset which is the terminus of 5 important bus routes (viz., 79B, 81, 87, 88 and 95). In addition five more heavily used routes pass through Baraset (viz., 78A, 78N, 79, 79C and 90). With a view to relieving acute traffic congestion in the Shayambazar crossing caused by the termination of suburban bus routes at the place, the position was reviewed by Government in a high level conference and it was decided to undertake the scheme of construction of a central bus stand on a piece of Government land measuring 1.24 acres at Baraset in the district of 24-Parganas at a total estimated cost amounting to Rs. 2,78,000 for implementation by inclusion in the Third Five-Year Plan. The scheme provides for overall accommodation of a total number of 26 buses, viz., 25 buses of the terminal routes (at the rate of 5 buses per route) and one bus of the wayside routes. The scheme also covers construction work such as high island between two consecutive rows of buses, wide footpath, waiting sheds for male and female passengers, canteen for drives, conductors, etc., lavatory and urinal facilities, provision for two sentry boxes at the entrance and exit, widening of existing municipal road and the approach road to the S.D.O.'s residence.

The scheme as administratively approved is not expected to be fully implemented within the current financial year. To cover part cost of work under the scheme, a provision of Rs. 1.35 lakh has been proposed in the Revised Estimate of 1961-62. As the scheme is expected to be completed in course of first two years of the Third Five-Year Plan, the balance cost of Rs. 1.43 lakh is required to be provided in the Budget Estimate of 1962-63, which may be accepted without any curtailment.

Extension of the Motor Stand at Darjeeling Bazar.—Besides being a source of great attraction for the visitors, Darjeeling is fast growing as an important town. The problem of acute parking difficulties and traffic congestion at the Bazar and on the main road of the Darjeeling town has been keenly felt for a long time. It was, therefore, decided in consultation with the municipal authorities, to extend the existing Motor Stand on Lebong Cart Road at an estimated cost of Rs. 61,000. Due to paucity of funds, Darjeeling Municipal authorities have expressed their inability to undertake the work. Accordingly with a view to ensuring betterment in the parking facilities and the regulation of traffic in this important centre as well as on the grounds of public safety, the scheme has been included in the Third Five-Year Plan for implementation at Government cost.

The matters relating to acquisition of necessary land from the Darjeeling Municipality and taking up of work of construction during the current year under the scheme are in progress. Revised Estimate has been fixed at Rs. 30,000 to cover part execution of the scheme during the current year. For completion of the work of extension of Motor Stand at Darjeeling Bazar, the balance cost of Rs. 31,000 has been proposed in the Budget Estimate, 1962-63, which may be accepted without any reduction. It may be mentioned that the scheme relates to the improvement of the area inhabited by the hilly people and as such, any reduction of estimates for the scheme may lead to delay in its execution giving rise to the scope for them to think that the State Government are indifferent to their needs and interest.

Inland Water Transport

Crew Training Scheme.—To cope with the problem of acute shortage of inland water transport crews such as, Masters, Serangs, Drivers, etc., as well as from the point of view of systematic recruitment of trained crew personnel from amongst Indian Nationals for the Inland Steam Vessels, a crew training scheme has been included in the Third Five-Year Plan for execution at a total estimated cost of Rs. 12.35 lakh. The scheme provides for development of the existing small I.W.T. Crew training centre at Garden Reach Road, Kidderpore, and expansion of the scope of higher training for about 150 boys instead of 100 at a time as at present. This will afford facilities for training of 600 boys per year.

The matter relating to acquisition of a suitable site for erection of a new building for the existing crew training centre is in progress. It is expected that provision for a small capital expenditure to the extent of Rs. .50 lakh for payment of cost of land will be necessary during the current year. The Revised Estimate of 1961-62, has therefore been adopted at Rs. 1.65 lakh including the recurring revenue cost of training (Capital .50, Recurring 1.15).

In view of the urgency in the matter of speedy implementation of this essential scheme, a provision of Rs. 4.75 lakh is considered necessary in the Budget Estimate of 1962-63, to cover the capital expenditure on account of cost of land and other construction work under the scheme. To introduce higher training scheme and to meet the increased recurring cost for training more boys, a provision of Rs. 1.25 lakh has been proposed in the Budget Estimate of 1962-63. The total provisions for capital and recurring expenditure are, therefore, estimated as follows:—

	Revised Estimate, 1961-62	Budget Estimate, 1962-63
	(Rs. in lakh)	(Rs. in lakh)
Capital ..	.50	4.75
Recurring ..	1.15	1.25
Total ..	<u>1.65</u>	<u>6.00</u>

In view of the acute demand for recruitment of trained Indian crews in inland vessels in place of Pakistami Nationals both in the private and the public sectors as well as solution of acute unemployment problem in the State, the provisions proposed both for Revised Estimate of 1961-62, and Budget Estimate of 1962-63, may stand without any modification.

To cater to the needs and to co-ordinate the increased activities including introduction of higher training, such as Masters, Serangs and Engine Driver, etc., a suitable site near the marine House on the Strand Road, Calcutta, belonging to the Government of India was requested for its release in favour of the State Government. But unfortunately the Government of India not being agreeable to release the aforesaid land, much delay has ensued and inconveniences are being felt towards implementation of the scheme. It is highly essential at this stage to end the bottleneck so that the scheme with its higher activities can be executed without any further hindrance. Besides availability of land from the Centre, Government of India should extend their hand allotting substantial portion of the fund, say at least Rs. 10 lakh, out of Rs. 20 lakh earmarked in the Central Sector of the Plan for the improvement, development and expansion of this training centre which is pioneer in India.

Construction of a Jetty with cafeteria at Botanical Gardens.—The Indian Botanical Gardens at Shibpur, Howrah, is a source of great attraction for all sections of the people, residing in the over populated and congested areas of Calcutta and its suburbs all the year round for its natural beauty, environments, as well as educative value. Tourists, both at home and from abroad, take great interest in visiting the gardens. It has been felt that the amenities and facilities now available in the gardens are proving to be grossly inadequate for the growing requirements of the visitors. It has, therefore, been decided to implement a scheme of construction of jetty with cafeteria at Botanical Gardens at a total estimated cost of Rs. 1.65 lakh by its inclusion in the Third Five-Year Plan.

As the scheme involves construction of necessary jetty pontoons and gangway at the Indian Botanical Gardens, Shibpur, under the control of the Forest Department, the matter for implementation of the scheme in consultation with that Department is in progress. To meet the part cost of execution of the scheme during the current year, the requirement of Rs. 65,000 as estimated by the Forest Department has been fixed as Revised Estimate of 1961-62. In the interest of providing amenities and facilities for the growing number of visitors to the gardens as well as to link up much needed river communication for the benefit of tourist traffic travelling by water, the balance cost of 1.00 lakh for completion of the scheme as proposed in the Budget Estimate of 1962-63, may be retained without any modification.

Investigation and model experiment for the preparation of a scheme for improving navigation in River Rupnarayan.—This scheme provides for carrying out, for a period of 3 years, field investigations and model studies in respect of the river Rupnarayan and its tributaries which are essential for determining what specific type of training works and corrective measures should be undertaken for restoring navigability in the River Rupnarayan.

The Ganga-Brahmaputra Water Transport Board has agreed to bear half of the cost of such investigations and experiments subject to a ceiling of Rs. 5 lakh from the funds of the Board.

Improvement of navigation in the Hiji Tidal Canal.—This is a scheme for improvement of navigation in the Hiji Tidal Canal which constitutes the link of communication between Calcutta and southern parts of Midnapore district, connecting also certain parts of Orissa State through the Orissa Coast Canal. It originated from Geonkhali on the Hooghly to Etamogra on the left bank of the river Haldi a distance of 11 miles (Reach I) and again from Teropakhia on the right bank of the river Haldi to Kalinagar of the left bank of the river Rasulpur, a distance of 18 miles (Reach II). The scheme provides for re-excavation of these reaches and also for special repairs to lock-gates and sluices lying on the Canal.

CHAPTER XVI

TOURISM

Development of tourism which has for some time been increasing in significance, occupies an important place in our Plan. Of late, more and more foreign tourists are being attracted to our country. Not only are they a source of valuable foreign exchange but they are also a potent factor in developing international relations of India. The promotion of tourism at home is also a matter of some importance. On the one hand, it broadens the intellectual horizon of our people and makes them aware of the potentialities of development all over the country and on the other, it fosters a sense of common heritage and helps the cause of national integration.

Tourism was included in the Plan late in 1958 and much could not be done during the Second Five-Year Plan. But a large amount of spadework has already been done and progress during the next Plan is expected to be rapid.

Third Plan Proposals

Three different classes of schemes are contemplated. The first of these is designed primarily for the benefit of the foreign tourists. These schemes are financed entirely by the Central Government. The second class of schemes, the expenditure on which is equally shared by the Central and State Governments, are mainly for the home tourists but are also likely to be of use to those from abroad. The last are meant for the home tourists alone and the entire expenditure on such schemes is provided in the State Plan.

In all these schemes emphasis has been laid on providing suitable accommodation like Rest Houses, Retiring Rooms, etc., for the tourists. Details of the tourist accommodation to be provided in course of the Third Plan are shown below:

Scheme 1	(Rs. in lakhs)	
	Total Outlay 2	Outlay in the State Plan 3
(1) Tourist Rest House at Santiniketan ..	3.50	1.25
(2) Canteen-cum-retiring room at Daimond Harbour	1.50	0.75
(3) Tourist Lodge at Malda	1.50	0.75
(4) Rest House at Darjeeling	4.25	3.00
(5) Low Income Group Rest House at Durgapur	2.50	2.50
(6) Low Income Group Rest House at Bishnupur	1.00	1.00
(7) Low Income Group Rest House at Digha (or at Fraserganj)	1.75	1.75
(8) Tourist Rest House at Berhampore ..	2.00	2.00
(9) L. I. G. Rest House at Kalimpong ..	2.00	1.00
(10) Tourist Publicity	1.50	1.50
(11) Tourist Buses, other vehicles and launches	23.40	1.50

In addition to providing suitable accommodation some improved touring facilities will also be made available. Provision has, therefore, been made for purchase of luxury tourist buses, luxury cars, launches for excursions on the Hooghly and some luxury taxi cabs. Adequate attention will also be paid to publicity and attractive brochures on places of tourists' interest will be published.

CHAPTER XVII

EDUCATION

In planning for development, as elsewhere, man is the measure of all things. He is at once the architect and the beneficiary, the means and the end. The largest possible investment of capital will be of little avail, if the human element lags behind, and a plentiful production if it is not properly utilised will only lead to degeneration, squalor and suffering. Education which alone can help man to gain his full stature is therefore of over-riding importance in our scheme of things. Every citizen, whether he is growing crops, tending machines, teaching in a University or running a Government, should be able to give his best and at the same time develop the sense of value, which will enable him intelligently to make that choice between alternatives which is his privilege and responsibility in this democratic society of ours.

2. With these objectives in view, our successive plans have provided for a balanced and extensive development of education. Special stress has necessarily been laid on the sectors where much leeway is yet to be made. Technical Education in particular has received the emphasis, which it needs in this industrialised State. Primary, secondary and university education have also been given due attention. And while we are however near our ultimate objective, we have been advancing towards it picking up speed all the while.

Progress during the Second Plan

3. **Primary and Basic Education.**—Substantial progress was made in the field of primary education during the first two plans. 26,297 primary schools had been established by the end of the Second Plan and 964 converted into basic school. Besides these 126 basic schools had been established till the end of 1959-60.

4. **Secondary Education.**—The State has made good progress in the field of secondary education as well. By the end of the Second Plan about 24 per cent. of the student population of the age group of 11 to 14 has been in school. Similarly, there was about 14 per cent. of the student population of the age group of 14 to 17 in the higher secondary schools by the end of 1960-61.

5. **University Education.**—The State has now 120 colleges providing education up to degree level for 1.30 lakh of students. Out of these, 94 colleges have been taken up during the Second Plan under the U.G.C. Scheme for conversion into the Three-Year Degree Course pattern.

6. **Technical Education.**—Before independence there was hardly any scope of technical education except at the collegiate level. In order to cope with the growing demand for technical assignments, Engineering Institutions for Diploma Courses or Polytechnics were set up to meet the requirements of supervisory personnel. By the end of the First Plan period there were 9 such Polytechnics with a total capacity of about 2,000, students. By gradual expansion of technical education facilities at the Diploma level the State has now 20 Polytechnics for various courses including Mining, Engineering, Printing Technology, etc., with a total capacity of 9,300 students. Besides the supervisory personnel, facilities have also been provided in seven Polytechnics for Draftsmanship course for turning out annually about 200 draftsmen.

7. With a view to meeting the demand of workers at the craftsman level, one year certificate course has also been provided in 4 Polytechnics. The State have also set up so far for 11 Junior Technical Schools which aim at diversification of educational opportunities at the middle stage and at giving a boy a training to enable him to condition him for different productive occupation of a technical nature, while continuing their formal general education so that he may become an enlightened member of the Society.

Another feature of the Second Plan has been the provision of two centres for Craft Teacher Training to train qualified persons to meet the requirements of teachers in Craft in Basic and Secondary Schools.

An institution has also been set up for training supervisory personnel in engineering industries. This will provide a sandwich course to pupils already in industry.

8. In regard to the engineering education at the under-graduate and post-graduate level, the intake of the Bengal Engineering College was raised to 200 at the beginning of the Second Five-Year Plan. Under the Scheme of expansion of Training facilities for under-graduate studies, the intake and the capacity for enrolment have been raised to 430 and 1,680, respectively.

At the instance of the Government of India, post-graduate courses have been introduced in the college with an intake of 30 students to give an impetus to the young engineers for research work.

The Centrally-sponsored Scheme of Mining Engineering was also introduced at the College with an annual intake of 30 students. Besides these, the Rural Housing Scheme of the Government of India and the Operative Course of the Hindustan Steel Project are now in operation at the College. Re-organisation of the Berhampur Textile Institute, the Textile Institute at Serampur and the Bengal Tanning Institute, expansion of the Calcutta Technical School were taken up during the Second Five-Year Plan.

9. In consequence of the re-organisation of the secondary education and the provision of XI class schools with corresponding provision of Three-Year Degree Course, the under-graduate course at the engineering College has undergone a change and the Five-Year integrated course has been introduced in the College from the current year.

In order to meet the difficulties of providing adequate and qualified teaching staff for the increased admission of students, the Central scheme of training teachers has been introduced in the College.

Full advantage has been taken of the facilities provided by the T.C.M. Programme for the training of the collegiate teaching personnel in the U.S.A.

Various schemes of scientific research under the auspices of the Council of Scientific and Industrial Research are in operation in the College and the result achieved have received recognition in India and abroad.

10. Under a Central Scheme, Regional Engineering College, Durgapur, has started functioning, pending construction of teaching and residential accommodation at Durgapur the arrangements have been made for holding classes and workshop training in Bengal Engineering College.

11. The College of Engineering and Technology under the Jadavpur University is also being developed along similar lines under various Central Schemes for which matching grants are being provided by the State Government. The Chemical Engineering Department of this College has also been developed by the State. The present intake is 370.

12. **Social Education.**—The Social Education programme was initially embarked upon with the principal objective of liquidating adult illiteracy. It was started as an adjunct to the regular work of the schools, especially the primary schools. But there has since been a marked shift of emphasis from acquisition of formal literacy to functional education for everybody outside the school. And while the problem of mass-illiteracy still looms large, continues to be tackled through the comprehensive technique of Community Development, the sphere of Social Education has brought within its purview the important programme of library development, production of literature and other ancillaries.

By the end of the Second Plan over 4,000 Social Education Centres had been set up in nearly 200 Development Blocks, annually attended by 4,00,000 people of whom nearly 1,50,000 were literate. The National Educational programme comprising education at the primary and the secondary levels in particular, requires that schemes for sustaining the progress made in the different fields and obviating the possibility of wastage in the shape of relapse into illiteracy and stagnation should be taken up. A continued process of post-literacy education supported and promoted by a well organized library service is the only effective step for this purpose. The Second Plan was the successful establishment of a comprehensive library service in West Bengal comprising a Central Library at the State Headquarters to serve as the directing and controlling authority, 19 district libraries, 24 area libraries and 464 rural libraries. It has been possible to provide a fairly wide coverage to the reading public in the rural areas through the agency of these libraries. On a moderate estimate over one million people are either directly or indirectly benefited.

13. **Schemes for the socially handicapped.**—The Second Plan period actually opened with the following institutions catering to the needs of the socially handicapped:

- (1) Seventy-five Welfare Homes including Destitute Home;
- (2) One Deaf and Dumb School;
- (3) Two Blind Schools; and
- (4) One Home for Mentally deficient.

The total number of beneficiaries in all these institutions was more than 5,000. At the middle of the Second Plan period a centralised Home for children of the age-group 6—14 under the direct management of the State, was started at Banipur, 24-Parganas. This institution is being organised on Basic lines with adequate provision for vocational training. A welfare Home for girls of upper age-group is also under re-organisation at Dhanyakuria, 24-Parganas.

14. **Youth Welfare.**—During the Second Five-Year Plan period, progress was maintained both in training facilities as well as in giving technical and financial assistance to educational institutions, State associations, clubs, Bayamshalas, Akharas and 19 units of the Inter Schools Sports Associations. A total sum over six lakhs was spent from Central Fund and the State fund for providing increased facilities in way of grants for construction of gymnasias, pavilion, small stadia, swimming platforms and purchase of equipment. It has been possible to establish a large number of youth clubs in rural areas all over the State with financial assistance from Government of India and it may be asserted that people in rural areas are becoming increasingly sports-minded. The baneful social impact of non-utilisation of the leisure time in healthy physical activities has, to a great extent, been minimised and a new social pattern is growing up in the villages which will surely be beneficial in the long run.

Third Plan Proposals

15. **Primary and Basic Education.**—During the Third Five-Year Plan it will be an attempt of this State to cover at least 80 per cent. of the child population of the age group 6—11 years provided the Central assistance in the manner envisaged by the Planning Commission is made available. For successful implementation of this scheme a large number of qualified and trained teachers will be required. For this purpose the State have already taken up the implementation of the Centrally-sponsored schemes of setting up new Training Institutions as also the strengthening of the existing ones. This scheme and the State scheme taken together will bring out annually 2,420 trained teachers in addition to 2,360 teachers as are being trained annually in existing institutions. It is expected that during the Third Five-Year Plan there will be an annual output of 5,000 trained teachers to meet the requirements of the existing as well as additional Primary and Basic schools as may be set up during the Plan in this State with a view to meeting the objective.

16. **Secondary Education.**—With a view to maintaining the tempo of progress in the field of secondary education the State of West Bengal will endeavour to bring into schools about 40 per cent. of the student population of the age group 11 to 14 and about 25 per cent. of the age group 14 to 17 during the Third Plan period.

The Scheme of re-organisation of Secondary Education as implemented requires qualified and trained teachers. The initial difficulty about such teachers is being met by providing short-term intensive course of contents training to existing teachers. This difficulty will be removed in the Third Plan when teachers of better quality will be available under the new system of collegiate education (Three-Year Degree Course).

The training institutions since set up under the Central Government Scheme and the existing training colleges as well as those proposed to be set up under the Third Plan are likely to meet the requirements of trained teachers in full. In this Plan special emphasis will be given on expansion of Girls' Education.

17. **University Education.**—The three existing Universities now provide only limited facilities and can meet at best a fraction of the requirement of the requisite specialised personnel. The Third Five-Year Plan will bring into existence three more Universities in addition to the University of Burdwan which has started functioning towards the end of the Second Plan and it is expected that it will thus be possible to meet to a much greater extent the needs in the advanced spheres of science as well as art and culture. The Tagore University is being specifically established as a cultural University with dance, drama music, art, crafts and other cultural subjects as its special features and will thus form a valuable addition to the existing pattern of University Education.

18. Ninety-four college have so far been converted into 3-year degree course colleges. The remaining 26 of the colleges will be taken up and the entire process of conversion completed during the Third Five-Year Plan, when a still greater emphasis will be placed on development of Science studies in a more comprehensive form and also on improved facilities for honours studies.

The student population in the under-graduate level by the end of Third Five-Year Plan is likely to reach 1.80 lakh.

19. One of the most important features of the State Plan will be to make liberal provisions for higher education for girls, both by starting new colleges for women and providing better facilities for co-education in the men's colleges.

Development of residential accommodation in almost all the colleges in urban as well as rural areas will form one of the main features of the Third Plan. This will provide better opportunities for higher education to a wider section of the people.

In order to improve the present standard of education and to make it cover all essential aspects, considerable facilities will be provided for library studies, seminars, physical education and other co-curricular activities which will lead to the balanced development of the student as a citizen.

Provision of improved amenities for students will also form an important part of the Plan. This will include larger provisions for scholarships and stipends to enable the needy and meritorious students to pursue the course of higher education, establishment of non-residential students' centres in colleges on the Day Home pattern, Text Book Libraries and Students' Aid Funds, the last item entirely on private enterprise.

Improvement of the teacher-student ratio, continuation of the improved pay-scale of the teachers, better facilities for research and higher studies and provision of staff quarters will form the main features in the programme of furnishing better amenities of teachers during the Third Five-Year Plan.

20. **Technical Education.**—During the Third Five-Year Plan still more emphasis will be given to consolidation of technical education. It is proposed to have three more engineering colleges with a capacity of 2,450 students to meet the growing demand of higher engineering personnel. Similarly for supervisory personnel eight additional polytechnics will be set up in districts where no such provision has been made. In six of the polytechnics part-time facilities will be provided for the people already in industries. There is already an institute for sandwich course and it is proposed to have another one during the Third Five-Year Plan.

Junior Technical Schools in this State have been considered to be very useful institutions and it is proposed to establish 15 more of such institutions in this State during the Third Five-Year Plan. Ample provision will also be made for stipends and scholarships for needy and meritorious students.

The two existing Textile Colleges at Serampore and Berhampore and the College of Leather Technology in Calcutta will be further re-organised and provided with modern equipment and adequate staff. It is proposed to introduce a Diploma Course in the college of Leather Technology in addition to the Degree Course already introduced. The Ceramic Institute in Calcutta will also be re-organised and a degree course in Ceramic Technology will be introduced. Besides there a Chemical Polytechnic to impart training on paint and varnish technology is proposed to be established.

In the field of scientific and technical research the existing societies and institutions will be assisted financially to maintain the tempo of research already undertaken or proposed to be undertaken.

21. **Social Education.**—During the Third Plan period, there will be nearly 5,000 social education centres to foster adult literacy as well as to promote community living and co-operation.

The library set up envisaged under the Third Plan would include re-organisation and development of an adequate library service for the city of Calcutta, and other towns and townships. Further expansion of library service over the rural areas by establishing Block libraries and Anchal Panchayet libraries with a view to reaching the people in the remotest parts of the country is also contemplated. This would involve training of personnel for which provision has been made in the library blue-print for the Third Plan.

22. **Schemes for the socially handicapped.**—The work started in the Second Five-Year Plan will be continued in the Third. The Existing Junior High School of the Home for girls of upper age-group will be upgraded to a High School with provision for vocational training including, if possible a School Masters' Training Centre. It is also proposed to open at least one Children's Welfare Home at the headquarter of every district, since at present, there are some districts in the State where no such institution exists. In the voluntary section two Junior High Schools have been opened, one under Rahara R. K. Mission Boys' Home and the other under St. Xaviers' Welfare Home at Basanti. A multi-purpose school with three streams has also been set up under R. K. Mission Boys' Home, Rahara, where deserving orphans get special preference for Higher Education. A junior basic training college has also been opened under the same institution. The orphan children having passed the School Final Examination can get opportunity for practical training in that institution.

23. Financial assistance in the form of grants-in-aid on per capita basis at the ceiling rate of Rs. 33 has so far been given to the Aided Welfare Homes. But during the Plan period, the rate of that grant has been increased for certain specific institutions where facilities for specialised training and education are imparted. For instance, per capita grant for students of the Multi-purpose and Junior Technical Section of R. K. Mission Boys' Home has been raised to Rs. 45, for Blind Schools to Rs. 40 and for the institution meant for Mentally deficient children to Rs. 35. The Destitute Homes which have not been functioning on sound educational lines, so long, have also been brought under re-organisation scheme with a view to making rehabilitation possible. A four-year course for practical training linked with a Condensed Course has been drawn up and it has been proposed to raise per capita grant to these institutions from Rs. 18 to Rs. 33.

Besides these, this section has increased the accommodation in the two centres, viz., Amtala Training Centre linked with B. E. College, Shibpur, and Transport Department and Manindra Mills Welfare Home, linked with Cossimbazar Manindra Mills for Technical Training, so that greater number of orphan children may be admitted as apprentices and ultimately absorbed.

It is also proposed to establish a Training Centre for Social Workers, either under Janata College, Banipur, or Kalimpong or independently. The progress of rehabilitation and after-care will also form subjects of special attention during the Third Plan period.

24. **Youth Welfare.**—With a view to providing trained leadership in educational institutions and in other youth organisations, increased facilities were added in the Post-Graduate Training College for Physical Education at Banipur during the Second Plan period. It is proposed to further increase the intake of the institution before the end of the Second-Five-Year Plan period. Voluntary organisations like Scouting, Bratachari, Junior Red Cross received substantial assistance from Government during this period and their activities have expanded to a great extent. The State associations controlling major games and sports have also been assisted for their maintenance and also for participation in the national and inter-national meets.

25. The following new schemes are proposed to be taken up :

- (a) Coaching of College and School students in the different games and sports.
- (b) Increased facilities for games and sports by way of grants for purchase of equipment.
- (c) Rowing facilities.
- (d) Camping facilities.
- (e) Assistance to Akharas carrying on indigenous activities.
- (f) Youth Festivals.
- (g) Physical Efficiency Drive.
- (h) Training facilities for establishing at least one more college of Physical Education in the State.
- (i) Strengthening of administration.
- (j) Construction of Gymnasia and play-sheds for Colleges, High Schools and Senior Basic Schools and construction of play-sheds for Junior High Schools and Junior Basic Schools.

(Details of Schemes)

Elementary Education—General Schemes.

Improvement and expansion of Teachers' Training (including Basic) facilities.—The scheme is meant for expansion of the existing teachers training institutions as also for setting up new institutions and craft training centres for training of teachers of Primary and Basic Schools. During 1961-62 additional 60 seats have been provided in the Government Junior Basic Training College, Kalimpong.

Improvement and expansion of Basic Education (Classes I to V).—It is proposed to convert the existing Primary Schools into Junior Basic and also to set up new Junior Basic Schools. During 1961-62, 161 schools will be set up and 200 schools next year.

Improvement and expansion of Basic Schools (Classes I to VIII).—It is proposed to set up schools of Basic type for the age-group 6-14 covering classes I to VIII. During 1961-62, 26 such schools will be set up and 50 schools are contemplated to be set up next year.

Provision of educational facilities for the children of the age-group 11-14.—The provision is meant for providing schooling facilities of the children of the age-group 11-14.

During 1961-62, 63 such schools will be set up and during the next year 50 such schools are contemplated to be set up.

Improvement of the condition of service of teachers of Primary (including Basic) Schools.—Under this scheme improved scales of pay have been sanctioned to teachers of Primary (including Basic) Schools.

Improvement of teaching in Primary Schools towards Basic pattern (including accommodation, equipment, teaching in Science, etc.).—The provision is meant for improving teaching facilities in Primary Schools by providing accommodation, equipment, teaching in science, etc.

Orientation of Primary Schools including Seminars, Conferences, Teachers' Educational Tours, etc.—The programme of orienting Primary Schools towards basic pattern as contemplated under the Third Five-Year Plan includes holding of seminars, conferences for teachers and inspecting staff and educational tours for students and teachers. During the current year it is proposed to give orientation training to 18 D.I. of Schools, 52 A.I. of Schools and 300 S.I. of Schools besides 8,000 teachers of elementary schools. Next year the aim is for giving orientation training to 12,000 teachers.

Essential accommodation for Teachers of Primary (including Basic) Schools.—The scheme aims at providing essential accommodation for teachers of a number of Primary Schools. Current year's programme is for providing accommodation for 30 teachers and accommodation for 140 teachers proposed next year.

Production of literature and other materials for teachers and children.—The scheme provides for production of literature and reading materials for children of basic and elementary schools and preparation of source guide books for teachers and monograms of basic education.

Research in Basic Education and new Experiments.—The scheme aims at encouraging research through Research units to be set up in the Basic Training Colleges. The units will also review the procedure followed and suggest for reform in work of the department.

Improvement of library services in Basic Schools.—Under this scheme it is proposed to attach a library to selected basic schools. It will serve teachers and pupils of the school as also the community in general. 50 schools are proposed to be taken up during the current year and 75 schools next year.

Strengthening of Administrative Inspectorate staff for Primary (including Basic) Schools.—In order to plan and execute the programmes envisaged additional 34 inspecting staff have already been sanctioned. More staff will be added to keep pace with the increased work.

Provision of accommodation for improved inspectorate.—To overcome the difficulties of the inspecting officers in regard to accommodation it is proposed to pursue a programme of providing residential and office accommodation for the improved inspectorate.

Educational Survey.—The provision is for undertaking educational survey in transferred areas.

Planning, Statistical and Reporting Units.—(i) *Strengthening of planning and supervisory staff.*—It is proposed to appoint additional staff for work at the State and District Headquarters in connection with the preparation and execution of Third Five-Year Plan Schemes.

(ii) *Additional accommodation for planning and supervisory staff.*—Additional accommodation both for office and residential purposes is proposed to be provided for the staff.

Special Schemes for Girls.

Provision of Pre-Primary (Basic) Education.—Under this scheme 53 Pre-Basic (Nursery) Schools will be set up for children of the age-group 3-5 this year. These Schools will be staffed with women teachers who are more suited for the purpose. It is contemplated that 50 such units will be set up next year.

Measures for promoting attendance of girls at Primary and Middle stage (Classes I to VIII).—With a view to encouraging additional enrolment for girls in Primary and Middle stages, provision has been made for attendance Scholarships and prizes, free supply of books, stationery and clothing, free tuition and, where necessary, free transport in addition to merit scholarships. In the rural areas, some sort of allowance will be given to the teachers to promote enrolment of girls students.

Provision of Special Education Schemes (Primary) for Adult Women.—It is proposed to provide a condensed course of 2 to 3 years for adult women whose education was cut short so as to enable them to attain the standard of Middle School or Secondary School Education. They will be given further Training so as to be employed in Block areas, as also Teachers of Primary Schools, if found qualified. During the current year one such Centre will be set up at Kalimpong. Another Centre is also proposed to be set up next year.

Provision of essential amenities to women teachers in rural areas (free accommodation, etc.)—Under this Scheme 50 quarters for women teachers will be provided during the current year and 140 quarters are proposed to be provided next year.

Training facilities for School Mothers and providing for appointment of School Mothers.—Under this Scheme one School Mothers' Training Centre has been set up at Dakhineswar during the current year. Another Centre is proposed to be set up next year.

Free and Compulsory Primary Education (Universal).

Free and Compulsory Primary Education (Universal).—Having regard to the limitation of funds target for enrolment of the children of the age group 6-11 by the end of the Third Plan has been fixed at 80 per cent. The enrolment at the end of the Second Plan stood at 28.52 lakh. It is expected that by the end of 1965-66 it will rise to well over 40.00 lakh. A phased programme for setting up 3,912 schools with 7,824 teachers has been approved. During 1961-62, 2,564 schools will be set up and next year 1,348 schools will be set up. In addition, under the programme of introducing compulsion 2,626 teachers have also been appointed.

Secondary Education—General Schemes.

Provision of Higher Secondary Schools (Conversion and New), upgrading of Schools into Higher Secondary Schools (Humanities, etc.)—Under this scheme upgrading of 115 schools into Higher Secondary Schools has been undertaken during 1961-62. During 1962-63, 185 schools are proposed to be taken up.

Improvement of teaching facilities in Secondary Schools (including accommodation) in Arts, Science, Craft, etc.—Under this scheme 1,500 schools are proposed to be assisted under the projects 'Assistance to Teaching in Science', and 'Improvement of Teaching in Sciences and Crafts', 'Improvement of Audio-Visual Education' etc. 350 schools will be taken up in 1961-62 and 475 schools in 1962-63.

Multi-purpose Schools (New and Conversion).—During Third Five-Year Plan it is proposed to sanction 500 diversified courses to different upgraded schools. During 1961-62, 85 courses are proposed to be sanctioned and target for 1962-63 is 200 courses.

Improvement of Library and Reading Rooms.—Under this scheme adequate library facilities will be provided in multipurpose schools. Besides, it is intended to provide a text-book corner in each higher secondary schools. During 1961-62, 115 schools will be taken up under this scheme and the target for 1962-63 is 185 schools.

Improvement and Expansion of Teachers' Training facilities (including training in guidance).—The present intake in Post-Graduate Training College for Secondary School Teachers is 2,705. During the Third Plan it is proposed to set up 2 new Post-Graduate Teachers Training Colleges, 5 Training Colleges and 5 Training Centres for Craft. Extension Services projects as introduced at present in 4 Training Colleges will be started in 4 more Training Colleges.

Improvement and Development of the Institutions for the Training of Teachers in Music, Crafts, etc.—It is proposed to provide arrangement for training of teachers in music, art and craft in all Training Institutions to meet the increased requirements of trained teachers in these lines. There are already 3 institutions of this type. During 1961-62, one institution will be set up.

Improvement of the conditions of service of teachers (including prizes, etc.).—The provision under this scheme is meant for improvement of scales of pay of teachers of Secondary Schools. It is also proposed to institute special prizes and selection grade posts in each school.

Development of Educational Experiments and Research.—With a view to carrying out Experiments and Research in Education two Research Units were set up in two Training Colleges till the end of the Second Plan. Two more training colleges are proposed to be provided with Research Units during the Third Plan and one such Unit is proposed to be started during 1962-63.

Strengthening of Administrative and Inspectorate Staff.—Under this Scheme it is proposed to appoint one Assistant Inspector of Schools in each of the smaller districts and two in each of the larger districts and two more at the Headquarters for the work of collecting statistics in respect of progress of secondary education.

Provision of accommodation for improved Inspectorate.—Under this Scheme it is proposed to construct in each district (excepting Calcutta) a building of the Education Directorate for the use of the District Inspectorate where there is no Government building for the purpose at present. During 1961-62, building for one district will be provided. Two more districts are proposed to be provided with buildings next year.

Seminars and Refresher Course for teachers and headmasters.—It is proposed to hold altogether 6 Headmasters' Seminars and 20 Seminars and Refresher Courses for teachers during the Third Plan. One Headmasters' Seminar is proposed to be held during 1961-62 and one Headmasters' Seminar and five Seminars and Refresher Courses during 1962-63.

Provision of Stipends, books, etc., for needy and meritorious pupils.—Under this Scheme needy and meritorious pupils are proposed to be given stipends, books and a share of their boarding expenses.

Housing of students in Secondary Schools.—Hostels are proposed to be provided under this Scheme for Schools specially in rural areas. 65 Units are proposed to be sanctioned during the 1961-62 and 50 Units during 1962-63.

Essential amenities of teachers of Secondary Schools (Housing, etc.).—As in the Second Plan provision has been made for adding teachers quarters so that qualified teachers may be available in upgraded Schools in rural areas. 60 Units are proposed to be provided during 1961-62 and 100 Units during 1962-63.

Provision of special educational amenities in Experimental Schools.—Under this scheme residential accommodation for students and libraries and reading rooms for facility of their studies will be provided to set up purely residential schools where there will be accommodation also for teachers and other staff of the school to improve the education facilities. Two schools are proposed to be taken up during 1961-62.

Provision of school meals.—85 schools had made some arrangements for providing school meals by the end of the Second Plan. 100 more schools will be taken up during 1961-62 and 150 schools during 1962-63.

Planning, Statistical and Reporting Units—(i) Strengthening of Planning and Supervisory Staff.—It is proposed to set up a Planning and Statistical Unit attached to the Inspectorate in each district. The scheme will be given effect to with one Senior Technical Assistant in each district for 1961-62 and the staff will be strengthened gradually.

(ii) Additional accommodation etc. for planning and Supervisory staff.—Improved accommodation will be provided at the Inspectorate of each district for the planning and statistical unit.

Arrangements for accommodation of one such inspectorate has been matured during 1961-62. Two more districts will be covered during 1962-63.

Special Schemes for Girls

Provision of Residential Girls' Schools in selected areas.—As in the case of boys schools it is proposed to make special provision for the promotion of education of girls by providing residential girls' schools in selected areas where these will serve as area schools. The schools will be run as model schools.

Provision of free education for girls up to Class VIII in recognised schools.—Free education for girls up to Class VIII stage in rural areas has been provided during the Second Plan. It is proposed to continue the scheme in the Third Plan and extend the same in urban areas also. About one lakh more girls are expected to be attending schools within this stage.

Special measures for promoting attendance of girls at Middle and Secondary stages.—As a supplement to the similar scheme taken up at the Primary stage, it is contemplated to provide special amenities in the form of stipends to girls, allowance to teachers, book grants, etc., for accelerating the attendance of girl students in schools at the middle and higher stages.

Provision of Hostels for Girls in Secondary Schools (Area Schools).—Apart from the exclusively residential schools for girls provided elsewhere, it is also proposed to continue the programme of providing girls' schools in selected areas with residential accommodation for a number of students.

Essential amenities of women teachers (housing etc.).—As women teachers are not keen to take employment in rural and remote areas unless special amenities are provided for them, it has been proposed to continue the programme of provision of residential accommodation and also an allowance for such teachers who may be posted in rural areas.

University Education—General Schemes.

Development of Universities (including Post-Graduate Studies and Research).—The newly set up Universities of Burdwan and Kalyani have already started functioning. The North Bengal University is expected to start functioning from the next session. The Cultural University under the name “Rabindra Bharati” is also likely to function from the next session. The two existing Universities of Calcutta and Jadavpur will be further improved and developed.

Development of Non-Government Colleges.—Apart from developing the existing 108 non-Government Colleges for providing facilities for three-year degree course, it is proposed to start 15 new Degree Colleges during the Third Plan of which 5 will be in the next year with a total student population of about 1.36 lakhs.

Development of Government Colleges.—Such Government Colleges as are lacking in suitable provision for the teaching of science will be taken up for further development during the Third Plan. Residential accommodation for the students as well as for the teachers will also be provided where necessary.

Development of Presidency College (Post-Graduate and Honours).—The process of development of the Presidency College as taken up during the Second Plan will be continued.

Development of Commercial and Art Education.—In addition to Goenka College of Commerce and Business Administration set up during the Second Plan, some more colleges of commercial education are proposed to be set up during the Third Plan. One such Institute will serve as a School of Economics for which a site has already been acquired. One college of Commercial Education is proposed to be set up this year and two more next year.

Development of Non-University Institutions.—There are certain institutions in this State which though providing higher education of Under-graduate and Post-graduate level are not affiliated to any University. In view of important work done by them in the field of higher education it is proposed to render financial assistance to them during the Third Plan. One such institution, the Institute of Culture under R. K. Mission is being assisted for providing facilities for higher education both of the Under-graduate and Post-graduate level for Humanities studies. One more institution of this nature is also proposed to be assisted during the next year.

Stipends for needy and meritorious students.—With a view to providing opportunities for higher education to bright poor students, it is proposed to award stipends to Under-Graduate, Post-Graduate and Research students. It is proposed to provide 355 more stipends during the current year and 40 more stipends in the next as against 1,282 stipends proposed to be awarded in the Third Plan period.

Provision of educational amenities for needy students (Day students' Homes, Text-Book Library, Reading Rooms, etc.).—The scheme provides for provision of educational amenities for needy Students in the form of Day Students' Homes, Reading Rooms, Book libraries, etc. It is proposed to provide such facilities in 20 colleges during 1961-62 and in 25 more colleges during 1962-63.

Improvement of conditions of services of teachers.—Scales of pay of teachers of Non-Government Colleges were revised during the Second Plan. Further improvement of the conditions of service of University and College teachers are contemplated under the University Grants Commission Scheme.

Housing of college students.—Provision of residential accommodation for students is proposed to be made in certain selected colleges. Twelve hostels are proposed to be provided during Third Plan. Of these, 3 hostels will be provided this year and 3 more next year.

Essential Amenities for College teachers (Housing, etc.).—It is proposed to continue the programme of providing residential facilities for the teachers of Colleges particularly in rural areas. Fifty-four new quarters are proposed to be provided under the Third Plan. Of these, 4 will be sanctioned in 1961-62 and 6 in 1962-63.

Planning, Statistical and Reporting Units—(i) Strengthening of Planning and Supervisory staff.—As for the Primary and Secondary Education the Planning and Statistical Unit has been proposed to be strengthened in the Directorate as well as in the districts to cope with the additional volume of work for the University education in the Third Plan.

(ii) Additional Accommodation for Planning and Supervisory Staff.—The scheme provides for meeting the extra expenditure for accommodation for these Planning and Supervisory Units and in particular cases residential accommodation as well.

Special Schemes for Girls.

Development of Women's Colleges (including new Colleges).—This scheme is intended to meet the special needs of Girls students in Colleges particularly in respect of sanitary arrangements. Certain Colleges will be taken up for exclusive development as Girls' Colleges. Seven new Colleges are proposed to be set up under this scheme. Of these, 5 Colleges have been set up this year and two more are proposed to be set up next year.

Provision for hostels for girls in Colleges.—Altogether 17 hostels have been provided for girls up to 1960-61. During Third Plan 48 more hostels are proposed to be added under this Scheme. One hostel has been started in the current year and 4 more are proposed in the next year.

Measures for promoting attendance of girls at Collegiate level.—With a view to promoting attendance of girls at Collegiate level, the Plan contemplates the provision of about 2,000 stipends of which 300 such stipends are proposed in the current year and 300 more stipends in the next year.

Centrally Sponsored Schemes (States Share).

Introduction of Three-Year Degree Courses in Affiliated Colleges.—The provision under this Scheme is meant for meeting the State share of the U.G.C. Scheme of Introduction of Three-Year Degree Courses in affiliated Colleges.

Other Education Schemes—Social Education.

Strengthening of Social Education Service (Staff accommodation, etc.).—The scheme contemplates strengthening the administrative machinery concerned with a view to coping with the increased volume of work to be taken up during the Third Plan. There will be a high level officer at the headquarters who will be assisted in the work of administration at the district and subdivisional level by additional officers and technical assistants.

Provision of educational facilities for Adults (Folk and Night Schools, Centres, etc.).—The scheme provides for assisting voluntary educational organisations, schools, etc., to run literary centres. In addition to 1,000 centres opened till the 2nd year of the Second Plan, there will be 500 such centres in rural areas, 100 centres in Calcutta and 100 centres in other towns and urban areas.

Development of Research, Workshop Centres in Social Education of Neo-literates and children (literature, reading materials, method, etc.).—As in the Second Plan, arrangements will be made during the Third Plan for bringing out reading materials and literature suitable for neo-literates as also for children. For this purpose a permanent Bureau is proposed to be set up for continuing the activities including researches in co-ordination with certain aspects of the training college programme, namely vocabulary research and evolution. The Bureau in the beginning will be attached to a teachers' training college. It will also hold seminars, conferences, etc.

Improvement and Development of Training Institutions for Teachers in Social Education.—The programme for the training of the Social Education Teachers through periodical camps has proved successful. This will be continued during the Third Plan period. It is proposed to hold six-week camps under the auspices of the Post-Graduate Basic Training College and the Janata College at Banipur for 200 teachers a year.

Development and Expansion of Library Services.—In continuation and further expansion of Library Service already initiated and developed during the Second Plan it is proposed to set up during the Third Plan—

(1) Zonal Libraries in Calcutta	...	20
(2) Subdivisional Town Libraries	...	56
(3) Block Anchal Panchayat Libraries	...	100

Development of Training Institutions for Librarianship.—With the expansion of library service and the re-organisation at the Secondary and Collegiate level a large number of trained librarians will be required. To meet the requirements, Regular Librarianship Training Courses are proposed to be organised during the Third Plan with provision for two types of courses, viz., full one-year course for Graduates and under-Graduates and a shorter course for Matriculates for village libraries. A six months' course for the training of rural librarians has been sanctioned. In furtherance of social educational activities, it is proposed to establish some Community Centres during the Third Plan.

Provision of Community Recreation and Cultural Halls, etc.—On the occasion of Tagore's Birth Centenary a scheme for the establishment of Community Halls equipped with stages for play acting and auditoria has been taken up. Three such Halls have already been established and proposals for six more Halls are under consideration.

Special schemes for women—continuation of education for women.—Training Centres for adult women whose schooling was cut short for various reasons would be arranged during the Third Plan through condensed course of training with greater emphasis on art and craft. Training centres for such women will be arranged under voluntary organisations. If possible, each district will be provided with such training centres.

Audio Visual Education.

Provision of Audio-Visual Education.—For effectively organising the System of audio-visual education a Regional Board of Audio-Visual Education has already been set up. The activities for audio-visual education through the State Audio-Visual Section Training Course, and District Audio-Visual Units will be pursued.

Physical Education and Youth Welfare Activities.

Improvement and expansion of teachers' training facilities in Physical Education (Under-graduate and Post-graduate).—The scheme provides for the re-organisation of the Post-graduate Training College for Physical Education on the lines as recommended by the Government of India. Two Courses are proposed to be followed—one for the graduates leading to the Diploma and the other for the under-graduates leading to certificate. The intake capacity will also be increased from 60 to 120. It is also intended to provide for introducing three-year degree course on the pattern of National College of Physical Education.

Provision of Aquatic Sports (Rowing, etc.) facilities.—Aquatic Sports including rowing, etc., have its importance and provision for encouraging these sports through the various organisations with financial assistance is proposed during the Third Plan.

Development of Physical Education—Assistance to organisations, Associations, Clubs, etc.—To revive the declining enthusiasm for sports in the country, it is proposed to assist the organisations, associations, clubs, etc. to pursue a chalked out programme for achieving the end. Grant will be given to conduct planning for sports and games, festivals, etc.

Improvement and development of sports and games (provision of Coaches, Efficiency Drive Centres, etc.).—The scheme provides for training to promising men and women for imparting various games and sports through trained coaches. Person already trained as coaches will conduct coaching camps for the benefit of teachers and students.

Youth Welfare, Youth Festivals, Contests, Students' Tour., Youth Hostels etc.—About 15 institutions have been granted financial assistance for conducting educational tours of students. The programme will be continued. One Youth Hostel is under construction at Bolpur with assistance given by State.

Social Service Camps.—The Scheme for labour and social service camps in which both boys and girls participate has proved highly beneficial during the past year. It is proposed to continue the scheme during the Third Plan, holding 100 such camps each year for a period of 15 days.

Expansion of N.C.C. and A.C.U.—The provision is made for raising new units of N.C.C. as well as undertaking scheme in N.C.C. Rifles. There is also provision for necessary training units for N.C.C. and A.C.C. and construction of buildings.

Improvement and Expansion of Scouting and Girl Guides.—The provision has been made in the Third Five-Year Plan to assist the Bharat Scouts and Guides for expanding their activities, holding training camps for Scouts and guides, organising for first class scouts, developing scouting in rural areas as well as providing and helping centres, etc.

Campus Works Projects, Stadium, etc.—As in the Second Five-Year Plan, institutions will be encouraged to have small stadia, playing fields, etc., according to plans laid by the Government of India. Associations and organisations, etc., will be assisted to build Stadia for the public in the districts for which suitable financial assistance from the Government will be given.

Special Schemes for Girls—Provision of facilities for Games, Sports and Recreational Activities for women, particularly in rural areas.—Provision of facilities for games and sports and recreational activities for girls in rural areas will be made. Such activities will be conducted through the organisations already in the field for encouraging the girls to participate in larger number in recreational activities, games and sports, etc. Recreational activities for women will also be provided in additional centres in rural areas.

Language

Development of languages.—The provision is meant for development of regional languages.

Education of the Handicapped.

Development of Social Welfare Homes.—In pursuance of the scheme of reorganisation adopted by the State Government it is proposed to strengthen and expand the scope of some of the Welfare Homes. Some of the Homes will need additional construction programme for both teaching as well as residential purpose.

Development of Institution for physically handicapped.—Besides development and expansion of the existing three institutions for deaf and mute and three institutions for blind in the State it is proposed to have two more institutions for the physically handicapped.

Development of Institution for mentally retarded children.—The plan provides for assisting the existing institutions and also to have two more institutions for mentally retarded children where educational and training facilities will be provided for higher grade of mental defectives and for other children more on practical lines according to their individual abilities and aptitudes.

Development of Training Institutions for teachers for handicapped.—It is proposed to make arrangement for training of teachers for staffing the institutions for handicapped. The existing training centres will be expanded and developed and new centres will be opened, if necessary.

Provision of scholarships and stipends for handicapped students.—The scheme would provide for grant of scholarships for the needy children. It will also provide for award of scholarships to such students passing out of the institution of the handicapped as would benefit them by pursuing higher course of studies.

Improvement of the condition of service of teachers of Institutions of handicapped.—The provision is meant for improving the condition of service of teachers of institutions for the handicapped by way of granting higher scales of pay, etc.

Expansion and Strengthening of Directorate

Planning, statistical and Reporting Units—(i) *Strengthening of Planning and Supervisory Staff*.—The existing planning units will be suitably strengthened by providing some qualified staff in the headquarters as well as in the districts.

(ii) *Additional accommodation for Planning and Supervisory Staff*.—As in the Second Five-Year Plan, provision will be required for staff accommodation as also residential accommodation in some cases.

Archives.

Improvement and Development of Archives.—During the Third Five-Year Plan, it is proposed to pursue the following programme:—

- (i) Provision of adequate accommodation for the State Archives.
- (ii) Proper arrangement for storage of records; and
- (iii) Publication and acquisition of records, rare books, etc.

Cultural and Aesthetic Education

Improvement and Development of Museums, etc.—The provision is for the following Schemes—

- (i) Attaching small museums to selected Secondary Schools and Training Institutions.
- (ii) Development of the existing museums with provision for research studies.

Improvement and development of organisations devoted to Cultural, Aesthetic, educational activities.—As in the Second Plan, provision has been made for assisting voluntary organisations and institutions engaged in the working of the cultural uplift and for promoting the aesthetic side of the people through educational and other means.

Improvement and development of institutions of music, etc.—There is a large number of institutions of music in the State. A programme of improving and developing these on proper lines has been drawn up which contemplates giving financial assistance to them according to the grant-in-aid rules. Grants are being given to 10 such institutions during the current year and 10 more will be given next year.

Technical Education—Technical and Engineering.

Development of Engineering Colleges (Degree) including Post-Graduate courses and Research.—An Engineering College is proposed to be set up on the northern part of the city. An Engineering College with capacity for intake of 150 students has already been set up at Jalpaiguri. Bengal Engineering College at Shibpur will be further developed. Similarly, facilities for engineering study at the Jadavpur University will be extended and developed. The provision is meant for development of engineering study at the Calcutta University.

Development of Engineering Institutions and Diploma Courses.—The provision under this scheme is intended to meet the expansion schemes of the existing institutions as may be taken up as also the new institutions as may be set up during the Third Five-Year Plan. It is intended that 8 more new institutions will be set up during the Third Plan Period.

Provision of facilities for Part-time courses.—Part-time facilities for diploma courses of studies are also proposed to be provided in Polytechnics. Such facilities for part-time study have already been provided in Jadavpur Polytechnics.

Establishment of Institutions for Sandwich courses.—Besides the Birla Institute of Technology set up during the Second Plan another institution for Sandwich courses is proposed to be set up near Calcutta.

Development of Junior Technical Schools (Junior Diploma).—Besides the 12 existing Junior Technical Schools set up during the Second Plan some more such institutions will be set up. 3 institutions are being set up during the current year and 3 more next year.

Development of Institutions of Art and Craft, etc. (Post Schools).—The Government College of Art and Craft is being developed on modern lines approved by the All India Council for Technical Education.

Provision of Stipends and Scholarships.—In order that students pursuing the technical courses of studies may not find any difficulty in completing the courses, it is proposed to provide adequate Stipends and Scholarships for needy and meritorious students.

Planning and Statistical and Reporting Units—(i) Strengthening of Planning and Supervisory Staff.—As stated under the Primary, Secondary and University stages of education, the planning and supervisory staff for the technical education is proposed to be strengthened to cope with the additional volume of work involved in the Third Five-Year Plan.

(ii) Additional accommodation for Planning and Supervisory Staff.—As there will be small units in all the districts, it is proposed to provide office accommodation as also residential accommodation for the supervisory staff where necessary.

Re-organisation of the College of Textile Technology, Berhampore (provision—10.00 lakhs), Re-organisation of the College of Textile Technology, Serampore (provision—11.00 lakhs) and Re-organisation of the College of Leather Technology, Calcutta (Provision—10.00 lakhs).—In order to cater to the growing demands for technically trained hands for manning the various Textile and Leather Technology Projects and Undertakings, the Textile Institute at Berhampore and Serampore and the Tanning Institute at Calcutta have been re-organised and the standard of training in each of the institution has been raised to the Degree course of the Calcutta University.

In the Third Plan, the two Textile Colleges at Serampore and Berhampore and the College of Leather Technology at Calcutta are proposed to be further re-organised, by equipping them with adequate staff, modern machinery, etc., in accordance with the recommendations of the University. It is also proposed to introduce a Diploma course in the College of Leather Technology, in addition to the Degree course already introduced.

Establishment of a Chemical Polytechnic (Provision—10.86 lakhs).—It is proposed to establish a Chemical Polytechnic to impart training in the following courses:—

- (i) National certificate course in Chemical Engineering;
- (ii) Diploma course in Paints and Varnish Technology;
- (iii) Chemical Operator's course;
- (iv) Operator's course in Paints and Varnish Technology.

Introduction of B.Sc. (Tech.) course in Bengal Ceramic Institute (provision—10.00 lakhs).—The Ceramic Institute at Calcutta has been remodelled. The Institute is further proposed to be re-organised by equipping it with adequate staff, modern machinery for introduction of Degree course in Ceramic Technology.

Establishment of a Technical School on the model of Calcutta Technical School (provision—15.00 lakhs).—The Calcutta Technical School has a limited capacity and, therefore, a large number of eligible candidates fail to secure admission in that institution. A school on the model of Calcutta Technical School, is proposed to be established in order to meet the growing demand for theoretical training of apprentices attached to industrial units.

Training in Mining (provision—18.14 lakhs).—The scheme is designed to create increased facilities for training in mining by introducing certain new training courses in the existing Evening Mining Classes at Sitarampur and Raniganj. This would help the coal mining industries of the country to a great extent by providing trained personnel in certain categories where there is known shortage.

Scientific Research

Scientific and Technical Research—Provision of Post-graduate activities and Scientific and Technical Research in Research Institutes, Associations, etc.—A number of institutions in this state are already engaged in higher Scientific and Technical Research. It is proposed to continue to assist these institutions to continue their research programmes.

Special Schemes—Schemes for systematic study and research in plant and wild life (high altitude parks, etc.).—The provision is meant for further development and expansion of the activities of the institutions like Himalayan Zoological Park, Darjeeling, National History Museums and allied activities of other institutions.

CHAPTER XVIII

HEALTH

In a country where 80 per cent. of the population live in villages health planning cannot but have a rural bias. After Independence when the people came to manage their own affairs it became only natural that rural population would get proper attention which was denied to them previously. Health Planning in West Bengal, therefore, started with a broad base in the villages. Since Independence two Five-Year Plan periods are over. If we look back we may find with satisfaction that there are signs of all round improvement in the health conditions of the State and there are definite trends for even distribution of the health care services among the urban and the rural population although the progress may not have always been satisfactory.

Progress made during the Second Plan

A provision of Rs. 20.59 crore was made in the Health sector of the State Second Five-Year Plan.

It is true that it was not possible to utilise the entire allocation for the Health Plan and in some cases achievement fell short of the Plan target. There was shortage of trained personnel. The construction of buildings took a much longer time than anticipated owing to scarcity of building materials and other difficulties. The Second Health Plan had also to be revised as a result of the offer of assistance by the Government of India for certain Centrally-sponsored schemes in addition to the State Plan ceiling. It was also necessary to revise a number of important schemes after the all-India patterns at the instance of the Government of India. Nevertheless endeavour was made to have the best possible progress within these limitations and the Second Five-Year Plan saw an all round expansion of health services in the State. During the five years of the Plan an expenditure of Rs. 12.65 crore was incurred for the health schemes included in the Plan. In addition an expenditure of Rs. 5.52 crore was incurred during the said period outside the Plan ceiling from the loans and grants sanctioned by the Government of India for the Centrally-sponsored schemes.

Water Supply and Sanitation

Every endeavour is being made to provide for supply of potable water for the people in rural and urban areas. The Rural Water Supply Scheme aims at provision of the water supply source for every 400 persons in rural areas as the immediate target and one such source for every 250 persons as the ultimate target. Till the end of the Second Five-Year Plan about 28,000 sources of water supply comprising sinking and resinking of tube-wells and construction of masonry wells were provided for the rural areas. These include about 20,000 sources of water supply provided during the Second Five-Year Plan at a cost of more than Rs. 2.31 crore.

To enable the municipalities to undertake water supply, sewerage and drainage schemes involving appreciable capital expenditure, the State Government have been providing assistance for such schemes to the extent of 2/3rds of the cost as grant-in-aid, the balance 1/3rd being met by the municipalities concerned either from the municipal fund or from loan obtained from Government or both. During the First Five-Year Plan 15 urban water supply and sanitation schemes were taken up and

executed through the Public Health Engineering Directorate. Besides, 10 more municipal water supply schemes were taken at the later part of the First Five-Year Plan under the National Water Supply and Sanitation Programme. During the Second Five-Year Plan another 17 water supply schemes for different municipalities either having no piped water supply system or in need of augmentation of existing systems were taken up. During the Second Plan period 15 water supply schemes including 10 such schemes which had been taken up in the later part of the First Five-Year Plan period were completed. The total expenditure on this account amounted to Rs. 1.92 crore.

The Calcutta Corporation had also taken up a scheme for improvement of water supply and sanitation for which the Government of India had agreed to grant loan assistance to the tune of Rs. 2.30 crore. The Corporation spent a sum of Rs. 1.02 crore on this scheme during the Second Plan period.

Control of Communicable Diseases

Malaria was one of the major health problems of the State as well as of India. The Government of India in 1953 in collaboration with the State Governments and International Agencies like the Technical Co-operation Mission, the UNICEF, the WHO and the Rockefeller Foundation inaugurated a National Malaria Control Programme on an all-India basis. The State Government participated in the scheme from 1953-54. As the results were quite encouraging, the control programme was switched on to a programme of complete eradication of Malaria during the Second Five-Year Plan. During the Third Five-Year Plan surveillance-cum-spraying work will be continued with an eye to gradual withdrawal of the operations after ensuring that there was no chance of re-appearance of the disease. At the end of the Second Five-Year Plan 26 Operational units were in the field covering an area of 33,882 sq. miles and 26 million people. About 700 persons were employed in connection with the scheme.

For control of tuberculosis State Government maintained 15 mass campaign and 1 non-mass campaign B.C.G. Vaccination Teams for undertaking tuberculin test followed by B.C.G. Vaccination where necessary particularly among the school children and newly born babies. The operation will be carried on during the Third Five-Year Plan.

Besides, 15 Chest-Clinics, 2 Mass Miniature Radiography Units and a Tuberculosis Training and Demonstration Centre were sanctioned by the State Government under the Second Five-Year Plan Programme. The construction of the Occupational Training Centre attached to the Dhubulia T.B. Hospital was nearly completed during the Second Plan and it will be possible to open it in the near future. A substantial grant was also sanctioned to Dr. H. C. Mookerjee Memorial T. B. After-Care Colony Society for setting up a colony for ex-T.B. patients at Digri in the district of Midnapore with accommodation for 100 persons.

The State Government also sanctioned a Filaria Control Unit at Contai as well as 16 Leprosy Control Units each with 4 sub-units in different parts within the endemic area of the State. Besides, 25 V.D. Clinics were set up at the district and subdivisional levels.

A Pilot Project for eradication of small-pox was also taken up in Birbhum district, with a view to implement a Statewise Project for eradication of small-pox during the Third Plan.

Hospitals and Health Centres

At the end of the Second Five-Year Plan about 28,000 hospital beds were available to the people including more than 4,000 additional beds at different State hospitals and health centres opened during the Second Plan. Of the new hospitals set up during the Plan special mention may be made of the Infectious Diseases Hospital at Beliaghata with 280 permanent beds and the Beliaghata General Hospital with 320 beds as also of the T.B. Hospital at Dhubulia where provision has been made for 1,000 beds. At the end of the Second Five-Year Plan construction of the 500-bed Hospital at Kalyani, the 360-bed wing of the Nilratan Sircar Medical College Hospital as well as building for 16 hospitals at district and subdivision levels with provision for more than 1,300 beds was in progress. During the Second Five-Year Plan period a total expenditure of about Rs. 4 crore was incurred for establishment and improvement of hospitals.

In order that the District and Subdivisional Hospitals and large Primary Health Centres with 50 beds can function properly as referral hospitals, these institutions were provided with ambulance cars according to prescribed scales. Provision for ambulance cars was made for the large Calcutta hospitals as well. During the Second Plan period in all 102 ambulance cars were purchased for the purpose, bringing the total number of ambulances under Government to 123.

The State Government simultaneously carried out their programme for medical relief to the people of the rural areas through Health Centres. The Rural Health Centre Scheme envisages establishment of 1 Primary Health Centre with 10 beds and 2/3 subsidiary Health Centres with 2 non-dieted maternity beds in each Development Block. During the Second Five-Year Plan 247 Health Centres (53 Pr.H.C.'s plus 194 S.H.C.'s) were set up at a cost of about Rs. 2 crore. The total number of Health Centres functioning at the end of the Second Five-Year Plan was 486 (154 Pr.H.C.'s plus 332 S.H.C.'s) and they carried out curative, preventive and positive health programmes in the rural areas within their respective jurisdictions.

The Public Health staff of the District Boards were also taken over by Government with effect from 1st January 1959. These staff are now available for supplementing the efforts of the rural Health Centres and there is today a unified and co-ordinated health service in West Bengal under the direct control of the State Government.

Maternity, Child Health and Family Planning

Under the integrated scheme for establishment of Maternity, Family Planning and Child Welfare centres, 99 clinics were set up in different parts of the State. Of these 48 Centres were attached to Primary Health Centres in rural areas.

School Health and Health Education

Health Education work was carried on through the staff in the periphery, particularly those of the Health Centres. In order that the work may be carried on in an organised and planned way a State Health Education Bureau was set up at the Directorate of Health Services, West Bengal, towards the end of the Second Five-Year Plan. The Health Education work will be further intensified during the Third Five-Year Plan.

It was also possible to set up a supervisory unit for School Health Work at every District Headquarters. It will be for the Third Five-Year Plan to extend these services from these nuclei. An expanding health service requires more and more trained personnel. So during the Second Five-Year Plan training arrangements for medical and para-medical personnel were expanded to meet the growing requirement. A new Post-Graduate Institution, viz., Institute of Post-Graduate Medical Education and Research, was set up at the Seth Sukhlall Karnani Memorial Hospital, Calcutta. The School of Tropical Medicine, Calcutta, which also prepares students for Post-Graduate courses was improved and equipped during the Plan.

A Department of Preventive and Social Medicine was sanctioned for the three State Medical Colleges of Calcutta.

The number of annual admission to the Calcutta Dental College was increased from 30 to 40. The construction of a three-storeyed block of the College was completed. The construction of another four-storeyed block of the institution was also sanctioned towards the close of the Plan. Besides, the institution was gradually equipped during the 5 years of the Second Plan.

During the Second Five-Year Plan, 8 centres for training of Auxiliary Nurse-cum-Midwives were established at different District Hospitals. In addition provision for training of such categories of workers was made in a non-Government Institution, viz., Chittaranjan Seva Sadan.

Arrangements were also made for training of Health Assistants and Sanitary Inspectors at a new training centre at Burdwan. At this institution arrangements have also been made for refresher course for Medical Officers and Nurse-Midwives.

The School of Physical Medicine for training of Physiotheraputists and Occupational Theraputists also started functioning at the premises of the Institute of Post-Graduate Medical Education and Research.

Two training centres were set up for training of Laboratory Assistants and Technicians. One of these takes students with I.Sc. qualification and it is located at the Institute of Post-Graduate Medical Education and Research. The other which takes in science Graduates for the D.L.T. Course is located in the School of Tropical Medicine, Calcutta.

Other Schemes

Thirty Jeep Cars were purchased and provided at the headquarters and the districts for administrative convenience.

At 4 District Hospital it was possible to set up Dental Centres. These centres in addition to their commitments in these hospitals will also function as touring dental teams.

Besides, 7 District Diagnostic and Public Health Laboratories were established during the Second Plan period.

Compilation of reasonably correct statistics is an essential requirement of any good planning. During the Second Five-Year Plan, a Central Unit at Calcutta was established for mechanical compilation of vital and health statistics of the State. The arrangement for collection of statistics will be further improved during the successive plans.

Third Plan Proposals

In the Third Five-Year Plan published by the Planning Commission an overall provision of about 342 crore has been made under the head of Development "Health" for the Centre as well as the States. Of this West Bengal's Health Plan accounts for a sum of Rs. 19.80 crore.

The health programme in the Third Five-Year Plan aims at progressive improvement in the health of the people by ensuring certain minimum of physical well being—a prerequisite to the creation of conditions favourable to greater efficiency and productivity. The Plan aims at expansion of the health care services in the urban and rural areas and has special emphasis on preventive and positive health services. The Plan also accords high priority on family planning.

Control of Communicable Diseases

Under the broad head 'Control of Communicable Diseases' a provision of Rs. 5.17 crore has been made.

The National Malaria Eradication Programme which has been undertaken as an all-India policy will be continued. Surveillance work will be undertaken in addition to the spraying work during the initial years of the Plan. The scheme contemplates gradual withdraw of surveillance and spraying operations after ensuring that there is no danger of re-appearance of the disease.

The provision for Filaria Control Programme is required for maintenance of one Control Unit to cover 6 lakh of people for the present.

The State Government in consonance with the Government of India's policy propose to undertake a scheme for eradication of small-pox in the State. One half of the population will be covered in the first instance and thereafter the eradication work will be undertaken for the remaining one half of the population.

The State Government have also sanctioned a comprehensive scheme for control of Cholera, Small-Pox and Typhoid for giving coverage to the 6 million people of the Calcutta Metropolitan area comprising the Calcutta Corporation and 31 municipalities involving an expenditure of Rs. 28 lakh per annum. A provision of Rs. 1.10 crore has been made in the Plan for the purpose.

To step up production of small-pox vaccine lymph it has been decided to shift the West Bengal vaccine Institute from its present site at Convent Lane, Entally, Calcutta, to the township at Kalyani in the district of Nadia. The construction of buildings for the Institute at its new site is in progress. When the Institute begins to function at Kalyani it will be possible to manufacture 4,50,000 c.c. of lymph per year as against 2,50,000 c.c. per year as at present and 10 per cent. to 20 per cent. of the production will be diverted to freeze drying method enabling the lymph to remain stiff at 40°C. for two years.

Tuberculosis is a major health problem of the State. Judicious use of modern therapy has made it possible to concentrate on domiciliary treatment rather than on the age-old method of expensive sanatorium treatment. During the Third Five-Year Plan it is proposed to set up 51 new Chest-Clinics scattered over the whole State each provided with a Domiciliary

Wing. It is also proposed to attach Domiciliary Wings to the existing 51 Government and non-Government Chest Clinics. The Ambulatory cases will have treatment in the Static Clinics while the Domiciliary Wings will provide for treatment at the homes of those patients who are not in a position to visit the Clinics. A provision of Rs. 1 crore has been made in the Third Plan for the purpose. Two Mass Miniature Radiography Units will also be set up for detection of tuberculosis cases among the masses. Already there are 9 Domiciliary Units and 2 Mass Miniature Radiography Units. An additional Centre for rehabilitation of T.B. patients is also proposed to be established.

For control of Leprosy there is a provision of Rs. 35 lakh in the Third Plan. The State Government have a comprehensive Scheme for control of Leprosy in the endemic areas of the State having an incidence of the disease at 1 per cent. of the population or above. The money provided in the Plan will be utilised towards the gradual implementation of the scheme as well as for establishment of a Rehabilitation Centre for Leprosy patients.

Maternity, Child Welfare and Family Planning

Special emphasis has been laid on Family Planning Programme for obvious reasons. In West Bengal integrated Centres are being set up to provide for maternity, child health and family planning services. During the Second Five-Year Plan, 99 integrated Centres were established covering Calcutta and all District and Subdivisional towns as also a few Development Blocks. During the Third Five-Year Plan it is proposed to set up 271 Maternity, Child Health and Family Planning Centres attached to Primary Health Centres. A training centre in Family Planning Method was also established during the Second Plan and another Training and Research Unit is contemplated during the Third Five-Year Plan. A provision of Rs. 50 lakh has been made in the State Plan as State's share of cost. This being a Centrally-sponsored scheme substantial assistance is expected from the Government of India outside the State Plan ceiling. The Plan target as aforesaid, is, therefore, provisional and the scope of the scheme may be expanded depending on the quantum of assistance from the Government of India.

Rural Water Supply and Sanitation

The Rural Water Supply Scheme aims to provide one water supply source for every 400 persons in rural areas as the immediate target and one such source for every 250 persons as the ultimate target. Till the end of the Second Five-Year Plan about 28,000 new sources of water supply comprising sinking and resinking of tube-wells and construction of masonry wells had been completed. It has been estimated on the basis of village-wise survey undertaken by the Public Health Engineering Directorate that about 29,000 new sources of water supply are still required to achieve the ultimate target of one source of water supply for every 250 persons.

Planning Commission have advised that during the Third Five-Year Plan Rural Water Supply Schemes have to be taken up in the main under the programmes of Community Development, Local Development Works and Welfare of Backward Classes. For the Rural Water Supply and Sanitation schemes a provision of Rs. 94 lakh has been made which is meant for supplementing the aforesaid programmes. About 4,000 sources of water supply is proposed to be provided under the Health Plan.

Urban and Corporation Water Supply and Sanitation

During the Second Plan period the National Urban Water Supply and Sanitation Scheme and the Calcutta Corporation Water Supply and Sanitation Scheme were entirely financed by the Government of India by way of loans outside the State Plan. The Government of India have lately advised that during the Third Five-Year Plan the expenditure for these schemes will continue to be financed by the Government of India by way of loan but the cost will have to be met from within the overall ceiling of the State Health Plan. This decision has been rather hard in view of the limited allocation for the Health Plan. For the present a provision of Rs. 2.30 crore has been made in the Plan for Corporation and Municipal schemes of water supply and sanitation, but this small allocation will be far from being sufficient. It will be necessary to augment this provision by re-appropriation if the Plan target is to be fully achieved. During the Third Five-Year Plan 10 spill-over Municipal Schemes will be completed and another 10 such schemes are proposed to be undertaken. Besides, it is also proposed to undertake such schemes through the Development Corporation for which some funds are likely to be available from the funds provided for the said Development Corporation. Two other schemes for improvement of drainage, viz., (a) Tollygunj Panchannagram Drainage Scheme and (b) Silt Clearance of the Calcutta Corporation's Outfall System, have been included in the Plan. The former scheme, estimated to cost Rs. 29.15 lakh, provides for drainage of about 12.8 sq. miles including 6.25 sq. miles lying within the limits of Calcutta Corporation. The other scheme, estimated to cost Rs. 1,06.00 lakh, is a scheme continuing from Second Plan. It provides for desilting of the Calcutta Corporation's Outfall system from Bantala to Kulti and completing the Dry weather flow channel.

It is also proposed to prepare a master plan for Water-Supply and Sewage Disposal for Calcutta Metropolitan area in collaboration with foreign agencies for which a new organisation, viz., Calcutta Metropolitan Planning Organisation, has already been set up. Calcutta Corporation Scheme for Water-Supply and Sanitation is ultimately to be fitted in to the above master plan for Water-Supply and Sewage Disposal of Calcutta Metropolitan area.

Hospital and Health Centres and other Health Care Services

Under the broad group "Hospitals and Health Centres and other Health Care Services" a new scheme, viz., Domiciliary Medical Services, with a provision of Rs. 90 lakh has been included in the Third Plan for providing immediate medical relief to the people with a view to lowering the increasing pressure on hospitals, construction of which obviously takes a long time and has been one of the main causes of the shortfall in expenditure under the Second Plan. This scheme is intended to be implemented in Calcutta and other Urban areas as well as in the rural areas where the requisite number of Primary and Subsidiary Health Centres is yet to be established. The proposed domiciliary health care service will be partly contributory in character.

Most of the other Schemes are more or less continued from the 2nd Plan period and as such a substantial provision of the Third Plan outlay has been needed to meet the spill-over expenditure. For the two schemes, viz., Improvement and Establishment of Hospitals other than the Sadar and Subdivisional Hospitals and Improvement and Establishment of Sadar and Subdivisional Hospitals a total outlay of Rs. 4.06 crore has been made, nearly one crore of which is meant for spill-over expenditure for such works

in progress, viz., 500-bedded Hospital at Kalyani, a new ward of 360 beds at Nilratan Sircar Medical College Hospital, Bankura Sadar Hospital, Midnapore Sadar Hospital, Arambagh Subdivisional Hospital, etc.

In addition a provision of Rs. 30 lakh has been made for T.B. Hospitals and Rs. 35 lakh for Mental Hospitals. This includes spill-over expenditure in respect of the 1000-bedded Dhubulia T.B. Hospital as well as the cost of Institute of Mental Diseases at Gobra with 100 beds, the construction of which has already been started.

It is expected that during the Third Five-Year Plan it will be possible to provide for additional 5,000 hospital beds.

Regarding Rural Health Centres Scheme which envisages the establishment of one Primary Health Centre and 2/3 Subsidiary Health Centres in each Development Block, the additional requirement for the Third Plan period to cover the 341 Blocks will be 171 Primary Health Centres and 651 subsidiary Health Centres. The provision of Rs. 2.30 crore under the Third Plan will be hardly sufficient to provide for more than 75 new Primary Health Centres with 100 new Subsidiary Health Centres during the Third Plan period after meeting the spill-over expenditure of Second Plan period estimated at about Rs. 1.00 crore for construction works in progress. The ultimate target, however, should be one Primary and five Subsidiary Health Centres in each Block for the purpose of adequate coverage.

Education and Training

Most of the schemes under this broad head are carried over from the Second Plan. In view of the deficiency of teachers in Medical Colleges and also for turning out an adequate number of Post-Graduate qualified medical men to meet the requirement of specialised services in outlying areas it is proposed to expand and improve the existing facilities for Post-Graduate training available at the School of Tropical Medicine and in the Institute of Post-Graduate Medical Education and Research. It is also proposed to deploy Post-Graduate training and research facilities in the existing Under-Graduate Medical Colleges by up-grading corresponding departments. A sum of Rs. 50 lakh has been provided for the purpose in the Third Plan. This is however, a Centrally-sponsored scheme during the Third Plan and so additional funds will be available as Centre's share of cost in addition to the provision in the State Plan.

A provision of Rs. 40 lakh has also been made for establishment and improvement of State Medical Colleges and also establishment of field training centres. The construction of a hostel for under-graduate medical students is also contemplated. Under the scheme the Bankura Sammilani Medical College has already been taken over by the State Government. The Dental College will be further improved with additional staff, equipment, etc., and by provision of a few indoor beds. A four-storeyed new wing of the Calcutta Dental College is now under construction for the purpose.

The existing training programme in respect of para-medical personnel will be expanded and improved upon. Against the Second Plan allocation of Rs. 19 lakh out of which seven new Nurses' Training Centres have been set up, and increased outlay of Rs. 35 lakh has been made in the Third Plan for setting up additional Training Centres primarily for auxiliary nurse-midwives and for setting up of a Nursing College. The present annual output of 400 nurses is inadequate to meeting growing needs of the

State. The existing training centres for Sanitary Inspectors, Pharmacists, Laboratory assistants, Physiotherapists and Occupational Therapists will be continued with provision for additional trainees and additional centres will also be established for such workers.

Regarding the training of health assistants, a sum of Rs. 11.50 lakh has been suggested for establishment of one additional Centre to train-up about 1500 health assistants during the Plan period besides existing arrangements at Burdwan.

Arrangements for training of such para-medical personnel as Social Workers, Radiographers and Dental (Oral) Hygienists and Dental Mechanics will also be made for which suitable allocations have been made in the plan.

Other Schemes

Among other schemes may be cited Students' Health Service, Health Education, Central Combined Laboratory with Nutrition Laboratory and Survey, Improvement of Health Statistics, Diagnostic and Public Health Laboratories and Dental Clinics which are continuing schemes. The provision of Rs. 20 lakh for Students' Health Service is intended to arrange for inter-alia general health examination of all students at least once a year and rectification of their defects through the agency of local medical practitioners on a suitable remuneration basis in areas where such facilities through Health Centres and similar institutions are not available. Free supply of spectacles and dental materials to poor students, provision of first aid and production of health education materials and posting of one Health Educator-cum-Social workers at each Development Block level, etc. are also contemplated. The fifteen Supervisory School Health Units at district levels as well as the Health Education Bureau set up during the Second Plan will also continue.

The new building at Convent Lane for the Central Combined Laboratory has been completed. The different laboratories of Calcutta are expected to move to the new building during the initial years of the Third Plan. Provision has been made for improving these laboratories as sufficient accommodation necessary for such improvement will be available in the new building. A new Nutrition Laboratory with arrangement for survey will be set up and this will also be located there.

Certain new schemes such as manufacture of X'ray equipment, expansion of Blood Bank and establishment of a Central Animal Breeding Farm have also been included.

Indigenous and other System of Medicines

Post-Graduate Education in Ayurvedic system of Medicine and Research is a Centrally-sponsored scheme during the Third Five-Year Plan. Every endeavour will be made to utilise to the full extent the central assistance which will be available for expenditure over and above the State ceiling. It is proposed to set up a State Ayurvedic College with attached Hospital, a Tol and a Research Institution by taking over the existing three big non-Government institutions. The necessary legislation in this regard has been enacted and it is expected that it will be possible to take over the institutions in the near future and implement the plan programme. A State Herbal Plant Farm is also contemplated during the Third Plan.

The Calcutta Homeopathic College is also proposed to be upgraded to the Degree standard.

The review will not be complete unless mention is made of the findings of the 1961 Census and its repercussions on the State Plan.

The 1951 Census had revealed that there were 248.10 lakh of people in West Bengal and the rate of increase in population during the previous ten years had been 1.27 per cent. per annum on the average. It was, therefore, taken that during the succeeding 10 years the growth in population will not exceed 2 per cent per annum. After taking into account the people of the territory transferred from Bihar and the growth at the usual rate it was estimated that there were about 296.00 lakh of people in the State in 1960. The Third Health Plan, therefore, sought to provide for this number plus the additions during the five years 1961-66 at the usual rate. But the 1961 Census has revealed that the increase in the growth of population has been rather rapid. In 1961 there are, 349.68 lakh persons in West Bengal and the rate of increase has been 3.3 per cent per annum during the previous ten years. This faster increase has up-set our calculations to a great extent. This means that provisions have to be made for more people than that was originally estimated and this can only be achieved if the efforts are intensified and more funds are available prospect for which are bleak at present and we have to push our Family Planning Schemes to the utmost limit of efficiency.

(Details of schemes)

Hospital and Dispensaries

Improvement and Establishment of Hospitals other than Sadar and Subdivisional Hospitals.—The Scheme envisages establishment and expansion of hospitals in Calcutta and places other than District and Sub-divisional Headquarters.

Improvement and Establishment of Sadar and Subdivisional Hospitals.—It is proposed to provide a minimum of 131 beds at District Hospitals and 68 beds at Subdivisional hospitals where these targets have not been reached.

Mental Hospital.—It is proposed to provide for 300 beds including 100 beds at the Institute of Mental Diseases at Gobra to be located in the buildings of the Albert Victor Leper Hospital (now defunct). Mental Health clinics with beds at district levels are also contemplated.

Ambulance Services.—It is contemplated to purchase 20 ambulances for meeting the requirements of Medical institutions in addition to those already provided. Besides construction of garages for these ambulances and those already purchased is in view.

Domiciliary Medical Services.—The Domiciliary Medical Service Scheme aims at providing immediate medical relief to the people at their homes with a view to lower the increasing pressure on hospitals the construction of which takes long time. This Scheme is intended to be implemented in Calcutta and other urban areas as well as in rural areas where the requisite number of primary and sub-health Centres is yet to be established. The proposed Domiciliary Medical Service will be partly contributory in character.

Nationalisation of Municipal Health Service.—Provincialisation of Health Officers of 18 smaller Municipalities is contemplated.

Health Units

Rural Health Centres.—The ultimate target of the schemes should be 1 Primary Health Centre and 5 Subsidiary Health Centres in each Development Block for the purpose of giving adequate coverage. The immediate target of the Scheme is, however, the establishment of one Primary Health Centre and two/three Subsidiary Health Centres in each Block.

Taking into account the Primary and Subsidiary Health Centres set up till the end of the Second Five-Year Plan it will still be necessary to provide for 171 Primary Health Centres and 651 Subsidiary Health Centres for 341 Development Blocks as per immediate target.

With the funds available during the Third Five-Year Plan period it will, however, be possible to set up 75 new Primary Health Centres and 100 Subsidiary Health Centres.

Medical Colleges

Improvement of State Medical Colleges including improvement and standardisation of pre-clinical and clinical training in Medical Colleges.—The schemes provides for reorganisation of the various teaching departments of the 3 Medical Colleges specially pre-clinical. This has been necessitated by the introduction of the new syllabus of the Calcutta University. It is also contemplated to provide for a Training Centre for Medical under-graduates as well as students' hostel.

Post-Graduate Education and Research.—In view of the deficiency of teachers in Medical Colleges and also turning out an adequate number of Post-Graduate qualified medical men to meet the requirement of specialised services in outlying areas it is proposed to develop the Institute of Post-Graduate Medical Education and Research and the School of Tropical Medicine and to upgrade certain departments in the existing Under-Graduate Medical Colleges. Provision has been made for constructional work under the Scheme and also for payment of Grant-in-aid to the School of Tropical Medicine as well as for purchase of equipments.

Dental Education and Services

Improvement of Dental College.—It is proposed to improve the Calcutta Dental College by provision of additional accommodation, equipment and staff.

Establishment of Dental Clinics.—It is proposed to set up 6 Dental Clinics at District Hospitals where such clinics could not be provided under the Second Plan programme.

Training Programme

Training of Nurses including graduate nurses.—The scheme contemplates provision of teaching facilities for auxiliary Nurse-Midwives at district hospitals with an intake of 50 students per annum at each place. It is also proposed to set up a College of Nursing as well as to augment training facilities for senior nurses.

Training of Pharmacists.—It is contemplated to expand training facilities at the Pharmacy Training Centre at Jalpaiguri so as to increase the annual intake from 50 to 100 students. Stipends will also be given to the trainees to attract suitable candidates and construction of buildings will be undertaken for accommodation of these increased number in the hostel.

Training of Laboratory Assistants.—Training of 200 Laboratory Assistants is contemplated during the Third Five-Year Plan period. Provision for payment of stipend had been made to attract better type of people.

Training of Physiotherapists and occupational therapists.—It is proposed to expand the training facilities at the School of Physical Medicine, Calcutta, and to undertake essential constructional works including Gymnasium for the said Institute.

Training of Health Assistants.—It is proposed to set up one Training Centre at Moinaguri for training of Health Assistants.

Training of Sanitary Inspectors.—The scheme envisages training of increased number of Sanitary Inspectors at the existing Training Centre at Burdwan to meet the growing requirement of the State.

Provision has been made for payment of stipends to the trainees to attract suitable persons.

Training of Social Workers.—It is proposed to arrange for training of social workers at the All-India Institute of Social Welfare and Business Management to meet the requirement of various medical institutions. Provision has been made for grant of stipends to the trainees.

Training of Dental (Oral) Hygienists and Dental Mechanics.—Arrangement will be made for training of Dental Hygienists and Dental Mechanics at the Calcutta Dental College by suitable batches.

Training of Radiographers.—In order to provide for Trained Radiographers in medical institutions, it is proposed to arrange for such training at the 3 Government Medical Colleges by suitable batches. The training will be for a period of one year and stipend will be paid to the trainees.

Control of Diseases

Malaria Eradication Programme.—Gradual withdrawal of spraying and surveillance in the Hyper-meso Endemic and Hyper Endemic areas by stages and continuance of spraying in the international border areas are contemplated.

Filaria Control Programme.—The existing arrangement of one Filaria Control-cum-Research Unit at Contai will be continued.

Chest Clinic-cum-Domiciliary Units.—The estimated number of persons suffering from pulmonary tuberculosis in West Bengal is 6 lakh. The incidence of the disease is alike in rural and urban areas. It is proposed to arrange for children service for ambulatory cases as well as domiciliary service for persons who cannot attend clinics. At the rate of 1 Chest Clinic-cum-Domiciliary Unit for 2 lakh of people 40 such institutions are necessary for 80 lakh people of greater Calcutta. For other areas 55 such Centres are required for a population of 2.20 crore each unit being entrusted to cater to the needs of 4 lakh of people. It is proposed to set

up 37 new Chest Clinics-cum-Domiciliary Service Units (9 for Greater Calcutta and 28 for other areas) and upgrade 50 existing clinics (22 Government and 28 non-Government) so as to provide for domiciliary service. The remaining 8 clinics will be provided by the Ministry of Refugee and Rehabilitation.

M.M.R. Units.—It is proposed to set up a laboratory for undertaking sensitivity tests of cases resistant to anti-tuberculosis drugs.

B.C.G. Vaccine Campaign.—Fifteen Mass Campaign teams and 1 Non-mass Campaign Team which functioned during the Second Plan period will be maintained. On an average each team will examine 10,000 persons per month by tuberculin test.

Rehabilitation of T.B. patients.—It is proposed to set up a Rehabilitation Centre for T.B. patients.

Expansion of T.B. Hospitals.—The scheme envisages opening of 695 T.B. beds construction in respect of which will be completed during the Third Plan period. Besides construction of a new T.B. Hospital is in view.

T.B. Research Laboratory.—It is proposed to set up a laboratory for undertaking sensitivity tests of cases resistant to anti-tuberculosis drugs.

Leprosy Control.—The comprehensive schemes for control of leprosy seeks to give coverage to the endemic area of West Bengal having an incidence of leprosy at 1 per cent. of the population or above. 92 Development Blocks within 80 police-stations in 22 subdivisions of 13 districts are involved. To give full coverage to the endemic area 41 Primary Control Units, 51 Supervisory Units and 460 Subsidiary Units are necessary. In addition 6 units with Mobile Wings are required for Calcutta and suburban areas. A part of the programme can only be implemented during the Third Plan period owing to the limitation of funds. Besides 1 training centre will be established at Gouripore Leprosy Colony for training of leprosy workers.

Rehabilitation of Leprosy patient A Rehabilitation Centre for 50 families is contemplated.

Small Pox Eradication Programme.—The scheme ends at giving coverage to 29 million people of the State.

Expansion of State Vaccine Institute.—The scheme envisages shifting of the West Bengal Vaccine Institute from its present site at Convent Lane, Entally, Calcutta, to the township of Kalyani with a view to increasing the production from 2,25,000 c.c. from 4,000 calves to 4,50,00 c.c. from 8,000 calves every year. It is also contemplated to manufacture freeze dried lymphs which remain stable at 40°C. for 2 years. 10 per cent. to 20 per cent. of the production will be diverted to freeze drying method.

Anti-Cholera Programme.—It is proposed to establish an Epidemiological Unit with a diagnostic laboratory for study of Cholera.

Infectious Diseases Hospital.—Spill-over works in respect of Infectious Diseases Hospital at Beliaghata will be completed.

Mass Immunisation against Poliomyelitis, Diphtheria, Tetanus and Whooping cough.—It is proposed to immunise children of Pre-School age

with Diphtheria Prophylactic combined with Whooping cough vaccine and anti-tetanus serum. Setting of 1 Medical Team is contemplated.

Indigenous Systems of Medicines

Ayurvedic Education.—During the Third Plan period it is proposed to set up a State Ayurvedic College with attached hospitals by taking over the existing 3 big institutions. Till such taking over, grants will be paid to those institutions.

Development of Homeopathic Education and Research.—The Calcutta Homeopathic College is proposed to be upgraded to the degree standard.

Laboratory Services

Central Combined Laboratory.—The construction of building of the Central Combined Laboratory at Convent Lane, Entally, is complete and will be ready for occupation at the beginning of the Third Plan. West Bengal Vaccine Laboratory, Pasture Institute, West Bengal Public Health Laboratory (Food and Water), West Bengal Public Health Laboratory (Bacteriology) and West Bengal Public Health Laboratory (Drug) will be shifted to the new building and improved. A Nutrition Laboratory will also be set up. Besides, arrangement for Nutrition Field Service for evaluation of nutritional standard of population, Nutrition Education, Publicity and Demonstration will be made.

Establishment of Diagnostic and Public Health Laboratories.—During the Third Plan period it is proposed to establish Diagnostic and Public Health Laboratories at 7 district hospitals where such laboratories will still remain to be set up. Besides provision has been made for authorising diagnostic laboratories at Subdivisional Hospitals and at some important Primary Health Centres.

Research and Statistics

Health Statistics.—The scheme envisages improvement of the present system of Central Compilation of Health and Vital Statistics. Besides existing 6, establishment of 4 Model Health and Ideal Registration Units are also contemplated.

Maternity, Child Welfare and Family Planning

Establishment of Paediatric Hospital with child guidance clinic and Orthopaedic Centres.—Fifty Paediatric beds with Child Guidance Clinic and Orthopaedic Centre will be provided.

Maternity Child Welfare and Family Planning Programme.—During the Second Plan period 102 Maternity Child Health and Family Planning Centres have been sanctioned in addition to 1 Regional Training Centre. Of these only 50 centres are in rural areas, being attached to health centres. Emphasis has been given on the expansion of this programme during the Third Plan period. It is proposed to establish 271 such centres at Primary Health Centres during the said Plan. A Training and Research Unit is also contemplated. The provision indicates State's share of expenditure.

Health Education and Publicity

Health Education.—It is proposed to undertake health education work at the periphery by appointment of health educators at Block levels. The Central Organisation, viz., the State Health Education Bureau was set up during the Second Plan and further expansion of the Bureau will also be made.

School Health

Students Health Service.—As an initial step to this direction School Health Units at district levels were set up during the Second Plan. Under the Third Plan programme it is proposed to undertake students health service for student population of the State by utilising the general practitioner on payment of capitation fees. It is also proposed to arrange for free service for rectification of defects amongst the students population. Free supply of spectacles, dental materials and X-ray films to the students of the low income group is also contemplated.

Water Supply and Sanitation (Urban and Corporation)

Urban Water Supply and Sanitation Scheme.—Ten new Municipal Water Supply and Sanitation Schemes are proposed to be undertaken. Besides completion of the spill-over schemes carried over from the Second Plan is in view.

Tollygunge Panchanangram Drainage Scheme.—This is a scheme for drainage of an area of 12.8 sq. miles of which about 6.23 sq. miles lies within the limits of the Calcutta Corporation, about 2.47 sq. miles is being rapidly urbanised and the balance 4.1 sq. miles is rural. It provides for a main drainage channel of about 4 miles in length, branch channels of about 7 miles in length, a pumping station with a total installed capacity of 450 cusecs, a major sluice at the outfall end of the main channel and a number of bridges and culverts.

Silt clearance and completion of works of Calcutta Corporation's outfall system from Bantala to Kulti.—This scheme consists of desilting of storm-water channel and completion of the dry weather flow channel and other allied works of the Calcutta Corporation's drainage outfall system from Bantala to Kulti. It is for improvement of the drainage facility of the City of Calcutta and some rural areas. The scheme commenced in October 1957, and is likely to be completed in 1964. The progress up to the end of the Second Plan may be about 45 per cent. of the drainage facility to be derived from it.

Rural water-supply and Sanitation Scheme.—Provision has made for completion of works for which commitment was accepted during the Second Plan period. Besides supplementary sources of water supply in areas not covered by the scheme for deep tube-well irrigation of the Agriculture Department are also contemplated.

Miscellaneous Schemes

Re-organisation of Central Medical Stores.—Improvement of storing arrangement at Calcutta and at district and subdivisional levels is contemplated. Forty Units will be set up during the Third Plan period.

Drug Control.—The inspecting organisation under the D.L.O. will be strengthened.

Manufacture of X'Ray machine.—A limited concern under the style of “Electro Medical and Allied Industries (Private) Ltd.” with an authorised capital of Rs. 1 crore and issued capital of Rs. 25 lakh will be established for manufacture of X'ray equipment in collaboration with a foreign firm. Government will own 51 per cent. of the shares and the factory will be located in the vicinity of Calcutta on the B. T. Road.

Establishment of Central Animal Breeding Farm.—To ensure regular supply of animals to the Laboratories, hospitals and other medical institutions for research, laboratory examination, chemical examinations, etc. it is proposed to establish a Central Pool in the shape of an Animal Breeding Farm.

Expansion of Blood Bank.—Blood Banks will be provided at all District Hospitals.

Administrative Staff in connection with the Development Schemes and Transport.—Provision has been made for appointment of additional staff and purchase of vehicles in connection with the implementation of Development Schemes.

CHAPTER XIX

HOUSING

After food and clothing, housing is about our most important need. But the pace of the construction of new houses in the last decade has not been commensurate with our needs due to a variety of reasons. First, there has been a very rapid growth of population in recent years. Secondly, in West Bengal there has been a large influx of displaced persons from East Pakistan. Thirdly, the growing industrialisation has attracted many more people from outside the State. The result has been intense overcrowding in the cities and the growth of industrial towns giving rise at many places to horrible slums.

The business of providing new houses has largely been left to the private sector. But Government must step in where private sector finds the task unrewarding or attempts to exact more than a reasonable return for undertaking such work.

The land value in the overcrowded cities and townships has been sky-rocketing for some time and people of moderate means have found it impossible to start construction on their own. A part of Government's efforts has therefore been directed towards helping them with loans and building sites on liberal terms. There are however others in the still lower income brackets who cannot avail themselves of these benefits and Government have decided to share the burden of providing them with houses at rent, which has been kept within their paying capacity by grant of subsidies. The schemes for housing low paid industrial workers and slum dwellers come within this category. Provision has also to be made for another class of people who, though they are somewhat better off, have been subjected to rack-renting by landlords in the prevailing context of housing scarcity. Government have been helping them by providing loans, building sites and suitable built-houses, a proportion of which also are let out on rent.

Though attention had of necessity been concentrated on the overcrowded cities and townships the villages have also been kept in mind. A Village Housing Project has been under progress for a number of years and its aim is to provide better living conditions in the countryside.

Progress during the Second Plan

Low Income Group Housing Scheme.—The scheme envisages the grant of long-term loans to persons having income not above Rs. 6,000 per year. The maximum amount of loan admissible to an individual is Rs. 8,000 and the loanee is expected to invest Rs. 2,000 from his own source. Such loans are also made to the Co-operatives of persons eligible for loans as well as local bodies and registered and recognised hospitals and institutions for construction of residential houses for their low paid staff. The loans are repayable with interest at the rate of 5 per cent. per annum over a period varying from 16 to 25 years. The State Government have also undertaken to construct houses under this scheme on

a no-profit no-loss basis for either selling on hire-purchase basis or letting out on rent. The progress made during the Second Five-Year Plan is indicated below :

	Sanctioned	Disbursed
	Rs.	Rs.
(a) Individuals }	2,00,00,000	1,00,05,027
(b) Co-operatives }		
(c) Institutions	41,26,000	32,61,000
(d) Constructed by State Government ..	62,77,200	41,77,200
	3,04,03,200	1,74,43,227
(a) No. of houses for which loans have been sanctioned ..		4,208
(b) No. of houses completed		2,296
(c) No. of houses under construction		1,912

Subsidised Industrial Housing Scheme.—Under this scheme the Central Government provides the State Governments, Statutory Housing Boards and Local bodies 50 per cent. of the cost as loans and 50 per cent. as subsidy subject to the ceiling costs prescribed under the scheme for different types of quarters. The houses are let out on subsidised rate to the industrial workers whose income does not exceed Rs. 350 per month each. Thirty-three projects comprising a total of 9,926 tenements at an estimated cost of about Rs. 5,00 lakh were sanctioned till the end of the Second Five-Year Plan. Of these 5,740 (including 104 tenements constructed during the First Plan) were completed and another 2,012 were under construction at the end of the Second Plan.

The scheme also provides for grant of financial assistance to the employers and registered Co-operative Societies of eligible workers for the construction of such tenements. Seventeen projects involving construction of 1,978 tenements by employers for which Rs. 42 lakh were to be paid as financial assistance in the shape of loans and grants were sanctioned up to 1960-61. Of these, 400 were completed during the First Plan, 678 during the Second Plan, while another 600 were under construction at the end of the Second Plan.

Plantation Labour Housing Scheme. This scheme was introduced in 1956 for assisting Planters who were in need of financial assistance to build houses for the workers and their families residing in the plantations, at the rate of 8 per cent. per year in discharge of their statutory obligation under the Plantation Labour Act of 1951. During the Second Plan period 23 Tea estates applied for financial assistance under the scheme for construction of 1,124 houses. Projects of 9 of these estates involving

construction of 446 tenements with a total loan assistance of Rs. 10.38 lakh were sanctioned. Rupees 4.69 lakh of loan had been paid up to the end of the Second Five-Year Plan.

Slum Clearance Scheme. The problem of slums in Calcutta as well as the surrounding industrial belt has assumed colossal proportions. A survey by the State Statistical Bureau shows that there are about 1,89,000 families living on 96,427 kattahs of land in the slum areas of Calcutta proper. Government of West Bengal have enacted a legislation which contemplates that these slum areas will be gradually cleared after alternative accommodation has been provided for the slum dwellers. The progress has of necessity been slow at the beginning, but once it gets under way a sort of chain action will develop and the pace is expected to improve. The limiting condition is however funds. At the rate of Rs. 6,000 per tenement, which is rather on the low side, the total cost of clearing the slums will be a little over Rs. 103 crore.

A beginning has however been made. Construction of 800 tenements under two projects entrusted to the Calcutta Improvement Trust was completed in October 1960, at a total cost of Rs. 60.71 lakh. The occupation of these tenements by the slum dwellers had just commenced at the end of the Second Five-Year Plan.

Other Urban Housing Schemes.—A new township at Kalyani, about 35 miles away from Calcutta, is being developed. It comprises 6 blocks, out of which the development of Block B has been completed in all respects and that of a portion of Block D is nearing completion. Another Block, namely, Block C, has been transferred to the Education Department for the establishment of the Kalyani University. The B Block, about 1,100 acres in area, have 5,688 plots of sizes varying from 5 kattahs to 1 bigha each. About 1,475 plots have already been sold out to the public and many of them have already started construction. Several Government Offices too have moved to Kalyani. An Industrial Estate has been opened in Block D. Many industries are coming up in this area pretty fast. The cost of development is being recovered through sales.

In Calcutta proper three Housing Estates have been constructed for letting out flats to the middle class people on reasonable rent. Of these, the one at Karaya Road was started during the First Five-Year Plan, during which 104 flats constructed. Work had to be suspended as some legal complications cropped up. The work will commence again as soon as these are cleared up. Another Housing Estate, namely, Gariahat Housing Estate consisting of 50 three-roomed flats was completed during the Second Five-Year Plan, at a cost of Rs. 20.77 lakh. A Housing Scheme for providing housing accommodation to the poorer section of the people was undertaken at Bowali Mondal Road, Tollygung, and here too the work was interrupted due to some complications. The work will be resumed as soon as the difficulties are removed.

Village Housing Scheme.—Originally this was a Centrally-sponsored scheme. The object was to improve housing conditions in selected villages in Block areas by granting loans to villagers and co-operatives for construction, extension or remodelling of houses. The work started in 1959-60. The total expenditure incurred at the end of the Second Plan is Rs. 10.87 lakh. Out of this, Rs. 7.16 lakh represents the loan granted for the purpose and the rest is accounted for by administrative expenditure.

Third Plan Proposals

All the above schemes will be continued during the Third Five-Year Plan, but the coverage will be larger. The table below sets out the Third Plan targets:

Scheme				Allocation (Rs. in lakhs.)
Low income Group Housing	..	..	..	330
Subsidised Industrial Housing	..	..	..	430
Plantation Labour Housing	..	..	..	15
Slum Clearance (State's share)	..	..	..	100
Karaya Road Housing Estate	..	..	..	9
Bowali Mondal Housing Estate	..	..	..	8.48
Kalyani Township (Kanchrapara Development Area)	..	..	..	2
Village Housing Scheme	..	..	..	25
Filling up of Circular Canal in Calcutta	..	..	..	51
Town Planning Organisations	..	..	..	6

In order to co-ordinate these housing activities a good deal of concerted planning is necessary. The Calcutta Metropolitan Planning Organisation has been set up to look after the planning in the Greater Calcutta Area. A fuller account of this will be found in another Chapter. Another town planning organisation for the rest of West Bengal has been set up. Rs. 6 lakh will be spent on it during the Third Five-Year Plan.

(Details of Schemes)

Subsidised Industrial Housing.—Subsidised Industrial Housing Scheme envisages construction of houses for industrial workers to be let out to them on standard rents prescribed under the scheme with financial assistance from the Government of India in the shape of 50 per cent. loan and 50 per cent. subsidy.

Slum clearance.—A sum of Rs. 1.00 crore representing State Government's share of the cost of the projects to be executed has been provided for under the Slum Clearance Scheme in the Third Five-Year Plan of the State. As 75 per cent. of the cost of the projects is met from the Central assistance the total cost of the projects proposed to be implemented during the Third Plan will be Rs. 4.00 crore. All the projects started during the Second Five-Year Plan period will be continued. Besides, the following new works have been taken up at a cost mentioned against each of them:—

	Rs.
(a) Construction of 1392 Nos. of tenements for Harizans working under the Calcutta Corporation	83,33,500
(b) Project at 40A, Gopal Chatterjee Road (240 tenements) ..	16,24,000
(c) Project at 30, Ramkrishna Samadhi Road (208 tenements) ..	15,07,800
(d) Project at 49, Narkeldanga North Road (400 tenements) ..	25,02,000
	1,39,67,300

In addition to the above, the following projects are now under consideration:—

- (i) Land on the side of Desbandhu Park (48 tenements).
- (ii) 17, Muraripukur Road (80 tenements).
- (iii) Within the area of the Veterinary College (568 tenements).
- (iv) 111, Narkeldanga Main Road.
- (v) 5, 5A and 5B, Karim Bux Road.
- (vi) C.I.T's Scheme No. B.R.S.-V-107/108, Ultadanga Main Road (424 tenements).
- (vii) C.I.T's Scheme No. BRS-VI-166/1, Beliaghata Main Road (48 tenements).

Low Income Group Housing Scheme.—The scheme envisages the grant of long-term loans to persons of the low income group (viz., persons having an annual income not exceeding Rs. 6,000) for the purpose of construction of residential houses. The maximum amount of loan admissible to an individual is Rs. 8,000. Loans are also advanced to Co-operative Societies for the construction of residential houses by the members of the Co-operative Societies and to local bodies and registered and recognised hospitals and institutions for the construction of residential houses for their low paid staff. The loans are repayable with interest in annual instalments over a period varying between 16 years and 25 years. The State Government are also constructing houses for sale to individuals of this income group or for letting out on a no-profit no-loss basis to such persons.

The total provision for the Third Five-Year Plan is Rs. 3,30 lakh of which Rs. 45 lakh will be spill-over expenditure and the rest amount will be spent on new application from the loanees, new construction by this Government, etc.

Plantation Labour Housing Scheme.—Plantation Labour Housing Scheme contemplates grant of loan to planters, for building houses for their resident workers, up to 80 per cent. of the cost of construction subject to the ceiling limits prescribed under the scheme.

Village Housing Scheme. The Village Housing Scheme was originally taken up by the Development Department during the Second Plan as a Centrally-sponsored scheme and is now being administered by the Community Development and Extension Service Department. The object of the scheme is to improve the housing conditions in selected villages in block areas by granting loans to villagers and co-operatives, if any, for construction/extension/remodelling of houses. The work under the scheme was actually started in 1959-60.

The total expenditure incurred under the scheme during the Second Plan is Rs. 11.19 lakh. Out of this, the amount of loan expenditure is Rs. 9.78 lakh which is receivable as loan from the Government of India in the Ministry of Works, Housing and Supply. The balance of Rs. 1.41 lakh, representing expenditure on staff for the Rural Housing Cell under the scheme is shared between the Central and the State Governments in the ratio of 50:50. The number of houses built or improved out of the aforesaid loan expenditure during the Second Plan is 919 and the number of houses under construction is 781.

This Government was under the impression that the scheme should continue to be treated as a Centrally-sponsored scheme during the Third Plan also and that provision in the Third Plan would be made in the central sector for all expenditure under the scheme excepting the agreed share of State's contribution towards the cost of establishment of the Rural Housing Cell at the rate of Rs. 40,000 per year. Accordingly, a provision of Rs. 2 lakh was made in the State sector for the scheme in the State's overall Third Plan outlay of Rs. 3,41 crore. But it has lately been decided by the Planning Commission that this scheme should be included in the State Plan and the Central Government would only provide in their sector a sum of Rs. 2 lakh as their share of contribution towards the Rural Housing Cell. Consequent on this decision, the State Government decided that a sum of Rs. 25 lakh should be provided for the scheme within the State Plan. This provision of Rs. 25 lakh has been distributed over the 5 years of the Third Plan at the rate of Rs. 5 lakh each year.

On the basis of the amount of loan admissible in each individual case, it has been worked out that the improvement of about 3,700 houses would be made possible under the scheme during the Third Plan.

Establishing of a Town Planning Organisation.—The Town and Country Planning Organisation, which is proposed to be established during the Third Five-Year Plan, will mainly undertake the work of preparation of Master Plans for the growing towns.

Karaya Road Housing Scheme.—This scheme was sponsored during the First Plan period. It envisages construction of 11 blocks—(9 Nos. big and 2 Nos. small) of residential buildings comprising 160 flats at an estimated cost of Rs. 29.37 lakh. During the First Plan period, 7 blocks—(6 Nos. big and 1 No. small) comprising 104 flats were constructed. The remaining blocks which were programmed to be constructed during the Second plan period could not be taken up as the possession of the land acquired for the purpose could not be secured, the tenants occupying the same having filed petitions in the High Court against eviction which are now awaiting orders of the Court. Provision for the remaining works has therefore been repeated in the Third plan. If possession of land is received early, the physical target as per programme may be reached within a period of 2 years of the Third Plan.

The completion of the remaining works under the scheme which will not cost more than Rs. 9 lakh may be done in the usual way with the assistance of the technical staff of this Department which may be strengthened slightly if considered necessary.

Bowali Mondal Road Housing.—With a view to providing housing accommodation to the poorer section of the people, particularly the bustee dwellers at the Bowali Mandal Road. Tollyganj, who were displaced by a disastrous fire in 1953, it was decided to construct six blocks of four-storied buildings comprising 192 tenements at an estimated cost of 9.54 lakh. One such block was completed during the First Five-Year Plan period. The construction of further blocks could not be started as the land on which the other blocks were to be constructed had been occupied by the squatters. It was decided that construction of further blocks would be taken up by removing the squatters from the open land to the completed block. As the completed block was also forcibly occupied by the inmates

of a neighbouring bustee, it has not been possible to start construction of further blocks. Civil suits have been filed for eviction of the persons, occupying the complete blocks. The case is sub-judice. Construction will be resumed as soon as the squatters are removed.

A sum of Rs. 1.06 lakh has been expended so far. The balance of Rs. 8.48 lakh will be expended during the Third Plan period.

Filling up Circular Canal in Calcutta.—This scheme is for filling up the part of the Circular Canal from its junction with the New Cut Canal up to its junction with the Beliaghata Canal. The navigation canal lost its importance along with the deterioration of the river Vidyadhari and partition of Bengal. The filled up space and the canal side lands will be utilised for residential purposes. This will also improve sanitation of the locality.

Kanchrapara Area Development Scheme (Kalyani Township).—The Kalyani Township comprises of six blocks, out of which the development of Block 'B' has been completed in all respects and that of a portion of Block 'D' is nearing completion. The land in Block 'C' has entirely been transferred to the Education Department and the area is being developed for the purpose of establishment of the Kalyani University. The 'B' Block comprises of 1,100 acres with 5,032 plots of varying sizes from five cottahs to one bigha. About 1,475 plots have already been sold out to the public and some of them have already started construction of residential buildings on their plots. Many Government offices have been shifted to Kalyani and accommodated in the Administrative Building. An Industrial Estate has been opened in Block 'D'. Some other industries, both public and private are being set up there.

The cost of development of the area is being recovered through sale proceeds from disposal of plots and the figures are net of expenditure and recoveries, the minus figures representing excess of recoveries over expenditure.

A provision of 2.00 lakh has been made for this scheme for the Third Five-Year Plan period.

CHAPTER XX

WELFARE OF BACKWARD CLASSES

One of the principal aims of planning is to reduce inequalities in income and to promote social justice. The under privileged classes of the society must, therefore, receive special attention. India has among its population a large number of Scheduled Tribes, Scheduled Castes and Other Backward Classes, whose standard of living is low. As a direct result of this economic backwardness, they have been unable to avail themselves fully of all the educational opportunities provided by the State. This prevents them from getting the full share of the results of development. Poverty and educational backwardness have thus reacted one upon the other in preventing their progress. The strategy of planning for the welfare of the Backward Classes has, therefore, been to tackle these two problems. It also aims at providing some social amenities to make living easier for the people.

2. West Bengal differs from several other States of India in having no Scheduled Area as defined in Article 244 of the Constitution nor any sizeable tract with a predominantly tribal or Scheduled Caste population. These people are interspersed with the general population in varying concentration throughout the State. This peculiarity of the distribution has created some difficulties in the implementation of the welfare measures specially meant for the Scheduled Tribes, the Scheduled Castes and the Other Backward Classes. They do no doubt share the results of the general development work in the area, but because of their poverty and indebtedness they are unable to partake adequately in general development schemes which require contribution from the beneficiaries. In order to obviate this disadvantage of the backward classes, special provision of fund is made by the Department of Tribal Welfare to execute schemes like 'Water Supply', 'small Irrigation Projects', 'Village Roads', etc., which require no contribution. According to the present practice in the general Water Supply scheme one source for water supply is provided for a population of 450. As in many areas the Scheduled Tribe population lives in isolated hamlets, the general Water Supply scheme cannot always cater for their needs. In such cases, attempts are being made by the Tribal Welfare Department to provide a source of Water Supply for such hamlets if the nearest available source is at a considerable distance even if the population of the hamlet is less than 450. As the backward classes live interspersed with the general population, avoidance of a separatist attitude is of prime importance. It has, therefore not been considered proper to provide separate schools, dispensaries, training institutions, etc., exclusively for the backward classes. The backward classes are encouraged to join such institutions established by the State or other aided agencies for all.

3. The economy of the Scheduled Tribes is predominantly based on agriculture, either as agricultural labourers or as share croppers. Most of them have hardly sufficient land of their own to subsist themselves. Traces of their past nomadic habit has not as yet disappeared fully. Of the 53 Scheduled Castes in West Bengal excluding the areas transferred from Bihar and 21 Scheduled Castes in the transferred areas from Bihar, the economic condition and status have divergent variations. While some of the castes depend mostly on agriculture, others still depend upon their traditional vocations which at the present day are not finding them adequate means for livelihood. The felt needs of both groups have been studied and plans for their welfare have been conditioned by this background.

Progress during the Second Plan

4. Attempts to improve their economic status have been directed towards establishing mixed farming practices among them as well as to encourage them to engage in simple industrial pursuits. There have been schemes to foster these purposes both in the Central and State sectors of the Plan. In the execution of the State Schemes 9,982 maunds of seed was distributed. Eighty-five small irrigation schemes meant to benefit the scheduled tribes have been completed and 24 pumping sets distributed amongst them. 6,403 families got grants for improving the vegetable-cum-fruit gardens adjacent to their houses. They were also given 15,585 birds for poultry keeping, as well as 1,575 goats, 1,092 pigs and 1,428 sheep to encourage them to take to mixed farming. Under the Central schemes 900 families received grants for taking up improved method of lac cultivation and 640 persons were given grants for agriculture. Under the State Schemes 57 Co-operative-cum-Grain Golas were established and 31 more established previously were maintained. A big size marketing society has also been established under a Central plan. Seven creamery societies started functioning and one poultry multiplication centre was started in Darjeeling district.

5. In order to give them training in simple crafts five Training-cum-Production Centres were established which imparted training in weaving, wood-cum-metal crafts, fibre work, sericulture and carpentry. Four hundred and twenty-two of the trainees received stipends and 178 were given grants to set up their own industry. Under the Central Schemes 47 persons were trained in sheet-metal industry and each was given a subsidy. In addition 40 persons were trained in wood industry, 40 in wool industry and 240 in bee-keeping. 530 families were supplied with an improved dhenki each.

6. The above schemes were all meant for the Scheduled Tribes. The needs of the Scheduled Classes have also received attention. Under the Central Schemes three Training-cum-Production Centres for jute spinning and weaving have been established. Two hundred and thirty persons have so far been trained in these crafts. Another Training-cum-Production Centre meant for the Muchis was established and 90 persons have undergone training there. Under the State Plan 143 persons were given stipends and 270 persons were given grants to set up their own industry.

7. Promotional activity in the educational sphere has taken the shape of establishment of new schools as well as reorganising and upgrading the existing ones. Grants of tuition fees, books, examination fees, hostel charges, etc. have also been made to deserving candidates. One hundred and fifty-eight primary schools for the Scheduled Tribes were renovated. Ten new secondary schools were established and 16 more upgraded. Twelve new hostels were constructed and 19 of the existing ones had their capacity expanded. Three primary schools and one hostel in the Purulia district for the scheduled castes received maintenance assistance. Eighteen more hostels had their capacity expanded. As to the various types of grants made to individual students the details would be found in the table below.

		Education				
		Stipends.	No. of students.			
	Tuition fees.		Books	grants.	Examination fees.	Boarding charges.
I. Scheduled Tribes	..	1,229 (school) 120 (college)	46,368	7,068	794	4 204
II. Scheduled Castes	..	3,557	3,491	3,883	269	2,353
III. Other Backward Classes	..	1,659 (school) 360 (college)	..	..	..	..

8. The social amenities provided included housing, water supply, roads and medical facilities. One hundred and forty families belonging to what were once known as Criminal Tribes and some Toto families in the Jaipalguri District have been rehabilitated. Two hundred and twelve forest village huts were constructed under the State Plan and 1,053 houses under Central Plan. 1,039 sources of water supply have been created under the State Plan and another 919 under the Central Plan for the Scheduled Tribes. Ten pipe lines have also been laid. Twenty-six miles of roads have been constructed under the State Plan and three bridges and 87 culverts constructed. Another 76 miles of roads have been constructed under the Central Plan. Some more are under construction. Thirty-three Tribal Welfare Centres have been established and 128 monasteries and 56 non-official organisation received grants for welfare activities among the Scheduled Tribes. A Cultural Research Institution was maintained and construction of a Social Workers' Training Institute completed.

9. As regards the Scheduled Castes, 1,077 and 919 water supply sources have been created under the State and Central Plans respectively and one pipe line laid under each. Grants have also been made for welfare activities among the Scheduled Castes. Fifty non-official organisations among the Scheduled Castes have been given grants.

10. A Mobile Dispensary-cum-Venereal Disease Clinic has been functioning under the Central Plan and two Leprosy Clinics have been established under the State Plan. Thirty beds for the T.B. patients of Scheduled Tribes are also maintained.

11. Welfare schemes for the other backward classes have also been taken up. In the last two years of the Plan 119 minor irrigation schemes were executed for their benefit and 260 persons were given financial assistance to set up their own industry. 345 drinking water supply sources have been created. In addition to the 140 families referred to above, 45 of the ex-criminal tribes families have been rehabilitated under this scheme.

12. A statement of expenditure actually incurred during the period of the Second Plan is given below:—

				(Rs. in lakh.)
Welfare of Backward Classes.				Amount spent during the Plan period.
State Sector—				
Scheduled Tribes	..	..	..	101·00
Scheduled Castes	..	..	..	29·01
Other Backward Classes	..	..	..	2·68
Ex-Criminal Tribes	..	..	..	1·86
				134·55
Central Sector—				
Scheduled Tribes	..	..	..	48·87
Scheduled Castes	..	..	..	26·04
Other Backward Classes	..	..	..	17·22
Ex-Criminal Tribes	..	..	..	1·00
				93·13

Third Plan proposals

13. The financial provisions for the Third Five-Year Plan are shown below:—

Category of the Backward Classes.	Provision in lakh.
Scheduled Tribes	159·50
Scheduled Castes	180·50
Other Classes	10·00
	350·00

14. The Third Five-Year Plan proposals have been drawn up in the light of experience gained in working the First and the Second Plan. Because of the very low land holding of the Scheduled Tribes all economic schemes aim at providing them with a subsidiary source of income. The following schemes were taken up under the Second Plan for this purpose:

- (a) Subsidised distribution of seeds;
- (b) Demonstration plots in cultivators' holdings;
- (c) Improvement of livestock;
- (d) Subsidised distribution of poultry birds;
- (e) Encouragement of homestead vegetable-cum-fruit gardening;
- (f) Establishment of creamery societies.

It was found, however, that the foreign breeds of poultry birds could not be maintained in the tribal villages as these birds were not immune to the local diseases. This scheme has, therefore, been abandoned in the Third Plan. As regards Establishment of creamery societies it was found that the tribal superstition against milking of cows could not be overcome and it was considered expedient not to interfere too much with their superstition at this stage. This scheme, therefore, was dropped. As regards the schemes for 'subsidised distribution of seeds, demonstration plots in cultivators' holdings, encouragement for homestead vegetable-cum-fruit gardening, an omnibus scheme, viz., 'reclamation and development of waste land' has been introduced in the Third Five-Year Plan to cover the objects in view. The scheme 'Improvement of livestock' has been split up into three separate schemes, viz., 'Sheep rearing, pig rearing and goat keeping', as it was found that the tribals could easily take to the rearing of these three animals. The scheme for upgrading of 4-Classes Junior High Schools taken up in the Second Five-Year Plan has been abandoned in the Third Five-Year Plan as the Education Department are themselves making grants for upgrading of schools to Class XI school.

15. The education schemes have met with ready acceptance. The following schemes will, therefore, be extended in course of the Third Five-Year Plan:—

Scheduled Tribes

- (a) Payment of tuition fees to tribal students.
- (b) Book grants.
- (c) Boarding charges.
- (d) Stipends to school students.
- (e) Examination fees.
- (f) Training facilities to vocational trades and crafts.
- (g) Financial assistance to set up trades.
- (h) Aid to Voluntary Agencies.

Scheduled Castes

- (a) Stipends to school students.
- (b) Examination fees.
- (c) Training facilities in vocational trades and crafts.
- (d) Financial assistance to set up trades.
- (e) Aid to Voluntary Agencies.

16. The following new schemes have also been included keeping in view of the backward classes as well as the results of the implemented welfare programme during the last two Plans:

Scheduled Tribes

- (a) Provision of Ashram facilities to tribal students in basic schools.
- (b) Provision for hostel facilities to Scheduled Tribe students reading in post-secondary institutions in Calcutta.
- (c) Residential facilities to Scheduled Tribe students receiving training in vocational trades and crafts.

Scheduled Castes

- (a) Residential facilities to Scheduled Caste students receiving training in vocational trades and crafts.
- (b) Free tuition to poor-meritorious Scheduled Caste students reading in schools.

(Details of Schemes)

WELFARE OF SCHEDULED TRIBES

Education

Payment of tuition fees.—The Scheduled Tribe students of the secondary stage who do not get plucked more than once in the Annual Examination will be paid, tuition fees at the average rate of Rs. 60 per student per annum. 63,333 students are expected to be benefited during the Plan period.

Book grants to tribal students reading in secondary schools.—The scheme aims at giving grants to tribal students at the secondary stage for purchase of books at the average rate of Rs. 30 per student per annum. 19,000 students will be benefited during the Plan period.

Grants for books and other equipment to tribal students reading in primary schools. The scheme provides for grants to tribal students reading in primary schools for purchases of books, slates and other equipment at an average rate of Rs. 4 per student per annum. 1,25,000 students will be benefited during the Plan period.

Examination fees for Scheduled Tribe students appearing at the School Final and Higher Secondary Examinations.—The object of the scheme is to give grants to Scheduled Tribe students for payment of examination fees for appearing at the School Final and Higher Secondary Examinations. 2,500 will be benefited during the Plan period.

Special stipend to poor meritorious Scheduled Tribe students of selected Secondary Schools.—This scheme seeks to give stipends to poor meritorious Scheduled Tribe students reading in selected number of good institutions

and residing at hostels attached to these institutions so that all opportunities may be provided to them for prosecuting higher studies with satisfactory result. Each student will be given stipend at the rate of Rs. 30 per month. 1,000 students will be benefited during Plan period.

Provision of Ashram facilities to tribal students in Basic Schools.—It is found that generally academical attainment of the tribal students is poor due to irregular attendance and unsatisfactory home condition. It is proposed to establish 10 hostels which will be attached to existing basic schools for providing residential facilities to tribal students. There will be accommodation for 20 students in each hostel. There will be provision for a Superintendent also. Food and other charges of all students will be borne by Government.

Extension of existing schools hostels.—The object of the scheme is to give grants for extension of existing hostels at Rs. 15,000 per hostel. 20 hostels will be extended during the Plan period.

Construction of new hostel buildings.—The scheme aims at giving grants towards construction of new hostels at Rs. 20,000 per hostel. 10 hostels will be taken during the Plan period.

Boarding charges for Schedule Tribe students of Secondary Schools.—The scheme envisages provision for Scheduled Tribe students residing in hostels in the shape of boarding charges at Rs. 20 per month per student in rural areas and at Rs. 25 per month per student in urban areas. Ten thousand students will be benefited during the Plan period.

Provision for hostel facilities to Scheduled Tribe Students reading in post-secondary institutions in Calcutta.—Extreme inadequacy of hostel accommodation at present in Calcutta necessitates the opening of a hostel in Calcutta under Government management. This will have a sprinkling of students of other communities. Two hundred and fifty students are expected to be benefited during the Plan period.

Economic Uplift

Training in poultry farming and grant for taking up poultry rearing as a subsidiary means of livelihood.—Scheduled Tribes will be given training in poultry farming for setting up poultry farm. Each trainee will be given stipend at Rs. 60 per session (three months) and after training Rs. 300 will be given for setting up of poultry farm. Two hundred and fifty persons will be benefited under the scheme during the Plan period.

Goat keeping as a subsidiary means livelihood.—The object of the scheme to provide goats (both he-goats and she-goats) to families having no goat. This is by way of providing subsidiary means of livelihood to them. Each block will consist of 2 he-goats and 30 she-goats. The estimated non-recurring cost of each block is Rs. 1,000. Maintenance Allowance of he-goats is Rs. 5 per head per month will be borne by Government and the maintenance allowance of the she-goats will be borne by the keeper. One hundred blocks will be taken up during the Plan period.

Sheep rearing as a subsidiary means of livelihood.—Same as goat-keeping.

Pig rearing as a subsidiary means of livelihood.—To provide subsidiary means of livelihood, pigs will be distributed to tribals. During the Plan period, it is proposed to distribute pigs in 60 blocks at the rate of 30 sows and 2 boars in each block. Maintenance allowance of each boar is Rs. 15 per month which is to be borne by Government and that of sow will be borne by the keeper.

Training facilities to Scheduled Tribes in vocational trades and crafts.—

The object of the scheme is to provide training facilities to Scheduled Tribes in vocational trades and crafts by way of giving stipends (maintenance expenses of Rs. 30 per month and tuition fees subject to a maximum of Rs. 6 per month). One thousand students will be benefited during the Plan period.

Residential facilities to tribal students receiving training in vocational trades and crafts.—A provision of Rs. 60,000 is proposed for providing residential facilities to tribal students receiving training in vocational trades and crafts.

Financial assistance to Scheduled Tribe artisans in selected trades.—Persons trained in institutions will be financially assisted at the average rate of Rs. 300 per head to set up cottage industry of their own or on a co-operative basis. One thousand students will be benefited during the Plan period.

Health, Housing and other Schemes

Training as auxiliary nursing-cum-midwifery.—Under the scheme, it is proposed to provide additional residential facilities and adequate maintenance expenses for tribal people in the institutions. Three hundred families will be benefited during the Plan period.

Medical aid to indigent tribal patients.—For purchase of special medicines not supplied in the health centres and public dispensaries and for meeting charges of clinical examinations and X-Ray plates and special diets.

Provision of T. B. beds for tribal patients.—During the Plan period T. B. beds in different hospitals are proposed to be reserved for treatment of tribal T. B. patients. Fifty beds will be reserved during the Plan period.

Establishment of Welfare Centres—Anchal Seva Kendra along with 5 Feeder Gram Seva Kendra in each.—As in the Second Plan, Welfare Centres, providing for (1) cultural activities, (2) demonstration in agriculture, animal husbandry practices, (3) adult and social education in the neighbourhood, (4) distribution of Red-Cross milk for expectant and nursing mothers and children, (5) information and other services will be set up. There will also be meeting places for tribal panchayats proposed to be activated. Workers in charge of the Centres will be given training in the Training Institution. Five sub-centres will be set up within a radius of five miles to work as Gram Seva Kendras. Seventy-five centres will be established during the Plan period.

Aid to Voluntary Agencies.—A few selected non-official organisations are to be assisted for carrying out tribal welfare work and also for providing (a) Ashram facilities, (b) economic activities like rope making, paddy husking and other crafts.

Encouragement of Tribal Panchayat for Welfare activities.—The tribal panchayats have a significant role to play in their social life. It is proposed to activate them and to orient their activities for securing their services in development work. Small grants are proposed to be given to each such active panchayat for carrying out various activities, such as, temperance movement organising shramdan in connection with welfare activities against witch-craft and other undesirable practices, improvement of unhygienic condition of villages, conciliation of internal disputes and promotion of other interest of the tribals, etc. In addition to provision for fostering the above types of activities, there should be provisions for arranging competition among the panchayats and also for grant and rewards to Tribal Panchayats for outstanding work.

Grants to individuals for relief, clubs, libraries and similar institutions, night schools, exhibitions, other cultural and recreational activities.—The scheme aims at giving ad-hoc grants to individuals for relief, clubs, libraries and similar institutions, night schools, exhibitions, other cultural and recreational activities.

Expansion of Social Workers' Training Institute.—The institute established in the Second Five-Year Plan is to be expanded to impart training to (a) welfare workers of Government and voluntary agencies, (b) primary school teachers in tribal areas, (c) tribal graingola staff and (d) arrange orientation course to supervisory personnel of various departments and leaders of panchayats.

Institute for Reserch, Planning, Evaluation and Cultural Development.—The existing Cultural Research Institute will be re-organised during Third Plan period to extend its scope of activities. Apart from guiding training in Social Workers' Training Institute, it will deal with the following: (a) Applied Research, specially in the field of culture, education and socio-economic life of the tribals; (b) Evaluation of welfare schemes; (c) Preparation of text books for primary stage and for neoliterates and promotion of literature in a few tribal languages.

Strengthening of staff at the headquarters and at the field level.—Staff at the Headquarters and at the field level will be strengthened.

Free legal aid to Scheduled Tribes.—The scheme aims at giving free legal aid to poor Scheduled Tribe litigants in the cases involving land rights.

SCHEDULED CASTE

Education

Special stipend to poor but meritorious Scheduled Caste students.—The object of the scheme is to give stipend to poor meritorious Scheduled Caste students at Rs. 300 per annum. Five thousand students will be benefited during the Plan period.

Expansion of hostel facilities.—The scheme provides for giving grants for expansion of existing hostels at Rs. 15,000 per hostel. Ten hostels will be expanded during the Plan period.

Stipend for purchase of books.—The scheme aims at giving stipends to Scheduled Caste students reading in schools at Rs. 30 per annum per student for purchase of books. Ten thousand students will be benefited during the Plan period.

Hostel charges.—The object of the scheme is to provide Scheduled Caste students with hostel charges at Rs. 20 per month per student in rural areas and Rs. 25 per month per student in urban areas. Three thousand and seven hundred students will be benefited during the Plan period.

Examination fees to Scheduled Caste students appearing at the School Final and Higher Secondary examinations.—The Scheduled Caste students will be provided with examination fees for appearing at the School Final and Higher Secondary Examinations. Ten thousand students will be benefited during the Plan period.

Free tuition to poor meritorious Scheduled Caste students reading in Schools.—The poor but meritorious Scheduled Caste students belonging to most backward classes reading in secondary stage will be given tuition fees

at the rate not exceeding Rs. 60 per annum per student. Two lakh fourteen thousand and six hundred students will be benefited during the Plan period.

Economic Uplift.

Training facilities in vocational trades and crafts.—The Scheduled Caste students will be given stipends for providing training facilities in vocational trades and crafts. Two thousand students will be benefited during the Plan period.

Residential facilities to Scheduled Caste students receiving training in vocational trades and crafts.—The object of the scheme is to provide residential facilities to Scheduled Caste students receiving training in various trades and crafts. Forty students will be benefited each year under the scheme.

Financial assistance to Scheduled Caste artisans in selected trades.—Persons trained in institutions will be financially assisted to set up cottage industry of their own on co-operative basis. Each person will be given Rs. 300 per annum. About 300 persons per annum will be benefited under the scheme.

Health, Housing and Other Schemes

Aid to Voluntary Agencies.—A few selected non-official organisations are to be assisted for carrying out welfare work for the Scheduled Castes and also for providing (a) Ashram facilities, (b) economic activities, like rope making, paddy husking and other crafts.

Grants to individuals for relief, clubs, libraries and similar institutions and encouragement of community activities, such as, holding of melas, celebration of Harijan days, grant of prizes, encouragement of recreational and cultural activities.—Grants will be given to individuals for relief, clubs, libraries and similar institutions and encouragement of community activities, such as, holding of melas, celebration of Harijan days, grant of prize, encouragement of recreational and cultural activities.

OTHER BACKWARD CLASSES

Education

Stipends to poor meritorious Other Backward Classes students reading in Schools and Colleges.—Stipends to poor but meritorious Other Backward classes students at the average rate of Rs. 100 per annum will be given to meet tuition fees and other compulsory charges. Provision is also made for sanctioning stipend to college students who will not be covered by the Government of India Scholarship Scheme.

SPILL OVER SCHEMES

SCHEDULED TRIBES

Health, Housing and Other Schemes.

(a) **Water Supply in tribal areas.**—Sources of water supply like tube-wells/Masonry wells/Ring wells were taken up during 1960-61 in order to remove the acute scarcity of drinking water in the tribal areas. But 77 sources remained incomplete in that year. Provision for the current year is for completion of the incomplete 77 sources of the last year.

(b) **Minor Irrigation Scheme.**—Provision is for payment of land acquisition charges of the scheme for “Jhikukhal Irrigation”.

(c) **Small Irrigation Schemes.**—About 15 Small Irrigation Schemes which were taken up during 1960-61 but could not be completed in that year are to be completed in this year.

(d) **Irrigation through Tank Improvement.**—A sum of Rs. 10,000 has been proposed for completion of 2 incomplete schemes taken up during 1960-61.

(e) **Construction of pucca village road.**—During the Second Five-Year Plan period pucca roads were constructed in tribal villages in order to improve the communication system.

A sum of Rs. 40,000 has been provided for in order to complete the construction of 3 miles of road which was taken up during the year 1960-61.

(f) **Construction of cart tracks in hill areas.**—There is no left over scheme of the Second Plan and as such no provision will be required for the scheme.

(g) **Provision of wooden bridges and masonry culverts on village roads.**—In order to ensure all weather traffic in the interior, new wooden bridges and masonry culverts were provided on existing village roads during the Second Five-Year Plan period. A sum of Rs. 30,000 has been provided for completion of 1 wooden bridge and 10 culverts taken up during 1960-61.

(h) **Establishment of Welfare Centre.**—Welfare Centres were set up during Second Five-Year Plan to serve as nuclei of welfare activities amongst the tribals. Seven Centres taken up during 1960-61 will have to be completed in 1961-62.

(i) **Improvement of kutcha village road.**—The improvement work of 5 miles of kutcha village road which was taken up during 1960-61 but remained incomplete, is to be completed in 1961-62 and for this purpose a sum of Rs. 20,000 will be required.

WELFARE OF SCHEDULED CASTES

Health, Housing and Other Schemes.

Water supply in Scheduled Caste areas.—In order to remove the scarcity of drinking water in scheduled caste areas different sources of water supply like tube-wells/masonry wells, ring-wells, etc., were taken up during 1960-61. But about 70 sources remained incomplete in that year. The incomplete sources are to be completed in 1961-62 and for this purpose a sum of Rs. 60,000 will be required.

CHAPTER XXI

SOCIAL WELFARE

In one sense social welfare is the ultimate aim of our Plan. But as used in this chapter the term refers to a particular group of activities designed to promote the welfare of the weak, exploited and socially handicapped sections of the people. In pursuing this aim Government have not only initiated certain schemes on their own but are also successfully progressing in mobilising and co-ordinating the services of voluntary organisations engaged in various kinds of welfare activities and the response received has been encouraging so far.

Progress during the Second Plan

2. A sum of Rs. 22.68 lakh had been allocated for social welfare work during the Second Five-Year Plan. But the target was exceeded and Rs. 53.04 lakh was spent. Various voluntary organisations were given Rs. 6.51 lakh as grants-in-aid. The rest was applied to schemes under the direct management of Government, a brief account of which is given below.

3. There was no Reformatory School in West Bengal. It was, therefore, decided to establish a composite School at Murshidabad with accommodation for about 150 boys and adequate arrangements for training. The construction of the building is nearing completion.

4. The Suppression of Immoral Traffic in Women and Girls Act, 1956, came into force on the 1st May 1958. A Rescue Home was essential for administering that Act. Such a Home has started functioning at 8 Stark Road, Lillooah, with effect from 23rd June 1961. A District Shelter has already started functioning at Nadia since 15th August 1960 and it is expected to open at least 2 more in other suitable districts in future.

5. Women and girls are sometimes found to have been laid astray by designing persons. They often find it difficult to return to their families and are compelled to live in immorality. In order that these women and girls are prevented from adopting a life of shame, a scheme has been taken in hand for establishing a Home for them with adequate facilities for educating as well as training them in some useful craft which would later on enable them to stand on their own. The building for such a Home has already been completed. It will accommodate 50 women for the present and 50 more beds are going to be added to the existing structure to accommodate more women.

6. Much inconvenience was experienced in administering the Bengal Vagrancy Act, 1943, effectively because there was no Reception Centre for women vagrants. It was, therefore, decided to establish such a Centre. The buildings have now been completed. The Centre will accommodate about 50 women vagrants and also provide for the inmates education as well as training in suitable useful crafts.

7. To bring the Children's Court and the House of Detention into line with West Bengal Children's Act, 1959, it was essential to establish a Children's Court and Reception Home at Lillooah with the usual educational

and training facilities. The buildings have since been completed and the institution has started functioning with effect from 1st October 1961. There is accommodation for 150.

8. A Girls' Home has been established in the periphery of the Gope Palace, Midnapore. This will provide shelter and impart training in suitable crafts to the destitute girls in the age group 6-18 years. The building is nearing completion. This Home will accommodate about 350 girls.

9. An After-care Home for the ex-inmates of the Reformatory, Industrial and Borstal Schools is being built at Berhampore, Murshidabad. The building is nearing completion.

10. The West Bengal Children's Act, 1959, also provides for the custody for protection, treatment and rehabilitation of non-delinquent and neglected children. In order to implement this provision of the Act a Home has been established at Berhampore, Murshidabad. It will accommodate 150 children and provide facilities for education and training. It is expected to start another Home at Lalgarh, district Midnapur, to accommodate 100 such cases.

Third Plan Proposals

11. In the Third Five-Year Plan Rs. 4,40 lakh has been provided for social welfare work. The break-up is as follows:

	(Rs. in lakh).				
(i) Social Defence	138.80
(ii) Women Welfare	179.84
(iii) Child Welfare	20.36
(iv) Welfare of the handicapped	31.10
(v) Youth Welfare	5.00
(vi) Welfare aspects of the Slum Clearance	10.00
(vii) Grants-in-aid	50.00
(viii) Manpower and Training	5.00

12. The schemes include two guidance clinics for juvenile offenders, a pilot scheme for rehabilitation of fallen women, two After-care Homes for ex-inmates of non-correctional institutions (one for men and the other for women), two similar Homes for ex-prisoners, two Homes for women and girls in distress, a few more Welfare Extension Projects and the introduction of socio-economic schemes for women.

13. This time some new types of schemes will also be included in the Plan. There is a pilot scheme for old age pension. The scheme has been drawn up and approved, awaiting final sanction and implementation as quickly as possible. Three schools—one for the blind, one for the deaf and the third for the mentally retarded children—will be established, the first two in North Bengal where there is no school at present. Several scholarships will also be granted to physically handicapped people with a view to help them receive proper education and training. In addition, two workshops will be established for the benefit of the blind and the orthopaedically handicapped.

14. Provision has been made for the expansion of Youth Welfare activities, better amenities to the West Bengal Volunteer Force and welfare services in jails. A pilot scheme for social welfare work as an ancillary to the slum clearance scheme will also be undertaken.

15. Financial assistance will in addition be available for the starting of Lok Karya Kshetras and other types of social works by voluntary organisations. This will meet part of the costs of the staff to be employed by such organisations. Provision will also be made for the starting of a construction service by the Bharat Sevak Samaj. The profits earned by this construction service will be utilised in works and services benefiting the community as a whole.

(Details of Schemes)

Social Defence

Establishment of a new Reformatory and Borstal School for delinquent children.—The scheme provides for establishment and maintenance of as many reformatory and Borstal Schools by the State Government as may be considered necessary. The proposed school is a unit and a step towards the implementation of the West Bengal Children Act, 1959. The scheme has been deferred for the present.

Establishment of two guidance clinics for juvenile delinquency.—The delinquency has of late drawn the attention of the authorities as well as of the public and the need for adoption of adequate steps to meet the situation is emphasised both in the press and in platform. Establishment of guidance clinics is one of the measures in this direction. The clinics are to be maintained in consultation with the Police and such other authorities as may be considered necessary.

Establishment of a new Home for Women and Girls exposed to moral danger.—Cases very often arise that women and girls are led astray by designing persons and are left at lurch. They find it difficult to return to their families because of their temporary lapses and are very often left with no alternative to living a life of immorality. In order that these women and girls do not adopt a life of shame, the scheme envisages provision of adequate training and education to them so that they may lead an honourable life and ultimately be rehabilitated in society. The scheme has been deferred for the present.

Establishment of District Shelters.—Establishment of protective Homes is one of the essentials for the proper implementation of the Suppression of Immoral Traffic in Women and Girls Act, 1956, which came into force with effect from the 1st May 1958. Five District Shelters which are to be regarded as protective homes are proposed to be established during the Third Plan period. One has already been established by Government at Nadia and attempts are being made, if possible, to open two more during 1960-61 under the Second Plan. Each shelter is to meet the needs of two or more neighbouring districts. These shelters will provide adequate facilities for general education and training in suitable crafts and to serve as feeder institutions to State Home for such women and girls as needing longer period of accommodation and detention under orders of Court. The Scheme under the Third Plan has been deferred for the present.

Pilot Schemes for rehabilitation of fallen women.—The Suppression of Immoral Traffic in Women and Girls Act, 1956, which came into force throughout India on the 1st May 1958, and the Rules made thereunder lay great stress on rehabilitation aspect of the women and girls rescued from houses of ill fame. The scheme envisages provision of proper training and other facilities that might help these girls and women changing their mode of living and turning out as useful citizens. The scheme has been deferred for the present.

Provisions for special staff for vigilance in connection with the implementation of Immoral Traffic in Women and Girls Act, 1956.—Adequate staff are necessary for ensuing proper implementation of the Suppression of Immoral Traffic in Women and Girls Act, 1956, and also for follow-up work to see that the training and rehabilitation facilities afforded in the course of the implementation of the Act are fully utilised after the release of the inmates from different Homes (e.g., District Shelter, State Home, etc.) and that they do not lapse into their former mode of living. The scheme has been deferred for the present.

Extension of Welfare Service in Jails.—One of the aims of penal administration as generally accepted is the prevention of crime and restoration of the criminals to society as useful citizens. With a view to their reformation, the prisoners are given training in different industries available in jails and are taught moral and physical discipline there. But in the present state of affairs, they lose contact with their friends and relatives. With a view to maintaining and strengthening their ties with their families, as much as possible, welfare services in Jails are proposed to be extended, so that the welfare officers to be appointed under the scheme may act as liaison between the prisoners and their families. The scheme has been deferred for the present.

Extension of probation system as contemplated under the West Bengal Offenders Act, 1954.—Since the latter part of 1956, when the State Probation Act was brought into force in certain areas, over 600 offenders were released on probation. Of these, more than 80 per cent. have been enabled to avoid the path of crime. It is anticipated that with the extension of field of operation of the Act, the probation system will be able to render assistance to saving delinquent juveniles and others from being sent to jails. In this background, it is expected that the jail population will be reduced. The scheme has been deferred for the present.

Establishment of five probation hostels with training-cum-production centres under the West Bengal Probation of Offenders Act, 1958.—The environments in which many of the offenders released on probation live are sometimes found to be not conducive to the fulfilment of the aims and objects of the probation system. Further, homeless juvenile offenders who have nowhere to go cannot suitably be treated under the probation method. Establishment of probation hostels with training-cum-production facilities at certain suitable places are considered to be essentially necessary for the proper implementation of the Probation of Offenders Act. The scheme has been deferred for the present.

Establishment of an After-care Home for Women prisoners.—At present there is no Home for rendering after-care services to women ex-prisoners. The scheme envisages establishment of a Home at a suitable place whether female ex-prisoners needing after-care service may be given temporary

shelter and further training immediately after their release so that they may be able to rehabilitate themselves in society and may not lapse into their previous mode of living. The Home is to accommodate about 30 inmates initially with proper arrangements for their training. The scheme has been deferred for the present.

After-care Home for male prisoners.—At present there is no State After-care Home for male ex-prisoner. It very often occurs that prisoners on release feel difficulty in finding out suitable shelter to live in and that a little more training as received during the period of their imprisonment might help them finding out honest means of livelihood. In order that these ex-prisoners may not lapse into criminal life after their release on account of the aforesaid difficulties, it is proposed to establish an After-care Home for them. The proposed Home is to accommodate about 50 inmates for the present with proper facilities for training. The scheme has been deferred for the present.

Establishment of an After-care Home for men discharged from non-correctional institutions.—A number of social welfare institutions of non-correctional type (i.e., Destitute Homes), are being maintained by the State Government. A few more are also proposed to be established during the Third Five-Year Plan. One of the main aims and objects of these Homes is to help the distressed people with accommodation and training at the time of their distress so that they may be self-reliant and thus get themselves rehabilitated in society on their own efforts. In order that these persons may not continue to occupy accommodation in these Homes for any period longer than necessary for their training and lose all initiative for finding out suitable means of livelihood themselves, it is proposed to establish an After-care Home for them so that on discharge from their parent institutions they may find temporary shelter which they may not otherwise have and make serious efforts for their ultimate rehabilitation in life. The proposed Home will be provided with such facilities and services as are considered to be essentially necessary for the object in view. Initially, the Home is to provide accommodation for 50 inmates. This scheme also forms a part of the After-care Programme of the Government of India.

Establishment of an After-care Home for Women discharged from non-correctional institutions.—The explanatory note against the scheme of establishment of an After-care Home for men discharged from non-correctional institutions generally applies to this scheme also. The necessity for such a Home is particularly greater and more urgent in the case of women and girls discharged from non-correctional institutions as otherwise they are likely to fall preys to evil designs of bad characters.

Establishment of two new Homes for destitute and vagrant women.—Economic distress, partition of Bengal, etc., have rendered a number of women as destitutes. The number has been gradually increasing with the progress of time. Petitions are received almost daily from women in distress praying for accommodation in suitable Homes. The provision of accommodation in such cases is particularly important as otherwise it is likely to lead women in distress to go astray and to adopting a life of shame.

In order to save the women from possible danger as explained above, the present scheme has been drawn up. The two Homes are to accommodate 500 inmates each and will have adequate facilities for general

education and training in suitable crafts so as to make the inmates self-reliant and help their ultimate rehabilitation in life as quickly as possible. The scheme has been deferred for the present.

Establishment of a new Home for male vagrants—Extension of the Home at Andul Road.—The problems of destitution and vagrancy, have been drawing greater attention of the public and authorities. The problems are more acute in the case of males (adults) who generally turn to anti-social activities as their means of livelihood. The proposed scheme aims at providing additional accommodation and facilities for training to larger number of such people so that the field of operation of the Bengal Vagrancy Act, 1943, may be extended and its provisions enforced more strictly.

Establishment of a new Home—Extension of the present Home for aged and invalid male vagrants.—The Special Vagrants' Home at Dhakuria, which is proposed to be shifted to the Old Jail Building at Midnapore in the near future, contains about 420 aged and infirm male vagrants at present. At Midnapore, the accommodation provided is estimated to cover about 500 inmates. As the number of aged and invalid male vagrants in Calcutta alone is generally estimated to be much larger, additional accommodation with requisite facilities for their care and maintenance is essentially necessary. The proposed scheme aims at providing accommodation for 300 inmates and will thus facilitate stricter enforcement of the Bengal Vagrancy Act of 1943. The scheme has been deferred for the present.

Establishment of a new Home for aged and invalid women vagrants.—At present there is no Home for aged and invalid women vagrants with the result that it is found to be difficult to round them up and to provide them with accommodation.

The establishment of the proposed Home will facilitate better operation and enforcement of the Bengal Vagrancy Act, 1943. It will accommodate 100 inmates with proper facilities for their care and attention. The scheme has been deferred for the present.

Provision for additional hundred beds for non-leper vagrant patients either at Uttarpara Hospital or some other Hospitals.—During the Third Five-Year Plan period a number of Homes dealing with the accommodation for and training of vagrants, both male and female, are proposed to be established to meet the evils of vagrancy. The number of ailing vagrants will naturally grow larger with the increase of members of inmates of various Vagrants' Homes, old and new. This explains the need for additional beds for non-leper vagrants.

Provision for additional beds for leper vagrants.—Already there are about 150 leperous vagrants in the existing leperous Vagrants' Home, Calcutta. Arrangements are being made to create 100 beds in the Gouripur Leper Colony, Bankura, and the balance is proposed to be established in the Third Five-Year Plan period. This will also help rounding up of leperous vagrants still found on roads and in public places. The proposed arrangement will give the suffering vagrants proper and better facilities for such medical treatment as are not at present available in the existing Home which is also housed in a rented building and which is proposed to be closed after the removal of the inmates to Bankura.

Opening of an additional reception centre (Psychological Clinic for Prisoners).—In order that newly admitted prisoners may derive maximum benefit of training provided in a jail, scientific study of their aptitudes and capabilities before assignment is considered to be necessary. The proposed centre is expected to help reformation programme in jail and to raise the output of jail industries in consequence of better adjustment of aptitude and capabilities of a prisoner and his work.

Provision for unforeseen expenditure (Legal aid, Miscellaneous Expenditure).—The provision as the nomenclature of the scheme suggests is for an unforeseen expenditure to be incurred generally in connection with the implementation of any important and urgent scheme which has not been included in the Third Five-Year Plan.

In many cases it is found that some legal and financial assistance might help the distressed women petitioners to establishing their claim to maintenance in Courts of Law and thus save Government from possible maintenance cost.

Spill-over from the Second Five-Year Plan

Establishment of a Composite Reformatory Industrial and Borstal School.—The construction of the composite school is expected to be completed by the current financial year and the school may start functioning from the beginning of the next financial year.

Establishment of care and after-care institutions at Lillooah.—The provision is meant for the purchase of equipment, etc. The Rescue Home at 45, Lower Circular Road, Calcutta, is to be shifted to Lillooah as soon as the buildings now under construction there are ready for occupation. It is expected that all the four Homes at Lillooah will start functioning from early next year.

Establishment of a Girls' Home in the periphery of Cope Palace.—The construction of requisite buildings at Midnapore is nearing completion. The buildings may be made available by the Construction Board to the administrative department towards the middle of 1961-62. The estimate of Rs. 1.34 lakh is for purchase of equipment of Rs. 50,000 and Rs. 84,000 for cost of maintenance for six months.

Women Welfare

Welfare Extension Projects.—The Welfare Extension Projects initiated in the districts at the instance of the Central Social Welfare Board have been rendering useful service to the community particularly to women and children during the Second Five-Year Plan. According to the present arrangement the State Government are required to contribute roughly 26 per cent. of the cost of maintenance of these projects which are run through the West Bengal Social Welfare Advisory Board. The State Government are also to bear 50 per cent. of the cost of maintenance of the Board's Headquarters establishments. During the Third Plan period the number of such projects will greatly increase with the increase in the number of Community Development Blocks. The scheme has been deferred for the present.

Socio-Economic Scheme.—This project contemplates adoption of suitable schemes which are likely to provide supplementary income to families of lower income group in the urban and rural areas for raising their economic status.

Condensed Course for training of adult women.—The scheme contemplates measures to be adopted for the training of adult women in urban and rural areas so that they may be eligible for admission to training courses as may be available for midwives, nurses, social workers, matrons, etc., who are necessary for the efficient running of various State Welfare institutions.

Convalescent Home for Women with Children's Annexe.—Hospitals now-a-days are overcrowded and quick admission is not possible unless the cases are of emergent type. Further, women suffering from chronic diseases which require periodical medical check-up or who come from long distance for routine treatment in hospitals, have very little chance of admission as such admissions are likely to block up beds for considerable period to the disadvantage of other urgent cases. The provision of a convalescent home for such women patients, at a suitable place where they may put up temporarily to facilitate their medical treatment, will go to lessen their difficulties. As these women may have little children, a children's annexe is contemplated.

Building grant for Welfare Extension Projects.—Welfare Extension Projects have been rendering useful Social Welfare Service in the districts. For facilitating the activities of the Welfare Extension Projects and for providing accommodation of field workers, buildings in Project areas are necessary. The scheme aims at meeting this requirement as far as possible.

Home for deserted wives.—Petitions are very frequently received from married women who approach Government for accommodation in suitable Homes as they have been deserted by their husbands and have no other relatives to look after them. The problem has assumed seriousness in consequence of partition of the country. For the sake of convenience, a separate Home for such classes of women is desirable. The proposed Home is to accommodate initially about 100 inmates and to have proper arrangements for their training so that they can arrange for their own rehabilitation quickly. The proposed Home is also to serve as a measure to reducing the chances of these women in distress being misled to dishonourable mode of living.

Child Welfare

Children Bureau.—Recalcitrance, indiscipline and delinquency among children are to a great extent the result of environments and the economic condition of the family to which they belong. Scientific and sympathetic treatment of such erratic children have shown that a good many of them turn out to be decent. A beginning has been made in the Calcutta Police organisation and the Bureau there has been giving good results. Similar units are proposed to be established in other suitable places.

Services essential for the implementation of the West Bengal Children Bill, 1958.—The West Bengal Children Act, 1959, enjoins the establishment of various boards and institutions and appointment of different type of officers for the proper implementation of the Act. The scheme provides for the expenditure to be incurred in connection with the above.

Establishment of a new State Home for destitute girls of age group 6-18.—Economic distress has been found to be one of the major causes of women and girls falling preys to immoral mode of living. In order to save such girls from paths of immorality, the scheme has been adopted. The proposed Home is to accommodate 350 inmates initially and will have adequate arrangements for training in suitable crafts and for general education so that the inmates may eventually become self-dependants and rehabilitate themselves properly in society. The scheme will not be implemented during 1961-62.

Home for Vagrant Children.—A considerable number of vagrants are children. For proper and effective implementation of the Bengal Vagrancy Act, 1943, additional accommodation for vagrant children as distinct from adult vagrants is considered necessary. The proposed Home will have adequate arrangements for the training of inmates so that on their discharge they may earn an honest living. The scheme will not be implemented during 1961-62.

Establishment of a new reformatory and Industrial School for non-delinquent children.—This is one of the institutions which are to be set up under the West Bengal Children Act, 1959. One such institution is already under construction at Murshidabad under the Second Plan. Another Home for non-delinquent children will be necessary as the area of operation of the Act will gradually increase from district to district. The Home, when established, will have proper arrangements for training of the inmates. The schemes will not be implemented during 1961-62.

Training Institute (Balwadi in Rural Areas).—Care and maintenance of children (6 to 7 years) of working people, particularly in the case of working mothers when there is no other members in the families to look after their children during their temporary absence on work, causes anxious problem to them. The scheme contemplates adoption of measures to meet the situation in rural (and urban) areas and for the training of personnel required for the implementation of the scheme.

Welfare of the Handicapped

Pilot Scheme for old age pension.—Economic distress, the gradual breaking of the joint family system, etc., have combined together to make the life of aged persons in many cases disquiet. The object of the scheme is to grant small financial assistance to respectable aged persons with little or no income for their maintenance at the fag end of their life. A pilot scheme is proposed to be introduced during the Third Five-Year Plan period. The scheme may also serve as a measure towards checking vagrancy.

Establishment of a school for the Blind in North Bengal.—At present there is no blind school in North Bengal and the facilities available in the existing institute for the blind are also very limited. A school to cater to the needs of the districts of North Bengal is proposed to be established at a suitable place. The proposed institution will have proper arrangements for training of 50 students at the initial stage.

Establishment of a school for the Deaf in North Bengal.—At present there is no school for the deaf in North Bengal and the facilities available

at present for such categories of people are also very limited. A school to meet the requirements of the northern districts of the State is proposed to be established at a suitable place. It will initially provide for 50 students with adequate arrangements for their training.

Expansion and modernisation of the existing schools for the handicapped.—The scheme aims at ameliorating the condition of physically handicapped people and providing greater facilities for their training, etc.

Establishment of a school for mentally retarded children.—Scientific survey and experience have shown that mentally retarded children may better be treated and educated in a separate institution of their own rather than in a general educational institution. This scheme envisages establishment of an institution of this special type.

Scholarship for orthopaedically handicapped; Scholarships for the Deaf, and Scholarships for the Blind.—The schemes are self-suggestive and are measures towards the amelioration of the conditions of the physically handicapped persons and grant of adequate facilities for higher study in subjects suited to their intellect and capacity. The schemes are expected to greatly help them in their rehabilitation. Under these schemes about 50 scholarships of suitable values are proposed to be awarded annually.

Establishment of two workshops for Blind and Orthopaedically handicapped persons.—This is one of the measures which are contemplated for the betterment of the conditions of the physically handicapped section of the community and for their suitable rehabilitation in life.

Establishment of an Information Bureau as a part of the Directorate of Social Welfare for supplying information to handicapped persons.—In order to help the handicapped people to finding out suitable means and sources of training and rehabilitation, an organisation under the Social Welfare Directorate is proposed. This will help them with advice and information in this regard and will be utilised for such other welfare work as may be considered suitable.

Short-term training course for Social Workers to provide recreational facilities for the handicapped.—Trained personnel for the institutions proposed to be established for the welfare of the handicapped are essentially necessary for their efficient management. The scheme envisages arrangements for training of such personnel.

Youth Welfare

Provision for expansion and better amenities, etc., to West Bengal National Volunteer Force.—The West Bengal National Volunteer Force is a very useful organisation under the State Government which renders well appreciated service at times of emergency. The scheme envisages provision for amenities considered essentially necessary for the improvement of the social welfare aspect of the organisation and for the well-being of the personnel and the trainees thereunder.

Welfare Aspects of Slum Clearance

Pilot Welfare Programme in Slum and Urban Community Development Projects.—The scheme envisages adoption of measures which would afford

relief in matters of essential amenities to the dwellers in slum and which may help them learning better mode of living. It also contemplates taking of steps for the improvement of social and economic condition particularly of women through the Community Development Projects in urban areas.

Aid to Voluntary Organisation for Social Welfare Works.—A lump grant of Rs. 5,67,500 has been sanctioned to the All Bengal Women's Union Home for construction of its new buildings at 89 Elliot Road, Calcutta. The provision here represents the cost of completion of the building, already under construction.

Aid to Voluntary Organisations for Social Welfare Works.—Voluntary Organisations have been rendering useful Social Welfare Services to the community in various ways. New organisations have been gradually growing up and taking the field. But most of them suffer from lack of adequate finance. The scheme envisages grant of suitable financial assistance to bona fide and deserving voluntary organisations which have been rendering such welfare service as are considered to be really beneficial to the community. Reasonable matching contributions either in cash or in kind or both are generally insisted upon before any financial assistance is granted by Government to an organisation.

Manpower and Training

Manpower and Training resources, etc.—At present there are a number of social welfare institutions both under the Government and under private management. But many of them suffer from lack of trained personnel. During the Third Five-Year Plan period a number of new institutions are proposed to be established by Government. For the efficient management of these institutions, trained personnel are essentially necessary. The scheme contemplates adoption of suitable measures to ensure adequate supply of trained personnel needed for running these institutions.

Lok Karya Kshetra Programme.—The main objective of the scheme is to associate more closely with the voluntary organisation and other non-official institutions and through them secure people's active participation in the implementation of various schemes in the rural areas.

The expenditure on Lok Karya Kshetra programmes will be shared between the Centre and the State Government on 60:40 basis. The pattern of assistance provides for a grant of Rs. 5,000 per Kshetra per annum. In this State the Bharat Sevak Samaj have been associated with the Lok Karya Kshetra Programme.

A committee is going to be set up in this State shortly to look after the execution of various schemes. The Bharat Sevak Samaj will function apart from their capacity as the co-ordinating agency to train workers at various levels, to research, excluding to organising study teams, conferences or seminars to exchange successful experience, to public guiding materials and to advise the official agencies at the national and State levels regarding Lok Karya Kshetras Programme, etc.

CHAPTER XXII

Labour and Labour-Welfare

Industrial labour is per excellence the task-force of a planned economy. The break-through from the traditional to the self-sustaining stage of growth will depend largely upon its efficiency. The plan must therefore provide for everything that helps to make the labourer an efficient, contented and willing worker as well as a good citizen with a sense of responsibility to the nation.

The Scheme to foster these aims can be grouped under several heads. First comes the business of bringing the work and worker together and fitting the job to the man. The next group aims at fitting the man to the job he has chosen. Third in the list is the group of schemes which look after the human relations between the employers and the employees. Lastly, there are schemes which are designed to promote labour welfare in all its aspects.

Progress during the Second Plan

Four schemes were undertaken during the Second Five-Year Plan: (1) Manpower and Employment, (2) Establishment of a Regional Labour Institute in Calcutta, (3) Employees State Insurance Scheme, and (4) Establishment of Model Labour Welfare Centres.

Good progress was made in implementing the Manpower and Employment Schemes. During the period of the Second Five-Year Plan, 10 new Employment Exchanges, 11 Vocational Guidance Units, one University Employment Bureau at the Calcutta University and two Employment Assistance Bureaus at Dinhatia in the district of Cooch Behar and at Sainthia in the district of Birbhum were opened.

The scheme of establishing a Regional Labour Institute in Calcutta was more or less fully implemented. A sum of Rs. 7,01,690 was spent for meeting the cost of land made over to the Government of India as a free gift for the establishment of the Institute. Training facilities were also extended in the newly established industrial institutes at Kalyani, Durgapur, Jhargram and Cooch Behar, as well as the existing I.T.I. centres at Howrah Homes, Tollygunge, Gariahata and Krishnagar and the Calcutta Technical School. About 2,676 additional seats have been provided in these institutes. In addition 300 more can now receive training under the National Apprenticeship Training Scheme. Arrangements for training another 300 have been made under the post-employment evening classes training scheme for industrial workers.

Employees' State Insurance Scheme which provides for sickness and cash benefit, free medical treatment, etc., has been in operation in Calcutta and Howrah since 1955. Due to want of hospital facilities, it could not be extended to areas other than Calcutta and Howrah during the Second Plan.

The purpose for construction of Model Labour Welfare Centres is to provide educational and recreational facilities to the industrial workers and their dependants who cannot normally afford to go to holiday resorts or similar places for relaxation as they are not in a position to meet the usual accommodation charges on their own.

Only one such Model Labour Welfare Centre at Motijheel, Dum Dum, was constructed during the Second Plan. Construction of the Centre at Sundia was also undertaken and land was acquired at Belur, Patulia, Sundia and Tarapukur Gardens, Serampore. Due to the time taken for finding out suitable site and the completion of land acquisition proceedings not more than one centre, as stated above, could be completed.

Third Plan Proposals

During the Third Five-Year Plan period, it is proposed to open seven new Employment Exchanges, a special Employment Exchange for the handicapped persons and two University Employment Bureaus, one each at Jadavpur and Viswabharati. It is also proposed to set up five assistance Bureaus in rural areas. A scheme for the establishment of the staff training section is proposed to be put into operation during the Third Five-Year Plan. All new Employment Exchanges to be opened during the period will be provided with Employment Market Information Units. The scheme is Centrally-sponsored and the expenditure is met jointly by the Central Government and the State Government in the proportion of 60 to 40. The total expenditure allotted for this scheme during the Third Five-Year Plan is Rs. 18.80 lakh.

Increase in productivity of labour is essential for fulfilment of plan targets. Besides, increased productivity will lead to increased earnings of the workers and improve their lot. Opening of a productivity unit is therefore considered essential. A scheme of Rs. 1.63 lakh has been, therefore, drawn up. Better training facilities will also increase productivity. Eight new Industrial Training Institutes will be established and the capacity of the existing Institutes expanded in order to provide institutional training facilities in engineering trades to about 4,014 additional trainees. Another 852 seats will be provided under the Craftsman Training Scheme by conversion of an equal number of the existing seats under the Displaced Personnel Training Scheme. About 2,000 more seats are proposed to be introduced under the National Apprenticeship Training Scheme and 1,000 seats under the scheme for evening classes for industrial workers. The Vocational Training Wing is proposed to be suitably re-organised for ensuring efficient and smooth administration of the schemes. Besides, a number of educated youngmen are being given training in various trades and crafts, e.g., book-keeping, business management, woodcraft, light mechanics, so as to change their outlook and self-employment capacity under the scheme Work-cum-Orientation Centre. This scheme was started in 1958. During the period 1,000 trainees were trained in six sessions and 836 of them came out successful.

The volume of industrial dispute will considerably increase in the Third Five-Year Plan period as a result of the impact of progressive industrialisation. Strengthening of industrial relations machinery was one of the broad policies discussed and recommended at the meeting of the Standing Labour Committee. Such strengthening is essential to ensure that the industrial relations in State does not deteriorate. The scheme will cost Rs. 6 lakh.

The scheme for an Advisory Service for Personnel Management and Trade Union Organisation aims at offering appropriate advice on matters relating to industrial relations and industrial laws. In the last meeting of the Standing Labour Committee a policy fostering a healthy growth of trade unions and education in trade unionism was emphasised. In the

interest of industrial workers and in the interest of the community at large it has been decided that an advisory service in the Labour Directorate should be opened. The cost for additional staff will be Rs. 0.98 lakh.

A scheme for production of films has been taken up for educating and informing both employer and workers in the subjects of Code of Discipline, participation of labour in management, criteria for recognition of Trade Unions, Code of Conduct, etc. There will be films showing happy industrial relations atmosphere in various establishments reached through the joint efforts of the management and workers, such as collective bargaining, joint consultation, etc. The films will be made available both to the workers and the management on loan and also will be exhibited through mobile vans. During the Plan period there is a scheme for production of 6 films (16 mm.) and each will cost Rs. 25,000. The total expenditure for this scheme has been estimated at Rs. 1,80,000. The phasing of production of films is given below :

1961-62	1962-63	1963-64	1964-65	1965-66
1	2	1	1	1

Special emphasis has been laid on extension of the Employees' State Insurance Scheme to 24-Parganas and Hooghly during the first year of the Third Five-Year Plan, and the benefit of the scheme will be extended to the families of the insured workers after extension of the scheme to the industrial area of these two districts. Provisions has been made for Rs. 1,18.50 lakh for this scheme during the Third Plan.

It is proposed to construct 21 more Model Labour Welfare Centres and 2 Holiday Homes (one at Digha and the other at Darjeeling) during the Third Five-Year Plan. The cost of construction of the Holiday Home at Digha will be Rs. 4,10,798 and that at Darjeeling will be Re. 3,79,198. The cost of construction of 21 Model Labour Welfare Centres will be Rs. 39.22 lakh.

In order that the measures for the welfare of labour are effectively implemented, it is necessary to strengthen the staff of supervisory personnel. This will be done by imparting the requisite training to the staff already employed as well as by recruitment of additional qualified personnel.

The Labour Directorate is at present conducting Labour Officers Training Programme. A separate Training Institute will be started to give a better shape to the programme. It will include a Central Labour Library for the use of Government officials, managements and trade union representatives. The scheme will cost Rs. 6,01,400. The capital cost of construction has been assessed at Rs. 2,96 lakh and non-recurring expenditure will come to Rs. 3.05 lakh.

Fixation of minimum wages in different industries is a statutory obligation. State Government has already fixed minimum wages in all the scheduled industries including agriculture. For proper enforcement of the minimum wages particularly in agricultural operations where 30 lakhs of workers are employed, an elaborate machinery is necessary. The cost of such machinery has been assessed at Rs. 1.88 lakh (recurring) during the Third Plan period.

In order to check the upward trend in accidents in mills and factories the last Labour Ministers' Conference recommended appointment of Safety Officers in factories. An industrial Safety Training Course for supervisory staff has recently been started in the Factories Directorate in order to train them in accident prevention duties. The training of such officers will cost Rs. 1.16 lakh during the Plan period.

In view of the existence of occupational health hazards, three Medical Inspectors of Factories have already been appointed. For investigation of causes and prevention of health hazards, an well, equipped laboratory will be set up. Without detailed analysis and research, it is not possible to take control measures. Setting up of such a laboratory is essential from the point of view of health and welfare of labour. The total expenditure has been estimated at Rs. 1.37 lakh.

The Texmaco Boiler Factory at Agarpara and another boiler factory near Calcutta have undertaken the manufacture of water-tube boilers. Inspection of the boilers under construction is a statutory obligation and the Indian Boiler Regulations require that every portion of the welded joints shall be subjected to radiographic examination. For this purpose, specially trained staff and equipments are required. Besides the two plants, another boiler manufacturing plant is being built at Durgapur. A Testing Laboratory will therefore be set up to meet the obligations of the Regulations properly. The total cost during the Plan period will be Rs. 6.73 lakh. The recurring expenditure has been estimated at Rs. 2.8 lakh and non-recurring at Rs. 3.93 lakh.

Rapid industrialisation of the State necessitates collection and analysis of information and organised research on labour problems. The collated information apart from benefiting the employers and the workers would provide the basis of formulation of labour standards and labour policies. Besides, Government of India often approaches us for information relating to labour in both organised and unorganised sector. For want of an adequate staff, it has not been possible for the Statistical Section of the Labour Directorate to analyse the collected materials expeditiously and to bring out the results in time and also to check the accuracy of the figures submitted by individual Units even on a sample basis. It has not also been possible for that section to analyse the causes of industrial disputes (not involving stoppage) though such analysis would be helpful in throwing light on the trend of industrial relations and suggesting remedies. It has, therefore, been decided that the Statistical Section of the Labour Directorate should be strengthened adequately in order that these deficiencies may be made good. The total cost has been estimated at Rs. 12.64 lakh.

(Details of Schemes)

Model Labour Welfare Centre and Holiday Homes.—The purpose of construction of Model Labour Welfare Centres is to provide educational and recreational facilities to the industrial workers and their dependants. The industrial workers cannot normally afford to spend some time at holiday resorts or similar places as they are not in a position to meet the cost of residences in those places. So, it is proposed to construct 21 Model Labour Welfare Centres and 2 Holiday Homes (one at Digha and the other at Darjeeling) during the Third Five-Year Plan. The cost of construction of the Holiday Home at Digha will be Rs. 4,10,798 and that at Darjeeling will be Rs. 3,79,198. The cost of construction of 21 Model Labour Welfare Centres will be Rs. 39.22 lakh.

E.S.I. Scheme.—Special emphasis has been laid on the question of extension of the scheme to 24-Parganas and Hooghly during the first year of the Third Five-Year Plan, and the benefit of the scheme will be extended to the families of the insured workers after extension of the scheme to the industrial areas of these two districts. Provision has been made for Rs. 1,18.50 lakh for this scheme during the Third Plan.

Manpower and Employment.—During the Third Five-Year Plan period, it is proposed to open seven new Employment Exchanges, a special Employment Exchange for the handicapped persons and two University Employment Bureaus, one each at Jadavpur and Viswabharati. It is also proposed to set up five Assistance Bureaus in rural areas. A scheme for the establishment of the staff training section is proposed to be put into operation during the Third Five-Year Plan period. All new Employment Exchanges to be opened during the Third Five-Year Plan period will be provided with Employment Market Information Units. The scheme is Centrally-sponsored and the expenditure is met jointly by the Central Government and the State Government in the ratio of 60 and 40. The total expenditure allotted for this scheme during the Third Five-Year Plan is Rs. 18.80 lakh.

Production of Films.—The scheme has been taken up for educating and informing both employers and workers in the subjects of Code of Discipline, participation of labour in management, criteria for recognition of trade unions, Code of Conduct, etc. There should be films showing happy industrial relations atmosphere in various establishments reached through the joint effort of the management and workers, such as collective bargaining, joint consultation, etc. The films will be made available both to the workers and the management on loan and also will be exhibited through mobile vans. During the plan period there is a scheme for production of 6 films (16 mm.) and each will cost Rs. 25,000. The capital expenditure for this scheme has been estimated at Rs. 1,80,000. The phasing of production of films is given below:—

1961-62	1962-63	1963-64	1964-65	1965-66
1	2	1	1	1

Training Institute-cum-Central Library.—The Labour Directorate is at present conducting Labour Officer's Training Programme. A separate Training Institute has been proposed to be started to give a better shape to the programme. In it should be located a Central Labour Library for the use of Government officials, managements and trade union representatives. The scheme will cost Rs. 6,01,400. The capital cost of construction has been assessed at Rs. 2,96 lakh and non-recurring expenditure will come to Rs. 3.05 lakh.

Advisory Service for Personnel Management and Trade Union Organisations.—The scheme aims at imparting appropriate advice on matters relating to industrial relations and industrial laws. In the broad Third Five-Year Plan policies discussed at the last meeting of the Standing Labour Committee, healthy growth of trade unions and education in trade unionism was emphasised. In the interest of industrial workers and in the interest of the community, it is suggested that an advisory service in the Labour Directorate should be opened. The cost for additional staff will be Rs. 0.98 lakh.

Strengthening of Industrial Relations Machinery.—The volume of industrial dispute will tremendously increase in the Third Five-Year Plan period as a result of impact of industrialisation achieved in the Second Five-Year Plan period and further industrialisation in the Third Five-Year Plan period. Strengthening of Industrial Relations machinery is also one of the broad policies discussed at the meeting of the Standing Labour Committee. The necessity of strengthening this machinery is felt so that the industrial relations in the entire State may not deteriorate. Therefore, the scheme has been proposed which will cost Rs. 6 lakh in total. The annual cost will be Rs. 1.11 lakh.

Development of Statistical Section.—Rapid industrialisation of the State necessitates collection and analysis of information and organised research in labour problems. The collated information, apart from benefiting the employers and the workers, would provide the basis of formulation of labour standards and labour policies. Besides, Government of India often approaches for collection of information relating to labour in both organised and unorganised sector. For want of sufficient staff, it has not been possible for the Statistical Section of the Labour Directorate to analyse the collected materials expeditiously and to bring out the results timely and also to check the accuracy of the figures submitted by individual units even on a sample basis. It has not yet been possible for the section to analyse the causes of industrial disputes (not involving stoppage) though such analysis is helpful to know the trend of industrial relations and to suggest remedies. It is, therefore, proposed that the Statistical Section of Labour Directorate should be developed sufficiently to rise to the needs. The total cost has been estimated at Rs. 12.64 lakh for necessary technical staff and allied matters.

Administration of Minimum Wages Act.—Fixation of minimum wages in different industries is a statutory obligation. State Government has already fixed minimum wages in all the scheduled industries including agriculture. For proper enforcement of the minimum wages particularly in agricultural operations where 30 lakhs of workers are employed, an elaborate machinery is necessary. The cost of such machinery has been assessed at Rs. 1.88 lakh (recurring) during the Third Plan period.

Industrial Safety Training.—In order to check the upward trend in accident in mills and factories the last Labour Ministers' Conference recommended appointment of Safety Officers in factories. An Industrial Safety Training Course for Supervisory Staff has recently been started in the Factories Directorate in order to train them in accident prevention duties. The training of such officers will cost Rs. 1.16 lakh during the Plan period.

Industrial Hygiene.—In view of existence of occupational health hazards, three Medical Inspectors of Factories have already been appointed. For investigation of causes and prevention of health hazards, a well-equipped laboratory should be set up. Without detailed analysis and research, it is not possible to take control measures. Setting up of such a laboratory is essential from the point of view of health and welfare of labour. The total expenditure has been estimated at Rs. 1.2 lakh.

Opening of a Productivity Unit.—Increase in productivity of labour is essential for fulfilment of plan targets. Besides, increased productivity will lead to increased earnings of the workers and improving their lot. Opening of a productivity unit is considered essential. A scheme of Rs. 1.63 lakh has therefore been drawn up.

Setting up of a Testing Laboratory for Examination of Boilers.—The Texmaco Boiler Factory at Agarpara and another boiler factory near Calcutta have undertaken the manufacture of water-tube boilers. Inspection of the boilers under construction is a statutory obligation and the Indian Boiler Regulations require that every portion of the welded joints shall be subjected to radiographic examination. For this purpose, specially trained staff and equipments are required. Besides the two plants, another boiler manufacturing plant is being built at Durgapur. So, a Testing Laboratory should be set up to meet the obligations of the Regulations properly. The total cost during the Plan period will be Rs. 6.73 lakh. The recurring expenditure has been estimated at Rs. 2.8 lakh and non-recurring at Rs. 3.93 lakh.

Labour and Labour Welfare Training Schemes

			(Rs. in lakh)
1.	Expansion of Craftsman Training	.. ..	96,24
2.	Conversion of Displaced Personnel seats into Craftsman seats	.. ..	6,00
3.	Pre-employment Apprenticeship Training	.. ..	12,00
4.	Post-employment Evening Classes	.. ..	2,40
5.	Re-organisation of Vocational Training Wing of Directorate of Industries	.. ..	3,36
			<u>1 20,00</u>

Under the scheme for expansion of Craftsmen Training, it is proposed to establish during the Third Five-Year Plan, eight new Industrial Training Institutes and to expand the seating capacity of the existing I.T.Is., in order to provide training facilities in engineering trades to about four thousand additional students. It is also proposed to introduce about 2,000 seats under the Pre-employment Apprenticeship Training Scheme and 1,000 seats under the Post-employment Evening Classes. The Vocational Training Wing of the Directorate of Industries is also proposed to be suitably re-organised for ensuring efficient and smooth administration of the training schemes introduced during the Second and the Third Five-Year Plans.

CHAPTER XXIII

DURGAPUR INDUSTRIES

As in many other places coal has been the prime mover in the industrialisation of Bengal. But the exploitation of this major mineral resource of the State had been far from rational. Superior grades were utilised for purposes, which could with a little care be served by the inferior grades. There was not much attempt to improve the quality of the inferior grades by beneficiation. And lastly most of the valuable By-products were allowed to run to waste. With the advent of planning, all this needed to be changed. The fast growing steel industry required large supplies of hard metallurgical coke. The Railway, the speedily proliferating industrial units, and above all the large thermal power units also pushed up the demand for coal to an enormous extent. The West Bengal Government therefore established a non-statutory board to organise the exploitation of coal on a rational basis and to establish thermal power stations as well. This started functioning in 1955. By 1961, the foundations of the organisation had been securely laid and the undertaking has since been converted into a Government Company.

Progress during the Second Plan

Coke-Oven and By-products Plant.—Construction of a Coke Oven and By-Products Plant at Durgapur started in the last year of the First Five-Year Plan, and continued during the Second Plan period till the Plant went into production in March 1959.

It is designed to carbonise 1,400 tons of coal per day. The principal daily products are 1,000 tons of hard coke, 15 million c.ft. of coke oven gas, 45 tons of tar and 5 tons of benzene.

Coke produced is Grade-I metallurgical hard coke ideally suitable for foundries, blast furnaces, ferro-alloys and chemical industries. Arrangements have been incorporated in the Plant to blend high volatile semi-coking or weakly-coking coal of Raniganj field with coking coal from Jharia field. The Plant is thus an effective contribution towards conservation of coking coal. Basic chemicals like benzene, toluene, xylene, etc., are recovered by further processing crude benzol available in appreciable quantity in the coke-oven gas. There is also arrangement for recovering sulphuric acid. On an average production is about 90 per cent of capacity. Full production cannot be attained for lack of coal supply.

During the First Five-Year Plan a sum of Rs. 46.17 lakh was spent. A sum of Rs. 7,30.73 lakh was spent during the Second Five-Year Plan towards the Plant, Railway siding, Colony, Water Works, etc. This sum includes some interest charges payable to the foreign contractor. There will be small spill-over expenditure of Rs. 2.50 lakh during the Third Plan period to meet the charges on account of delayed payment to the contractors. The total expenditure of the scheme will therefore be Rs. 7,79.40 lakh.

Thermal Power Plant.—Construction of a Thermal Plant by installation of two generating sets with 30 M.W. capacity each, started during the last year of the First Five-Year Plan period. Construction continued during the Second Plan period and the Power Plant was commissioned in June 1960.

A sum of Rs. 34.97 lakh was spent during the First Plan period. During the Second Plan period Rs. 5,97.33 lakh was spent for the Plant, Railway siding, Colony, Water Works, etc. There will be a small spill-over expenditure of Rs. 28.49 lakh during the Third Plan period towards the last payment to the contractors for materials supplied.

Gas Grid.—Construction of Gas Grid from Durgapur to Calcutta for transmission of the Coke Oven gas to the city under high-pressure for domestic and industrial use was undertaken during the Second Plan period. The total estimated capital outlay is Rs. 4.25 lakh out of which the cost of Plant and equipment including cost of erection, civil works, etc., is estimated to be Rs. 3,60 lakh and the balance of about Rs. 65 lakh will be required for Housing, Laboratory, Workshop, etc.

A sum of Rs. 1,85.10 lakh was spent during the Second Plan period. The spill-over expenditure is to be accommodated within the Third Plan provisions. The work is expected to be completed in the second half of 1962.

Tar Distillation Plant.—The work of installation of a 100 ton/day Tar Distillation Plant at Durgapur started during the Second Plan period. The following products will be obtained from the Distillation Plant: (i) Ammonia liquor, (ii) Light oil, (iii) Carbolie oil, (iv) Naphthalene oil and Nphthalene mixture, (v) Wash oil, (vi) Anthracene oil mixture and (vii) Pitch. There is also provision for manufacture of phenol-formaldehyde resin. The total estimated capital outlay is Rs. 1,10 lakh. Rs. 48.60 lakh was spent during the Second Plan period. The spill-over expenditure is to be accommodated within the Third Plan provisions. The work is expected to be completed by the middle of 1962.

Third Plan Proposals

(Details of Schemes)

Development of Subsidiary Industries.—Subsidiary industries are being set up in Durgapur area and land is being allotted to different industries. About 4,000 acres of land have been acquired and some essential development works, such as common railway siding, road, supply of water, construction of H.T. and L.T. power lines, etc. are being undertaken by Government in the area. About Rs. 70 lakh is the estimated cost of development. The work was undertaken during the Second Plan period and Rs. 45 lakh was spent for the purpose. Rupees 25 lakh will be required during the Third Plan period.

Doubling of Coke-Oven By-products Plant (including Washery).—With the establishment of the Coke-Oven and By-products Plant there was some improvement in the supply of coke, but in view of the large unsatisfied demand, intensification of efforts was urgently needed. It was therefore decided to double the capacity of the unit.

The doubling of Coke-Oven and By-products Plant is estimated to cost Rs. 4.5 crore. Along with the doubling of the capacity of the Coke Oven Plant, a washery will be essential for getting proper supply of ash-reduced coal as high grade metallurgical coal is getting scarce. The cost of installation of a Washery is estimated at Rs. 1.5 crore. These estimates which were framed in 1959-60 may require some upward revision in view of the steadily increasing prices.

The scheme was taken up towards the end of 1960-61 and expenditure of only Rs. 9 lakh was incurred during the year for preparation of estimates, blue-prints, specifications, etc. The balance will have to be accommodated within the Third Plan provisions.

Expansion of Power Station. The present Power Station which has a capacity of 60 M.W. is also being extended to 210 M.W. Orders have been placed for supply of turbines, boilers, switch plants, etc. The total expenditure for the expansion scheme including the cost of transmission and distribution lines is estimated to be Rs. 14 crore. Rupees 2,91.33 lakh was spent during the Second Plan period. The balance will have to be accommodated within the Third Plan provisions. Addition of another Unit of 75 M.W. was sanctioned in January, 1962, which will cost Rs. 6.5 crore approximately.

Fertilizer Project.—A scheme for manufacture of 300 tons of urea and 200 tons of di-ammonium phosphate per day has been included in the Third Plan. The total estimated cost of the Project is Rs. 200 crore out of which State contribution will be of the order of Rs. 10 crore. During the Second Plan period Rs. 52 lakh was spent on preliminary works, mainly water supply arrangements and preparation of preliminary report.

Chemical Project.—Under this Project, which will be taken up during the Third Plan period, caustic soda, chlorine, synthetic phenol, pentachlorophenol and phthalic anhydride will be produced utilising common salt, benzene and naphthalene as the principal raw materials. The estimated cost is Rs. 5 crore.

Low Temperature Carbonisation.—A project for low temperature Coal Carbonisation for manufacturing soft coke for domestic use is under preparation.

CHAPTER XXIV

MISCELLANEOUS DEVELOPMENT SCHEMES

In the category of Miscellaneous Schemes are included those that are ancillary to the other schemes as well as those which are too limited in scope to be dealt with in separate chapters.

Statistics

Statistics is one of the principal instruments of formulation and execution of the Plan schemes. It aims at regular collection and analysis of miscellaneous socio-economic data. On the one hand, these provide the base line on which all future plans are built up and on the other, they provide the index by which the rate of progress can be measured. Work along these lines have continued throughout the last two Plans.

Third Plan Proposals

During the Third Five-Year Plan it is proposed to strengthen the Sample Survey Section of the State Statistical Bureau for the purposes of State Income estimation, demographic studies, etc. The aim is to collect data on earners and their income by profession, cost of cultivation, unemployment and employment position, cereal consumption, sample population count, estimate of fruit production and similar other matters. The estimated cost is Rs. 17.85 lakh.

The machine tabulation facilities now at the disposal of the State Statistical Bureau will be inadequate for its work-load during the Third Five-Year Plan. It is therefore proposed to strengthen the mechanical tabulation unit by hiring (a) one tabulating machine, (b) one sorting machine, and (c) one collator machine from the International Computers and Tabulators India (Private) Ltd. at a monthly rental of Rs. 2,809 and by purchasing (a) one auto-reproducer, (b) three punching machines and (c) two verifying machines at a total cost of about Rs. 0.40 lakh.

In view of the increase in the volume of work, it will also be necessary to strengthen the staff. The total cost of the scheme is estimated to be about Rs. 3.84 lakh.

Publicity

If collection of statistics about the Plan processes is important, its wide dissemination among the public in a form acceptable to it is hardly less so, because such information is the raw material for an enlightened public opinion.

Progress during the Second Plan

Publicity work during the Second Plan employed various media. The details of few such are given in the table below:—

Items	1956-57	1957-58	1958-59	1959-60	1960-61	Actual Achievement
1. Charandal Units	10	—	—	—	—	Dropped
2. Mobile Cinema Units—						
(a) Replacement of existing 35 m.m. units by new units	4	—	4	—	2	6
(b) Opening of new 16 m.m. units (10 Jeep and 2 Boat units)	—	12	—	—	—	8
3. Mobile Drama units ..	2	1	—	—	1	2
4. Mobile Exhibition Unit ..	1	1	—	—	1	1
5. Rural Broadcasting installation of Community Listening sets in the Dist. of Purulia ..	—	—	52	16	16	—
6. Information Centres in districts	—	—	10	—	5	14
7. Information Centre at Calcutta	—	—	—	—	1	Incomplete
8. Radio Rural Forum ..	—	—	—	—	44	44
9. Labour Welfare Publicity ..	—	—	—	—	2	2

In addition, other media like advertisement, arts, photography, press publicity, etc., were also made use of.

Six existing 35 m.m. units were replaced and eight new 16 m.m. units were put into operation. One Drama Unit started functioning during the year 1957-58 and another in 1960-61 without the van and generator which could not be purchased due to scarcity of equipment and vehicles. Thirty-nine documentary films together with copies of reprints were produced to cover the important projects undertaken by different Departments of the State Government under the Second Five-Year Plan. Twenty-one posters were produced and ten publications specially on Plan objects brought out to educate the people on the various aspects of the Plan.

Additional staff had to be appointed for the purpose in the publication, distribution and editorial section, the development, planning and co-ordination section, the art section, the photographic section, the drama unit, the exhibition unit and the radio rural forum and labour welfare publicity units.

The actual expenditure incurred during the Second Five-Year Plan was as follows:—

Year	Expenditure
1956-57	... 1,43,839
1957-58	... 3,52,854
1958-59	.. 3,28,527
1959-60	... 2,93,062
1960-61	... 6,71,316

Third Plan Proposals

The State Publicity Organisation at present extends up to the subdivisional level. During the Third Five-Year Plan it is proposed that the units should be multiplied to reach the Panchayat level. One Panchayat Information Post will be established within the jurisdiction of every Gram Panchayat and this will have arrangements for display of posters and photographs and making available publicity literature to the people of the rural areas. In addition, Information Centres will be opened in each block with a library, a small reading room, a community listening set and arrangements for display of posters and pictures. Each will be under the charge of a Block Publicity Organiser.

Information Centres will be opened during the Third Five-Year Plan in important towns other than district headquarters, such as, Asansol, Kharagpur, Kalimpong and Siliguri and these will be of somewhat specialised type and larger than the District Information Centres.

A 35 m.m. mobile cinema unit will be maintained at each district headquarters. This will be available for operation anywhere in the district for large gatherings. 16 m.m. mobile units will similarly be maintained at the Subdivisional headquarters. The present 35 m.m. mobile unit in Calcutta is proposed to be supplemented by a 16 m.m. mobile unit. These two will serve the needs of Calcutta proper.

There will be 1,000 new additional Community Centres at Anchal Panchayat Headquarters in addition to the existing 1,750 Community Listening Centres and School Broadcasting Sets. Another one thousand School Broadcasting Sets will also be made available.

The other media, e.g., song and drama, exhibition, etc., will also receive adequate attention. The Central Exhibition Unit in particular will be strengthened by recruitment of additional staff. The publication of pamphlets, posters, leaflets, etc., will have to be multiplied several fold in view of the need for supplying the very large number of centres to be established during the Plan period. Steps will also be taken to improve the quality of these publications so far as get-up, printing, etc., are concerned.

Salt Lake Reclamation

In view of the acute shortage of housing sites in Calcutta a scheme for reclamation of the Northern Salt Lake area by filling it up with spoils dredged and pumped from the Hooghly has been taken up. It also provides for ancillary work including installation of a Sewage Treatment Plant at Bagjola. The tender for the work were accepted and preliminary works taken in hand in 1960-61. Work on the Sewage Treatment Plant was also taken up. The execution is expected to be completed in the Fourth Five-Year Plan. The Plan outlay under this head is Rs. 6,24 lakh for the Northern Salt Lake Reclamation—City Extension Scheme.

Disposal of Sewage

A scheme for production of gas from Calcutta sewage has also been taken up. It provides for construction of a complete sewage treatment plant at Topsia for the City of Calcutta and for generating methane gas from the sewage sludge. It also aims at producing organic manure from the digested sludge and city garbage for use in agricultural operations. An experimental pilot plant of the scheme has been completed for collection of data. The expenditure incurred during the Second Plan was Rs. 0.25 lakh. The entire scheme is estimated to cost Rs. 2,00 lakh, out of which Rs. 40 lakh is the outlay for the Third Five-Year Plan.

Development Corporation

A statutory corporation has been established under the West Bengal Development Corporation Act, 1954. It has so far been authorised to execute two road schemes, a few municipal water supply and sewerage schemes and the development of townships. Besides obtaining financial assistance from the State Government in one form or another the Corporation is also expected to raise funds from the open market. The schemes which the Corporation have so far undertaken or are likely to undertake in the very near future are shown in the table below:

Name of the Scheme	Estimated total cost (Rs. in crore)
(1) Calcutta-Dum Dum Super Highway	1.27
(2) Calcutta-Durgapur Expressway	13.00
(3) Water-supply and sewerage schemes for three Dum Dum Municipalities, Hooghly-Chinsurah Municipality and Uluberia Town	3.59
(4) Kona Township Scheme in the district of Howrah	4.00

The Corporation has also been investigating the feasibility of extending the water supply and sewerage schemes to the other municipalities of West Bengal.

There is a provision of Rs. 10 crore for work in connection with the development of the Greater Calcutta area. Government's contribution whether in the form of loan or contribution towards the share capital of the Corporation will be met from this.

Contribution to Howrah Improvement Trust

The Howrah town has of late become extremely congested and slums have developed all over the place. The population has also grown very fast. In order to secure an all-round development of this important town the Howrah Improvement Trust was constituted under Howrah Improvement Act, 1956, on the 1st of June, 1957. So far the Trust has been busy with the preliminaries, a total grant of about Rs. 17 lakh having been made in its favour till the end of the Second Plan period. It will considerably extend its range of activities during the Third Five-Year Plan and a total sum of Rs. 71 lakh will be made available to it. This will supplement the Trust's income from statutory sources which average about Rs. 11 lakh per year.

Aid to municipalities (including Town Committees) for improvement of roads

The roads in the municipalities and areas under the administration of Town Committees in West Bengal are generally in a deplorable state and it is beyond the resources of the municipal bodies concerned to make any substantial improvements. A scheme was therefore taken in hand for having these roads improved through the agencies of the Development (Roads) and the Public Works Departments and municipal authorities concerned. With a view to expediting execution the municipal authorities having the necessary road making staff and equipments were allowed to undertake the works themselves subject to the supervision of the Public Works Department. Sixty-six municipalities and five areas under Town Committees were benefited by this scheme during the Second Five-Year Plan. Rupees 49.11 lakh was spent during this period. The scheme has now been named as 'Development of Municipal Areas' scheme and the

Third Plan outlay on it has been fixed at Rs. 2,53 lakh. It will no longer remain confined to the Road Schemes alone but will undertake various other schemes as well, namely, (a) installation of septic tanks in consolidated blocks for municipal areas, (b) improvement of road traffic control, (c) urban water supply, and (d) housing of municipal employees.

Botanical Gardens

The Botanical Garden and other important Government Gardens, such as, the Calcutta Eden Garden, the Lloyd Botanic Garden at Darjeeling and the Parks and Gardens at Cooch Behar, are in need of improvement. This includes construction of a museum of economic plants and plant products, renovation of the conservatory, remodelling of the Glass House, construction of a laboratory, construction of a Children's Corner, construction of quarters for Medical Officer and staff, sinking of tube-wells, etc. The Third Plan allocation for such schemes is Rs. 10 lakh.

Partition of 24-Parganas district

The district of 24-Parganas is the biggest in West Bengal and has a population of over 60 lakh excluding the city of Calcutta. The district consists of two entirely different kinds of areas. The western and the central parts are highly industrialised and well served with different means of communication. They have always been fairly well-administered. But the southern and eastern portions, especially those comprised in the Sundarbans, have suffered from bad communications and under-administration. This area is interspersed by numerous big and small rivers and khals. Protected forests comprise vast areas of the Sundarbans. Good drinking water is scarce, medical and educational facilities are inadequate and the entire area compares unfavourably with the rest of the district in almost every respect. Even with a number of Additional District Magistrates and Additional Superintendents of Police the administration of the backward areas of the district has not been really satisfactory, chiefly due to bad communications and lack of a sufficient number of police stations and subdivisions.

In order to remedy this state of affairs Government took a firm decision for the partition of 24-Parganas into two independent districts. The scheme was finalised in November, 1959, when it was decided that there would be two districts, viz., North 24-Parganas with headquarters at Barasat comprising the present subdivisions of Bongaon, Barasat and Barrackpore and that portion of the Basirhat subdivision comprising the police stations of Swarupnagar, Baduria, Basirhat, Hasnabad, Haroa, Sandeshkhali, and two new police stations, viz., Minakhan and Hingalganj, and South 24-Parganas with headquarters at Alipore consisting of four subdivisions, viz., Alipore, Diamond Harbour and two new subdivisions, viz., Jaynagar and Kakdwip. Alipore will consist of the Calcutta suburban police stations and also Tollygunge, Behala, Maheshtala, Budge Budge, Bishnupur, Sonarpur, Baruipur, Bhangar and Metiabruz. The Diamond Harbour subdivision will consist of police stations Falta, Diamond Harbour, Kulpi, Magrahat, Mathurapur and a new police station Mandir Bazar. The Jaynagar subdivision is to consist of Jaynagar, Canning and three new police stations, viz., Basanti, Gosaba and Kultali. The Kakdwip subdivision will consist of police stations Kawdwip, Sagar and two new police stations, viz., Namkhana and Patharpratima.

Thus there are going to be besides the new district headquarters at Barasat, two new subdivisional headquarters at Jaynagar and Kakdwip and eight new police stations, viz. Minakhan, Hingaljanj, Mandir Bazar, Basanti, Gosaba, Kultali, Namkhana and Patharpratima. The construction of the police stations has been sanctioned and the work actually taken up in most cases, while suitable blocks of land have been notified for acquisition under the Land Acquisition Act for the district headquarters at Barasat and the subdivisional headquarters at Jaynagar and Kakdwip. A high power committee has been recently appointed to select the actual sites.

Notifications defining the boundaries and areas of the different police stations involved have already been published, while those regarding the new districts and subdivisions are expected to be published before long. Meanwhile the police work is being conducted in many cases on the basis of the new police stations, while the recent Census Operations were also conducted on that of the plan approved by Government in November, 1959.

The total estimated expenditure is Rs. 4,56 lakh. Out of this Rs. 2,05 lakh are for construction of residential buildings, while Rs. 2,51 lakh are for administrative buildings, hospitals, etc. and also the cost of land and developing the sites. It is hoped to finance the first part, viz., construction of residential buildings with funds made available by L.I.C. for low and middle income housing. The planning Commission has recently agreed to the inclusion of the remaining operation of the scheme within the Third Five-Year Plan.

Expansion of Electrical Laboratory

The expansion of the Electrical Laboratory attached to the Directorate of Electricity, West Bengal, which has been recognised by the Indian Standard Institute as Certifying Laboratory for the purpose of standardisation of different makes of electrical meters and instruments will be taken up during the Third Five-Year Plan.

Cultivation of Coffee

Experimental cultivation of Coffee at Mungpoo and Munsong has proved that Coffee cultivation on large scale can be undertaken in these areas profitably. The Coffee Board has been satisfied with the experimental work and suggested large scale expansion. It is therefore proposed to undertake the cultivation on a somewhat commercial scale.

Rural Work Programme

The Planning Commission has formulated a scheme of utilising the rural manpower by giving unemployed agricultural labourers employment during the slack agricultural season. The objective is to relieve unemployment as well as to build up productive community assets in the rural areas. In the first year of the Plan, the scheme was a Centrally-sponsored one. From the second year onwards, these will figure in the State plan. The Central Government will provide funds for this scheme one half of which will be in the form of a loan and the other half an outright grant. Two such projects were taken up in the last year of the Second Plan. Fourteen more are expected to be taken up by the end of the 1st year of the Third Plan. Its scope will be further extended in years to come. The entire expenditure on these schemes will remain outside the State Plan.

Construction of Foodgrains Storage

Twenty-four several godowns—big and small—for storage of the State reserve of foodgrains have been established throughout West Bengal. Some of these require renovation or strengthening and some others are in need of replacement. The large godown at Siliguri which feeds all the northern districts has worn out with age and been condemned. Provision has therefore been made for constructing 15 storage godowns at an estimated cost of Rs. 12 lakh. Boundary walls will be put up round 5 existing godowns at an estimated cost of Rs. 3.34 lakh. Electrification of godowns and setting up of weigh-bridges have also been provided for. These will cost Rs. 5.74 and 1.88 lakh, respectively.

Development of Digha as a Sea-side Health Resort

The scheme envisages development of Digha in the district of Midnapur as a sea-side health resort at a total estimated cost of Rs. 13 lakh. The area will be developed by the West Bengal Co-operative Health Resort Society Ltd. to whom necessary financial assistance in the form of loan will be given by the Government. Besides, this Government have directly completed the following constructional works:—

- (a) Ten tenements,
- (b) One cheap hotel,
- (c) One market,
- (d) Shopping centre,
- (e) One platform.

The tenements are being let out to the visitors. Cheap hotel and shopping centre have already been leased out. Steps have also been taken for construction of additional tenements and an airstrip.

Further steps will be taken up during the Third Plan. Some more tenements will be put up for visitors and the internal road system extended. Land is being made available to the Indian Air Lines Ltd. for the construction of an airstrip. All these steps are expected to enhance the popularity of this health resort much further.

CHAPTER XXV

DEVELOPMENT OF GREATER CALCUTTA

Calcutta holds the key to the development not only of West Bengal but of the Eastern Region of India as a whole. Established more or less as the result of a historical accident it has come to occupy a unique position. The big jute industry grew around it, because, it was the natural meeting point of raw jute from the districts now in East Pakistan and coal from the Jharia-Raniganj Coal Fields. When the tea industry developed extensively in the Hill Regions of Assam and West Bengal, Calcutta became its principal market. Gradually a big industrial complex including chemicals, cotton textiles, paper making and light engineering industries clustered around the city and it became the chief entrepot for foreign goods with the whole of Eastern India as its hinterland. Though it ceased to be the capital city of India in the beginning of the century, its importance as a commercial, industrial and cultural centre steadily continued to increase, and it registered a phenomenal rate of population growth. Some of the increased population spilled over into the surrounding areas, but most preferred a shelter within the confines of the city so that they might be near the place of their work. The result has been excessive overcrowding and growth of unhygienic slums all over the place. The population has in the meantime been growing faster and faster and unless some radical steps are taken the position may well pass beyond control before long.

With a view to devising ways and means to remedy this state of affairs a new organisation called, The Calcutta Metropolitan Planning Organisation, has been established as a separate unit within the Development Department. This Organisation has been assigned the task of planning the future development of Calcutta and its surrounding industrial areas known collectively as the Greater Calcutta Area.

The Organisation proposes to draw up, on the basis of detailed surveys, a forward-looking plan of development which will take into account the projected growth of population and industries over a number of years. Improvement of sanitation through provision of an adequate water supply and sewerage system, provision of better living conditions for the population, easing the congestion in the streets, provision of adequate crossing over the Hooghly, clearing up of the slums, development of the urbanizable hinterlands—all these will come under the purview of this Organisation.

The Ford Foundation and the United Nations Special Fund through the agency of the World Health Organisation are assisting this organisation by providing expert Consultants on different aspects of planning.

APPENDIX

Draft Outline of a Master Plan for Integrated Development of Greater Calcutta

I. BACKGROUND

Greater Calcutta comprises of a considerable tract of land situated on both sides of the Hooghly of which the city of Calcutta proper is the nucleus. Calcutta has been a place of importance in the eastern part of India and served practically throughout her life as a port, as an industrial centre and as the administrative headquarters of India. Round about Calcutta grew up other similar urban areas for similar reasons. As a result on both sides of the Hooghly there is a strip of land which has developed as an urban area mostly accommodating important industries. It spreads for some 40 miles along both sides of the Hooghly river with a depth of 3 to 5 miles on either side of the banks. There are 34 municipalities including the Corporation of Calcutta on the eastern and Howrah on the western side. The total area is estimated to be about 270 sq. miles. The population of this area according to 1951 Census was 4.63 millions. According to 1961 Census it has increased to 5.55 millions.

The Capital was shifted from Calcutta in 1912 to Delhi. This no doubt gave her a shock, but its growth although impeded was not hampered. Even now it is the administrative headquarters of the State of West Bengal. It is the first port of India, being the main centre for export of commodities like tea, jute, coal, etc. This port serves the adjacent States of Orissa, Bihar, Assam and Uttar Pradesh. The urban areas on both sides of the Hooghly are studded with jute mills which form the principal industry of the locality. There are other industries like textile industries. Light industries dealing with steel processing are heavily concentrated on the western side of the river, particularly round about Howrah. India's biggest Motor Car production factory is situated on the western bank of the river. It thus forms the industrial centre of the eastern part of India.

The density of population in Greater Calcutta area is very high as has been already stated. The present population is 5.55 millions for an area of 270 sq. miles. This gives a density of about 20,555 per sq. mile which is perhaps one of the highest in the world. There are various factors which are responsible for this heavy density. The opportunities of employment created by the industries attracted a large labour population even from outside the State. Opportunities of commerce also grew apace. This led to quick urbanisation. Moreover, large scale exodus from Eastern Pakistan has been one of the recent factors which contributed to its density. It is estimated that of about 3½ million refugees who migrated to West Bengal after partition, about a million and a half have settled in this area.

But Calcutta grew in a haphazard fashion without any well laid out plan to follow. This explains the growth of extensive slums all over the area. In many places refugees coming after partition squatted in large scale and set up their own colonies. They had not the means to build good houses and in the squatted area could not provide wide roads, or undertake measures for supply of water, drainage and sewerage. Except for the city of Calcutta proper there is thus no planned development in evidence. There is a sewerage system existing in central Calcutta, but there is no sewerage system for the rest of the area. The conservancy is based on daily removal of night-soil from service privies and dumping them in trenching grounds.

II. PROBLEMS

This haphazard unplanned growth has created some problems which have assumed a formidable magnitude at present. They cry for immediate solution and if no solution is forthcoming in time, its very existence is threatened. An attempt will be made here to give an account of the problems confronting the city at present.

Sanitation

The major problem is the problem of sanitation which involves drainage, sewerage and supply of water in sufficient quantity and suitable quality. At the initiative of the State Government and the Government of India the World Health Organisation organised a team in 1959 to review the environmental sanitary conditions in the Greater Calcutta area. It has since prepared its report from which the magnitude of the problem of sanitation can be gathered. A few quotations from the Report are given below :

“Water-supply, sewerage, drainage and garbage collections and disposal facilities are grossly inadequate. Water is provided in the city of Calcutta on a limited basis during the day, with unfiltered as well as filtered river water available to most premises. In general, sanitary facilities, not only in the Calcutta Corporation but in the area as a whole, are either completely lacking, or eminently unsafe or are greatly deficient in comparison with those modern utilities normally available in many other metropolitan areas.”

It observes that this area suffers from deficiency in supply of filtered water, particularly in large areas occupied by poorer people. Such persons have therefore to use unfiltered water or water from ponds, canals or ditches and commonly suffer from intestinal diseases.

As regards conservancy arrangements it notes that only two-thirds of the city area proper is covered by sewerage and the rest is unsewered. The latter comprises service latrines and in a few cases sanitary privies. They have to deal with loads many times more than they usually carry. On the other hand, servicing in these days of labour unrest is hardly satisfactory. Consequently, fly breeding is enormous during the favourable season.

For short supply of head waters the Bidyadhari which was the main outlet for drainage of Calcutta has silted up. A new drainage water channel had to be opened up to connect Calcutta with the Kulti river further east. Even so the problem has not eased. The report observes “The arrangements for removal of the storm water are deficient. Extensive flooding occurs in many low-lying areas in the city after heavy rain, since the system is designed to accommodate one-fourth of an inch of rain-fall per hour, with 100 per cent. run off.”

Congestion

Congestion in the Greater Calcutta area is another serious problem. The various factors have been referred to already. The present trends, however, indicate that there is a tendency to further concentration of population in this area. The Census of 1961 definitely shows a tendency towards urbanisation of population in West Bengal. It is further evident that the main centre of attraction is the Greater Calcutta area as compared to other urban areas away from Calcutta. The various municipalities

round about Calcutta have registered a phenomenal increase of the rate of growth. A few illustrations may be taken. Thus South Dum Dum Municipality registers a growth of 81 per cent., the population according to 1961 Census being 111,507 as compared to 61,000 in 1951 Census. The increase of population in North Dum Dum is more striking; while the population in 1951 was 12,000 it has shot up to 38,000 recording an increase of 216 per cent. These towns lie on the eastern side of the river. We may refer to Baidyabati and Kotrong which lie on the western side of the river. Baidyabati has a population of 44,273 according to 1961 Census against 24,883 in 1951, registering an increase of 77 per cent. Kotrong shows an increase of 118 per cent. The population according to 1961 Census is 30,977 against 14,177 in the previous Census. Although the city proper registers an increase of only 8 per cent. there is a tendency to heavy increase in the rest of the area of Greater Calcutta.

Slums

The rapid spread of industries is responsible for the growth of a heavy labour population in the area. Large scale migration of refugees who have set up their colonies has also led to haphazard unplanned development. The result is extensive growth of slums. Unfortunately there is no survey report available for the entire area of Greater Calcutta about the extent of growth of slums. The State Government, however, conducted a survey through its Statistical Bureau in 1959 of the extent of growth of slums in Calcutta city proper. This survey showed that there are altogether 189,447 families living in the slum areas. They account for a population of 668,904 out of 2.7 million which was the population in 1951 of the city proper. This means that within the city area itself slums gave shelter to 25 per cent. of the population. The position must be worse in the municipalities outside Calcutta proper. Houses built with flimsy materials with little planning for ventilation are packed with people living in slum areas. The streets are narrow, there is no drainage system worth the name. The source of water is usually a tap provided in the street or nearby tanks or ponds. Conservancy is through a system of service privies. There is heavy incidence of cholera during the epidemic season in these areas.

Problem of silt and salinity

Greater Calcutta area stands on both sides of the river Hooghly. This river is the combination of three rivers, viz., Churni, Jalangi and Bhagirathi all of which are spill channels from the Ganges about 120 miles north of Calcutta. Unfortunately it appears that the Hooghly is slowly dying for want of head water from the Ganges. This is said to be due to a gradual and most definite alteration towards the east in the flow of the Ganges, also known as Padma. Consequently these three rivers are receiving less water and so silting up. They are at present reduced to spill channels from the Ganges during the rainy season only.

This is a serious threat to Calcutta Port also, as silting up of the bed of the river is inevitable. As a result vessels with a deep draught cannot be docked in the Calcutta Dock area. Want of head water for the Hooghly is slowly converting the river near about Calcutta area into a tidal channel. As a result the salinity in the river in Calcutta area is gradually increasing. When the site at Palta was chosen in 1865 for supply of water in Calcutta water in that reach was free from salt. While the upland water from the Ganges was scarce, the tidal flow of water from the sea created salinity; with

the decrease of supply of upland water salinity increased. As a consequence in 1936 the salinity in Palta rose to 380 parts per million. The generally accepted drinking water tolerance is 250 parts per million. In 1959 the salinity increased to 2,480 parts per million.

Communication

The growth of communication has not kept pace with the growth of Calcutta as an industrial and commercial centre. The result is that Calcutta suffers from want of facilities for communication to its inter-linked areas as well as within itself. The problem of communication is thus a twofold problem. There is no highway linking it up with the southern and eastern parts of India. The only important road worth mentioning is the Grand Trunk Road which connects Calcutta with the industrial area in the north-west. For about 30 miles however it passes through the Greater Calcutta area itself and is narrow and heavily congested. Movement of traffic is slow and road accidents are on the increase. Similarly inside Calcutta large number of people, estimated to be about 5 to 6 lakhs, come daily to attend offices from outside. Inside the city communication is highly unsatisfactory. There are two terminal railway stations on two sides of the city where the passengers are poured out and they have to avail of the existing travel facilities which are inadequate. These are either tramways or the State run bus service. There is one satisfactory bridge connecting Calcutta with the western part of Greater Calcutta.

The above survey of the problems of Calcutta is indeed disheartening. It definitely shows that Calcutta is heading for a serious crisis and if she is to be saved, immediate steps should be taken. The magnitude of the problems and their heavy financial implications make them formidable. But with Calcutta is linked up the interest of India as a whole and the magnitude of the problem is a challenge which we must meet.

No wonder that her problems attracted the attention of the World Bank Mission which was shocked to find that in the Draft Outline of India's Third Plan there was no provision for improvement of Calcutta and made the following observation: "In the Mission's view one of the most dangerous weaknesses in the Plan is the continued neglect of the problems of urban development in Calcutta. If this is to be remedied, it is essential, first, the Central Government should accept a direct and special financial responsibility for the improvement of the conditions in the city and, second, that the provincial and municipal authorities should co-operate in establishing an effective body to carry through an enlarged programme of municipal reconstruction and improvement".

As regards the financial burden they further observed: "The Mission got the impression that the Corporation of Calcutta has neither the power nor the financial resources to cope with the staggering problems faced in the city. The annual municipal revenue is restricted to the paltry sum of about Rs. 85 million—a good deal less than Bombay, which is a smaller city. The Government of India tends to regard these problems as wholly the concern of the Government of West Bengal, which, in turn, is struggling with many other difficulties and must respond to a legislature that inadequately represents the interests of the urban areas. The very magnitude of the challenge that Calcutta presents to the conscience and political commonsense of those in authority no doubt in part explains the inadequacy of the response. Everybody admits that more ought to be done about it. Nobody is ready to do it".

III. INTEGRATED PLAN

The general observations about the problems facing Calcutta will show how multifarious and complicated they are. It is not possible to tackle them by separate individual approach in respect of each problem. They are inter-linked. This the problem of silt and salinity is both a problem for the Port of Calcutta as well as a problem affecting sanitation. The problem of congestion is linked up with the problem of slums. The problems of communication has also an important bearing with the question of congestion. If better facilities for communication are available dispersal of population is feasible.

What is wanted, therefore, is a multi-purpose approach. All the problems have to be simultaneously tackled by an integrated Master Plan. Such an integrated plan is essential to make the planning effective and prevent lopsided development. The preparation of such a Master Plan pre-supposes collection of data, conducting surveys and deliberations by expert bodies. This is, however, a time-consuming process. Even so, on the basis of materials already available a draft outline may be suggested for the Master Plan. This may very well serve the purpose of a framework round which can be built up detailed plans on basis of subsequent studies.

A draft outline of the shape which such a Master Plan should take is indicated below.

The Master Plan shall tackle the major problems in Greater Calcutta enumerated as above, viz., the problem of sanitation, congestion, slums, silt and salinity of the river and communication—internal and external. A set of schemes is given below. They have been drawn up in some cases on basis of materials already made available by expert bodies:

The schemes are:

- (1) Scheme for water-supply and sewage disposal of Greater Calcutta.
- (2) Scheme for a new city in the neighbourhood of Calcutta.
- (3) Scheme for clearance of slums in Calcutta.
- (4) Scheme for removal of silt and salinity in the river.
- (5) Scheme for communication.

(1) Scheme for water-supply and sewage disposal of Greater Calcutta

Mention has been made of the consultant team set up in 1959 by the World Health Organisation to review the environmental sanitary conditions of the Greater Calcutta area and to consider steps which should be taken to improve water-supply and drainage of Greater Calcutta.

The consultant team has conducted its study and submitted its report. Their recommendations may form the draft outline for the scheme for water supply and sewerage of Greater Calcutta. Their recommendations are summarised below.

The Greater Calcutta area measuring 270 sq. miles and comprising the 34 municipalities on both sides of the river should form the Calcutta Metropolitan district.

The problem of sewage disposal, drainage and water-supply of this area should be entrusted to a statutory body to be called the Calcutta Metropolitan Authority. It shall have three major component elements, viz., (1) A small full time Board of Directors, (2) A large representative Council and (3) A General Manager to be selected by the Board of Directors. It should be a public and political corporation with perpetual existence and specified rights to sue and to be sued. It should exercise all powers for the accomplishment of the mission of the Authority.

To start with it should undertake preparation of an integrated Master Plan for water, sewerage and drainage against a back-ground of human requirements and land uses.

The expenditure involved for execution of the plan shall be financed from (1) Union Government, (2) State Government and (3) Other governmental and private money-lending agencies.

It shall also have the right to levy taxes on the general property up to a limited amount.

(2) The scheme for a new city near Calcutta

In view of certain developments indicated below it is not proposed to suggest immediately any specific scheme about a satellite city. The Ford Foundation has accepted the overall responsibility of preparing a Master Plan for controlling the Housing and Industrial Development of Calcutta and its hinterland. It is expected that by September, 1961, enough progress will have been made to make a beginning of the implementation. Such a big job, however, requires time and a great deal of study, analysis and research to be followed by preparation of plans. For this purpose, the State Government proposes to set up a Calcutta Metropolitan Planning Organisation. Pending the preparation of the Master Plan the Chief Planner, Mr. Echeveria, whose services have been provided by the Ford Foundation, will be glad to appear before the World Bank/I.D.A. authorities in Washington and explain in detail with maps and drawings the work that is going on, the data that have been already collected and the nature and direction of the development and growth being attempted for a large area round Calcutta. It is proposed to submit duly at a later date an integrated finalised Project Report to the World Bank/I.D.A. vetted by the Ford Foundation, the U. N. Special Fund and the World Health Organisation.

(3) Slum Clearance

The problem of slums in Calcutta has assumed a colossal magnitude. In fact tackling this will mean very heavy financial implications. The survey conducted by the State Statistical Bureau already referred to above shows that there are 189,000 families living on 96,427 cottas of land. The Ministry of Housing have recently agreed to permit a density of 120 tenements per gross acreage. This means a density of 2 families per cotta, 60 cottas making an acre. Evidently, therefore the area on which slums at present stand will be sufficient to accommodate the entire slum population if a density of 120 tenements per gross acre is permitted.

The main problems, however, are the question of finances and the question of necessary authorisation of Government to execute the slum clearance programme.

An idea of the financial implications of an effective schemes for the city of Calcutta proper can be formed from the data which are already available. To clear all the existing slums in the city 189,000 tenements have to be built. The ceiling of cost fixed for a tenement of Calcutta and Howrah areas by the Ministry of Housing is Rs. 6,000. It follows, therefore, that for 189,000 tenements the total cost will be 113.40 crores. The maximum allocations anticipated for clearance of slums in the Third Five-Year Plan of the city amounts only to Rs. 5.48 crores. If financial resources are of this meagre quantity, it will take at least 20 more Plans to tackle the problem of the city alone. However, a beginning has to be made anyhow.

As regards the second problem of authorisation by the State Government, the necessary steps have already been taken by the State Government. For effective tackling of the problem the State should have authority to remove the tenants living in the tenements first, then to pull down the existing structures, build new tenements and put people from other slum areas into these new tenements. The State Government have passed the Slum Clearance Act which invests it with all these powers. It provides for a method of equitable compensation to the owners of the lands and structures of the slum area.

Any slum clearance programme has to be based on an anticipated chain reaction. Initially some tenements have to be built on a vacant plot of land for families to be displaced from a slum to be taken up for clearance. This is the essential first step in the programme. When the tenants are removed to these tenements, plots occupied by them will be available for further construction. When these tenements are completed there another slum area can be cleared by removal of the occupants to the newly constructed tenements. In this manner the continuous process of construction continues. On this basis a scheme has been drawn up for initiating the Slum clearance programme in Calcutta. The rough outlines are given below :

Slum clearance scheme for Calcutta: First Phase. Acquisition of areas measuring 1,401.43 cottas of land in the following places :

	Cottas.
(1) Kankurgachi 2nd Lane	... 49
(2) 30 Ramkrishna Samadhi Road	... 99.2
(3) 17 Muraripukur Road	... 40
(4) 49 Narkeldanga North Road	... 235
(5) 111 Narkeldanga Main Road	.. 415
(6) 35 Cossipore Road	... 340
(7) 40A Gopal Ch. Chatterjee Road	.. 160
(8) 60-67 Barrackpore Trunk Road	... 63.23
	1,401.43

In four-storey blocks with a density of 120 tenements per gross acre we can have 2,800 tenements.

Second Phase: Slums within a radius of one mile from these places have been located which can be accommodated in these tenements.

	Families.
Holding No. 31 of Ward No. 33 at 218 Maniktala Main Road ..	133
Holding Nos. 35 and 36 of Ward No. 16 at 97 and 98 Narkeldanga Main Road	341
Holding Nos. 106 and 107 of Ward No. 15 at 34 and 35G Murari-pukur Road	113
Holding Nos. 19-24, 26-28 of Ward No. 22 at 1, 6, 11 Kasai Bustee 1st Lane, 1, 1/1 and 10 Kasai Bustee 2nd Lane and 2 Kasai Bustee Cross Lane	447
Holding Nos. 83-86 and 14-18 of Ward No. 33 at 9/1, 13, 16, 17, Sir Gurudas Banerjee Road and 40/A, 40/B, 40/C, 40/D and 45 Kankurgachi Road	739
Holding Nos. 16, 18, 19 and 65 of Ward No. 1 at 465, 35/1, 37A, 37/1A Cossipore Road and 5/2 Pranath Chowdhury Lane	465
Holding No. 40-47 and 90-94 of Ward No. 1	261
Holding No. 2 of Ward No. 2 at 57/2, B. T. Road	100
Total ...	2,599

Third Phase: These 2,599 families in the Bustee areas described above occupy a total area of 2,201 cottas. So after these families are removed to the tenements to be constructed under the first phase, building operations for new tenements can be taken up in these new areas for an additional number of 4,400 families.

Financial implications: First phase—2,800 × 6,000, i.e., Rs. 1,68,00,000. Second Phase—4,400 × 6,000, i.e., Rs. 2,64,00,000.

The process may be continued to the extent funds are available. A sum of Rs. 50 crore to start with will make it feasible to undertake a really effective scheme.

(4) Scheme for removal of silt and salinity from the River Hooghly

Both deposit of silt and increase in the salinity of the river water stem out of the fact that the Hooghly is being denied the head water from the Ganges. As previously mentioned, it has now become the spill channel for the main river during the rainy season. At other times of the year it functions as a tidal channel which carries salt water from the sea far into the interior.

The remedy lies, therefore, in making more head water available for the river Hooghly. This is a problem which not only threatens the sanitation of Calcutta area but also the future of the Port itself.

In order to bring the water from the Ganges into the Hooghly through the Bhagirathi, a barrage has to be erected at Farakka. The Central Government has already started action on the scheme. There will be a channel linking up the main river with the Hooghly to ensure perennial supply of

head water. It is stated that the Central Government have already prepared a plan with an outlay of Rs. 56 crores and preliminary work has already begun.

(5) Scheme for improvement of communication in Calcutta

This scheme will be in two parts. One part deals with the improvement of communication between Calcutta and its hinterland. The other part deals with communication inside the city proper.

(I) Scheme for improvement of communication between Calcutta and its hinterland: There is need for improvement of communication between Calcutta and the following places:—

(1) Calcutta to Krishnagar which will open up the northern part of the land lying to the east of the Hooghly.

(2) There is need for improvement of communication between Calcutta and the eastern and southern part of India. Both these parts are linked with Calcutta through a national highway which passes through Kharagpur lying 70 miles due west of Calcutta. This will involve construction of a big bridge across the Rupnarayan which flows into the Hooghly at a point above Diamond Harbour.

(3) The new industrial area which is rapidly developing round Durgapur calls for an Expressway connecting Calcutta with that area. The old G. T. Road is too congested.

(4) There is need for a direct link road between Calcutta and the airport at Dum Dum by-passing the heavy traffic congestion points in the city.

(5) Another link between Calcutta and Howrah (on the western side of River Hooghly) either by bridge or a tunnel.

(6) Road and Rail link to the subsidiary port of Haldia.

An outline of these schemes is given below:—

(i) Calcutta-Durgapur Expressway (extended up to Barakar on the West Bengal border): 132 miles: (1) **Alignment:** The alignment of the Expressway will start from the Vivekananda Bridge approach-end at Bally railway station. It will then run parallel to the Calcutta Chord Railway line up to Dankuni, wherefrom it will run in north-western direction (more or less parallel to the Burdwan Chord Railway line) and cross the existing G. T. Road near Palsit Railway Station. From Palsit the alignment will turn west and run parallel to the Eastern Railway Main Line and reach Durgapur by-passing the Burdwan town. The total length of the road up to Durgapur will be 92 miles.

The alignment of the section from Durgapur to Barakar (40 miles) will follow the G. T. Road up to half-a-mile east of Nunia Bridge, wherefrom it will run to the north and meet the G. T. Road near Niamatpur by-passing the Asansol town. From Asansol it will follow the existing G. T. Road up to Barakar with a bye-pass near Sitarampur.

(2) **Specifications:** The section of the road from Calcutta to Durgapur (92 miles) will have 100 ft. wide crest with two 24 ft. carriageways separated by a 16 ft. wide central strip and will have 18 ft. wide flanks. It will thus cater for four lanes of traffic—two up and two down. At

crossings with railways and important roads either an overbridge or an underbridge will be provided. The thickness of the road crust will vary from 17" to 20" (according to the nature of the soil that will be met with). The cost of this portion is estimated to be Rs. 2,100 lakhs.

The section of the road from Durgapur to Barakar (40 miles) will have two lanes of carriageways 24 ft. wide and a road crust thickness varying from 17" to 20". The cost of this portion is estimated to be Rs. 160 lakhs.

(3) **Estimated Cost:** The total estimated cost of these two sections of the road, viz., Calcutta-Durgapur (92 miles) and Durgapur-Barakar (40 miles) is Rs. 2,260 lakhs.

(4) **Utility:** This road will serve as a very important as well as a shorter communication link between Calcutta and its rapidly growing industrialised hinterlands and colliery areas. There is a growing urgency for transport facilities for quick movement of heavy materials, plants, accessories and industrial products to and from Durgapur and other important industrial areas and coal regions. The existing G. T. Road passing through built up areas has exceeded its maximum capacity for carrying simultaneously both local and long distance, slow and fast, vehicular traffic; and its improvement by widening and improving the geometries to the required standard will hardly be economical or feasible. It is, therefore, essential to construct this entirely new expressway.

(ii) **Calcutta-Dum Dum Super Highway (5 miles):** (1) **Alignment:** The alignment of the road will start from the west side of the junction of the Shyambazar Khal (new canal) and the Krishnapur canal up to which extends the new (Belegkata) C.I.T. Road within the Calcutta Corporation. It will then follow the northern bank of the Krishnapur canal up to Bagjola canal and then turning north and passing through Baguihati it will connect Calcutta-Siliguri National Highway (N.H. 34) through the airport area.

(2) **Specification:** The super highway will have 100 ft. wide crest with 24 ft. wide double carriageways separated by a 16 ft. wide central verge and have 18 ft. wide outer flanks. This will provide four lanes traffic two up and two down. Thickness of the crust will be between 17" and 20" according to the nature of the soil.

(3) **Estimated Cost:** The estimated cost amounts to Rs. 1,27,50,000 only.

(4) **Utility:** At present Dum Dum Airport is connected with Calcutta by the Calcutta-Jessore Road which in most of its length is extremely congested. The improvement of this existing road to cope with the rapidly growing present day traffic, by widening and improving its geometries to the required standard will hardly be economical or feasible. Traffic bottlenecks at five roads crossing at Shyambazar is a great obstacle. The construction of this Superhighway is, therefore, essentially necessary to cope with the volume of traffic to and from Dum Dum Airport which is rapidly increasing with the development of the airport.

(ii) **Calcutta-Krishnagar Road (63 miles):** (1) **Alignment:** This road at Calcutta side will start from the Belgachia Bridge (North Calcutta) and will follow the Jessore Road (N.H. 35) up to Barasat, wherefrom it will run to the north following the Barasat-Ranaghat Road (N.H. 34) up to Ranaghat. From Ranaghat it will follow a new alignment along the existing kutchha road running more or less parallel to Ranaghat-Krishnagar Railway line meeting the existing National Highway (N.H. 34) at Krishnagar.

(2) **Specifications:** The section of the road from Calcutta to Barasat (12 miles) will have two 24 ft. carriageways catering for four lanes of traffic—two up and two down. The remaining section of the road from Barasat to Krishnagar (51 miles) will have two lanes of carriageways 22 ft. wide. There will be either an over bridge or an under bridge at each of the railway crossings. The thickness of the road crust will be between 17" and 20" (according to the soil condition).

(3) **Estimated Cost:** The total estimated cost of these two sections of the road, viz., Calcutta-Barasat (12 miles) and Barasat-Krishnagar (51 miles) is Rs. 456 lakhs.

(4) **Utility:** The existing Jessore Road (N.H. 35) up to Barasat which passes through industrialised and municipal areas has almost reached its maximum capacity for carrying vehicular traffic. This leads to traffic congestion and repeated accidents. It is not suitable for present day fast and long distance traffic. The proposed improvement of the road is, therefore, essentially necessary to cope with the increasing growth of the heavy and fast moving traffic. The Haringhata Dairy and Agricultural Farm lies on this road. This road forms a main part of the only communication link between Calcutta and the North Bengal districts.

(iv) **Calcutta-Kalyani-Tribeni Road (with a bridge over the Hooghly at Kalyani): 34 miles:** (1) **Alignment:** This road will start from Sham-bazar end (north side of Cossipore canal) and will follow the existing Barrackpur Trunk Road up to Titagarh. Crossing the railway line at Titagarh it will run more or less parallel to the railway line lying to its west. It will cross the railway line again near about Halishahar Railway Station and meet the existing Ghoshpara Road. It will follow a certain length of this road and reach Kalyani. It will then connect Kalyani with Saptogram-Kalna-Katwa Road via Tribeni on the other bank of the Hooghly through a bridge constructed across the Hooghly at Kalyani.

(2) **Specifications:** The section of the road from Calcutta to Titagarh (14 miles) will be developed to provide two 24 ft. carriageways. The remaining section of the road from Titagarh to Tribeni (20 miles) will have two lanes of carriageways having a width of 22 ft. Over or under bridges will be there at all railway crossings. The thickness of the road crust will be between 17" and 20". The bridge across the Hooghly at Kalyani will have a length of about 2,000 Rft. with approach roads on its both ends having a total length of about 2 miles.

(2) **Estimated Cost:** The total estimated cost of the project with the bridge over the Hooghly is Rs. 247 lakhs (the cost of the bridge with approach roads being estimated at Rs. 129 lakhs).

(4) **Utility:** Because of the growth of various industries all along this road, viz., jute, paper, steel, chemicals, etc., which are developing very rapidly, there has been a great rise in the growth of heavy and fast moving traffic on the entire length of the B.T. Road extending up to Kalyani. The proposed road will greatly relieve the traffic congestion on this road and will meet the requirement of an efficient link between Calcutta and its hinterlands round about Kalyani which is rapidly developing into an important residential-cum-industrial area. The construction of the bridge over the Hooghly will greatly facilitate movement of traffic from the west of the Hooghly to Calcutta areas considerably relieving traffic congestion

over the Vivekananda and Howrah bridges. All traffic bound for the northern regions on the east of the Ganges, originating on the west bank of the river, will not have to come to Calcutta at all. This will relieve the traffic congestion in Calcutta.

(v) **Another road link between Howrah and Calcutta:** The number of people who daily travel into Calcutta from the western side of river Hooghly ran into hundreds of thousands. There is only one Howrah bridge which often times becomes so congested that an alternative means of communication between Calcutta and Howrah is essential. The scheme is being enquired into.

(vi) **Calcutta-Kharagpur road (extended up to Bihar border): 98 miles:**
 (1) **Alignment:** The alignment of the road will branch off at Joypurbeel (lying 4 miles west of the Vivekananda bridge approach-end at Bally Rly. Sta.) on the alignment common both to the Durgapur Expressway and N.H. 2. From Joypurbeel it will follow the existing alignment of the Calcutta-Bombay-Madras Road (N.H. 5 and 6) up to Bihar border passing through Uluberia, Kharagpur and crossing the Damodar river at Bagnan, the Rupnarayan at Kolaghat and the Cossye at Panskura.

(2) **Specifications:** The section of the road from Joypurbeel to Kharagpur (72 miles) will have two 24 ft. divided carriageways catering for four lanes of traffic—two up and two down. The road crust will have a thickness varying from 17" to 20" depending on the soil condition. The road will, however, cross the Damodar river, the Rupnarayan river and the Cossye river by two lanes bridges. The cost of this section is estimated to be Rs. 1,512 lakhs.

The other section of the road from Kharagpur to Bihar border (26 miles) will have two lanes of carriageways 22 ft. wide, the road crust having the same thickness as above. The cost of this section is estimated to be Rs. 100 lakhs.

(3) **Estimated Cost:** The total estimated cost of these two sections of the road, viz., Calcutta-Kharagpur (72 miles) and Kharagpur to Bihar Border (26 miles) is Rs. 1,612 lakhs.

(4) **Utility:** This route provides the shortest route to Calcutta from Madras as well as Bombay sides. Jamshedpur will have a direct road connection with Calcutta. This road will provide an efficient link with Calcutta and its hinterlands in these parts of the country extending up to Jamshedpur (in Bihar) and Cuttack (in Orissa).

(vii) **Road and Rail Link to Haldia, Subsidiary Port:** As vessels with deep draught cannot be docked in the port of Calcutta proper a subsidiary port has been opened at Haldia about 20 miles down the river on the west bank. Road and rail link have to be opened up to enable it to work effectively.

The Calcutta Port authorities have proposed the following scheme to tackle this problem:—

(1) **Road Link:** The main Calcutta-Bombay road (Highway No. 6) crosses the Cossye and Rupnarayan rivers. The bridge at the former crossing is under construction and is expected to take 15 months more to complete. Tenders for construction of a road bridge over the Rupnarayan

at Kolaghat are ready and will be invited shortly. This bridge will take about three years to complete from the date of award of the contract. There are two possible routes taking off from the main road mentioned above which can be widened and improved to establish a road connection with Haldia. The first is from Panskura through Tamluk on to Sutahata and the other is from Kolaghat via Machada through Tamluk and on to Sutahata. The former is not to be favoured as in its present condition it is winding in nature and has many hair-pin bends. The road from Kolaghat to Haldia is preferred and will be approximately 36 miles in length. At present the road exists only up to Machada and has a 12 ft. asphalted width which can be widened to 22 ft. A short stretch of road from Kolaghat to Machada (approximately 2 miles in length) is to be constructed. At the Haldia end an extension from Sutahata past Barakumarchowk leading on to the road system of the proposed dock area and its environs will have to be constructed.

(2) **Rail Link:** The alignment of the rail link is likely to be from Panskura through Tamluk, Geonkhali, Sutahata and on to Haldia. The length of this link will be approximately 38 miles. Between Panskura and Kharagpur, a distance of approximately 28 miles, a third line will be added to handle the extra traffic from Haldia and to relieve congestion from the existing line. No new bridge is required for this alignment but the bridge over the Cossye which already exists, will have to be augmented by new spans to take the proposed third line.

Detailed blue prints in respect of items (1) Calcutta-Durgapur Express way and (2) Calcutta Dum Dum Super Highway have been already prepared.

(II) **Internal communication:** The problem of internal communication of Calcutta has continued to be unsatisfactory for a considerable time. This will be evident from the fact that it had engaged the attention of Government as early as 1947 when a committee was set up called the Calcutta Terminal Facility Committee with Shri Jinwala as the Chairman. This committee prepared a plan for opening out facilities for bringing the travelling public to the points nearest to their destination without compelling them to make use of supplementary modes of transport like trams and buses. This committee recommended electrification of the whole of the suburban system, and running a circular railway through Chitpur into the Port Commissioners' Railway and then taking it over an elevated truck from Chitpur to Majerhat and thus connecting it with the existing railway system working between Calcutta and Budge Budge.

Subsequently the Railway Ministry appointed another committee with Shri S. N. Roy as Chairman to examine the feasibility of running a suburban railway over the Port Commissioners' railway lines in Calcutta. They came to the finding that running of passenger service through the Port Commissioners' lines will present operational difficulties. So they suggested a revised alignment. Subsequently under the directions of the Ministry of Railway Shri S. Sarangpani worked out the details of the circular railway proposed by the Roy Committee. It recommended that the alignment as proposed by the Roy Committee should be taken up in two phases as follows:—

Phase I: In phase I, it is proposed to include the section Dum Dum to Hastings through Chitpur yard, almost following the alignment suggested by the Roy Committee with a direct connection from the main line to Chitpur for the facility of traffic to and from Ballygunge. This section, together with electrification of the Ballygunge-Dum Dum section via Kankurgachi loop and the Southern section including Budge Budge

branch will permit of the through running of trains from the outer suburbs on Howrah Division and the north, central and south sections of Sealdah Division to Hastings via Fairlie Place. It will also be possible to run shuttle trains from Majerhat to Hastings and vice versa to cater for city traffic.

Phase 2: This phase will comprise of the high level alignment over trestles from Hastings to the Circular Garden Reach Road and thence the surface connection with Majerhat with a rail overbridge over Remount Road.

With the completion of this phase, it would be possible to run trains from the southern sections direct to Fairlie Place, avoiding the detour via Kankurgachi and through Chitpur yard. This will also enable the introduction of a more expeditious service for local traffic from Ballygunge, Kalighat and Tollygunge areas to Fairlie Place, Burrabazar and Shyambazar and vice versa.

ANNEXURE

- 1 Table showing Municipalities forming Greater Calcutta area.
- 2 Table showing population growth in Greater Calcutta.
- 3 Table showing slum population in the City.
- 4 Map showing alignment of proposed roads.
5. Map showing alignment of Circular Railway.
- 6 Map showing Greater Calcutta area.
- 7 Map showing the Road and Rail Link to the subsidiary Port of Haldia.

TABLE I

Municipalities forming the Greater Calcutta Area.**East Bank of the Hooghli**

1. Kalyani (Not a Municipality.)
2. Kanchrapara.
3. Halisahar.
4. Naihati.
5. Bhatpara.
6. Garulia.
7. North Barrackpore.
8. Barrackpore Cantonment.
9. Barrackpore.
10. Titagarh.
11. Khardah.
12. Panihati.
13. Kamarhati.
14. North Dum Dum.
15. Dum Dum.
16. South Dum Dum.
17. Baranagore.
18. Calcutta.
19. Garden Reach.
20. Budge Budge.
21. South Suburban.

West Bank of the Hooghli

22. Bansberia.
23. Hughli-Chinsurah.
24. Chandernagore.
25. Bhadreswar.
26. Champdani.
27. Baidyabati.
28. Serampore.
29. Rishra.
30. Konnagore.
31. Kotrong.
32. Uttarpara.
33. Bally.
34. Howrah.

TABLE 2

Population growth of Greater Calcutta*Provisional Population of Calcutta Industrial Region, 1961*

Name of Town	(Greater Calcutta)	
	Population.	Percentage variation 1951-1961.
Hooghly-Chinsurah (M)	83,468	+46·9
Bansberia (M)	45,510	+48·6
Serampore (M)	91,580	+23·2
Baidyabati (M)	44,273	+77·9
Rishra (M)	38,580	+40·5
Konnagore (M)	29,623	+46·4
Uttarpara (M)	21,118	+23·3
Kotrong (M)	30,977	-118·5
Champdani (M)	42,201	+33·8
Bhadreswar (M)	35,576	-2
Chandernagore (M)	67,534	+35·3
Howrah (M)	514,090	+18·6
Bally (M)	102,285	+62
Bhatpara (M)	147,725	+9·5
Garden Reach (M)	130,675	+19·7
South Suburban (M)	185,600	+78·4
Budge Budge (M)	39,912	+24
Batanagar (NM)	9,670	+40·7
Barrackpur-Cantonment (Cantt.)	16,890	+4·3
South Dum Dum (M)	111,507	+81·6
North Dum Dum (M)	38,451	+210·3
Dum Dum (M)	20,159	+44
Titagarh (M)	76,157	+6·3
Naihati (M)	58,316	+5·4
Halisahar (M)	51,469	+48·5
Kanchrapara (M)	69,324	+22·3
Panihati (M)	97,386	+96·7
Khardah (M)	28,384	+53·2
Barrackpur (M)	64,219	+50·6
Garulia (M)	28,954	+2·3
North Barrackpore (M)	56,828	+76·6
Ichhapur Defence	12,402	-15·1
Estate (NM) .. .. .	..	..
Baranagar (M)	107,542	+39·4
Kamarhati (M)	125,312	+62·2
Calcutta City (Corpn.)	2,926,498	+8·4
Total ..	5,550,195	+19·9

(M) stands for Municipality and (NM) for non-Municipal areas.

TABLE 3

Slum Population in the city

Bustee population total families and total area from Ward No. 1 to 75 of Calcutta

Locality.	Popula- tion.	No of families.	Bustee area. (Cottahs).	No of Industries.	Per capita income (PM).	Average rent paid by a family (PM).
1	2	3	4	5	6	7
					Rs.	Rs.
I. Ultadanga-Maniktala (15, 16, 33).	81,054	18,696	14,621	438	26 : 69	11 : 74
II. Mechuabazar (21, 22, 23, 29, 30, 31).	32,888	10,028	2,308	957	33 : 52	12 : 82
III. Burrabazar (19, 20, 24-28).	13,588	4,766	1,274	181	36 : 84	13 : 69
IV. Kalutala-Mirzapur (37-41, 43, 44).	10,716	4,286	730	93	38 : 69	13 : 42
V. Cossipore (1, 2, 3) ..	47,290	13,158	10,550	92	31 : 38	8 : 92
VI. Entally (47, 56, 57-58) ..	47,988	12,185	6,545	118	27 : 39	10 : 46
VII. Park Circus (55, 59, 60)	36,126	8,861	5,673	169	27 : 85	10 : 63
VIII. Ballygunj (61-64) ..	24,473	7,181	2,333	54	29 : 27	10 : 78
IX. Khidderpore-Chetla (71-75).	82,000	26,522	11,534	107	35 : 94	11 : 55
X. Paikpara - Belgachia (4 and 5).	38,860	9,087	6,143	85	26 : 24	10 : 69
XI. Canal West Area (10, 14, 32, 34).	50,726	15,952	5,394	470	32 : 23	11 : 30
XII. Beliaghata (35, 36) ..	52,733	11,362	9,919	181	25 : 18	11 : 33
XIII. Dharmatala (42, 45, 46, 50-54).	22,842	9,237	1,927	49	38 : 44	12 : 98
XIV. Bhowanipur (65-70) ..	26,031	6,820	2,796	46	27 : 37	12 : 10
XV. Shyambazar-Baghbazar (6-9, 11-13, 17, 18).	47,989	15,313	4,013	572	31 : 69	12 : 67
XVI. Tangra (48-49) ..	53,600	15,993	10,694	124	30 : 14	9 : 32
	6,68,904	1,89,447	96,427			

(Figures in brackets indicate Ward Nos.)

STATEMENT I

Distribution of State Plan outlay by heads on the basis of working plan of 329 crores

Head.	Second Plan.		Third Plan.			(Rs. in lakhs)
	Original Outlay.	Actuals.	Total.	Capital.	Foreign Exchange.	Budget Estimate 1961-62.
	2	3	4	5	6	7
1. Agricultural Programmes—						
Agricultural Production ..	5,22.86	3,72.17	18,19.00	4,29.75	20.09	3,48.13
Minor Irrigation ..	2,93.50	1,83.05	16,32.00	6,29.00	2,00.00	3,31.08
Soil Conservation ..	82.63	45.78	4,70.91	9.96	5.00	42.24
Animal Husbandry ..	1,74.10	76.18	4,11.00	2,07.32	39.95	50.10
Dairying and Milk Supply	4,66.45	3,02.28	6,00.00	6,00.00	6.00	1,01.54
Forests ..	1,33.06	1,17.79	2,33.84	2.86	38.70	37.33
Fisheries ..	75.74	26.79	2,04.83	19.95	3.80	18.14
Warehousing & Marketing	38.00	16.00	62.00	53.50	..	12.51
Total ..	17,86.34	11,40.04	54,33.58	19,52.34	3,13.54	9,41.07
2. Co-operation and Community Development—						
Co-operation ..	1,96.51	96.38	2,45.35	95.36	..	52.83
Community Development	14,66.87	8,09.32	12,39.00	3,84.00	..	2,50.70
Panchayats ..	..	50.01	1,97.00	..	..	16.29
Total ..	16,63.38	9,55.71	16,81.35	4,79.36	..	3,19.82
3. Irrigation and Power—						
Irrigation ..	7,71.21	8,66.34	11,80.53	11,39.72	74.25	2,49.10
Flood Control etc ..	1,21.37	1,38.11	4,54.99	4,52.83	0.39	90.02
Power ..	4,55.34	4,10.74	38,50.00	38,50.00	20,60.20	3,50.00
D. V. C. ..	17,26.15	16,88.66	9,00.00	9,00.00	..	..
Total ..	30,74.07	31,03.85	63,85.52	63,42.55	21,34.84	6,89.12
4. Industry and Mining—						
Large & Medium Industries	1,73.60	1,74.16	1,15.00	91.64	37.67	24.00
Mineral Development ..	..	..	92.50	80.87	37.10	1.85
Village & Small Industries	7,70.05	5,29.74	9,96.50	5,67.98	43.21	2,47.45
Total ..	9,43.65	7,03.90	12,04.00	7,40.49	1,17.98	2,73.30
5. Transport & Communications—						
Roads ..	17,47.69	14,59.91	25,00.00	25,00.00	26.00	4,48.00
Road Transport ..	1,99.19	2,23.10	1,00.00	1,00.00	2.00	22.16
Ports and Harbours ..	..	..	..	..	..	..
Inland Water Transport ..	..	10.00	33.00	9.00	..	3.15
Tourism ..	..	2.29	17.00	12.00	..	6.37
Total ..	19,46.88	16,95.30	26,50.00	26,21.00	27.00	4,79.68

Head.	(Rs. in lakhs)					
	Second Plan.		Third Plan.			Budget Estimate 1961-62.
	Original Outlay.	Actuals.	Total.	Capital.	Foreign Exchange.	
1	2	3	4	5	6	7
6. Social Services—						
General Education ..	19,69.98	27,58.62	29,20.31	1,14.59	..	4,57.65
Technical Education ..	2,26.71	281.18	7,16.62	1,02.57	14.16	1,52.43
Scientific Research ..	19.87	14.10	48.07	..	..	12.00
Health	20,58.77	12,64.60	19,80.03	7,08.21	1,02.69	2,97.96
Housing	8,67.45	5,22.77	10,26.48	9,07.25	..	2,21.57
Welfare of Backward Classes	1,83.71	1,34.55	3,50.00	..	..	50.45
Social Welfare ..	22.68	50.92	4,40.10	1,07.00	..	37.68
Labour & Labour Welfare	1,84.55	91.32	3,46.40	1,05.96	4.21	37.08
Total ..	55,33.72	51,18.06	78,28.01	20,45.58	1,21.06	12,66.82
7. Miscellaneous—						
Statistics	4.75	0.63	21.69	..	..	5.09
Information and Publicity	38.63	17.90	39.95	..	..	5.48
Local Bodies ..	1,54.85	66.11	3,24.00	..	..	46.00
State Capital Projects ..	6,00.00	20,47.06	36,94.00	36,94.00	24,27.00	10,43.77
Others	20.63	8.09	53.09	49.66	6.65	11.68
Total ..	8,18.86	21,39.79	41,32.73	37,43.66	24,33.65	11,12.02
Grand Total ..	1,57,66.90	1,48,56.65	2,93,15.19	1,79,24.98	51,48.07	50,81.83

STATEMENT II

Distribution of original state plan outlay of Rs. 341 crores which the State Government has decided to keep in view as the physical target

(Rs. in lakhs).

Head.	1	Third Plan.		
		Total.	Capital.	Estimated foreign exchange.
		2	3	4
1. Agricultural Programmes—				
Agricultural production	24,08·72	4,46·85	32·59
Minor Irrigation	27,32·00	9,90·00	3'00·00
Soil Conservation	4,70·91	9·96	5·00
Animal Husbandry	4,11·00	2,07·32	39·95
Dairying and Milk Supply	6,09·38	6,08·50	6·0
Forests	2,33·84	2·86	38·70
Fisheries	2,16·41	28·17	3·80
Warehousing and Marketing	85·00	70·21	..
	Total ..	71,67·26	23,63·87	4,26·04
2. Co-operation and Community Development—				
Co-operation	3,00·04	94·90	..
Community Development	17,39·00	5,39·00	..
Panchayats	1,97·00	..	..
	Total ..	22,36·04	6,33·90	..
3. Irrigation and Power—				
Irrigation	13,42·53	13,01·72	74·25
Flood Control, etc...	5,92·99	5,90·83	0·39
Power	38,50·00	38,50·00	20,60·20
-D V. C.	9,00·00	9,00·00	..
	Total ..	66,85·52	66,42·55	21,34·84
4. Industry and Mining—				
Large and Medium Industries..	1,15·00	91·64	37·67
Mineral Development	92·50	80·87	37·10
Village and Small Industries	10,96·50	6,48·56	43·21
	Total ..	13,04·00	8,21·07	1,17·98

Head.	(Rs. in lakhs).		
	Third Plan.		
	Total.	Capital.	Estimated foreign exchange.
1	2	3	4
5. Transport and Communications—			
Roads	25,00·00	25,00·00	25·00
Road Transport	1,00·00	1,00·00	2·00
Ports and Harbours .. .. .	..	..	..
Inland Water Transport	33·00	9·00	..
Tourism	17·00	12·00	..
Total ..	26,50·00	26,21·00	27·00
6. Social Services—			
General Education	34,64·43	1,26·93	..
Technical Education	9,59·77	1,12·57	14·16
Scientific Research	61·00	..	..
Health	19,80·03	7,08·21	1,02·69
Housing	10,99·48	9,49·75	..
Welfare of Backward Classes	3,50·00	..	..
Social Welfare	4,40·10	1,07·00	..
Labour and Labour Welfare	3,46·40	1,05·96	4·21
Total ..	87,01·21	21,10·42	1,21·06
7. Miscellaneous—			
Statistics	21·69	..	..
Information and Publicity	39·95	..	..
Local Bodies	3,57·00	..	..
State Capital Projects	48,94·00	48,94·00	24,27·00
Others	53·09	49·66	6·65
Total ..	53,85·73	49,43·66	24,33·65
Grand Total ..	3,41,09·76	2,01,36·47	52,60·57

STATEMENT III

Schemes included in the Third Plan

Rs. in lakhs.

Scheme.	Plan provision,, 1961-66		Estimated Foreign exchange, 1961-66.	Budget Estimate 1961-62.
	Total.	Capital.		
AGRICULTURAL PROGRAMMES				
Agricultural Production.				
<i>Seed Farms.</i>				
1. Seed Multiplication Farms				16.53
2. Extension of Hathwara Farm in Purulia District (spill over).				2.47
3. Seed Multiplication Farms at Malda and Burdwan	100.00	50.00	..	1.08
4. Additional Seed Multiplication Farms (spill over).				4.20
5. Establishment of Sisal Plantation at Rajnagar (spill over).				1.51
6. Seed Multiplication Farms at Burdwan ..				..
7. Jute seed multiplication at Krishnagar (spill over).	..	..	..	..
Total ..	100.00	50.00	..	25.79
<i>Supply, Multiplication and Distribution of Seeds</i>				
8. Seed Testing Organisation (spill over) ..	8.95	1.40	..	0.20
9. Strengthening of Seed Testing Organisation				2.05
10. Multiplication of Dhaincha Seeds for Green manuring.	64.34	..	..	0.66
11. Multiplication of wart immune varieties of potatoes in Darjeeling (spill over).				1.50
12. Seed Saturation with improved seeds ..				16.00
13. Seed Storage for every ten villages ..	1,20.00	1,02.00	..	..
Total ..	1,93.29	1,03.40	..	20.41
<i>Manures and Fertilisers.</i>				
14. Town Compost Scheme	3.41	..	..	0.66
15. Calcutta Sludge Distribution Scheme ..	15.17	..	..	2.35
16. Rural Compost—Local manural resources ..	80.95	..	..	5.00
17. Town Compost in under-developed Municipalities.	13.34	0.35	..	0.74
18. Distribution of Chemical Fertilisers ..	10.00	..	..	..
19. Distribution of super-phosphate ..	1,00.00	..	..	3.42
20. Distribution of Bone meal	19.00	..	..	2.19
Total ..	2,41.87	0.35	..	14.36

Rs. in lakhs.

Scheme.	Plan provision, 1961-66		Estimated Foreign exchange, 1961-66.	Budget Estimate 1961-62.
	Total.	Capital.		
<i>Improved Cultural Practices and Plant Protection.</i>				
21. Plant Protection	1,63.00	..	2.60	35.00
22. Destruction of wild animals	5.00	..	..	1.00
23. Improved Agricultural Practices and Improved Agricultural Implements.	62.00	..	..	6.00
Total ..	2,30.00	..	2.60	42.00

Development of Cash Crops

24. Jute Development	50.00	..	..	10.00
25. Sisal and Ramie Development	5.00	..	0.60	1.51
26. Sugar Cane Development	70.00	18.90	..	6.00
27. Coconut Development	15.70	..	..	1.80
28. Arecanut Development	4.25	..	..	0.50
29. Cashewnut Development	7.65	5.00	..	0.45
30. Cardamon Development	0.86	0.24	..	0.11
31. Pepper Development	0.86	0.24	..	0.11
32. Oilseeds Development	29.83	..	..	2.00
33. Development of lac industry	20.00	3.77	..	2.58
Total ..	2,04.15	28.15	0.60	25.06

Horticulture.

34. Fruit Development	30.00	}	7.55	..	2.10
35. Gardeners' Training	1.73				0.77
36. Development of Seed Potato Multiplication Farm at Rangbull, Darjeeling.	4.00				1.30
37. Establishment of progeny orchard-cum- nursery in the State.	2.05				0.57
38. Development of vegetable production and establishment of Nucleus seed farms.	7.50				1.95
39. Horticulture Extension Works .. ..	..	..	..	5.00	
Total ..	45.28	7.55	..	11.69	

Rs. in lakhs.

Scheme.	Plan provision, 1961-66		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
<i>Subsidiary Food.</i>				
40. Development of Potato .. ..	..	..	..	0.60
41. Development of Sweet Potato ..	0.45	..	..	0.06
42. Development of Tapioca	0.90	..	..	0.12
43. Development of Root Crops other than Potato, Sweet Potato and Tapioca.	3.00	..	..	0.42
44. Potato Seed Certification Centres ..	1.38	..	..	0.18
45. Subsidiary Seed Production Centre for Sweet potato, Tapioca, Colocacia etc.	0.94	..	..	0.18
46. Subsidiary Food Crops Divisions ..	2.09	0.03	..	0.38
47. Subsidiary, Supplementary and Diversified Food.	50.00	15.44	..	16.04
Total ..	58.67	15.47	..	17.98

Agricultural Education.

48. Expansion of the Birla College of Agriculture ..	..	..	..	8.94
49. Establishment of an Agricultural College at Haringhata (spill over).	..	..	..	0.23
50. Establishment of an Agricultural School at Cooch Behar (spill over).	..	27.00	..	0.02
51. Establishment of a Second Agricultural College.	20.00	..	0.50	1.00
52. Establishment of Schools for training of farmers' son.	21.00	..	..	5.00
53. Aid to private institutions for Agricultural Training.	1.00	..	..	0.20
Total ..	42.00	27.00	0.50	15.39

Agricultural Extension and Training.

54. Improvement of Agricultural Schools and Training Centre.	74.80	25.75	1.00	14.96
55. Establishment of an Extension Wing at the Birla College of Agriculture.	..	..	..	0.95
56. Establishment of new Extension Training School.	25.00	18.40	1.00	25.00
57. Package Programme (Intensive District Agricultural Programme).	1,50.00	32.50	..	10.00
58. Scheme for Farm Advisory Works ..	25.00	..	..	5.00
59. Miscellaneous Training Scheme—Training of Extension Staff (spill over).	13.20	7.20	..	..
Total ..	2,88.00	83.85	2.00	55.91

Rs. in lakhs.

Scheme.	Plan provision, 1961-66		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		

Agricultural Research.*Agricultural Engineering Section.*

60. Scheme for Research on Agricultural implements.	4.88	1.50	..	1.50
61. Scheme for study on water requirement of crops.	3.00	1.20	..	1.62
62. Establishment of Research Institute at Haringhata.				11.98
63. Lump Sum provision for other research Schemes.				2.94
64. Scheme for research on rice—				
(i) Establishment of Central Research Station at Chinsurah.				6.00
(ii) Rice Research Sub-station-Salt paddy Research station (24-Parganas)				1.53
(iii) Flood-resistant Paddy Research Station.				1.53
(iv) Drought resistant Paddy Research Station.				0.50
(v) Zonal Station for research on hill paddy				0.50
(vi) Zonal station for research on upland paddy.				0.55
65. Scheme for research on wheat				1.00
66. Scheme for research on maize—Maize research schemes at Kalyani and Kalimpong.				0.82
67. Scheme for research on pulses and millets—Strengthening of the section of crop research for research on pulse and millet.	1,51.78	70.00	..	0.50
68. Scheme for research on oil seeds—Establishment of regional oil seeds research station at Murshidabad and two sub-stations for laterite and northern regions.				2.34
69. Establishment of a Regional Coconut Research Station.				0.50
70. Scheme for the establishment of a Sugar cane Research Station.				2.50
<i>Horticulture Crops.</i>				
71. Expansion of the main Horticultural Research Station at Krishnagar.				1.50
72. Establishment of Horticultural Research Sub-Station for Sub-Tropical Fruits in Darjeeling District.				1.00
73. Establishment of Vegetable Research Station in Darjeeling District.				1.05
74. Establishment of one Horticultural Research Sub-Station for temperate fruits in Darjeeling.				0.50
75. Establishment of one Horticultural Research Sub-Station for lateritic tracts.				0.20
76. Banana Research Station at Chinsurah ..				0.90

Rs. in lakhs.

Scheme.	Plan provision, 1961-66		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
<i>Potato and Tuber Crops.</i>				
77. Strengthening of Potato Section ..				0.10
78. Establishment of a Potato Experimental Station in Hooghly.				1.00
79. Strengthening of Mycology Section ..				0.50
80. Strengthening of Entomology Section ..				0.20
81. Agricultural Chemistry Section —				
(i) Strengthening of Agricultural Chemistry Section.				0.30
(ii) Model Agronomic Experiment ..				0.33
(iii) Simple Fertiliser Trial ..				1.91
(iv) Soil Testing Service ..				0.42
82. Strengthening of Mycobiology and Bio-Chemistry.				0.50
83. Research Farms and Sub-Stations ..				3.70
84. Establishment of Research Sub-Stations (spill over).				0.50
Total ..	1,59.66	72.70	..	50.92

Agricultural Statistics.

85. Establishment of a State Agro-Economic Section.			0.06	1.13
86. Establishment of Agro-Economic Research Centre at Kalyani.			0.13	2.17
87. Establishment of Statistical Unit ..	27.05	..	0.13	6.53
88. Establishment of a statistical section for Bio-Metry and Design and Analysis of Experiments.			0.23	0.66
Total ..	27.05	..	0.55	10.49

Demonstration and Publicity Schemes.

89. Agricultural Information Service and Demonstration.	13.00	} 4.50	} 3.00	3.00
90. Agricultural Information and works (spill-over).	..				2.77
91. Demonstration Centres, Plots etc. (spill over)	..	..	..	5.84
92. Crop competition (spill over) ..	..	..	..	1.00
93. Improved Agricultura Implements for V. L. W. Block Head Qrs., Farm Advisory Head Quarters.	..	..	..	2.00
94. Demonstration in irrigated and assured rain fall areas.	1.00	..	..	..
95. Permanent exhibition ground in Directorate Head Quarters.	2.88	2.50	..	0.29
Total ..	16.88	7.00	3.00	14.90

Rs. in lakhs.

Scheme.	Plan provision 1961-66		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
<i>Agricultural Marketing Schemes.</i>				
96. Loan for Development of regulated Markets	10.78	10.78	..	2.00
97. Departmental staff for supervision management and inspection.	2.40	..	..	0.16
98. Subsidy for entertainment of Supervisory Staff.	1.82	..	..	0.46
99. Establishment of Grading Services—				
(i) Entertainment of trained graders ..	1.48	..	..	0.22
(ii) Purchase of equipment	0.40	..	..	0.18
(iii) Establishment of Supervisory Grading Centres.	1.36	..	..	1.35
100. Schemes for improvement of market intelligence.	4.81	..	..	1.36
101. Scheme for improvement and Extension of market research.	2.50	..	..	0.40
102. Pilot Scheme for the marketing of Jute (Spill over).	..	..	..	1.05
103. Training in Agricultural Marketing ..	..	..	..	0.14
104. Strengthening of the Marketing Branch of the Directorate.	2.50	..	..	0.40
105. Introduction of Marketing Extension Service	2.70	..	..	0.40
106. Scheme for granting loan to the fruit and vegetable preservation Units.	4.00	4.00	..	0.80
107. Establishment of three fruit processing Centres.	2.50	0.30	..	0.30
108. Scheme for training in fruit and vegetable preservation.	1.40	..	..	0.26
109. Pilot Scheme for demonstration of better system of packaging, storing etc.	..	..	..	0.30
110. Establishment of ghee and oil grading laboratories.	1.87	1.00	..	..
111. Setting up of a museum at Calcutta for preserving graded samples of different Agricultural Commodities.	1.63	1.00	1.00	..
112. Establishment of a Laboratory for grading and sampling of cereals, pulses and oilseeds.				
Total ..	42.15	17.08	1.00	9.78
<i>Administration.</i>				
113. Reorganisation of the Directorate ..	32.00	..	..	5.04
114. Replacement of vehicles and purchase of new ones for S.A.Os.	4.00	..	..	1.50
Total ..	36.00	..	..	6.54

Rs. in lakhs.

Scheme.	Plan provision, 1961-66		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
<i>Others.</i>				
115. Double cropping in River Valley Project commanded area (spill over).	..	..	..	1.35
116. Multiple cropping within tube well com- manded area.	..	..	..	0.98
Total	..	..	..	2.33
117. Consolidation of Holdings	..	..	10.00	..
<i>Land Development.</i>				
118. Land Reclamation and Land Development	1,00.00	0.20	..	15.00
119. Investigation in regard to the estuarine problems of Sundarban.	6.87	..	2.84	4.00
120. Survey works in Sagar Island	..	0.13	..	0.18
121. Detailed Soil Survey of West Bengal	..	..	..	0.40
122. Closure of creeks in Sagar Island in 24- Parganas District.	5.00	5.00	..	5.00
123. Closure of Creeks in Kakdwip in Sundarbans 24-Parganas District.	5.00	5.00	..	..
124. Northern Salt Lake Poldar Scheme	..	7.00	7.00	7.00
Total	..	1,24.00	17.20	9.84
Total—Agricultural Production	..	18,19.00	4,29.75	20.09
Minor Irrigation.				
1. Deep Tubewell Irrigation	..	7,13.92	2,79.00	2,00.00
2. Electricity Power	..	2,44.00	..	..
3. Small Irrigation	..	91.00	..	16.00
4. Tank Irrigation	..	1,38.00	..	18.00
5. Minor Drainage Schemes	..	17.08	..	17.08
6. Minor Irrigation Schemes	..	20.00	..	20.00
7. Lift Irrigation from rivers and beel	..	3,98.00	3,50.00	50.00
8. Minor Irrigation Scheme (new)	..	5.00	..	5.00
9. Minor Drainage Scheme (new)	..	5.00	..	5.00
Total	..	16,32.00	6,29.00	2,00.00
				3,31.08

Rs. in lakhs.

Scheme.	Plan provision, 1961-66.		Estimated Foreign exchange 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		

Soil Conservation.

1. Soil Conservation and Land Use Planning ..	4.82	0.25	..	1.14
2. Soil Conservation Extension Work on Waste Land and Agricultural Land.	2,65.27	4.55	..	15.00
3. Soil Conservation Schemes in Keleghai and other areas.	27.64	..	..	3.00
4. Soil Conservation in denuded Forests ..	1,00.00	..	5.00	18.00
5. Soil Conservation Research Stations in Late-rite Soil Zone and other hills.	10.14	4.50	..	2.00
6. Soil Conservation Demonstration Projects in the plains and on the hills—				
(i) Demonstration scheme in the Plains ..	4.99	..	..	} 3.10
(ii) Teesta Tributories originating in Darjeeling hills.	11.76	0.36	..	
(iii) Catchment area of Lish, Gheesh, Chel, Nasra and Relle.	0.93	0.30	..	
7. Master Plan for Soil Conservation in Lish Catchment.	45.36	..	..	..
Total ..	4,70.91	9.96	5.00	42.24

Animal Husbandry.*Disease Control Rinderpest Eradication.*

1. Establishment of twelve new check-post ..	7.55	..	..	0.50
2. Continuation of Second quarantine station	0.95	..	..	0.20
3. Extension of field Campaign	5.60	..	..	4.10
4. Mass production of Rinderpest ..	6.50	..	..	1.00
5. Central Medical store	1.00	..	..	0.20
Total ..	21.60	..	..	6.00

Expansion of Biological Product Station.

6. Production of vaccine for B. Q. H. S. Ranikhet and other diseases.	8.00	2.00	..	3.18
7. Increased output of Biological Products ..	3.80	..	0.50	1.10
Total ..	11.80	2.00	0.50	4.28

Rs. in lakhs.

Scheme.	Plan provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
<i>Aid Centres and Clinics.</i>				
8. Establishment of new Veterinary Aid Centres.	14.55	..	..	0.80
9. Establishment of Ambulatory Clinic ..	7.00	..	2.60	2.70
Total ..	21.55	..	2.60	3.50
<i>Slaughter House.</i>				
10. Construction of a new Slaughter House with arrangements for recovery of Glandular Products.	1,50.00	1,50.00	36.30	13.42
<i>Training, Research and Statistics.</i>				
11. Residential accommodation for the teaching staff in Bengal Veterinary College.	3.00	3.00	..	..
12. Establishment of a Statistical Section in Veterinary Directorate.	1.00	..	..	0.20
13. Development of Veterinary Research Organisation.	3.80	..	..	1.30
Total ..	7.80	3.00	..	1.50
<i>Others.</i>				
14. Improvement of hide flaying and carcass utilisation.	2.70	..	0.25	0.50
15. Strengthening of Supervisory Organisation in Muffasil and Headquarters.	2.92	..	..	0.40
16. Strengthening of staff of Veterinary Directorate.	13.10	..	..	1.20
17. Construction of office at Range and District Headquarters.	2.63	2.63	..	..
Total ..	21.35	2.63	0.25	2.10
<i>Construction of Hospitals and Dispensaries.</i>				
18. Construction of "A" Class Hospitals ..	5.40	5.05	..	1.20
19. Construction of "B" Class Hospitals ..	7.20	6.85	..	1.50
20. Construction of Dispensaries in N. E. S. Blocks.	11.88	11.27	..	2.09
21. Increase of grants for medicine etc. to veterinary Aid Centres outside C.D.P. and N.E.S. Block.	0.17	..	..	0.10
Total ..	24.65	23.17	..	4.89

Scheme.	Rs. in lakhs.			
	Plan provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
<i>Cattle Development.</i>				
22. Intensification of existing key village centres	2.00	..	..	0.48
23. Expansion of existing key village centres ..	2.00	..	..	..
24. New key village Blocks	3.50	..	..	..
25. Centralised semen collection centres ..	8.00	2.50	..	2.00
26. Strengthening of supervisory organisation for the key village scheme.	5.70	..	..	0.12
27. Calf rearing subsidy	5.10	..	..	1.00
28. Organisation of marketing facilities in key village area.	1.40	..	..	..
29. Marketing unit at Headquarters ..	0.25	..	..	..
30. Fodder Development Staff	0.50	..	..	0.10
31. Pasture Development at State Farms ..	0.95	..	..	..
32. Pasture Development in Blocks ..	1.00	..	..	..
33. Seed Multiplication and Fodder Demonstra- tion Farm.	3.00	1.55	..	0.27
34. Distribution of fodder seeds and cuttings ..	5.00	..	..	0.10
35. Subsidy of Silo pits	0.75	..	..	0.08
36. Subsidised chaff cutters	0.15	..	..	..
37. Establishment of Bull Rearing Farm ..	7.60	3.50	..	0.70
38. Demonstration on Farmer's Land ..	0.25	..	..	..
39. Mixed Farming	15.00	..	..	..
Total ..	62.15	7.55	..	4.85
<i>Piggery Development.</i>				
40. Pig breeding unit at Darjeeling ..	5.91	3.00	..	0.70
41. Piggery development blocks ..	4.00	..	..	0.56
42. Piggery development staff	0.50	..	..	..
Total ..	10.41	3.00	..	1.26
<i>Sheep Development.</i>				
43. Sheep development schemes	3.00	0.75	..	0.60

Scheme.	Rs. in lakhs.			
	Plan provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget, Estimate 1961-62.
	Total.	Capital.		
<i>Training, Research, Statistics, etc.</i>				
44. Specialised training in A. I. and Physio-pathology of reproduction.	0.20	..	..	..
45. Specialised training in Animal Husbandry to extension officers.	0.40	..	..	..
46. Training of stockman and field assistants ..	1.00	..	..	0.60
47. Strengthening of Nutrition Research Station at Haringhata.	0.60	..	..	..
48. Establishment of a Statistical Section at Head Quarters.	0.60	..	..	..
Total ..	2.80	..	..	0.60
<i>Other Schemes.</i>				
49. Cattle shows	1.25	..	..	0.20
50. Mass Castration of Scrub Bulls	3.19	..	..	0.40
51. Public Relation Service	0.75	..	..	..
52. Strengthening of Range and District Officers	2.00	..	..	0.30
53. Strengthening of Animal Husbandry Branch at Directorate Head Quarter.	2.45	..	..	0.40
54. Implementation of recommendations of Nalagarh Committee in A. H. Department.	3.00	..	..	..
55. Poultry Development Schemes	40.25	9.72	0.30	2.80
Total ..	52.89	9.72	0.30	4.10
<i>Spillover.</i>				
56. Poultry extension centres	7.00	5.50	..	1.50
57. Improvement of Live Stock Industry ..	6.00	..	..	0.70
58. Calf rearing subsidy	1.00	..	..	0.30
59. Lump Sum provision for Research Schemes of Central Government and Commodities Committee (spillover.).	7.00	..	..	0.50
Total ..	21.00	5.50	..	3.00
Total: Animal Husbandry: ..	4,11.00	2,07.32	39.95	50.10

Rs. in lakhs.

Scheme.	Plan provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
Dairying and Milk Supply.				
1. Greater Calcutta Milk Supply Scheme (spill)	1,51·00	1,51·00	..	} 1,00·00
2. Expansion of Dairy Schemes	22·00	22·00	..	
3. New Milk Supply Schemes	97·00	97·00	..	
4. Rural Creameries	} 50·00	} 50·00	} 6·00	
5. Milk Product Factory				
6. Cheese Factory				
7. Cattle feed compounding factory ..	15·00	15·00	..	
8. Milk Boards	5·00	5·00	..	
9. Training—				
(i) New Indian Dairy Diploma Centre ..	} 10·00	} 10·00	} ..	
(ii) New B.Sc. (Dairying) Centre ..				
(iii) Stipends for I.D.D. and B.Sc. Trainees sponsored.				
(iv) In-plant training				
10. Refrigerated transport	6·00	6·00	..	
11. Extension Services (Covering Schemes No. 1-5).	30·00	30·00	..	
12. Removal of Urban Cattle	72·00	72·00	..	
13. Loans for purchase of Milk animals ..	47·00	47·00	..	
14. Dairy Development Staff	3·00	3·00	..	
15. Survey and Statistics and development re- search.	3·00	3·00	..	
16. Development of milk co-operatives	1·54
Unallocated	89·00	89·00
Total ..	6,00·00	6,00·00	6·00	1,01·54

Forests.

1. Farm Forestry	10·00	..	..	0·10
2. Plantations	12·00	..	..	2·75
3. Consolidations (conservation)	10·00	..	..	1·50
4. Forest Resources Survey	1·00	..	..	0·20
5. Working Plans and Organisations ..	4·00	..	..	0·60
6. Rehabilitation of degraded Forests ..	35·00	..	6·00	7·00
7. Nature conservation	12·00	..	..	1·10

Rs. in lakhs.

Scheme.	Plan provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
8. Timber operation and Forest Utilisation ..	28.00	..	20.00	1.78
9. Training of staff	1.00	..	..	0.10
10. Forest Research and Institute	2.00	..	..	0.40
11. Communications	28.00	..	12.00	3.20
12. Buildings	25.00	..	..	6.97
13. Labour and Other amenities	3.00	..	..	0.60
14. Publicity	1.00	..	..	0.20
15. Protection	10.00	..	..	1.30
16. Cultivation of Medicinal Plants—				
(a) Ipocae Cultivation Scheme	28.00	2.86	..	4.53
(b) Cardamon cultivation scheme	2.47	..	..	0.82
(c) Tung cultivation scheme	7.52	..	..	1.51
(d) Experimental Cultivation of Lycopodium and other species.	0.85	..	..	0.17
17. Improvement of Zoological Garden	13.00	..	0.70	2.50
Total: Forests ..	2,33.84	2.86	38.70	37.33

Fisheries.

1. Short term loan for augmenting fish Production in culturable tanks of West Bengal.	6.70	6.70	..	1.10
2. Medium term loan for fish production in semi-derelict tanks of West Bengal.	7.00	7.00	..	1.00
3. Development of large derelict fisheries in the State of West Bengal.	19.94	..	..	3.43
4. Popularising the use of fish pond manure for increasing the productivity of pond fisheries.	1.25	..	..	0.25
5. Carrying out a sample survey to assess the inland fisheries resources of the State.	1.12	..	..	0.37
6. Demonstration fish farm on private parties tanks in every thana of the State.	1.75	..	..	0.33
7. Intensifying production of carp fry by granting bonus to the culturists.	2.25	..	..	0.25
8. Exploitation of Coastal fisheries of the State by mechanising indigenous fishing crafts etc.	4.97	..	2.20	0.64
9. Assisting the needy fishermen of the State and their co-operatives by giving loan for augmenting fish production.	5.00	5.00	..	0.50
10. Experimental fish farm at Kalyani	5.05	..	..	3.16
11. Sea fishing with the help of Danish Cutters and Japanese Trawlers.	24.00	..	..	..

Rs in lakhs.

Scheme.

	Plan provision, 1961-66		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
12. Development of "South Salt Lake" area for increasing fish supply to Calcutta Markets—				
(i) Part 'A' of the scheme (Co-operative Farm).	33.13	}	.. ..	0.10
(ii) Part 'B' of the Scheme (Development Farm).	3.43			
13. Improvement of private owned derelict tanks and other confined Water areas for pisciculture.	6.00	..	..	0.49
14. Establishment of seed farms for production of quality seeds through artificial breeding of Indian Major Carp by hormone treatment.	12.00	..	..	0.20
15. Development of fisheries in the hill areas of Darjeeling district by confining perennial Jhora Waters.	0.25	0.25	..	0.05
16. Pilot scheme for Reorganisation of Calcutta Fish markets on Co-operative basis.	15.25	..	1.60	0.95
17. Service Parties to render certain service facilities to fish farm ancillary to increase fish production.	2.85	..	..	0.69
18. Setting up producers' Co-operatives for culture and capture of fisheries sectors for improving the present supply and production of fish in the State.	19.80	1.00	..	1.54
19. Providing harbour facilities to Coastal Fishermen to continue fishing operation for longer periods.	13.00	..	..	..
20. Increasing the present rate of production of shark liver oil and fish meal in West Bengal.	2.67	..	..	0.25
21. Additional Supervisory and Head Quarters' Staff to cope with the increased volume of work contemplated under Third Five-Year Plan.	2.40	..	..	0.15
22. Establishment of an aquarium in Calcutta	15.02	..	..	0.35
23. Development of fishery Societies ..	..	..	..	2.34
Total : Fisheries ..	2,04.83	19.95	3.80	18.14

Warehousing and Marketing.

1. Warehousing Corporation	35.00	35.00	..	5.00
2. Licensing of Warehouses	2.00	..	..	0.30
3. Scheme for granting loan to Warehousing Corporation.	6.50	6.50	..	..
4. Setting up of State owned cold storage ..	8.50	2.00	..	5.21
5. Scheme for granting of loans to Municipal Markets for setting up of cold storage.	10.00	10.00	..	2.00
Total ..	62.00	53.50	..	12.51

Rs. in lakhs.

Scheme.	Plan provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
CO-OPERATION AND COMMUNITY DEVELOPMENT				
Co-operation.				
1. Development of Agricultural Marketing Societies—				
(i) Agricultural marketing Societies ..	50.12	40.88	..	9.74
(ii) Assistance to the Apex marketing Societies.				1.13
(iii) Establishment of grading Organisation.				0.10
(iv) Establishment of Rural Godowns ..				3.00
2. Supply of long-term credit	3.23	..	..	1.73
3. Establishment of Co-operative Cold Storage	4.00	4.00	..	..
4. Development of processing Societies ..	7.22	6.62	..	2.37
5. Expansion of Rural Credit—(Short term and medium term)—				
(i) Reorganisation of Central Co-operative Bank.	14.76	..	..	5.29
(ii) Subsidy to Apex Co-operative Bank				0.18
6. Organisation of Primary Panchayat level service Co-operative Societies—				
(i) Reorganisation of Primary Credit Societies.	73.90	..	..	16.00
(ii) Organisation of Village Societies ..				1.50
7. Development of Consumers' Societies ..	4.97	3.25	..	0.78
8. Organisation of Co-operative Sugar Mills ..	25.00	25.00	..	..
9. Creation of administrative Supervisory and Office Personnel.	16.45	..	..	1.45
10. Co-operative Farming	25.14	15.61	..	5.18
11. Organisation of non-official Co-operative training agencies :				
(i) Reorganisation of non-official training agencies.	6.84	..	..	1.46
(ii) District supervisory unit ..				..
12. Expansion of Co-operative Training and Education.	13.72	..	..	2.92
13. Funds (Relief and Guarantee and Co-operative Development Fund).	..	..	..	..
14. Special bad debt reserve for village co-operatives.	..	..	..	..
15. Miscellaneous .. ..	..	..	..	..
16. Outright grants to Central Banks ..	..	..	..	..
Total ..	2,45.35	95.36	..	52.83
Community Development ..	12,39.00	3,84.00	..	2,50.70
Village Panchayats	1,97.00	..	..	16.29

Scheme.	Rs. in lakhs.				
	Plan provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.	
	Total.	Capital.			
IRRIGATION AND POWER					
Irrigation					
1. Mayurakshi Reservoir Project	2,10·00	2,10·00	..	45·00	
2. Kangsabati Reservoir Project	8,07·00	8,07·00	70·00	1,64·00	
3. Karatowa-Talma Irrigation Scheme	24·97	24·97	..	7·81	
4. Saharajore Irrigation Scheme	15·00	15·00	..	6·00	
5. Jhargram Irrigation Scheme	0·10	..	..	0·10	
6. Rajar Bandh Irrigation Scheme	0·50	..	..	0·50	
7. Subankar Danra Irrigation Scheme	0·56	..	..	0·56	
8. Berai Canal Irrigation Scheme	0·10	..	..	0·10	
9. Outlay on schemes for transferred territories	2·35	..	..	2·35	
10. Hinglow Irrigation Scheme in the district of Birbhura.	50·00	50·00	3·00	..	
11. Bandhu River Irrigation Scheme in Purulia district.	17·75	17·75	..	..
12. Equipment of Central Design Office and Library.	1·35	..	0·25	1·35	
13. Training of Irrigation Engineers in selected River Valley Projects.	0·20	..	..	..
14. Development of River Research Institute, West Bengal—3rd phase.	15·00	15·00	1·00	10·00	
15. Research on basic and fundamental problems relating to River Valley Projects and Flood Control Works.	3·21	..	..	..
16. Construction of office buildings and quarters for Engineers and staff under North Bengal.	4·20	..	..	..
17. Construction of buildings for shifting of quarters of East Sundarbans Division from Calcutta to Hasnabad.	4·06	..	..	2·00	
18. Construction of buildings for shifting of quarters of West Sundarbans Division from Calcutta to Kakdwip.	4·05	..	..	2·00	
19. Construction of buildings for shifting of headquarters of Etamogra Irrigation subdivision to Bhagawanpur.	1·60	..	..	..
20. Residential quarters of Officers and staff of I & W Dept. in Sundarbans.	5·00	..	..	1·00	
21. Converting residence of Executive Engineer, Midnapore Division, into combined quarters of Midnapore and East Midnapore Divisions.	0·10	..	..	0·10	
22. Construction of Inspection Bunglow in North Bengal.	1·20	..	..	..
23. Survey and investigations for preparation of irrigation, navigation and drainage schemes.	8·00	..	..	2·00	
24. Investigation and model experiment in connection with Ganga Barrage Project.	4·23	..	..	4·23	
Total ..	11,80·53	11,39·72	74·25	2,49·10	

Rs. in lakhs.

Scheme.	Plan provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
Flood Control Schemes				
1. Protection of right bank of Char Torsa above NH-31 in Cooch Behar district.	1.27	1.27	..	1.27
2. Preventing diversion of Beach Raidok into Dhaulajhora.	2.00	2.00	..	1.00
3. Protection of Tal areas in Sambalpur union in Malda district.	15.32	15.32	..	8.00
4. Protection of Nagharia village in Malda district.	6.40	6.40	..	5.00
5. Protection work on left bank of the river Hooghly between Nathupalghat and Shyamghat in 24-Parganas district.	1.00	1.00	..	1.00
6. Protection of the right bank of the Bhagirathi at Kalna, district Burdwan, against erosion, part A.	4.27	4.27	..	3.00
7. Extension of Alipurduar town embankment on upstream side in Jalpaiguri district.	5.28	5.28	..	4.00
8. Construction of an embankment of the Teesta from Barnes to Domohani.	20.90	20.90	..	18.00
9. Outstanding land acquisition charges on some completed flood control schemes in Cooch Behar and Jalpaiguri district.	4.00	4.00	..	2.00
10. Protection of Hili twon and village Aptair in West Dinajpur district from erosion and floods.	1.49	1.49	..	1.49
11. Protection of left bank of the Hooghly near Sukchar in 24-Parganas district.	0.50	0.50	..	0.50
12. Further expenditure in some emergency scheme to be taken up during working season of 1960-61.	10.00	10.00	..	6.00
13. Hydrological investigation in flood affected parts of South and South-west Bengal required for preparation of new flood scheme.	5.03	5.03	0.39	2.00
14. Aerial contour survey in flood affected areas of Murshidabad, Hooghly, Howrah and Midnapur, etc.	7.00	7.00	..	5.00
15. Protecting right bank of the Bhagirathi at Kalna, district Burdwan, against erosion, part B.	10.00	10.00	..	..
16. Protection of the right bank of Bhagirathi Patuli, P.S. Purbasthali, District Burdwan.	2.23	2.23	..	2.00
17. Protection on the right bank of the Hooghly near Mallick Ghat, P.S. Chinsura, district Hooghly.	2.08	2.08	..	..
18. Protection of Kapil Asram at Chawdhati Tribeni against erosion of the Hooghly, district Hooghly.	0.23	0.23	..	0.23
19. Protection of the upper strand Road on the right bank of the Hooghly in front of old Collegiate School at Serampur, district Hooghly.	0.50	0.50	..	0.50
20. Protection of the right bank of the Hooghly in front of Risra High School, district Hooghly.	0.18	0.18	..	0.18

Rs. in lakhs.

Scheme	Plan provision, 1961-66.		Estimated	
	Total	Capital	Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
21. Construction of an embankment on the left bank of the Char Torsa from Hashimara Railway Bridge to NH31, Jalpaiguri district.	30.00	30.00	..	..
22. Jalpaiguri town protection work, Second Phase.	20.00	20.00	..	..
23. Protecting low areas in P.S. Kharba from inundation of the rivers Mahananda and Mora Mohananda in Malda district.	10.00	10.00	..	..
24. Training the river Mal below NH31 in Jalpaiguri district.	10.00	10.00	..	..
25. Protective work on the eroded left bank of the river Jallangi at Krishnagar, district Nadia.	0.45	0.45	..	0.45
26. Protection of Taki town against erosion of Ichamati, district 24-Parganas.	1.36	1.36	..	1.00
27. Protection of the right bank of the river Punarbhaba and left bank of the river Tango in P.S. Gangarampur and Bansihari, district West Dinajpur.	9.00	9.00	..	..
28. Protection of the east bank of the river Punarbhaba in P.S. Gangarampur and Tapan, district West Dinajpur.	14.00	14.00	..	..
29. Protection of Balurghat town from erosion ..	14.00	14.00	..	..
30. Hydrological investigations on the Ajoy river.	3.00	3.00	..	1.00
31. Survey and investigation for preparation of multipurpose project.	3.00	3.00	..	..
32. Survey and investigation for formulation of flood control schemes in Trans-Damodar area and Kaliaghye basin.	4.00	4.00	..	1.00
33. Survey and investigation for flood control Schemes in Kandi Subdivision, district Murshidabad.	0.50	0.50	..	0.25
34. Preventing diversion of Beech Raidak into Sukumari and the Raidak II in Jalpaiguri district.	9.50	9.50	..	..
35. Training in river Gheesh below the Road/Bridge in Jalpaiguri district.	10.00	10.00	..	..
36. Protection on the right bank of the river Raimatong in Jalpaiguri district.	5.00	5.00	..	..
Total ..	2,43.49	2,43.49	0.39	64.87

Drainage and anti-water logging Schemes.

1. Sonarpur-Arapanch-Matla Drainage Scheme Part II.	8.82	8.82	..	1.47
2. Bagjola-Ghuni-Jatragachi Drainage Scheme	5.62	5.62	..	2.37
3. Amta Basin Drainage Scheme ..	6.90	6.90	..	6.90
4. Bhuri Shyamsundar Bil Drainage Scheme in Burdwan district.	5.00	5.00	..	..

Rs. in lakhs.

Scheme.	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
5. Re-excavation of the Streams Tarajuli, Amodar and Hurhura Khal in Hooghly district.	10.00	10.00	..	..
6. Gobindapur Itkhola Scheme in Malda district.	13.00	13.00	..	..
7. Maliar Bil Drainage Schemes in Malda district.	20.00	20.00	..	8.00
8. Moynabasin drainage scheme in Midnapur	15.00	15.00	..	..
9. Contai Basin Drainage Scheme in Midnapur district.	10.00	10.00	..	..
10. Re-excavation of a khal from Chamtabil and re-excavation of Guruli Khal in Ranaghat Subdivision, dist. Nadia.	10.00	10.00	..	..
11. Sealdagong basin drainage scheme in 24-Parganas district.	40.00	40.00	..	5.00
12. Churial basin drainage scheme in 24-Parganas district.	15.00	15.00	..	..
13. Harahatuganj Drainage Scheme ..	0.10	..	..	0.10
14. Soadighi-Gangakhali Drainage Scheme ..	1.00	..	..	0.25
15. Silt Clearance of Dhunia Khal ..	..	..	..	..
16. Canalising the lower Damodar from Bagarhana upto Hooghly in Howrah district.	20.00	20.00	..	..
17. Nowi Basin drainage scheme in 24-Parganas district.	30.00	30.00	..	..
18. Re-excavation of Etabaria and Kalabaria Khal.	1.06	..	..	1.06
Total ..	2,11.50	2,09.34	..	25.15
Total—Flood Control, drainage and anti-water logging.	4,54.99	4,52.83	0.39	90.02

Power

1. Jaldhaka—Stage I	2,95.00	2,95.00	1,05.00	} 3,50.00
2. Jaldhaka—Stage II ..	..	..	15.00	15.00	..
3. Bandel Thermal Power Station ..	..	..	29,19.00	29,19.00	18,00.00
4. Transmission and Distribution ..	..	..	411.00	4,11.00	1,28.20
5. Rural Electrification ..	..	..	40.00	40.00	2.10
6. Normal Expansion of existing grids ..	..	..	1,50.00	1,50.00	18.90
7. Testing Laboratory ..	..	..	12.00	12.00	6.00
8. Hydro Investigation ..	..	..	8.00	8.00	..
Total	38,50.00	38,50.00	20,60.20	3,50.00
D. V. C.	900.00	800.00

Rs. in lakhs.

Scheme.	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		

INDUSTRY AND MINING**Large and Medium Industries**

1. Establishment of an undertaking for a 25,000-spindle cotton mill for spinning yarn, average 50s.	65.00	51.64	7.67	14.00
2. Establishment of a spun silk mill ..	50.00	40.00	30.00	10.00
Total ..	1,15.00	91.64	37.67	24.00

Mineral Development

1. Establishment of Geological Prospecting Branch of the State Mines and Minerals Directorate.	11.63	..	3.60	1.27
2. Coal Mining by State Government ..	80.87	80.87	33.50	0.58
Total ..	92.50	80.87	37.10	1.85

Village and Small Industries**HANDLOOM INDUSTRY***Silk*

1. Supply of Improved Appliances to Weavers	1.00	0.25	..	0.25
2. Supply of Working Capital loan ..	5.00	5.00	..	1.00
3. Supply of Share Capital loan	1.00	1.00	..	0.20
4. Establishment of Design Centre ..	1.00	..	..	0.15
Total ..	8.00	6.25	..	1.60

Wool

5. Supply of Improved Appliances ..	1.00	0.25	..	0.20
6. Supply of Working Capital to Handloom Weavers.	1.00	1.00	..	0.20
7. Construction of Worksheds for Weavers ..	0.50	0.50	..	..
Total ..	2.50	1.75	..	0.40

Scheme.	Rs. in lakhs.				
	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.	
	Total.	Capital.			
<i>Cotton</i>					
8. Supply of Improved Appliances ..	15.00	3.75	..	3.20	
9. Subsidy in Sales of Cloth	70.00	..	..	17.00	
10. Publicity and propaganda	6.00	..	..	1.20	
11. Collection of Statistics	6.00	..	0.04	1.10	
12. Housing Colony of Weavers ..	25.00	16.67	..	6.05	
13. Renovation of Rehabilitation of Weavers' Homes					
14. Subsidy on Interest charges on Working Capital.	6.50	..	..	0.75	
15. Establishment of 2 composite finishing plants.	40.00	22.36	14.00	5.50	
16. Establishment of 2 Model Block Printing and Pattern-making Units.	8.00	..	..	1.28	
17. State participation in Share-Capital of West Bengal Handloom Co-operative Societies.	4.00	2.00	..	2.00	
18. State participation in Share-Capital of Industrial Unions and Primary Societies.	11.00	7.78	..	3.22	
19. Establishment of 8 Inter-State Sales Depot	5.00	..	..	0.30	
20. Delivery Vans etc. for Marketing ..	0.45	..	..	0.30	
21. Supervisory Grant for Apex Marketing Society.	2.50	..	..	0.50	
22. Unit for quality marking and stamping ..	5.45	..	..	1.28	
23. Award of prizes	0.75	..	..	0.15	
24. Expansion of Handloom Research Station	1.50	..	..	0.40	
25. Provision for share-capital loan to Weavers	5.00	5.00	..	1.00	
26. Mobile Vans for Marketing and Publicity of Handloom Products.	4.36	..	..	0.70	
27. Establishment of Sales Depot	10.00	..	..	0.70	
28. Establishment of a 25,000-spindle cotton mill on co-operative basis for spinning yarns, average 30s.	50.50	43.00	10.50	6.00	
Total ..	277.01	100.56	24.54	52.63	
29. Organisational Expenses .. .	23.99	..	..	5.02	
Total—Handloom ..	311.50	108.56	24.54	59.65	
30. <i>Khadi and Village Industries</i> ..	10.00	..	..	2.00	

Rs. in lakhs.

Scheme.	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		

Handicrafts

31. Promotion of Handicrafts Exports ..	7.00	..	..	1.63
32. Supply of Models, Designs and Technical Assistance.	5.00	..	..	0.80
33. Publicity for Handicrafts	3.00	..	..	0.38
34. Expansion of quality marking scheme ..	2.00	..	..	0.22
35. Organisation of Handicrafts Co-operatives	7.00	2.50	..	1.29
36. Development of Screen Printings ..	1.00	0.46	..	0.32
37. Service Centre for Artisans in Toy-making and Artistic Pottery.	3.00	1.27	..	0.77
38. Development of Fancy Leather Goods ..	2.00	..	..	0.30
39. Establishment of Small Crafts Museum ..	1.00	..	..	0.10
40. Awards of Prizes to Handicraftsmen ..	0.40	..	..	0.08
41. Development of Non-ferrous Metalware ..	6.60	..	..	0.61
Total ..	38.00	4.23	..	6.50

Industrial Estates

42. Establishment of Industrial Estates :—				
(a) Howrah	30.00	29.00	..	22.10
(b) Habra .. ..	..	..	..	..
(c) Siliguri .. ..	..	..	..	..
(d) Saktigar .. ..	..	..	..	..
(e) Kalyani .. ..	..	..	..	..
43. Establishment of 2 new Estates ..	70.00	68.00	..	14.50
44. Establishment of 1 Estate for Hides and Leather.	30.00	29.10	..	7.10
45. Establishment of 8 small Estates ..	40.00	35.50	..	14.50
Total ..	1,70.00	1,61.60	..	58.20

Rs. in lakhs.

Scheme.	Plan Provision, 1961-66		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
OTHER SMALL-SCALE INDUSTRIES				
<i>Ceramics Industries</i>				
46. Development of Bone China and Fine Earthen Ware.	16.90	7.00	4.00	4.66
47. Supply of Processed Clay for Sanitary Wares and Electrical Fittings.	10.50	3.30	3.00	7.88
48. Development of Lithographic Transfers ..	6.00	0.25	0.25	1.40
49. Development of Common-clay glazed pottery	7.00	2.00	..	2.27
50. Development of production of Roofing and Flooring Tiles	2.00	0.50	..	0.28
51. Washery for China Clay	10.00	6.00	..	1.25
52. Development of Glazed Pottery (Uluberia)	2.30	..	..	..
Total ..	54.70	19.05	7.25	17.74
<i>Leather Industries</i>				
53. Model Servicing for Tannery	3.58	1.20	1.00	0.65
54. Establishment of 3 Peripatetic Parties for Footwear.	4.09	..	..	1.00
55. Establishment of 1 District Footwear Servicing Centre.	3.62	1.00	..	1.00
Total ..	11.29	2.20	1.00	2.65
<i>Engineering Industries</i>				
56. Central Shot-blasting, Electroplating and Stove enamelling Unit (Rs. 1.33 spill-over transferred from Manufacture of Surgical Instruments).	7.33	3.50	..	2.31
57. Development of Small-Scale Engineering Industries, Howrah.	14.00	10.00	3.00	6.75
58. Expansion of Luckmaking Unit, Howrah ..	5.00	2.95	..	1.25
59. Development of Cutlery Industries (Kanchannagar).	6.00	3.30	1.10	1.40
60. Expansion of Surgical Unit (Baruipur) ..	3.00	1.00	..	0.60
61. Expansion of Quality Marking Scheme for Small Scale Industries.	10.00	..	..	1.80
62. Establishment of a State Research Board, State Industrial Research Institute.	28.00	18.50	3.00	4.86
63. Loans under State aid to Industries Act (Block Loan).	1,26.00	1,26.00	..	24.75
64. Servicing-cum-Training Centre for Hand Tools in Purulia.	8.00	2.48	1.00	1.89
65. Development of Manufacture of Hospital Appliances etc. at Central Engineering Organisation, Howrah.	11.00	4.00	..	2.70
Total ..	2,18.33	1,71.73	8.10	48.31

Scheme.	Rs. in lakhs.			
	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
<i>Miscellaneous</i>				
66. Training-cum-Production Centra for Wool- len Blanket Weaving with machine-spun yarn.	2.62	1.20	0.95	0.56
67. Establishment of automobile repair shop and cycle rickshaw body building shop in West Dinajpur.	5.58	2.10	..	0.58
68. Subsidy for Power Consumption for Small Industries.	5.00	..	..	1.00
69. Marketing of Products of Small-Scale and Village Industries and Procurement and supply of Raw Materials to Cottage Indus- tries (Spill-over of Rs. 2.43 transferred from "Other Small-Scale Industries").	60.48	47.00	..	22.90
Total ..	73.68	50.30	0.95	25.04
Total—Other Small Scale Industries ..	3,58.00	2,43.28	17.30	93.74

Sericulture and Silk.

70. Re-organisation of Existing Nurseries ..	1.00	1.00	..	0.50
71. Hill Nurseries for Rearing Foreign Univol- tine Races.	2.65	2.00	..	1.08
72. Establishment of Grainages for supply of Disease-free layings.	2.00	1.25	..	1.40
73. Establishment of 4 Graft Nurseries ..	1.00	1.00	..	1.25
74. Foreign Race Seed station, Kalimpong ..	1.00	1.00	..	0.75
75. Development of Tassar Industry ..	6.25	2.34	..	2.08
76. Intensification of sericulture—				
(a) Supply of Disease-free Silk Worm Eggs	15.92	10.91	0.50	6.06
(b) Extension Service	12.76	3.74	..	3.86
77. Extension of Sericulture in Hill areas ..	0.50	..	..	0.18
78. Extension of Experimental Stations ..	1.00	0.80	0.05	0.22
79. Establishment of 1 Nursery-cum-Demons- tration centre for Ericulture.	2.00	0.92	..	0.35
80. Expansion of Peddie Silk Institute (Malda)	2.19	0.30	0.06	0.60
81. Establishment of a State Filature ..	10.00	8.16	0.23	0.50

Scheme.	Rs. in lakhs.			
	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
82. Expansion of Sericultural Training Institute (Berhampore).	4.00	2.30	..	0.55
83. Scheme for stabilisation of Raw Silk Market	11.38	7.59	..	1.62
84. Re-modelling of Rearing Houses in Government Nurseries.	5.00	5.00	..	0.41
85. Expansion of Silk Conditioning House ..	0.35	..	0.03	0.02
Total ..	79.00	48.31	0.87	21.43
<i>Coir.</i>				
86. Development of Coir Industry ..	10.00	2.00	0.50	3.05
<i>Administration</i>				
87. Re-organisation of Directorate of Industries	20.00	..	..	2.88
Total—Village and Small Industries ..	9,96.50	5,67.98	43.21	2,47.45

TRANSPORT AND COMMUNICATIONS

Roads

1. Development of State Roads ..	25,00.00	25,00.00	25.00	4,48.00
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Road Transport

1. Construction of Car Park and State Bus Stand around Dalhousie Square.	9.62	9.62	..	2.62
2. Improvement of Chowringhee from Dharmatolla Junction to Whiteways crossing—Construction of Subway etc.	3.86	3.86	..	1.36
3. Construction of a Bus Station at Belgachia ..	2.03	2.03	..	1.53
4. Improvement of Bus Services in Calcutta—Construction of a Depot and equipment.	27.50	27.50	2.00	5.00
5. Construction of two subways in Dalhousie Square.	15.18	15.18	..	3.00
6. Improvement of Road and Parking facilities in front of Sealdah Railway Station.	12.33	12.33	..	2.00
7. Remodelling of Parking areas road approaches in front of Howrah Railway Station.	26.09	26.09	..	5.00
8. Construction of a Bus Stand at Barasat ..	2.78	2.78	..	1.35
9. Extension of the Motor Stand at Darjeeling Bazar.	0.61	0.61	..	0.30
Total ..	1,00.00	1,00.00	2.00	22.16

Rs. in lakhs.

Scheme.	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
Inland Water Transport				
1. Crew Training Scheme	12.35	7.35	..	1.50
2. Construction of a Jetty Cafeteria at Botanical Gardens.	1.65	1.65	..	0.65
3. Improvement of navigation in the Rupnarayan Field investigation and model experiment for preparation of scheme.	8.00	..	..	1.00
4. Improvement of Navigation in the Hijli Tidal Canal in Midnapore District.	11.00	..	..	..
Total ..	33.00	9.00	..	3.15

Tourism

1. Canteen-cum-Retiring room at Diamond Harbour.	0.75	0.75	..	0.50
2. Extension for Rest House at Jaldapara Game Sanctuary.	..	..	..	0.12
3. Tourist Lodge at Malda	0.75	0.75	..	..
4. Tourist Rest House at Santiniketan ..	1.25	1.25	..	0.75
5. Low Income Group Rest House at Tiger Hill.	..	..	..	0.25
6. Tourist Rest House at Berhampur ..	2.00	2.00	..	..
7. Low Income Group Rest House at Kalinpong	1.00	1.00	..	..
8. Low Income Group Rest House at Chittaranjan.	..	..	..	0.50
9. Low Income Group Rest House at Durgapur	2.50	2.50	..	0.75
10. Low Income Group Rest House at Bishnupur.	1.00	1.00	..	0.25
11. Low Income Group Rest House at Digha (or Fraserganj).	1.75	1.75	..	0.50
12. Low Income Group Rest House at Suri ..	..	..	..	0.25
13. Rest House at Darjeeling	3.00	3.00	..	..
14. Tourist Publicity	1.50	1.50	..	0.50
15. Tourist Buses, other Vehicles and launches ..	1.50	1.50	..	1.00
16. Promotion of Tourism .. ..	..	..	..	1.00
Less—Reduction to be made later ..	..	(- )5.00	..	..
Total ..	17.00	12.00	..	6.37

Rs. in lakhs.

Scheme.	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
SOCIAL SERVICES				
General Education.				
<i>Elementary Education.</i>				
General Schemes.				
1. Improvement and Expansion of Teacher Training (including Basic) facility.	46·72	6·00	..	11·03
2. Improvement and Expansion of Basic Education (Classes I to V).	1,76·30	..	..	15·41
3. Improvement and Expansion of Basic Schools (Classes I to VIII).	75·25	..	..	3·78
4. Provision of educational facilities for the children of age group 11-14.	50·00	..	..	..
5. Improvement of the condition of service of teachers of Primary (including Basic) Schools.	2,45·63	..	..	60·16
6. Improvement of teaching in Primary Schools towards Basic pattern (including accommodation, equipment, teaching in science etc.).	22·98	..	..	3·26
7. Orientation of Primary Schools including Seminars, Conferences, Teachers, Educational Tours etc.	38·31	..	..	1·14
8. Essential accommodation for teachers of Primary (including Basic) Schools.	15·40	..	..	1·83
9. Production of literature and other materials for teachers and children.	3·84	..	..	0·76
10. Research in Basic Education and New Experiments.	1·91	..	..	0·38
11. Improvement of Library service in Basic Schools.	5·36	..	..	0·55
12. Extension services in Basic Training Schools including circulating libraries and demonstration sets.	..	..	..	0·84
13. Strengthening of Administrative Inspectorate's staff for Primary (including Basic) Schools.	5·00	..	..	0·70
14. Provision of accommodation for improved Inspectorate.	5·00	..	..	1·10
15. Educational Survey	1·50	..	..	0·11
16. Planning, Statistical and Reporting Units :				
(i) Strengthening of Planning and Supervisory staff.	12·34	..	..	1·75
(ii) Additional accommodation for Planning and Supervisory staff.	5·00	..	..	1·46
Total ..	705·54	20·86	..	1,04·26

Scheme.	Rs. in lakhs.			
	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate 1961-62.
	Total.	Capital.		
<i>Special Schemes for Girls.</i>				
17. Provision for Pre-primary (Basic) Education	3·84	..	..	0·76
18. Measures for promoting attendance of girls at Primary and Middle stages (Classes I to VIII).	15·10	..	..	3·13
19. Provision of special Education Schemes (Primary) for Adult women.	15·32	..	..	3·05
20. Provision of essential Amenities to women teachers in rural areas (free accommodation etc.).	15·38	..	..	1·36
21. Training facilities for School Mothers and providing for appointment of School Mothers.	7·95	..	..	1·14
Total ..	57·59	..	..	9·44
22. Free and Compulsory Primary Education (Universal).	5,76·14	..	..	58·12
Total—Elementary Education ..	13,39·27	20·86	..	1,71·82
<i>Secondary Education.</i>				
<i>General Schemes</i>				
23. Provision of Higher Secondary Schools (conversion and new upgrading of schools into Higher Secondary Schools) Humanities, etc. etc.).	1,25·10	..	..	21·91
24. Improvement of teaching facilities (including accommodation in Art, Science, Craft, etc.).	52·00	..	..	7·62
25. Multipurpose Schools (New and conversion)	1,53·22	..	..	21·56
26. Improvement of Library and Reading Room	10·72	..	..	1·68
27. Improvement and Expansion of Teachers' training facilities (including training in guidance).	38·31	..	..	1·99
28. Improvement of the conditions of service of teachers (including prizes, etc).	1,75·25	..	..	19·89
29. Development of Educational experiments and Research.	1·53	..	..	0·23
30. Strengthening of Administrative and Inspectorate staff.	3·84	..	..	0·53
31. Provision of Accommodation for Improved Inspectorate.	7·66	..	..	1·46

Scheme.	Rs. in lakhs.			
	Plan Provision, 1961-66,		Estimated Foreign exchange, 1961-66.	Budget Estimate 1961-62.
	Total.	Capital.		
32. Seminars and Refresher course for teachers and Headmasters	4.46	..	..	1.19
33. Provision of stipends, books, etc. for needy and meritorious pupils.	7.66	..	..	1.14
34. Housing of students in Secondary Schools	25.80	..	..	4.53
35. Essential Amenities of Teachers of Secondary Schools (Housing, etc.)	7.66	..	..	1.68
36. Provision of special Educational Amenities in experimental schools.	2.50	..	..	1.14
37. Provision of School meals	5.25	..	..	1.14
38. Provision for Hindi teachers in Secondary Schools.	..	..	..	0.34
39. Improvement and development of the institutions for the training of teachers in music etc.	3.84	..	..	0.76
40. Planning, Statistical and Reporting Units—				
(i) Strengthening of Planning and Supervisory Staff.	5.75	..	..	1.33
(ii) Additional accommodation etc. for Planning and Supervisory Staff.	5.66	..	..	1.46
Total ..	6,36.21	20.88	..	91.58
Special Schemes for Girls				
41. Provisions of Residential Girls' Schools in selected areas.	20.98	..	..	2.28
42. Provision of free education for girls upto class VIII in recognised schools.	41.79	..	..	5.51
43. Special measures for promoting attendance of girls at Middle and Secondary stages.	5.66	..	..	0.57
44. Provision of hostels for girls of secondary schools (area Schools).	15.34	..	..	3.05
45. Essential amenities of Women teachers (Housing etc.)	11.49	..	..	1.52
Total ..	95.26	..	..	12.93
Total—Secondary Education ..	731.47	20.88	..	104.51

Rs. in lakhs.

Schemes.

Schemes.	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate 1961-62.
	Total.	Capital.		

University Education.

General Schemes.

46. Development of Universities (including Post-Graduate studies and research).	252.85	..	..	71.36
47. Development of non-Government Colleges.	65.34	..	..	10.42
48. Development of Government Colleges ..	17.71	..	..	2.94
49. Development of Presidency Colleges (Post Graduate and Honours).	26.51	..	..	4.47
50. Development of commercial and Art Education.	3.84	..	..	0.76
51. Development of non-University Institutions	3.84	..	..	0.38
52. Stipends for needy and meritorious students	19.22	..	..	2.28
53. Provision of Educational Amenities for needy students (Day students Homes, Text Book, Library, Reading Rooms, etc.).	9.61	..	..	2.28
54. Improvement of conditions of service of teachers.	38.35	..	..	6.12
55. Housing of College students	17.48	..	..	0.92
56. Essential Amenities for College teachers (Housing etc.).	6.50	..	..	0.85
57. Planning, Statistical and Reporting units -				
(i) Strengthening of Planning and Supervisory staff	2.50	..	..	0.38
(ii) Additional accommodation etc. for planning and supervisory staff	5.25	..	..	1.46
Total ..	469.00	63.52	..	104.62

Special Schemes for Girls

58. Development of Women's College ..	19.18	..	..	3.05
59. Provision of hostels for girls in Colleges ..	19.18	..	..	3.52
60. Measures for promoting attendance of girls at Collegiate level.	7.50	..	..	1.52
Total ..	45.86	2.00	..	8.09

Centrally Sponsored Schemes—States Share

31. Introduction of Three-years' Degree courses in affiliated Colleges	15.96	..	..	6.12
Total: University Education ..	530.82	65.52	..	118.83

Rs. in lakhs.

Scheme	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate 1961-62.
	Total.	Capital.		
<i>Other Education.</i>				
<i>Social Education and Development of Libraries</i>				
<i>General Schemes</i>				
62. Strengthening of Social Education Service (staff, accommodation, etc.)	6.25	..	..	0.76
63. Provisions of educational facilities for adults (folk and night schools, Centres, etc.)	35.27	..	..	2.67
64. Development of Research, Workshop Centres in Social education for neoliterates and children (literature reading materials, methods, etc.)	1.15	..	..	0.23
65. Improvement and development of training institutions for teachers in social education	2.80	..	..	0.12
66. Development and expansion of library services	84.56	..	..	15.97
67. Development of training institutions for librarianship	6.96	..	..	2.23
68. Provision of Community Recreation and Cultural Centre	11.61	..	..	1.99
Total ..	1,48.60	1.45	..	23.97
<i>Special Scheme for Women</i>				
69. Continuation of Education for women ..	8.43	..	..	1.52
Total : Social Education and Development of Libraries	1,57.03	1.45	..	25.49
<i>Cultural and Aesthetic Education</i>				
70. Improvement and Development of Organisation devoted to Cultural and Aesthetic Education	50.00	..	..	8.00
71. Improvement and Development of the Institutions of Music	11.50	..	..	2.00
72. Improvement and development of museum	7.66	..	..	2.00
Total ..	69.16	1.50	..	12.00
<i>Audio Visual Education</i>				
73. Provision of Audio Visual Education ..	13.45	..	..	2.22
<i>Development of Archives.</i>				
74. Improvement and development of Archives, etc.	6.11	2.03	..	1.13

Scheme.	Rs. in lakhs			
	Plan Provision, 1961-66.		Estimated Foreign exchange 1961-66	Budget Estimate, 1961-62.
	Total.	Capital.		
<i>Youth welfare activities, etc.</i>				
General Schemes				
75. Improvement and expansion of teachers' training facilities in physical education (Under Graduate and Post Graduate)	4.02	..	..	1.13
76. Provision of Aquatic Sports (Rowing etc.) facilities	0.50	..	..	0.08
77. Social Service Camps	1.24	..	..	0.19
78. Development of Physical Education—Assistance to organisations, Associations, Clubs, etc.	1.07	..	..	0.27
79. Improvement and Development of Sports and Games (Provision of coaches, Efficiency Drive Centres, etc.)	4.32	..	..	0.34
80. Youth Welfare, Youth Festival Contests, Students' tour, Youth Hostels etc.	0.96	..	..	0.19
81. Expansion of N.C.C. and A.C.C. ..	22.98	..	..	4.57
82. Improvement and expansion for Scouting and Girl Guides	5.36	..	..	1.07
83. Campus Works Projects, Stadiums, etc. ..	8.04	..	..	1.60
Total ..	48.49	0.37	..	9.44
Special Schemes for Girls				
84. Provision of facilities for Games, Sports and Recreational activities for Women, particularly in rural areas	1.15	..	..	0.23
Total : Youth Welfare Activities ..	49.64	0.37	..	9.67
<i>Education of the Handicapped :</i>				
85. Development of Social Welfare Homes ..	3.44	..	..	0.69
86. Development of institution for physically handicapped	2.68	..	..	0.53
87. Development of institution for mentally retarded children	1.38	..	..	0.27
88. Development of training institution for teachers for handicapped	1.11	..	..	0.14
89. Provision of Scholarships and Stipends for the handicapped students	0.96	..	..	0.11
90. Improvement of the condition of service of teachers of institutions of handicapped	1.15	..	..	0.23
Total ..	10.72	..	..	1.97

Rs. in lakhs.

Scheme.	Plan Provision, 1961-66.		Estimated Foreign exchange 1961-66.	Budget Estimate, 1961-62.	
	Total.	Capital.			
<i>Promotion of Hindi</i>					
91. Production of literature, Reading materials etc.	..	..	..	0.19
92. Improvement and Expansion of training facilities for teachers in Hindi	..	..	..	1.02
93. Improvement of salaries of teachers in Hindi	..	..	..	1.53
94. Scholarship and stipends for higher study in Hindi	..	..	..	0.76
Total ..	..	..	..	3.50
<i>Promotion of Sanskrit studies</i>					
95. Production of literature, Reading materials, etc. —	..	..	..	0.76
96. Schemes for promotion of research and post-graduate studies (Library, Scholarship, etc.)	..	..	..	1.14
97. Improvement and expansion of indigenous Sanskrit Institutions, etc.	..	..	..	1.52
98. Facilities for teaching Sanskrit in Secondary Schools	..	..	..	1.14
99. Facilities for teaching Sanskrit at collegiate level	..	..	..	1.52
Total ..	..	1.61	..	6.08
100. <i>Development of languages</i>	10.50	..	..	..
<i>Expansion and Strengthening of Directorate</i>					
101. Strengthening of Planning and Supervisory staff	0.62	..	..	0.06
102. Additional accommodation etc. for planning and supervisory staff	1.52	..	..	0.37
Total ..	2.14	0.37	..	0.43	
Total: Other Education:	..	3,18.75	7.33	..	62.49
Total: General Education:	..	29,20.31	1,14.59	..	4,57.65

Scheme.	Rs. in lakhs.			
	Plan Provision, 1961-66.		Estimated Foreign exchange 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
Technical Education				
<i>Technical and Engineering</i>				
1. Development of Engineering Colleges (Degree) including Post-Graduate course and Research	1,46.06	..	..	23.70
2. Development of Engineering Institutions of Diploma Courses—				
(a) Expansion and New	1,75.00	..	..	21.00
(b) Part-time facilities	16.86	..	..	3.00
(c) Sandwich courses	22.98	..	..	3.00
3. Development of Junior Technical Schools (Junior Diploma)	1,18.93	..	..	23.50
4. Provision of stipends and Scholarships ..	1,15.09	..	..	9.50
(Centrally sponsored schemes—State's Share				
5. Setting up of Engineering (Degree) Colleges (including continuation schemes)	..	..	..	13.12
6. Setting up of Engineering Institution for Diploma course (including continuation schemes)	..	..	..	23.75
7. Training facility for Teachers in Polytechnic	..	..	..	0.50
8. Development of Specialised Institutions (Printing, Business Management, etc.)	..	..	..	2.00
9. Planning, statistical and Reporting Units—				
(i) Strengthening of Planning and supervisory staff	9.50	..	..	0.60
(ii) Additional accommodation for planning and Supervisory staff	11.88	..	..	4.44
Total ..	6,16.30	51.46	..	12,8.11
<i>Others</i>				
10. Development of Institutions of Art and Craft	15.32	1.70	..	2.50
11. Introduction of B.Sc. (Technology) Course in Bengal Ceramic Institute	10.00	4.25	1.00	2.94
12. Training in Mining	18.14	12.10	2.30	1.44
13. Establishment of a Technical School on the model of Calcutta Technical School	15.00	12.81	..	2.19
14. Reorganisation of College of Textile Technology at Berhampore	10.00	3.45	4.08	2.40
15. Re-organisation of College of Textile Technology at Serampore	11.00	4.10	3.67	4.15
16. Re-organisation of College of Leather Technology in Calcutta	10.00	3.70	3.11	3.70
17. Establishment of a Chemical Polytechnic ..	10.86	9.00	..	5.00
Total ..	1,00.32	51.11	14.16 ▲	24.32
Total: Technical Education ..	7,16.62	1,02.57	14.16	1,52.43

Rs. in lakhs.

Scheme.	Plan Provision 1961-66.		Estimated Foreign exchange 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
Scientific Education				
1. Scientific and Technical Research ..	38.32	..	..	9.50
2. Scheme for systematic study and research in Plan and Wild Life (high altitude park, etc.)	9.75	..	..	2.50
Total ..	48.07	..	..	12.00
Total : General Education, Technical Educa- tion, Scientific Research.	36,85.00	2,17.16	14.16	6,22.08

Health*Hospitals and Dispensaries :*

1. Improvement and establishment of Sadar and Subdivisional Hospitals	2,00.00	1,35.00	..	31.00
2. Improvement and establishment of hospitals other than Sadar, Subdivisional Hospitals	2,06.00	1,26.00	25.00	25.76
3. Mental Hospital	35.00	25.00	0.50	2.00
4. Ambulance Service	10.00	4.00	..	0.50
5. Domiciliary Medical Service	90.00	..	..	2.00
6. Nationalisation of Municipal Health Service	5.00	..	..	..
Total ..	5,46.00	2,90.00	25.50	61.26

Health Units

7. Rural Health Centres	2,30.00	1,40.00	..	40.00
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Medical Colleges

8. Improvement of State Medical College in- cluding improvement and standardisation of pre-clinical and clinical training in Medical Colleges	40.00	35.00	11.50	1.00
9. Post-graduate Education and research ..	50.00	10.00	26.00	1.50
Total ..	90.00	45.00	37.50	2.50

Dental Education and Services

10. Improvement of Dental College ..	10.00	7.50	2.00	2.00
11. Establishment of Dental Clinics ..	4.00	..	0.90	0.50
Total ..	14.00	7.50	2.90	2.50

Scheme.	Rs. in lakhs.			
	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
<i>Training Programme</i>				
12. Training of Nurses including graduate nurses	35·00	20·00	..	1·74
13. Training of pharmacists	3·00	1·00	..	0·35
14. Training of Laboratory Assistants ..	1·00	..	..	0·20
15. Training of Physio-therapeutists and Occupational Therapeutists	2·00	0·40	..	0·40
16. Training of Health Assistants	11·50	6·65	..	2·00
17. Training of Sanitary Inspectors	0·50	..	..	0·10
18. Training of Social Worker	1·00	..	..	0·20
19. Training of Dental (Oral) Hygienist and Dental Mechanics	1·00	..	..	0·20
20. Training of Radiographer	1·00	..	..	0·20
Total	56·00	28·05	..	5·39
Control of Diseases.				
<i>Malaria</i>				
21. Malaria Eradication Programme	1,53·00	..	..	46·11
<i>Filaria</i>				
22. Filaria Control Programme	6·00	..	..	0·66
<i>T. B.</i>				
23. Chest Clinic-cum-Domiciliary Units ..	1,00·00	20·00	..	3·00
24. M. M. R. Units	2·00	..	..	0·50
25. B. C. G. Vaccine Campaign	20·00	..	..	4·43
26. Rehabilitation of T. B. patients	10·00	3·00	..	0·20
27. Expansion and establishment of T. B. Hospitals	30·00	13·00	2·00	8·00
28. T. B. Research Laboratory	1·00	0·15	..	..
Total	1,63·00	36·15	2·00	16·13
<i>Leprosy</i>				
29. Leprosy Control	25·00	8·00	..	1·97
30. Rehabilitation of leprosy patients ..	10·00	6·00	..	0·50
Total	35·00	14·00	..	2·47
<i>Smallpox</i>				
31. Smallpox Eradication Programme	30·00	..	..	3·00
32. Expansion of State Vaccine Institute ..	15·00	13·55	2·00	3·00
Total	45·00	13·55	2·00	6·00

Rs. in lakhs.

Scheme.	Plan Provision, 1961-66		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
<i>Cholera</i>				
33. Anti-Cholera Programme	1,10.00	..	..	0.20
<i>Other Diseases</i>				
34. Infectious Diseases Hospital	2.00	2.00	1.00	2.00
35. Mass Immunisation against poliomyelitis, Diphtheria, Tetanus and Whooping Cough	3.00	..	1.00	..
Total ..	5.00	2.00	2.00	2.00
<i>Indigenous Systems of Medicine</i>				
36. Ayurvedic Education	15.00	3.00	..	2.00
37. Development of Homoeopathic Education and Research	15.00	5.00	..	1.00
Total ..	30.00	8.00	..	3.00
<i>Laboratory Services</i>				
38. Central combined laboratory	17.00	6.00	5.00	3.00
39. Establishment of Diagnostic and Public Health Laboratories	16.00	4.50	..	0.95
Total ..	33.00	10.50	5.00	3.95
<i>Research and Statistics</i>				
40. Health Statistics	7.00	..	0.50	0.50
<i>Maternity Child Welfare and Family Planning</i>				
41. Establishment of Paediatric Hospital with Child Guidance Clinic and Orthopaedic Centres	5.00	3.00	..	0.50
42. Maternity Child Welfare and Family Plan- ning Programme	50.00	4.00	..	3.40
Total ..	55.00	7.00	..	3.90
<i>Health Education and Publicity</i>				
43. Health Education	6.00	..	..	0.50
<i>School Health</i>				
44. Students' Health Service	20.00	..	..	1.00
<i>Water Supply and Sanitation (Urban and Corporation).</i>				
45. Urban Water Supply and Sanitation ..	1,50.00	15.00	3.00	40.00
46. Tollygunge-Panchannagram Drainage Scheme	25.15	25.15	6.00	4.50
47. Silt clearance and completion of works of Calcutta Corporations-outfall system from Bantala to Kulti	54.88	54.88	2.79	11.13
48. Rural Water Supply and Sanitation ..	94.00	..	..	38.00
Total ..	3,24.03	95.03	11.79	93.63

Rs. in lakhs.

Scheme.	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
<i>Miscellaneous Schemes</i>				
49. Re-organisation of Central Medical Store ..	10.00	5.43	..	0.60
50. Drug Control	5.00	..	2.50	0.46
51. Manufacture of X-ray Machines ..	15.00	..	10.00	3.00
52. Establishment of Central Animal Breeding Farm	2.00	2.00	..	0.40
53. Expansion of Blood Bank	10.00	2.00	1.00	0.80
54. Administrative staff in connection with development schemes and transport	10.00	2.00	..	1.00
Total ..	52.00	11.43	13.50	6.26
Total Health ..	19,80.03	7,08.21	1,02.69	2,97.96
Housing.				
1. Subsidised Industrial Housing ..	4,80.00	4,33.45	..	1,14.50
2. Slum Clearance (State's share) ..	1,00.00	27.32	..	30.43
3. Low Income Group Housing Scheme :				
(a) Loans under Low Income Group Housing Scheme.				24.00
(b) Construction of Houses under Low Income Group Housing Scheme :				
(i) Housing accommodation for working girls in Calcutta.				1.80
(ii) Regent Estate Project, Tollygunge ..				3.60
(iii) Netaji Subhas Road Project, Tollygunge.				5.33
(iv) Construction of 300 houses at Kalyani	3,30.00	3,30.00	..	23.60
(v) Construction of tenements at Sibpur ..				
(vi) Construction of tenements at Sodpur				
(vii) Construction of 100 houses at Kalyani				
4. Plantation Labour Housing	15.00	15.00	..	7.00
5. Rural Housing	25.00	25.00	..	0.38
6. Town Planning and Country Planning Organisation	6.00	6.00	..	..
7. Karaya Road Housing	9.00	9.00	..	..
8. Bowali Mondal Road Housing	8.48	8.48	..	0.02
9. Land Acquisition and Development Scheme				
Filling up of Circular Canal in Calcutta ..	51.00	51.00	..	10.00
10. Kanchrapara Area Development Scheme (Kalyani Township)	2.00	2.00	..	0.91
Total ..	10,26.48	9,07.25	..	2,21.57

Rs. in lakhs.

Scheme.	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
Welfare of Backward classes				
Welfare of Scheduled Tribes				
<i>Health, Housing and other schemes.</i>				
1. Water Supply in tribal areas	0.80	..	..	1.10
2. Minor Irrigation Schemes	0.30	..	..	0.10
3. Small Irrigation Schemes	0.30	..	..	0.50
4. Irrigation through tank improvement ..	0.10	..	..	0.10
5. Construction of pucca village roads ..	0.40	..	..	0.30
6. Construction of cart tracks in hill areas ..	0.30	..	..	..
7. Provision of wooden bridge and masonry culverts in roads.	0.30	..	..	0.30
8. Establishment of welfare centres ..	0.40	..	..	0.25
9. Improvement of kuteha village roads ..	0.20	..	..	0.20
10. Training as auxiliary nursing-cum-midwifery	1.50	..	..	..
11. Medical aid to indigent tribal patients ..	2.00	..	..	..
12. Provision of T. B. beds for tribal patients ..	5.72	..	..	..
13. Establishment of welfare centres—Anchal Seva Kendra along with Gram Seva Kendra.	11.00	..	..	..
14. Aid to voluntary agencies	8.00	..	..	0.60
15. Encouragement of tribal panchayet welfare activities.	2.50	..	..	..
16. Grants to individuals for relief, clubs, libraries and similar institutions, night school exhibitions and other cultural and recreational activities.	6.00	..	..	..
17. Expansion of Social Workers' Training Institute.	5.00	..	..	..
18. Institute for Research, Planning Evaluation at Cultural Development.	4.00	..	..	..
19. Strengthening of staff at Headquarters and at the field level.	10.00	..	..	0.50
20. Free legal aid to Scheduled Tribes ..	0.75	..	..	..
21. Water supply .. ..	..	..	..	2.00
22. Mobile Units .. ..	..	..	..	0.50
23. Progress, statistics and Co-ordination ..	..	..	..	0.20
24. Grants to institutions and organisations for cultural, recreational and social activities and the like.	..	..	..	0.40
25. Houses and house sites .. ..	..	..	..	2.00
Total ..	59.57	..	..	9.05

Scheme.	Rs. in lakhs.			
	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
<i>Education</i>				
26. Payment of tuition fees	38.00	..	..	6.00
27. Book grants to tribal students reading in Secondary Schools.	5.70	..	..	0.70
28. Grant for books and other equipment to the tribal students reading in primary schools.	5.00	..	..	..
29. Examination fees for Scheduled Tribe students appearing at the School Final Higher Secondary Examination.	0.55	..	..	0.08
30. Special stipend to poor meritorious scheduled Tribe students in selected Secondary Schools.	3.00	..	..	0.40
31. Provision of Ashram facilities to tribal students in Basic schools.	6.74	..	..	1.00
32. Extension of existing hostels	3.00	..	..	0.60
33. Construction of new hostel buildings ..	2.00	..	..	0.40
34. Boarding charges for Scheduled Tribe students of Secondary Schools.	22.00	..	..	2.64
35. Provision for hostel facilities to Scheduled Tribe students reading in post-Secondary institutions in Calcutta.	1.00	..	..	..
36. Upgrading of 2 class Junior High Schools ..	..	..	..	0.20
37. Contribution towards the establishment of Junior Basic Schools.	..	..	..	0.06
38. Coaching arrangement for scheduled Tribe students in Secondary Schools.	..	..	..	0.60
39. Grants for construction of primary school ..	..	..	..	..
Total ..	86.99	..	..	12.68
<i>Economic Uplift</i>				
40. Training in poultry farming and grant for taking up poultry rearing as a subsidiary means of livelihood.	0.90	..	..	..
41. Goat keeping as a subsidiary means of livelihood.	1.36	..	..	0.11
42. Sheep rearing as a subsidiary means of livelihood.	1.36	..	..	0.11
43. Pig rearing as a subsidiary means of livelihood.	1.72	..	..	0.13
44. Training facilities to Scheduled Tribe students in vocational trades and crafts.	4.00	..	..	0.60
45. Residential facilities to tribal students receiving training in vocational trade and crafts.	0.60	..	..	0.12
46. Introduction of bee keeping as a subsidiary livelihood.	..	..	..	0.50
47. Financial assistance to Scheduled Tribe artisans in selected trades.	3.00	..	..	0.40
48. Development of lac cultivation in tribal areas	..	..	..	0.20
49. Minor Irrigation .. .. .	..	..	..	3.00

Rs. in lakhs.

Scheme.	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
50. Development of non-Mulberry Tassar industry.	..	..	..	0.20
51. Scheme for eri-rearing and spinning and weaving.	..	..	..	0.20
52. Purchase of agricultural lands and house sites.	..	..	..	1.00
53. Reclamation and development of waste lands	..	..	..	2.00
54. Training centre for carpentry ..	..	..	..	..
55. Wooden bridges and masonry culvert ..	..	..	..	0.20
56. Improvement of kutchha village road ..	..	..	..	0.20
Total ..	12.94	..	..	8.97
Total—Scheduled Tribes ..	159.50	..	..	30.70

WELFARE OF SCHEDULED CASTES

Education

57. Special stipend to poor meritorious scheduled caste students.	15.00	..	..	2.00
58. Expansion of hostel facilities ..	1.50	..	..	..
59. Stipend for purchase of books ..	3.00	..	..	0.40
60. Hostel charges ..	8.62	..	..	1.00
61. Examination fees to Scheduled Caste students appearing at the School Final and Higher Secondary Examinations.	2.20	..	..	0.40
62. Free tuition to poor meritorious scheduled Caste students reading in schools.	126.80	..	..	9.00
63. Grants for construction of primary schools	..	..	..	..
Total ..	157.12	..	..	12.80

Economic Uplift

64. Training facilities in vocational trades and crafts.	8.00	..	..	1.00
65. Residential facilities to Scheduled Caste students receiving training in vocational trades and crafts.	0.30	..	..	0.06
66. Financial assistance to Scheduled Caste artisans in selected trades.	4.80	..	..	0.60
67. Training-cum-production centre for Jute Spinning and Weaving.	..	..	..	0.20
68. Servicing-cum-Training Centre for leather industry.	..	..	..	0.80
69. Agricultural subsidy ..	..	..	..	0.80
Total ..	13.10	..	..	3.46

Rs. in lakhs.

Scheme.	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		

Health, Housing and Other Schemes.

70. Aid to voluntary agencies	5.00	..	..	0.40
71. Grants to individuals for relief, clubs, libraries and similar institutions and encouragement of community activities, such as, holding of mela, celebration of Harijan days, grant of prizes, encouragement of recreational and cultural activities.	4.68	..	..	..
72. Grants to institutions and organisations for cultural, recreational and social activities.	..	..	..	0.20
73. Water supply arrangement in Scheduled Caste areas (spill-over).	0.60	..	..	0.60
74. Water supply .. ..	..	..	..	1.29
Total ..	10.28	..	..	2.49
Total—Scheduled Castes ..	180.50	..	..	18.75

Welfare of Other Backward Classes.

Education.

75. Stipends to poor meritorious Other Backward Class students reading in schools and colleges.	10.00	..	..	1.00
Total—Welfare of Backward Classes ..	350.00	..	..	50.45

Social Welfare.*Social Defence.*

1. Establishments of a new Reformatory and Borstal School for delinquent children.	14.20	8.00	..	..
2. Establishment of two Guidance Clinic for juvenile delinquency.	1.26	..	..	0.25
3. Establishment of a new Home for Women and Girls exposed to moral danger.	10.00	6.00	..	..
4. Establishment of District Shelters ..	11.00	5.00	..	..
5. Pilot Schemes for rehabilitation of fallen women.	12.00	3.00	..	..
6. Provision for special staff for vigilance in connection with the implementation of Immoral Traffic in Women and Girls' Act, 1956.	5.00	..	..	..
7. Extension of Welfare Services in Jails ..	1.00	..	..	..

Rs. in lakhs.

Scheme.	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
8. Extension of probation system as contemplated under the West Bengal offenders Act, 1954.	2.00	..	..	..
9. Establishment of Five Probation Hostels with training-cum-production Centres under the West Bengal Probation of Offenders Act, 1958.	3.00	1.00	..	..
10. Establishment of an after-care Home for women prisoners.	2.25	1.25	..	..
11. After-care Home for male prisoners ..	3.75	1.75	..	..
12. Establishment of an after-care Home for men discharged from non-correctional institutions.	3.75	1.75	..	0.50
13. Establishment of an after-care Home for women discharged from non-correctional institutions.	3.75	1.75	..	0.75
14. Establishment of two new Homes for destitute and vagrant women.	12.00	7.00	..	..
15. Establishment of a new Home for male vagrants/Extension of the Home at Andul Road.	8.00	4.00	..	0.50
16. Establishment of a new Home/Extension of the present Home for aged and invalid male vagrants.	11.00	6.00	..	..
17. Establishment of a new Home for aged and invalid women vagrants.	5.50	3.00	..	..
18. Provision for additional hundred beds for a non-leper vagrant patients either at Uttarpara Hospital or at some other Hospital.	10.00	6.00	..	0.75
19. Provision for additional beds for leper vagrants.	10.00	6.00	..	0.75
20. Opening of an additional reception centre ..	0.68	..	..	0.20
21. Provision for unforeseen expenditure ..	3.50	..	..	0.50
22. Establishment of a Home for non-delinquent children under Borstal School site (spill).	..	..	..	..
23. Establishment of a composite Reformatory Industrial and Borstal School.	2.82	..	..	2.82
24. Establishment of a care and after-care institutions at Lillooah.	1.00	..	..	1.00
25. Establishment of a girls' Home in the periphery of Gope Palace.	1.34	..	..	1.34
26. Establishment of an after-care Home for ex-inmates of Reformatory Industrial and Borstal Schools.	..	..	..	..
Total ..	138.80	61.50	..	9.36

Rs. in lakhs.

Scheme.	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
<i>Women Welfare.</i>				
27. Welfare Extension projects	114.84	..	..	..
28. Socio Economic Scheme	28.00	10.00	..	3.00
29. Condensed Course for training of adult women.	10.00	5.00	..	1.00
30. Convalescent Home for women with children's annexe.	4.50	2.00	..	0.50
31. Building grant for Welfare Extension Projects	20.00	..	..	2.00
32. Home for deserted wives	2.50	2.00	..	0.50
Total ..	179.84	19.00	..	7.00
<i>Children Welfare.</i>				
33. Children Bureau	2.00	0.50	..	0.30
34. Services essential for the implementation of the West Bengal Children Bill, 1958.	5.00	..	..	0.50
35. Establishment of a new State Home for destitute girls of age group 6-18.	2.19	1.75	..	..
36. Home for vagrant children	2.25	1.75	..	..
37. Establishment of a new reformatory and Industrial School for non-delinquent children.	1.42	1.00	..	..
38. Training Institute Balwadi in Rural areas	7.50	2.00	..	0.25
Total ..	20.36	7.00	..	1.05
<i>Welfare of the Handicapped.</i>				
39. Pilot Scheme for old age pension ..	5.00	..	..	0.50
40. Establishment of a school for the Blind in North Bengal.	5.00	2.50	..	0.75
41. Establishment of a school for the Deaf in North Bengal.	4.00	2.00	..	0.75
42. Expansion and modernisation of the existing schools for the handicapped.	5.00	2.50	..	0.75
43. Establishment of a school for mentally retarded children.	5.00	2.50	..	0.75

Rs. in lakhs.

Scheme.	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
44. Scholarship for Orthopaedically handicapped	2.50	..	..	0.25
45. Scholarships for the Deaf				
46. Scholarships for the Blind				
47. Establishment of two workshops for Blind and Orthopaedically handicapped persons.	4.00	2.00	..	0.75
48. Establishment of an Information Bureau as a part of the Directorate of Social Welfare for supplying information to handicapped persons.	0.30	..	..	0.05
49. Short-term training course for social workers to provide recreational facilities for the handicapped.	0.30	..	..	0.04
Total ..	31.10	11.50	..	4.59
<i>Youth Welfare.</i>				
50. Provision for expansion and better amenities etc. to West Bengal National Volunteer Force.	5.00	4.00	..	1.00
<i>Welfare Aspects of Slum Clearance.</i>				
51. Pilot Welfare Programme in Slum ..	10.00	2.00	..	1.00
52. Urban Community Development Projects Rs. 25,000 per year per unit—8 units (Pilot).				
<i>Grant-in-aid.</i>				
53. Aid to Voluntary Organisation for Social Welfare works (spill-over).	3.18	..	..	3.18
54. Aid to Voluntary Organisation for Social Welfare Works (New Scheme).	46.82	..	..	10.00
Total ..	50.00	..	..	13.18
<i>Man-power and Training.</i>				
55. Man-power and Training resources, etc. ..	5.00	2.00	..	0.50
<i>Public Co-operation.</i>				
56. Lok Karya Khetra Programme ..	..	..	..	..
Total—Social Welfare ..	440.10	107.00	..	37.68

Rs. in lakhs.

Scheme.	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
Labour and Labour Welfare.				
1. Model Labour Welfare Centre and Holiday Home.	60.09	39.22	..	0.50
2. Man-power and Employment (State's share)	5.61	..	..	0.33
3. Employees' State Insurance Schemes ..	118.50	1.90	..	8.60
4. Expansion of Craftsmen Training ..	96.24	60.88	..	23.72
5. Conversion of Displaced Personnel seats into Craftsmen seats.	6.00	..	..	0.34
6. Pre-employment Apprenticeship Training ..	12.00	..	..	1.83
7. Post-employment Evening Classes ..	2.40	..	..	0.32
8. Production of films	1.80	..	..	0.05
9. Training Institute-cum-Central Library ..	6.01	2.96	..	0.05
10. Advisory Service for Personnel Management and Trade Union Organisation.	0.98	..	..	0.10
11. Strengthening of Industrial Relations Machinery.	6.00	..	..	0.10
12. Development of Statistical Inspection ..	12.64	..	..	0.10
13. Administration of Minimum Wages Act ..	1.88	..	..	0.05
14. Industrial Safety Training	1.16	..	..	0.05
15. Industrial Hygiene	1.37	..	0.42	0.05
16. Opening of a productivity unit ..	1.63	..	..	0.05
17. Setting up of a Testing Laboratory for examination of Boilers.	6.73	1.00	3.79	0.20
18. Work-cum-Orientation Centre (States' Share)	2.00	..	..	..
19. Reorganisation of Vocational Training Wing of Directorate of Industries.	3.36	..	..	0.64
Total—Labour and Labour Welfare. ..	346.40	105.96	4.21	37.08

Rs. in lakhs.

Scheme.	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		
MISCELLANEOUS.				
Statistics.				
1. Strengthening of Sample Survey Section of the State Statistical Bureau for purposes of State Income Estimation for demographic studies and for other planning purposes.	17.85	..	..	3.78
2. Strengthening of Mechanical Tabulation Unit	3.84	..	..	1.31
Total ..	21.69	..	..	5.09
Publicity.				
3. Film Production	7.50			
4. Information Centre (Industrial Centre) ..	2.00			
5. Mobile Cinema Unit—16 m.m. ..	0.45			
6. Advertisement	5.00			
7. Plan Festival week	3.52			
8. Panchayat Publicity posts	2.03		.. ..	5.48
9. Central Exhibition Unit	2.05			
10. Technical Section	0.72			
11. Film Production Unit	0.70			
12. Block Publicity Organisation	11.88			
13. Subdivisional Publicity Organisation ..	3.35			
14. Publications	0.75			
Total ..	39.95	..	..	5.48
Local Bodies.				
15. Development of municipal roads and sewerage	253.00	..	..	32.00
16. Contribution to Howrah Improvement Trust	71.00	..	..	14.00
Total ..	324.00	..	..	46.00

Rs. in lakhs.

Scheme.	Plan Provision, 1961-66.		Estimated Foreign exchange, 1961-66.	Budget Estimate, 1961-62.
	Total.	Capital.		

State Capital Projects.**17. Durgapur Industries—**

(i) Gas Grid	225.00	225.00	100.00	..
(ii) Tar Distillation Plant	48.42	48.42	17.00	..
(iii) Expansion of Thermal Power Plant ..	929.06	929.06	530.00	..
(iv) Doubling of coke-oven by-products plant including washery.	500.00	500.00	250.00	699.00
(v) Coke Oven Plant	2.50	2.50	..	..
(vi) Power Plant	28.49	28.49	14.00	..
(vii) Development of subsidiary Industries	25.53	25.53	..	11.34
(viii) Fertiliser Factory	171.00	171.00	800.00	115.00
(ix) Krebs Scheme (Production of Chlorine, Caustic Soda, Ammonium Chloride, Phenol, etc.).	100.00	100.00	150.00	..
(x) Construction of over-bridge and ancillary roads at Durgapur.	..	..	..	2.93
(xi) Fifth generating unit .. .. .	..	..	498.00	..
18. Salt Lake Reclamation Scheme	624.00	624.00	12.00	114.50
19. Disposal of Sewage and Production of Sewage Gas.	40.00	40.00	..	1.00
20. Contribution (loan) to the West Bengal Development Corporation.	1,000.00	1,000.00	56.00	100.00
21. Calcutta Metropolitan Organisation .. .. .	..	..	..	..
22. Loans to Durgapur Development Authority.. .. .	..	..	..	..
Total	3,694.00	3,694.00	2,427.00	1,043.77

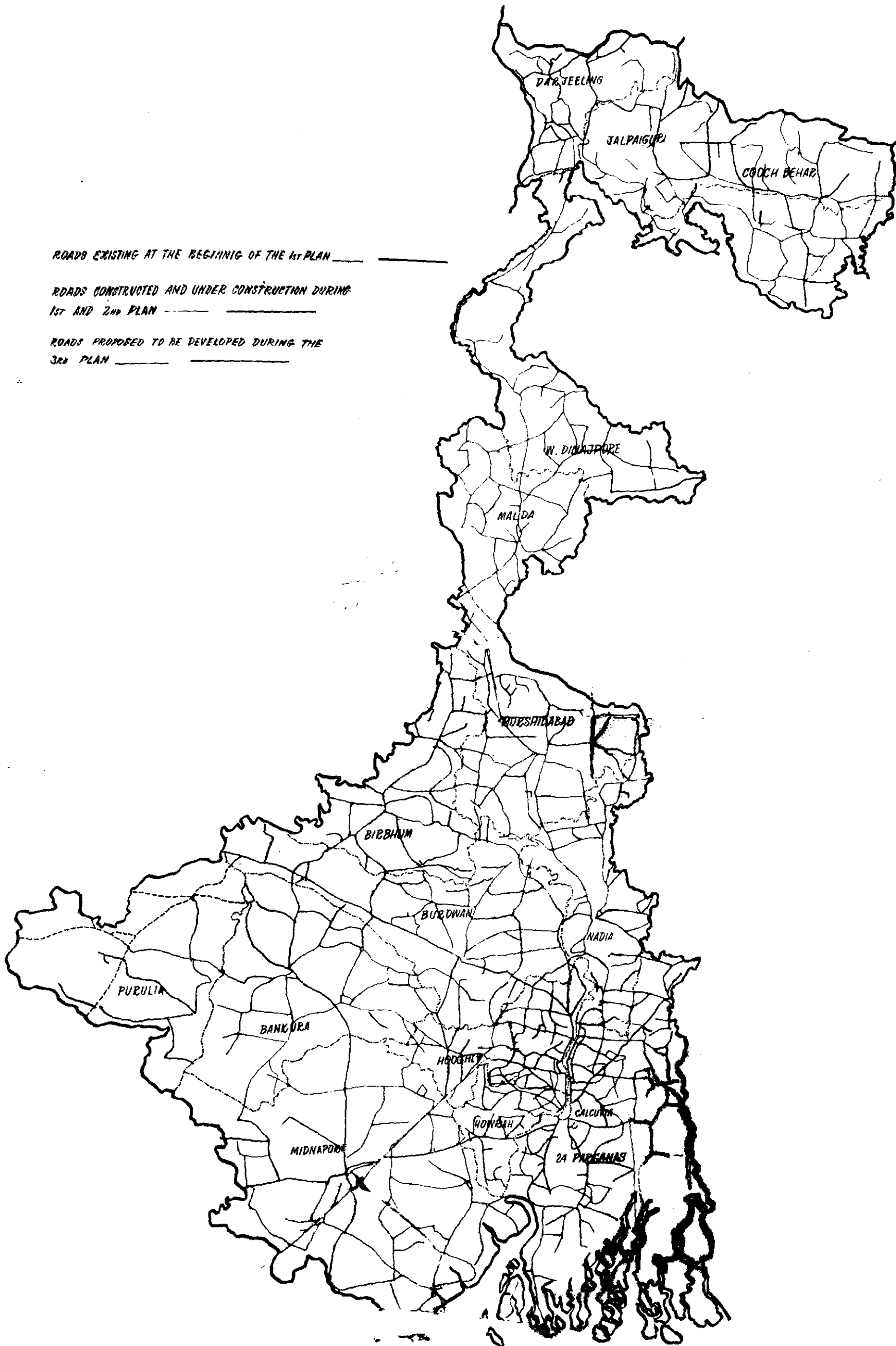
Others.

23. Expansion of Electrical Laboratory, State Electricity Directorate.	10.00	7.70	6.05	1.50
24. Construction of Food Grains Storage	22.96	22.96	..	6.00
25. Improvement of Botanic and Other public gardens.	10.00	10.00	0.60	2.99
26. Development of Digha as a sea-side health resort.	9.00	9.00	..	1.11
27. Cultivation of Coffee	1.13	..	..	0.08
28. Partition of the district of 24-Parganas .. .. .	..	..	..	..
Total	53.09	49.66	6.65	11.68

Total—All Schemes	29,315.19	17,924.98	5,143.07	5,081.83
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Note :—Capital outlay shown in this statement are as intimated to the planing Commission in letter No. 7205/1B-40/61, dated 6-10-61.

WBGP-62/6.-806R-2,500

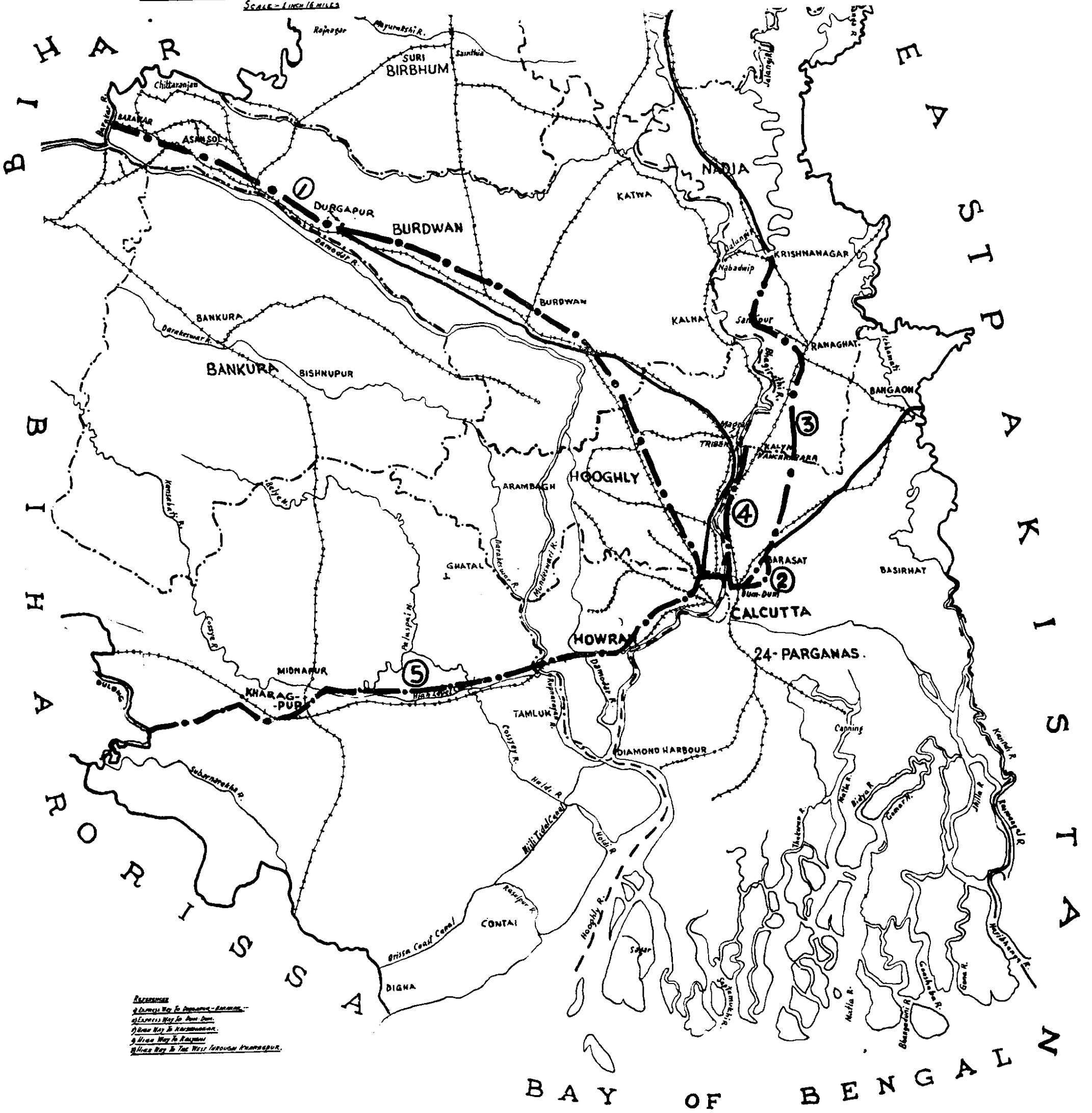


ROADS EXISTING AT THE BEGINNING OF THE 1st PLAN ————

ROADS CONSTRUCTED AND UNDER CONSTRUCTION DURING
1st AND 2nd PLAN ————

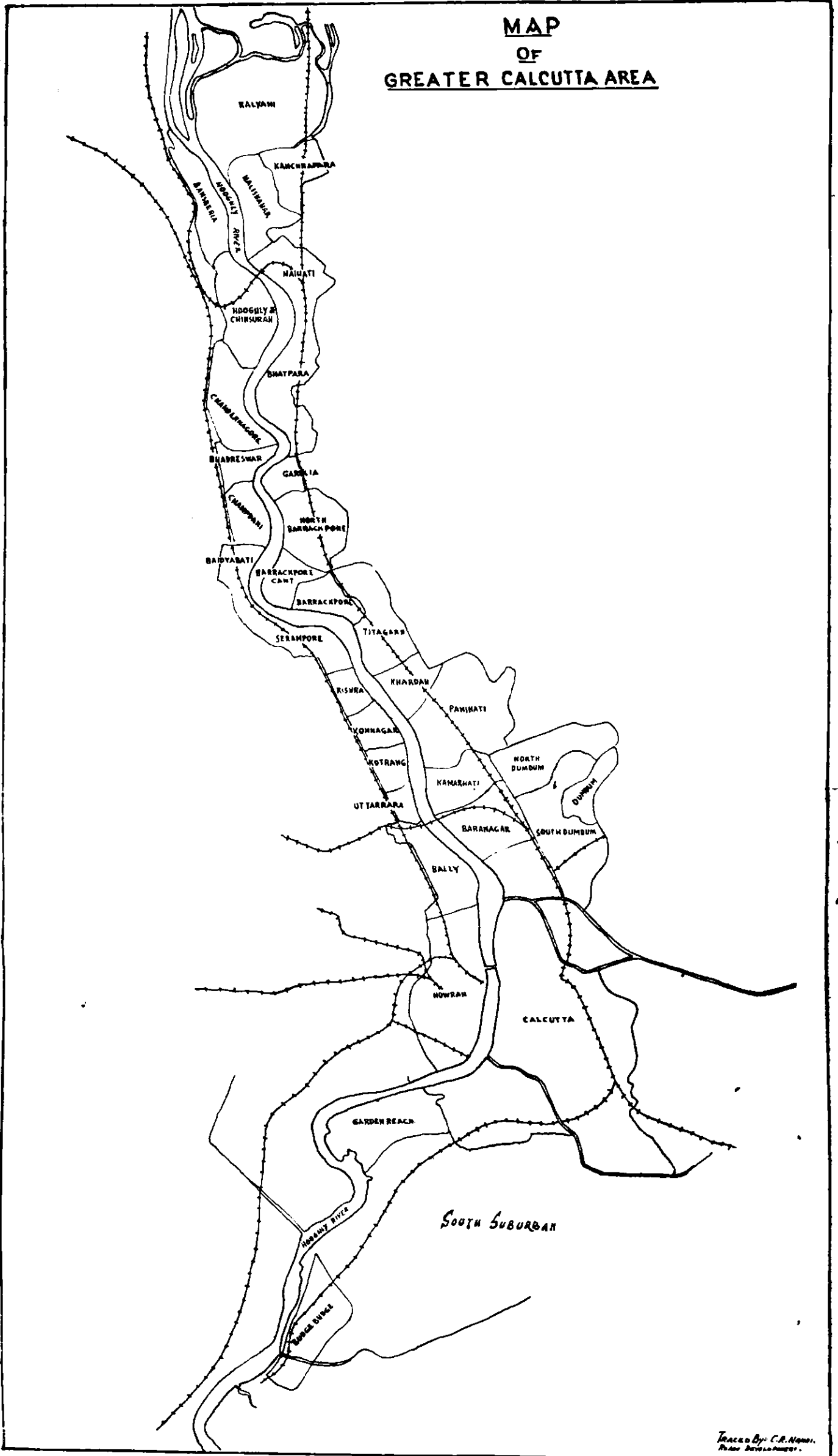
ROADS PROPOSED TO BE DEVELOPED DURING THE
3rd PLAN - - - - -

**MAP SHOWING ALIGNMENTS OF
PROPOSED ROAD LINKS WITH CALCUTTA**
Scale - 1 inch = 16 miles

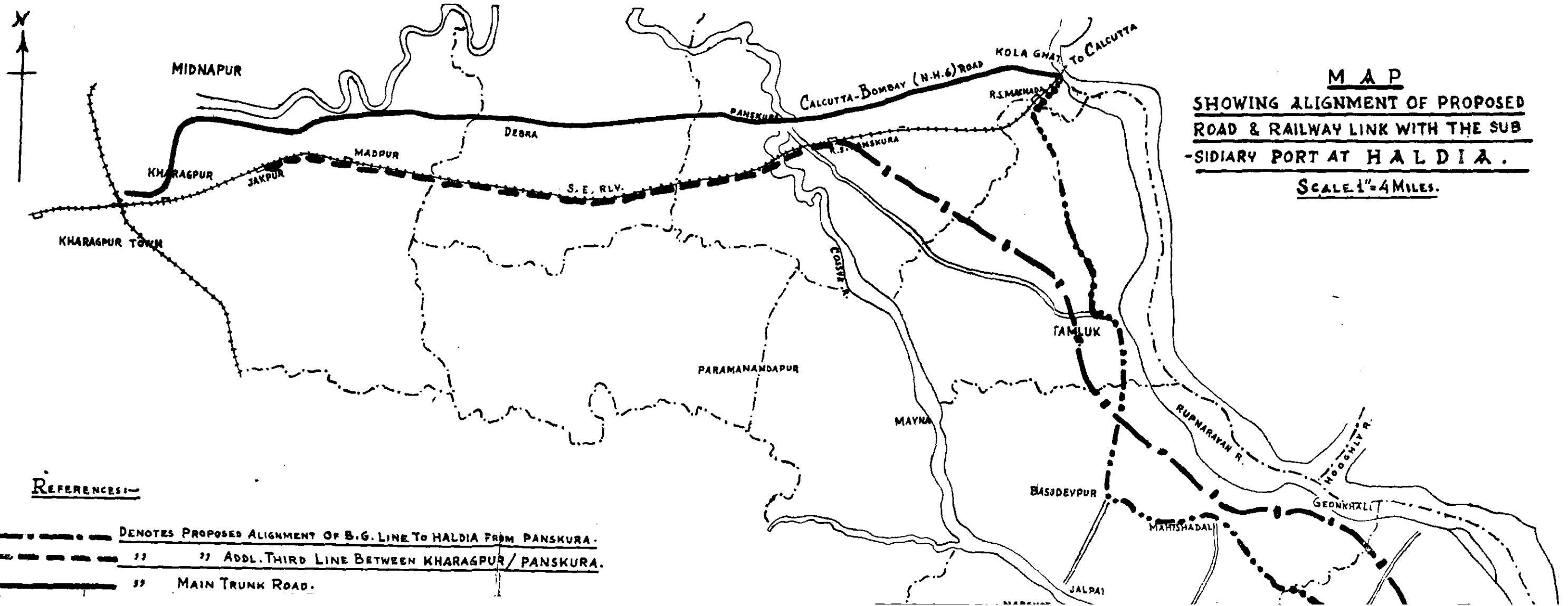


References
 1. Express Way to Durgapur - Calcutta
 2. Express Way to Howrah
 3. Road Way to Ranaghat
 4. Road Way to Hooghly
 5. Road Way to Midnapur

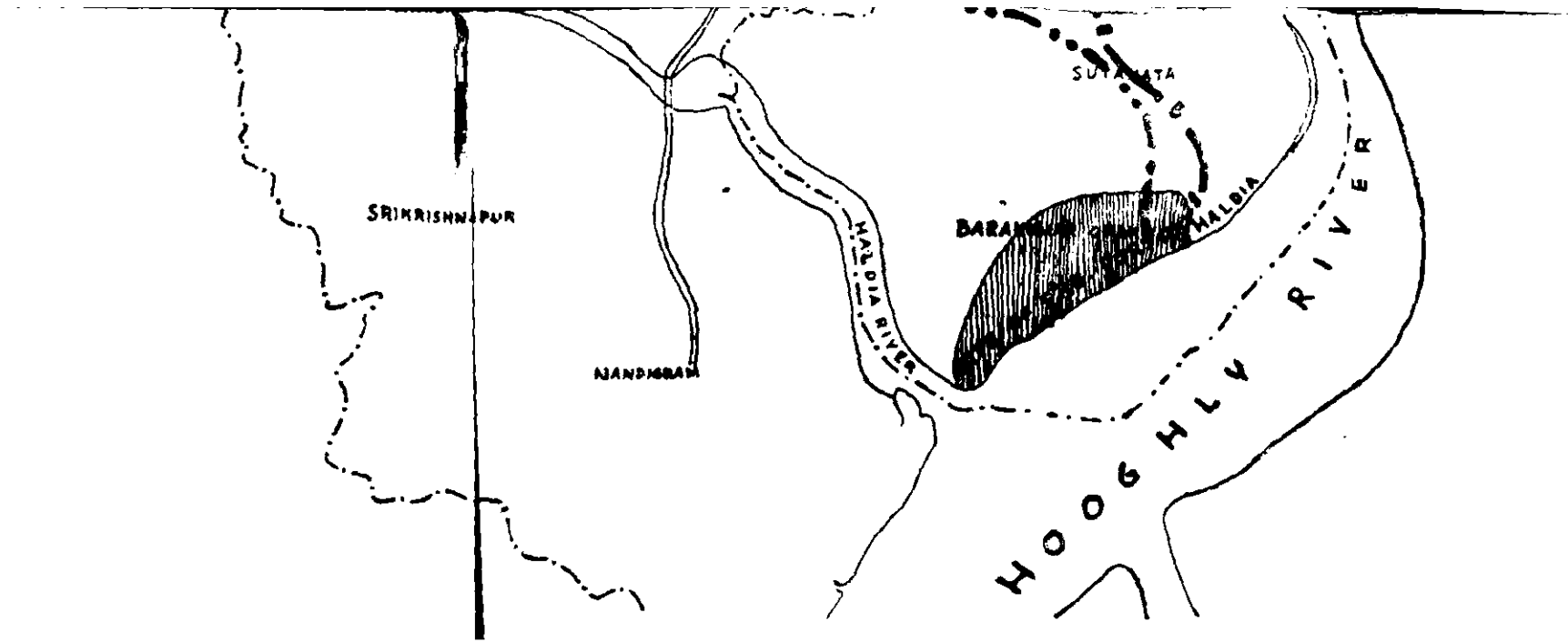
**MAP
OF
GREATER CALCUTTA AREA**



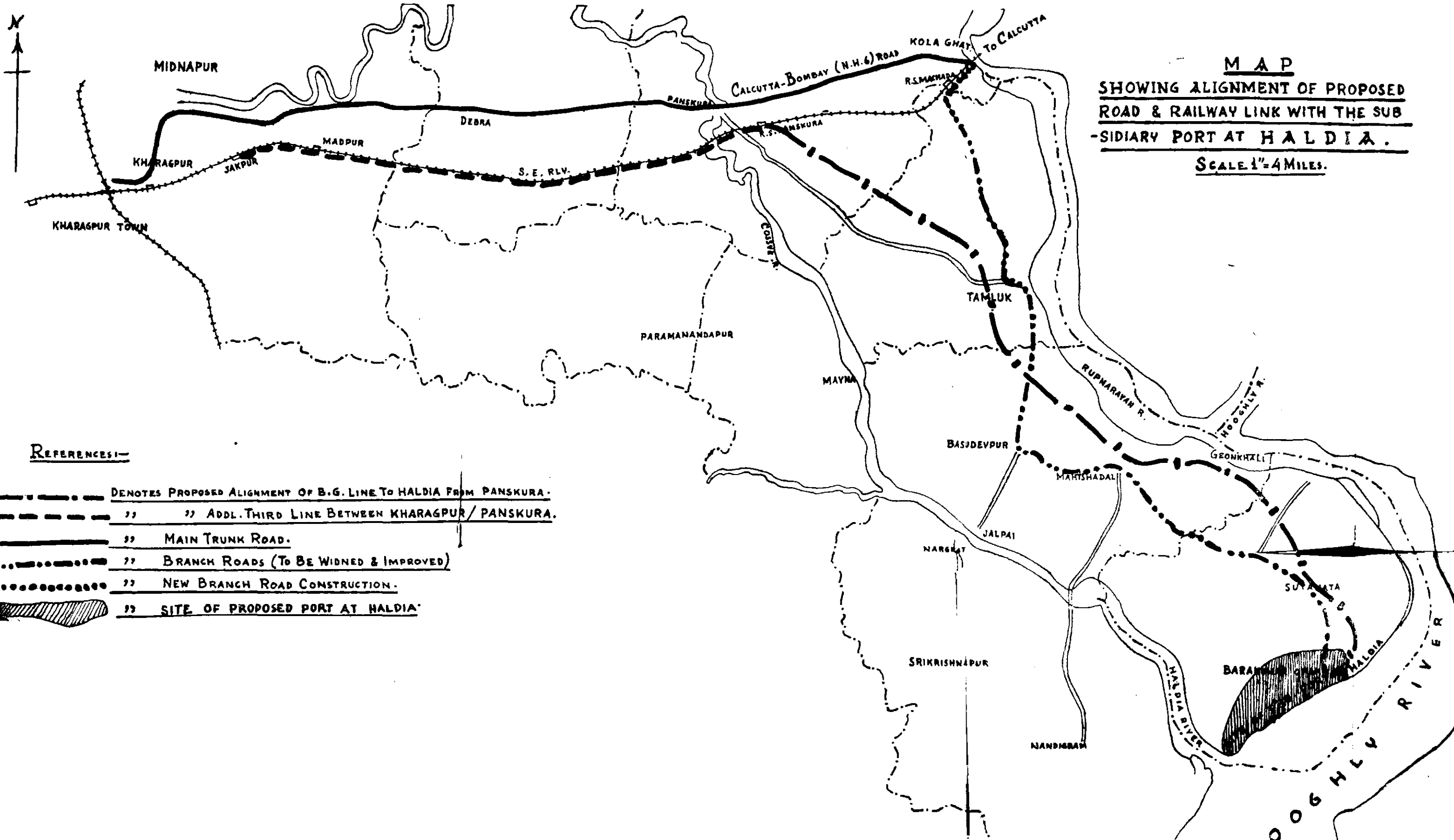
*Traced By: C.R. Nandi.
Road Development.*



- 27 BRANCH ROADS (TO BE WIDENED & IMPROVED)
- 28 NEW BRANCH ROAD CONSTRUCTION.
- 29 SITE OF PROPOSED PORT AT HALDIA



TRACED BY:- S. K. Ghosh. 20.4.51.
 C. E.'S. DRAWING OFFICE, DEV. (ROADS) DEPT.



M A P
SHOWING ALIGNMENT OF PROPOSED
ROAD & RAILWAY LINK WITH THE SUB-
SIDIARY PORT AT HALDIA.
SCALE 1"=4 MILES.

REFERENCES:-

- DENOTES PROPOSED ALIGNMENT OF B.G. LINE TO HALDIA FROM PANSKURA.
- - - - - " " ADDL. THIRD LINE BETWEEN KHARAGPUR / PANSKURA.
- " " MAIN TRUNK ROAD.
- . - . - . " " BRANCH ROADS (TO BE WIDENED & IMPROVED)
- " " NEW BRANCH ROAD CONSTRUCTION.
- ▨▨▨▨▨▨ " " SITE OF PROPOSED PORT AT HALDIA.

RAILWAY ELECTRIFICATION

MAP SHOWING

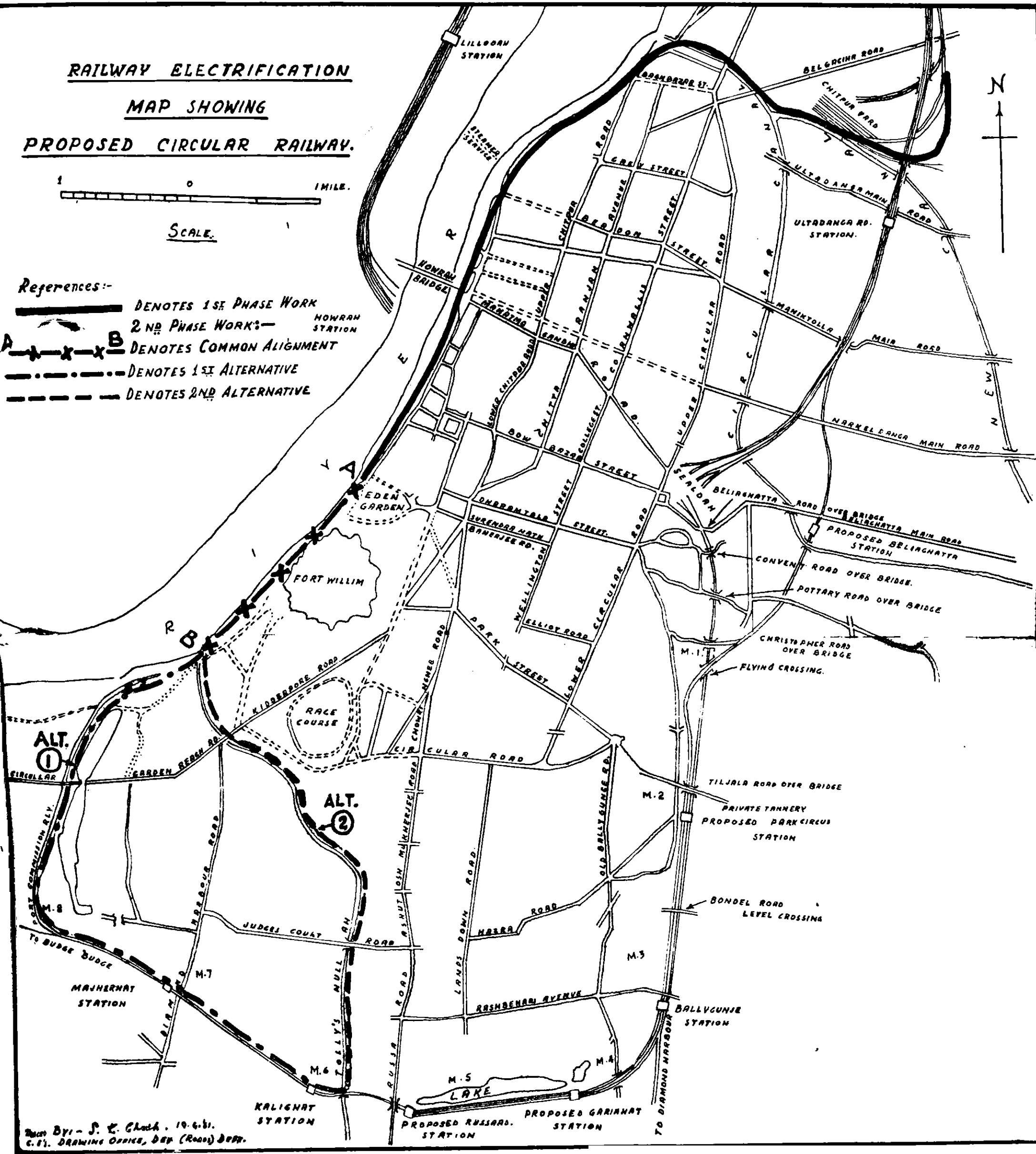
PROPOSED CIRCULAR RAILWAY.



SCALE.

References:-

- DENOTES 1ST PHASE WORK
- DENOTES 2ND PHASE WORKS—
- DENOTES COMMON ALIGNMENT
- DENOTES 1ST ALTERNATIVE
- DENOTES 2ND ALTERNATIVE



Drawn By: S. E. Chack. 10.4.51.
C.E. DRAWING OFFICE, DEP. (ROADS) DEPT.

WEST BENGAL THIRD FIVE-YEAR PLAN

ERRATA

1. Page 2, last line—
For me, read same
2. Page 6, serial 3—
For form, read from
3. Page 7, serial 7, line 2—
For iu, read in
4. Page 16, last para., line 2—
For No, read Not
5. Page 17, para. 1, lines 8 and 10—
For crop, read cropped
6. Page 18, line 24—
For Testa, read Teesta
7. Page 19, para. 2, line 4—
For cheep, read cheap
8. Page 20, para. 2, line 3—
For net, read met
9. Page 21, Table I, Col. 4, total—
For 4509.79 read 5409.79
10. Page 23 (details of Schemes)—
For Manures and Fertiliser read Manures and Fertilisers
11. Page 24, para. 6, line 4—
For 20, read 10
12. Page 24, para. 6, line 4—
For plaint, read plant
13. Page 25, after para. 8—
Delete—
Establishment of a training centre for refresher course
Establishment of a training centre for tubewell operators.
14. Page 26, para. 8, line 3—
For verious, read various
15. Page 28, para. 9, line 10—
For order, read also
16. Page 30, para. 3, line 9—
For tions, read tons
17. Page 31, para. 2, line 1—
For A, read As

18. Page 32, para. 5, line 5—
For temperature, *read* temperate
19. Page 34, line 25—
For taken, *read* token
20. Page 40, after para. 2—
For Other Statistics, *read* Other Schemes
21. Page 41, last para., line 2—
For cutting, *read* cuttings
22. Page 43, para. 2, line 1—
For scruff, *read* scrub
23. Page 55, para. 1, line 3—
For more for, *read* more room for
24. Page 57, last para., line 2—
For aforestation, *read* afforestation
25. Page 59, para. 5, line 3—
For accommodation, *read* accommodated
26. Page 61 bottom, item above Grand total—
For Secon period, *read* Second Plan period
27. Page 64, para. 1, line 3—
For signaficance, *read* significance
28. Page 70, line 2—
For has reoriented, *read* has been reoriented
29. Page 71, para. 5, line 1—
For is, *read* in
30. Page 73, last line—
For 180, *read* 1.80
31. Page 79, para. 4, line 3—
For 5.491, *read* 5,491
32. Page 79, para. 5, line 7—
For is, *read* are
33. Page 79, para. 8, line 1—
For Re-exavation, *read* Re-excavation
34. Page 84, para. 3, line 5—
For These schemes, *read* lakh
35. Page 85, line 6 from bottom—
For Annexure I. *read* Table II
36. Page 88, line 9 from bottom—
For Second period, *read* Second Plan period
37. Page 90, para. 1, line 3—
For MV., *read* MW.

38. Page 93, line 20—
For training-cum-production, read training-cum-production
39. Page 102, para. 11, last line—
For shall-scale, read small-scale
40. Page 105, para. 5, line 4—
For larry, read lorry
41. Page 106, para. 1, line 3—
For rocoons, read cocoons
42. Page 106, para. 4, line 2—
For lead an, read lead to an
43. Page 106, para. 6, after line 3—
For Dropped, read Intensification of Sericulture—(a) Supply of disease-free silk worm
44. Page 106, para. 6, item (b), line 5—
For ann, read and
45. Page 107, para. 1, line 3—
For expecten, read expected
46. Page 111, para. 6, line 3—
For on, read one
47. Page 116, para. 4, line 5—
For necessary, read necessity
48. Page 121, para. 1, line 3—
For bein, read being
49. Page 121, para. 3, line 4—
For eqally, read equally
50. Page 124, para. 2, line 6—
For proress, read progress
- 50(a) Page 131, line 1—
For concersion, read conversion
51. Page 134, para. 8, last line—
For currest, read current
52. Page 153, line 16 from bottom—
For ends, read aims
53. Page 153, line 16 from bottom—
For cvverage, read coverage
54. Page 154, line 2—
For setting of, read setting up of
55. Page 155, para. 6, line 1—
For has made, read has been made
56. Page 159, line 16 from bottom—
For 104 flats constructed, read 104 flats were constructed

57. Page 177, last para., line 3—
For whether, *read* where
58. Page 179, last para., lines 2 and 6—
For leperous, *read* leprous
59. Page 184, line 10 from bottom—
For Khetra, *read* Kshetra
60. Page 184, last para.—
For existing para., *read* A Committee is going to be set up in this State shortly to look after the execution of various schemes. The Bharat Sevak Samaj will also function as the co-ordinating agency to train workers at various levels, to conduct research, to organise study teams, Conferences or Seminars to exchange successful experience, to publish guiding materials and to advise the official agencies at the national and State levels regarding Lok Karya Kshetras Programme, etc.
61. Page 184, last para., line 5—
For public, *read* publish
62. Page 185, para. 1, line 1—
For per, *read* par
63. Page 186, para. 3, line 11—
For Aboct, *read* About
64. Page 187, line 20—
For Provisions, *read* Provision
65. Page 188, para. 3, line 6—
For sector, *read* sectors
66. Page 190, para. 1, line 7—
For sector, *read* sectors
67. Page 191, item 5—
For Vocatioul, *read* Vocational
68. Page 192, para. 1, line 6—
For By-products, *read* by-products
69. Page 193, para. 4, line 5, item (VI)—
For mixure, *read* mixture
70. Page 194, para. 2, line 3—
For Rs. 200 crore, *read* Rs. 20 crore
71. Page 194, para. 2, line 4—
For constribution, *read* contribution
72. Page 199, line 2 from bottom—
For Kawdwip *read* Kakdwip
73. Page 200, para. 3, line 6—
For planning, *read* Planning
74. Page 201, para. 1, line 1—
For Twenty four several, *read* Several

75. Page 201, para. 2, line 2—
For *estamated*, *read* *estimated*
76. Page 201, last para. line 2—
For *Visitirs*, *read* *Visitors*
77. Page 202, para. 1, line 12—
For *impportance*, *read* *importance*
78. Page 202, para. 3, line 4—
For *imprvement*, *read* *improvement*
79. Page 202, para. 3, line 7—
For *crossing*, *read* *crossings*
80. Page 205, para. 1, last line—
For *Grater*, *read* *Greater*
81. Page 205, line 11 from bottom—
For *know*, *read* *known*
82. Page 206, line 12—
For *area*, *read* *areas*
83. Page 207, para. 1, line 4—
For *This*, *read* *Thus*
84. Page 208, para. 5, line 1—
For *not proposed to*, *read* *proposed not to*
85. Page 209, para. 1, line 1—
For *schemes*, *read* *scheme*
86. Page 211, line 5 from bottom—
For *bye-pass*, *read* *by-pass*
87. Page 212, lines 20 from top and 14 from bottom—
For *Geometries*, *read* *geometrics*
88. Page 212, last para.—
For (ii), *read* (iii)
89. Page 215, line 10 from bottom—
For *Railway*, *read* *Railways*
90. Page 217, item 23—
For *Hughli-Chinsurah*, *read* *Hooghly-Chinsurah*
91. Page 218, Kotrong—
For *-118.5*, *read* *+118.5*
92. Page 220, Caption—
For *329*, *read* *293*
93. Page 222, Dairying and Milk Supply, Col. 4—
For *6.0*, *read* *6.00*
94. Page 228, Scheme 95—
For *Directorate*, *read* *District*